SUPREME COURT OF THE UNITED STATES

Pyrotechnic Specialties, Inc.,

Petitioner,

v.

Secretary of Defense,

Respondent.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

APPENDIX TO PETITION FOR A WRIT OF CERTIORARI

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NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

 $\begin{array}{c} \textbf{PYROTECHNIC SPECIALTIES, INC.,} \\ Appellant \end{array}$

v.

SECRETARY OF DEFENSE,

Appellee

2019-2024

Appeal from the Armed Services Board of Contract Appeals in Nos. 57890, 58335, 59103, Administrative Judge Reba Page, Administrative Judge Richard Shackleford, Administrative Judge Mark N. Stempler.

JUDGMENT

MICHAEL DEVLIN COOPER, Cooper, Barton & Cooper, LLP, Macon, GA, argued for appellant. Also represented by KENNETH E. BARTON, III.

PATRICIA M. McCarthy, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, DC, argued for appellee. Also represented by John V. Coghlan, Robert Edward Kirschman, Jr.

THIS CAUSE having been heard and considered, it is ORDERED and ADJUDGED:

PER CURIAM (O'MALLEY, CLEVENGER, and TARANTO, $\it Circuit\ Judges$).

AFFIRMED. See Fed. Cir. R. 36.

ENTERED BY ORDER OF THE COURT

February 4, 2021 Date /s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of Court

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of	<u>}</u>
Pyrotechnic Specialties, Inc.) ASBCA Nos. 57890, 58335, 59103
Under Contract No. W52P1J-04-C-0098)
APPEARANCE FOR THE APPELLANT:	Mr. David Karlson Chief Executive Officer

APPEARANCES FOR THE GOVERNMENT: Rayn

A -- - - C

Raymond M. Saunders, Esq. Army Chief Trial Attorney Robert B. Neill, Esq. Trial Attorney

OPINION BY ADMINISTRATIVE JUDGE PAGE

Pyrotechnic Specialties, Inc. (PSI, the contractor, or appellant) appeals from the termination for default of its contract with the Department of the Army, Army Contracting Command – Rock Island¹ (the government). PSI's contract was terminated for default after the government rejected two production lots for their failure to pass multiple acceptance tests, which placed the contractor in a delinquent status under the contract's delivery schedule. PSI also seeks to recover \$802,589 in unreimbursed costs relating to the government's alleged wrongful rejection of a production lot. We have jurisdiction over these appeals under the Contract Disputes Act of 1978 (CDA), 41 U.S.C. §§ 7101-7109. A hearing was conducted, and the parties extensively briefed the issues. Only entitlement is before the Board. We deny the appeals.

FINDINGS OF FACT

1. On 27 September 2004, the government awarded Contract No. W52P1J-04-C-0098 (the contract) to PSI (R4, tab 1). While the contract was awarded by the Army, it is a multiservice contract; units produced under the contract were designated for Army, Navy and Air Force customers (R4, tabs 1, 8; tr. 2/89). Both the Army and the Defense Contract Management Agency (DCMA) had active roles in contract administration. The various contracting officers (COs) assigned to the contract throughout contract performance were Army personnel. DCMA personnel acted as Quality Assurance Representatives (QARs) and

¹ The contract was awarded by Headquarters, U.S. Army Field Support Command (HQ AFSC), which is now known as the Army Contracting Command – Rock Island (R4, tabs 1, 185).

were responsible for issuing Corrective Action Requests (CARs) (see, e.g., R4, tab 80 at 2), ² whereas the Army CO maintained contract authority (see, e.g., R4, tab 50 at 1). Contract performance issues were at times addressed by both the CO and the QARs through separate correspondence reflecting the divergent administrative roles of the CO and the QARs (see, e.g., R4, tab 85 at 2).

- 2. The contract is a fixed-price contract for the production of 60,558 units of MK 124 Mod 0 Signal, Smoke and Illumination (MK 124 or signals) (R4, tab 1 at 1, 3, 6-12). The MK 124 is a distress signal that allows military personnel to signal to reconnaissance aircraft when in distress. Designed by the Navy for use in case of a service member overboard or a downed pilot, the MK 124 is used by all services of the Armed Forces. (Tr. 3/60, 71)
- 3. Through various contract modifications, additional quantities of signals were added to the contract during contract performance for a total quantity of 152,180 signals and a total dollar amount of \$7,575,305 (R4, tabs 23, 28, 33, 38, 40, 47, 68-69).
- 4. The contract incorporated by reference FAR clause 52.246-2, INSPECTION OF SUPPLIES FIXED-PRICE (AUG 1996). The clause states, in pertinent part:
 - (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering supplies under this contract and shall tender to the Government for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Contractor to be in conformity with contract requirements....
 - (f) The Government has the right either to reject or to require correction of nonconforming supplies. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with contract requirements....
 - (k) Inspections and tests by the Government do not relieve the Contractor of responsibility for defects or other

² For the purposes of identifying references to the record, we adopt the sequential pagination as affixed by the parties to the Rule 4 file documents.

failures to meet contract requirements discovered before acceptance.

(R4, tab 1 at 22)

- 5. The contract incorporated by full text FAR local clause 52.209-4511, FIRST ARTICLE TEST (GOVERNMENT TESTING) (MAY 1994), which provides, in relevant part:
 - a. The first article shall consist of: IN ACCORDANCE WITH THE SPECIFICATION, which shall be examined and tested in accordance with contract requirements, the item specification(s), the Quality Assurance Provisions (QAPS) and drawings listed in the Technical Data Package.

....

c. The first article shall be representative of items to be manufactured using the same processes and procedures as contract production.... All components, subassemblies, and assemblies in the first article sample shall have been produced by the Contractor (including subcontractors) using the technical data package provided by the Government.

....

e. [A]n additional first article sample or portion thereof, may be ordered by the Contracting Officer in writing when (i) a major change is made to the technical data, (ii) whenever there is a lapse in production for a period in excess of 90 days, or (iii) whenever a change occurs in the place of performance, manufacturing process, material used, drawing, specification or source of supply.

(R4, tab 1 at 22)

- 6. The contract also incorporated by full text FAR local clause 52.246-4530, SUBMISSION OF PRODUCTION LOT SAMPLES (GOVERNMENT TESTING) (MAY 1994), which provides, in relevant part:
 - a. A lot acceptance test sample is required to be submitted by the Contractor from each production lot

tendered to the Government for acceptance. This sample shall consist of: AS REQUIRED BY THE MK124 SPECIFICATION.

••••

j. If the Contractor fails to deliver any production lot test sample(s) for test within the time or times specified, or if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract. Therefore, this contract may be subject to termination for default.

(R4, tab 1 at 26-27)

7. The contract also incorporated by full text FAR local clause 52.246-4550, CRITICAL CHARACTERISTICS (FEB 2004), which provides, "As a result of previous practices, the governments technical data may refer to Critical...and Special characteristics. Characteristics classified as Critical...shall be subject to all requirements herein associated with Critical (I) characteristics and level I Critical nonconformances." FAR 52.246-4550(d). The clause defines Level I critical nonconformance.

Level I critical nonconformance. A nonconformance of a critical characteristic that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product; or a nonconformance that judgment and experience indicate would prevent performance of the tactical function of a weapon system or major end item. The following (as a minimum) are classified as Level I critical nonconformances:

- 1) A nonconformance that will result in a hazardous or unsafe condition (often referred to as a single point failure).
- (2) A nonconformance that will remove or degrade a safety feature (such as those in a safe and arm device or fuzing system).
- (3) A nonconformance that will result in violation of mandatory safety policies or standards.

- FAR 52.246-4550(e). The clause also outlines actions to undertake in the event that a critical nonconformance is found. When a critical nonconformance is found, production is immediately stopped and the contractor is required to conduct an investigation to determine the cause of the deficiency. The contractor is required to submit a report of its investigation and suggest corrective action to fix the deficiency. After the report is provided to the government, the contractor may request to restart production. (R4, tab 1 at 28-29)
- 8. The contract incorporates by reference FAR clause 52.249-8, DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984), which provides, in relevant part:
 - (a)(1) The Government may, subject to paragraphs
 (c) and (d) below, by written notice of default to the
 Contractor, terminate this contract in whole or in part if the
 Contractor fails to –
 - (i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;
 - (ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) below); or
 - (iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) below).
 - (2) The Government's right to terminate this contract under subdivisions (1)(ii) and (1)(iii) above, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(R4, tab 1 at 37)

9. The contract also incorporates, either by full text or reference, the following FAR clauses and FAR local clauses: FAR 52.233-1, DISPUTES (JUL 2002); FAR 52.243-7, NOTIFICATION OF CHANGES (APR 1984); Local FAR 52.245-4537, ACCEPTANCE INSPECTION EQUIPMENT (AIE) (FEB 2002); and Local FAR 52.246-4528, REWORK AND REPAIR OF NONCONFORMING MATERIAL (MAY 1994) (R4, tab 1 at 23, 27, 37, 39).

I. Design Specifications

- 10. The MK 124 is a cylindrical canister approximately 5.408 maximum inches long by 1.700 maximum inches in diameter; it weighs approximately 0.5 pounds (R4, tab 22 at 3). One end of the canister contains the flare candle subassembly (flare end); the opposite end contains the smoke candle subassembly (smoke end) (id. at 3, tab 97). The flare end, when triggered, produces a red flare, and is intended to be used for nighttime signaling. The smoke end, when triggered, produces a reddish orange smoke, and is intended to be used for daytime signaling. (R4, tab 22 at 12)
- 11. The design, production and testing of the MK 124 is controlled by the contract's technical data package (TDP). The contract's TDP incorporates Drawing No. 2113661, Tape, Foil (Drawing 2113661); Drawing No. 2114083, Disk, Sealing (Drawing 2114083); Drawing No. 3139733, Outer Container, Loaded (Drawing 3139733); and Specification No. WS 13697N, Prime Item Fabrication Specification, Signal, Smoke and Illumination, Marine MK 124 Mod 0 (Specification 13697N). (R4, tab 1 at 13, tab 294 at 2-5, tabs 295-96)
- 12. Of particular note to the present dispute, between each candle subassembly and its respective igniter/trigger assembly is a foil sealing disk (sealing disk) (ex. A-6). The primary purpose of the sealing disk is to "provide a hermetic seal at the end cap portion of the device so that...the candles inside the unit will stay dry." Secondarily, the disk assists in the buildup of heat and pressure in the candle when it is first ignited. The sealing disk must be strong enough to perform these functions but also fragile enough that it will burst so that the flare and smoke can be expelled from the canister to produce the distress signal. (Tr. 3/72)
- 13. The requirements for the sealing disk are controlled by Drawing 2114083 and Drawing 2113661. The sealing disk is circular, $1.500 \pm .005$ inches in diameter and .0065 inches thick (R4, tab 296). Drawing 2113661 notes the following average physical properties for an appropriate sealing disk:

ADHESION TO STEEL
 TENSILE STRENGTH
 JA OZ/IN WIDTH
 LBS/IN WIDTH

3. BACKING THICKNESS 2.2 MILS.

4. ELONGATION AT BREAK 4%

5. TOTAL TAPE THICKNESS 3.4 MILS.

(R4, tab 295) Drawing 2113661 lists a suggested source of supply. This list is meant to provide the contractor with a suggestion of previously proven good material (tr. 3/87). However, Note 1 of Drawing 2113661 states "IDENTIFICATION OF THE 'SUGGESTED SOURCE(S) OF SUPPLY' HEREON IS NOT TO BE CONSTRUED AS AGUARANTEE [sic] OF PRESENT OR CONTINUED AVAILABILITY AS A

SOURCE OF SUPPLY FOR THE ITEM(S)." Drawing 2113661's suggested source of supply lists 3M Industrial's (3M) Part No. 433L (Linered) High Temperature Aluminum Foil Tape (433L disk). (R4, tab 295; ex. G-1)

- 14. In addition to the sealing disks, each end of the MK 124 canister is secured by using an O-ring and crimping the MK 124 canister. The O-ring is a thin rubber ring that goes around the circumference of the igniter, one at each end of the canister (tr. 2/149). After the O-ring is put in place the canister is crimped, and the crimp in conjunction with the O-ring seals the unit (tr. 2/150).
- 15. Specification 13697N is a Naval Sea Systems Command specification that "covers the manufacture, assembly, and preparation for delivery of the MK 124...and the methods of examination and tests upon which product acceptance shall be based" (R4, tab 22 at 1). Essentially, it defines the performance parameters of the MK 124 upon completion of production (tr. 3/63).
- 16. Paragraph 3.4.2 of Specification 13697N classifies all MK 124 characteristics into one of three classifications: Critical, Major, or Minor. "Critical characteristics are identified by the symbol (C), and Major characteristics by the symbol (M).... Characteristics that are not annotated by the classification code symbol are classified as Minor." (R4, tab 22 at 3) All characteristics are assigned a subparagraph (i.e. 3.5.1.1); each characteristic requirement listed in paragraph 3 corresponds with a test requirement in paragraph 4 of Specification 13679N. Accordingly, determining whether an end unit complies with the requirement at ¶ 3.5.1.1 is accomplished by running the test described at ¶ 4.5.1.1. (*Id.* at 9)
 - 17. Paragraph 3.5.1.1, Function, of Specification 13697N states:

The signal shall meet the following requirements, when tested in accordance with 4.5.1.1.

a. Display color (C1): Produce orange

Produce orange smoke and red

flare display from the

designated end.

b. Function (M101):

Ignite and produce a display

from both ends.

c. Delay (M102):

3 seconds maximum from

initiation to generation of

display....

d. Display times (M103): The display time shall begin

after the delay time ends and shall not include any output after generation of the display stops.

TEST REFERENCE OF TABLE I	FLARE Min	(SEC) Max	SMOKE Min	(SEC) Max
Five Ft Drop (4.5.2.1)	16	23	12	19
Transportation Vibration (4.5.2.3)	16	23	12	19
Temperature and Humidity (4.5.2.4)	16	23	12	22
High Temperature (4.5.2.5)	16	23	11	18
Low Temperature (4.5.2.6)	16	23	15	25
Sealing Function (4.5.2.7)	16	23	12	19

e. Safety function (C8): During function igniter shall not separate from the outer container.

(R4, tab 22 at 4)

- 18. Compliance with the function requirements is tested in accordance with the Function Test described in ¶ 4.5.1.1; it describes the process used to ignite the signal to test whether the signal functions properly (R4, tab 22 at 9).
- 19. Paragraph 3.5.2.7, Sealing (M105), of Specification 13697N states, "The signal shall withstand a vacuum of 6.0 ± 1.0 inches of mercury below atmospheric for a minimum period of 60 seconds without signs of leakage when tested in accordance with 4.5.2.7" (R4, tab 22 at 5). Compliance with this requirement is tested in accordance with the Sealing Test described at \P 4.5.2.7 (id. at 11). During the sealing test, signals are submerged in a water vacuum. A defective signal, commonly referred to as a "leaker," is a unit that exhibits an escape of air bubbles in the water (tr. 2/120). The escape of air bubbles reveals that water has infiltrated into the unit, and, therefore, the unit does not meet the sealing characteristics described at \P 3.5.2.7 of Specification 13697N (R4, tab 22 at 11; tr. 2/94). Paragraph 4.5.2.7 specifically provides:

Leakers are indicated by air bubbles issuing from the signal. Do not mistake the escape of occluded air for leakage. Signals which are not defective may be used for further testing or returned to the lot. Replace protective cap after test. Defectives are signals failing to meet the requirements of 3.5.2.7.

(R4, tab 22 at 11)

- 20. Mr. Robert Hirst, PSI's vice president and general manager, testified that there are a variety of reasons why a signal could leak (tr. 2/147). The three root causes most commonly discussed by the parties during the performance of this contract are as follows: (1) a problem with the sealing disk; (2) a defect in the O-ring; and/or (3) an improper crimp of the MK 124 canister. The Board also notes, that according to the testimony of Mr. Hirst, an ongoing point of contention between PSI and the government was the amount of air bubbles necessary to indicate a failure of the sealing test as opposed to an escape of occluded air (tr. 2/120).
 - 21. Other signal requirements pertinent to this appeal are as follows:
 - 3.5.2.1 <u>Five (5) foot drop (C2)</u>. The signal shall withstand five (5) foot drop without exploding or burning when tested in accordance with 4.5.2.1.
 - 3.5.2.2 Forty (40) foot drop (C3). The signal shall withstand forty (40) foot drop without exploding or burning when tested in accordance with 4.5.2.2.
 - 3.5.2.3 <u>Transportation vibration (C4)</u>. The packaged signal shall withstand transportation vibration without exploding or burning when tested in accordance with 4.5.2.3.
 - 3.5.2.4 <u>Temperature and humidity (C5)</u>. The signal shall withstand temperature and humidity without exploding or burning when tested in accordance with 4.5.2.4.
 - 3.5.2.5 <u>High temperature (C6)</u>. The signal shall withstand a temperature of $\pm 120^{\circ}$ F $\pm 5^{\circ}$ F for a minimum period of 16 hours without burning or exploding when tested in accordance with 4.5.2.5.
 - 3.5.2.6 Low temperature (C7). The signal shall withstand a temperature of $-20^{\circ}F \pm 5^{\circ}F$ for a minimum period of 16 hours without burning or exploding when tested in accordance with 4.5.2.6.

(R4, tab 22 at 4-5)

22. Specification 13697N also describes the inspection requirements for the MK 124. It provides that there are two types of inspection requirements: (a) First Article

Inspection (4.3); and (b) Quality Conformance Inspection (4.4). Specification 13697N states that for a first article inspection "[t]he contractor shall deliver a sample of 185 signals to [Naval Service Warfare Center (NSWC) Crane], for examination, testing, evaluation, and acceptance as in Table I." (R4, tab 22 at 6) The parties commonly refer to a first article inspection as a first article test (FAT) (see, e.g., tr. 2/110). For a quality conformance inspection, Specification 13697N prescribes the following:

An inspection lot shall consist of 3201 to 10,000 signals offered for delivery at one time including test samples (see 6.2). Inspection lots shall be inspected as follows:

b. Each lot shall be sampled as required for Plan A, Table I.

- c. Upon failure of any lot to meet acceptance requirements for either Plan A or Plan B tests, the next lot shall be tested and accepted in accordance with Plan A, Table I.
- d. No lot shall be accepted in accordance with Plan B, Table I, unless the preceding lot has met the test requirements of the applicable plan.
- e. Each inspection lot shall contain only primers from one lot produced by one manufacturer.
- f. Upon completion of a lot and selection of the sample, the Government shall be notified. The designated government activity shall then notify the contractor which test plan shall apply (see 6.2).
- g. Sampling, examination, testing, and acceptance of inspection lots shall be performed as specified in the steps given below.
- STEP 1. Upon starting production or delivery of an acceptable first article sample, as applicable, all inspection lots shall be examined, tested in sequence and accepted in conformance with Table I, Sampling Plan A, until two (2) consecutive lots have met acceptance requirements of Table I.

- STEP 2. Inspection lots other than those defined in Step 1 shall be examined, tested in sequence and accepted in conformance with Table I, Sampling Plan B, except that one lot shall be randomly selected from each five consecutive inspection lots and examined, tested in sequence and accepted in conformance with Table I, Plan A.
- (R4, tab 22 at 6-7) The parties commonly refer to the quality conformance inspection as a lot acceptance test (LAT) (see, e.g., tr. 2/110).
 - 23. The pertinent inspection requirements for the MK 124 are as follows:
 - 4.5.2.1 <u>Five (5) foot drop test</u>. The signal shall be subjected to the five foot drop test prescribed in Test A4 of MIL-STD-331, except the signal shall be dropped free-fall without guidance system or associated equipment. Defectives are signals failing to meet the requirements of 3.5.2.1.
 - 4.5.2.2 Forty (40) foot drop test. The signal shall be subjected to the forty foot drop test prescribed in Test A3 of MIL-STD-331, except the signal shall be dropped free-fall without guidance system or associated equipment. Defectives are signals failing to meet the requirements of 3.5.2.2.
 - 4.5.2.3 <u>Transportation vibration test [(TV test)]</u>. The signal, as packaged in accordance with drawing 2128332, shall be subjected to the transportation vibration test prescribed in Test B1, Section 6.1 of MIL-STD-331. Inert mock-up signals shall be used to complete the filling of the package for this test. Defectives are signals failing to meet the requirements of 3.5.2.3.
 - 4.5.2.4 <u>Temperature and humidity test [(T&H test)]</u>. The signal shall be subjected to one 14 day temperature and humidity cycle prescribed in Test C1 of MIL-STD-331. Defectives are signals failing to meet the requirements of 3.5.2.4.

- 4.5.2.5 <u>High temperature test</u>. The signal shall be conditioned in a suitable chamber at $+120^{\circ}F \pm 5^{\circ}F$ for a minimum period of 16 hours and while at that temperature shall be subjected to the function test. Defectives are signals failing to meet the requirements of 3.5.2.5.
- 4.5.2.6 <u>Low temperature test</u>. The signal shall be conditioned in a suitable chamber at $-20^{\circ}F \pm 5^{\circ}F$ for a minimum period of 16 hours and while at that temperature shall be subjected to the function test. Defectives are signals failing to meet the requirements of 3.5.2.6.

(R4, tab 22 at 10-11)

24. Specification 13697N also includes Table I, which is a summary of the tests that are performed during inspection of the MK 124 (tr. 3/63). The table lists, in testing sequence order, all the inspections and tests that are performed as part of the FATs and LATs and details the sample size to be subjected to each particular test (R4, tab 22 at 8; tr. 3/64-65). Below is an excerpt of the tests pertinent to these appeals as they appear in the table.

EXAMINATIONS AND TESTS	FRIST ARTICLE]]	INSPECTION LOT SAMPLING			
	SAMPL	MPLING PLANS			PLANS		
Test Sequence4/	Sample	Acceptance	Plan2/		Sample	Acceptance	
	Size	Criteria1/	A	В	Size	Criteria <u>l</u> /	
Sealing (4.5.2.7)	100%	Ac 0 Re 1	X	X	100% of	Ac 0 Re 1	
	of						
	Sample				Sample		
Five (5) Foot Drop (4.5.2.1)		Ac 0 Re 1	X			Ac 0 Re 1	
Sealing (4.5.2.7)		Ac 0 Re 1	1			Ac 0 Re 1	
Function (4.5.1.1)	5	(a&e)	1		5 Signala	(a&e)	
	Signals	Ac 0 Re 1		}	5 Signals	Ac 0 Re 1	
		(b, c, &d)		ŀ		(b, c, &d)	
	<u> </u>	Ac 1 Re 2	<u> </u>	<u> </u>		Ac 1 Re 2	
Forty (40) Foot Drop (4.5.2.2)	5	Ac 0 Re 1			None		
·	Signals				None		
Transportation Vibration (4.5.2.3)		Ac 0 Re 1	X			Ac 0 Re 1	
Sealing (4.5.2.7)		Ac 0 Re 1				Ac 0 Re 1	
Function (4.5.1.1)		(a&e)				(a&e)	
	30	Ac 0 Re 1			20 Signals	Ac 0 Re 1	
	Signals	(b)				(b)	
		Ac 2 Re 3				Ac 1 Re 2	
		(c&d)				(c&d)	
		Ac 3 Re 4	<u> </u>	<u> </u>		Ac 2 Re 3	
Temperature and Humidity	30	Ac 0 Re 1	X			Ac 0 Re 1	
(4.5.2.4)	Signals				20 Signals		
Function (4.5.1.1)	Jignais	(a&e)	<u> </u>	<u> </u>		(a&e)	

	T	Ac 0 Re 1				Ac 0 Re 1
		(b)				(b)
		Ac 2 Re 3				Ac 1 Re 2
	1	(c&d)				(c&d)
		Ac 3 Re 4				Ac 2 Re 3
Ligh Tomporature (4.5.2.5)		Ac 0 Re 1	Х	ļ		
High Temperature (4.5.2.5)		· · · · · · · · · · · · · · · · · · ·	^			Ac 0 Re 1
Function (4.5.1.1)		(a&e)				(a&e)
	30	Ac 0 Re 1			, ,	Ac 0 Re 1
	Signals	(b)			20 Signals	(b)
		Ac 2 Re 3				Ac 1 Re 2
		(c&d)		ŀ		(c&d)
		Ac 3 Re 4				Ac 2 Re 3
Low Temperature (4.5.2.6)		Ac 0 Re 1	X			Ac 0 Re 1
Function (4.5.1.1)		(a&e)				(a&e)
	30	Ac 0 Re 1	Ì			Ac 0 Re 1
	Signals	(b)			20 Signals	(b)
	Signais	Ac 2 Re 3		į		Ac 1 Re 2
		(c&d)	ļ			(c&d)
		Ac 3 Re 4				Ac 2 Re 3
Function (4.5.1.1)		(a&e)	Х	X		(a&e)
·		Ac 0 Re 1				Ac 0 Re 1
	50	(b)			EO CI 1-	(b)
	Signals	Ac 1 Re 2	•		50 Signals	Ac 1 Re 2
		(c&d)				(c&d)
		Ac 3 Re 4				Ac 3 Re 4
Group Data Acceptance3/		(b)	X			(b)
*	155	Ac 5 Re 6			115	Ac 3 Re 4
	Signals	(c&d)	ļ		Signals	(c & d)
		Ac 10 Re 11				Ac 7 Re 8

NOTES: 1/ Ac = Acceptance number for defectives of specified requirements of Section 3.

Re = Rejection number for defectives of specified requirements of Section 3.

- 2/ Test plans applicable to inspection lots.
- $\underline{3}$ / Grouped for Function Test.
- 4/ Tests to be performed in order of indentured sequence within individual blocks.

(R4, tab 22 at 8-9)

25. Table I provides the acceptance criteria for each test and examination (R4, tab 22 at 8-9). For example, an acceptance criteria of "Ac 0 Re 1" attached to a test sequence means that a sample lot would pass the noted test and be accepted if there were zero failures but be rejected if there was one test failure, or defect, within the sample lot (tr. 2/122).

- 26. In some instances Table I lists a primary test and then notes secondary tests to be completed on the samples put through the primary test. For example, "Five (5) Foot Drop (4.5.2.1)" appears in the table, referring to the 5-ft. drop test described at ¶ 4.5.2.1. Directly below, in the 5-foot drop block of the table, "Sealing (4.5.2.7)" and "Function (4.5.1.1)" appear on sub rows. This prescribes that additional testing shall be performed immediately after the primary 5-foot drop test. Accordingly, for both the FAT and LAT Plan A, five signals are to be pulled and run through the 5-foot drop test. Following the 5-foot drop test, the same samples are to be put through the sealing test as described at ¶ 4.5.2.7. After the sealing test, the same samples are to be put through the function test described at ¶ 4.5.1.1.3 Each stage of testing has its own acceptance criteria appearing on the corresponding sub row within the 5-foot drop block row of the table. (See finding 24)
- 27. Table I also indicates that the function test has multiple acceptance criteria (see finding 24). Acceptance criteria varies dependent upon the function characteristic requirements listed at \P 3.5.1.1 (see finding 17). For example "a&e" in Table I, refers to the "display color" requirement listed at "a" of \P 3.5.1.1 and the "safety function" requirement listed at "e" of \P 3.5.1.1. For those tests pertinent to this appeal, the acceptance criteria for the safety function requirement is "Ac 0 Re 1." (See findings 17, 24)
- 28. The TDP also includes Drawing 3139733, which depicts a cross section of the MK 124. The drawing identifies additional required characteristics of the MK 124. Note 10 of the drawing provides:

After crimping, [both igniters] shall not be damaged and shall be capable of withstanding a torque of 20 inch-pounds min with [the outer container] without relative movement.

(R4, tab 97) Note 10 is preceded by the indicator "(M103)" identifying it as a Major characteristic. The drawing also includes Note 13, identified as a Critical characteristic. It provides:

Alignment pin of [the igniter for the smoke trigger assembly] shall be in alignment pin hole of [the smoke primer and holder] after crimping.

(*Id.*)

³ For this reason when discussing a sealing test or function test performed on samples that first underwent a primary test, the primary test will often be referred to as the "preconditioning environment" (see, e.g., tr. 3/78).

29. Mr. Kevin Bowen was the government's lead technical agent and design agent for the MK 124 during PSI's contract. He began acting as the design agent for the MK 124 in 1996 and, accordingly, was involved in the contracts for the production of the MK 124 prior to the award to PSI. Beginning in 1991 and up until the contract award to PSI, Martin Electronics produced the MK 124. Mr. Bowen testified that during that period of time Martin Electronics produced in excess of one million Code A⁴ MK 124s. (Tr. 3/60, 169-70) Mr. Andy Long began working for Martin Electronics in 1998 in a consultant capacity relating to Martin Electronics' production of the MK 124. He testified that Martin Electronics experienced problems manufacturing the MK 124, particularly relating to signals leaking. He was not involved with the testing of the MK 124 and had no knowledge of whether Martin Electronics had failed any LATs. (Tr. 3/36-37) Mr. Long, who later acted as PSI's senior quality manager during PSI's performance of the contract, testified that he believed the MK 124 was an "extremely difficult item to manufacture" and described it as "virtually un-producible" with "a lot of pitfalls in the design that makes it easy to make mistakes during assembly" (tr. 3/38).

II. PSI's Relationship with DCMA

- 30. At the time of contract award, PSI had multiple contracts that were administered or otherwise monitored by DCMA, and three QARs were assigned to PSI's facility (see tr. 1/46, 52). PSI's facility is located in Byron, Georgia, and includes a test lab. Testing at PSI's lab is conducted by PSI personnel and overseen by the lead test technician, an employee of PSI. (R4, tab 282 at 2; tr. 3/6) QARs and other government personnel would observe testing performed at PSI's facilities if the tests were required by one of the government's contracts with PSI (see, e.g., R4, tab 131).
- 31. Mr. David Karlson, a senior manager at PSI, testified that in 2004 the relationship between PSI and the QARs, particularly the lead QAR,⁵ began to deteriorate (tr. 1/46). Mr. Karlson testified that the QARs began to make fraud allegations against PSI and that PSI was investigated by the FBI and indicted based, in part, on the QARs' allegations (tr. 1/46, 55). None of the fraud allegations are related to the contract at issue in these appeals or the MK 124 (tr. 1/104, 108).
- 32. Mr. Karlson specifically testified about one of PSI's other contracts, referred to as the M583 contract. He testified that by 2006 PSI had a nonfunctioning

⁴ Condition codes are assigned to ammunition items to denote their availability for use. Condition Code A denotes full unrestricted use. Condition Code B denotes some type of restriction, i.e. "for training purposes only" or only for use in areas above a certain temperature. (Tr. 3/154)

⁵ According to the testimony of Mr. Dean Cowart, a DCMA QAR at PSI, there was no official lead QAR position (tr. 3/220).

working relationship with the QARs with respect to the M583 contract. Mr. Karlson described a meeting with the deputy program manager for the items produced under the M583 contract and testified that as a result of that meeting the lead QAR was removed from PSI in 2006. (Tr. 1/79-80)

- 33. Mr. Karlson testified that the removed QAR was replaced by one of his subordinates, Mr. Dean Cowart (tr. 1/80). It appears that the removal of the lead QAR did not resolve the conflict between PSI and the QARs on the M583 contract. In fact, a government engineer assigned to PSI to work on the M583 contract by the deputy program manager eventually wrote a letter to the deputy commander of DCMA. He requested that Mr. Cowart be removed from the PSI contract "because he could not be objective because of an incident that had occurred before [the government engineer] had arrived." (Tr. 1/126) Mr. Cowart worked as a QAR at PSI from March 2004 to the summer of 2012 (tr. 3/203). Mr. Cowart was one of the QARs involved with witnessing the testing of the MK 124 (tr. 3/205-06).
- 34. All testimony describing incidents demonstrating the bad relationship between PSI and the QARs related to contracts other than the contract at issue in these appeals (tr. 1/108-09). However, Mr. Karlson testified that due to the actions and representations of the QARs "there was a black cloud over the company" (tr. 1/100). Mr. Karlson further testified that PSI only experienced problems on projects involving the QARs. He stated that "it was only where these QARs were involved that we had very significant constant problems that lasted for years and all of which coincided with the period of performance of [the contract at issue in these appeals]." (Tr. 1/82-3)

III. Contract Performance

35. PSI began producing lots of MK 124s in 2006. PSI's production is broken into four major stages called "interfixes." The change from one interfix to the next denotes either a major change in the manufacture of the MK 124 and/or a restart of production following a stop of work (tr. 2/23-24). During each interfix, PSI produced production lots to include no more than 10,000 signals (R4, tab 22 at 6, tab 157 at 3; tr. 4/52-53). Each production lot was assigned a number consisting of the number of the

⁶ Mr. Cowart disputes that he was a subordinate of the removed QAR (tr. 3/220).

interfix in which it was produced followed by the number of the individual lot (see, e.g., ex. A-5⁷). Accordingly, Lot 001-002 was the second lot produced during Interfix 1.8

A. Interfix I

- 36. PSI produced eleven lots during Interfix 1. The signals produced during this interfix utilized the 433L disk, the suggested source of supply indicated in Drawing 2114083. (Tr. 2/22-23; ex. A-5)
- 37. Lot 1-1 failed the LAT due to leakers and was rejected (R4, tab 60 at 5; ex. A-5).
- 38. Mr. Bowen testified that the leakers in Lot 1-1 occurred as a result of the failure of a PSI vendor to properly re-anneal the outer containers of the MK 124s, which created problems when a unit was crimped (tr. 3/173-74). As a result, leaking was observed at the crimps around the O-ring (tr. 3/132). Accordingly, the lot was rejected (R4, tab 60 at 5; ex. A-5). Once the issue was brought to PSI's attention, the vendor was able to correct the issue (tr. 3/173-74).
- 39. Lot 1-2 failed the LAT due to long display times from the smoke end of the MK 124 (tr. 3/141). During the low temperature function test 12 signals, out of the sample of 20 signals, produced smoke displays longer than the maximum smoke display time of 25 seconds (R4, tabs 51, 285 at 5; see finding 17). The longest smoke display time was 30.29 seconds (R4, tab 283 at 3). Additionally, 6 units, out of a sample of 20 units, produced smoke displays longer than the maximum display time of 19 seconds during the TV function test (R4, tab 283 at 1; see finding 17). Mr. Bowen testified that witnesses to the test agreed that even though display times were long, the display of smoke "was continuous, was robust, and was significant" (tr. 3/141). PSI ultimately submitted Request for Deviation (RFD) No. 30606-8476-D012 (RFD 12), dated 28 November 2006, asking to extend the acceptable display time criteria for Lot 1-2 to 31 seconds. RFD 12 was approved, and Lot 1-2 was accepted on deviation. (R4, tab 51)
 - 40. Lot 1-3 passed all inspections and was accepted by the government (ex. A-5).

⁸ For the purposes of this decision, we will remove extraneous zeroes from the lot numbering system; Lot 001-002 will be referred to as Lot 1-2.

⁷ During the hearing, the government objected to appellant's exhibit, marked as Exhibit A-5, stating that there were inaccuracies with some of the data presented. The document was admitted but the government was allowed the opportunity to question witnesses in order establish inaccuracies in the data. (Tr. 2/18-20) Any reference made to Exhibit A-5 refers to information that was either not disputed by the government or that the government did not show to be inaccurate.

- 41. On 19 January 2007, PSI submitted an LAT report to the contracting specialist indicating that Lot 1-4 failed the LAT due to long display times from the smoke end of the MK 124. Nineteen units from a sample size of 50 units produced smoke displays longer than the maximum display time of 19 seconds during the function test. (R4, tab 283 at 9) The longest display time was 22.03 seconds (R4, tab 283 at 12). The lot was accepted on deviation (ex. A-5).
- 42. On 24 January 2007, PSI submitted RFD No. 30606-8476-D013 (RFD 13). In Box 22, Description of Deviation/Waiver, it stated:

Present requirements: WS 13697N, Para. 3.5.1.1, Table I; Smoke Max Burn time for sealing function is 19 to 25 seconds. The intent is that a full smoke column will be viable during this time frame. To have slightly longer column (plume) of smoke will not have an effect on Form Fit or Function as long as the Minimum to Maximum Smoke column is meet [sic].

In Box 23, need for Deviation/Waiver, it stated:

We respectfully request, at no cost to the Government, a Deviation from the requirement maximum of 19 seconds to a maximum of 25 seconds for the smoke burn on this Contract W52P1J-04-C-0098 and all Mods.

By letter dated 5 February 2007, the government approved the request and agreed to incorporate the change into the contract. (R4, tab 55)

43. While Box 22 describes the sealing function specifically, it appears that the parties treated RFD 13 as having raised the maximum smoke display times for all function tests to 25 seconds throughout Interfixes 1, 2 and 3. Mr. Bowen testified that RFD 13 changed the maximum smoke display time to 25 seconds "irrespective of...the preconditioning environment" (tr. 3/78; see finding 26 n.3). The individual test data sheets for Lot 1-6 lists the maximum smoke display times for all tests as 25 seconds. It also lists the longest smoke display times for signals tested in each preconditioning environment. Across multiple tests, the longest smoke display times are longer than the maximum display times listed in the "Test Reference of Table I" at ¶ 3.5.1.1(d) of Specification 13697N but less than 25 seconds (R4, tab 283 at 24; see finding 17). All

⁹ The government describes the effect of RFD 13 in its brief stating that it "change[d] the maximum smoke display times listed in [Spec 13697N] to 25 seconds for the duration of the contract, regardless of preconditioning environment" (gov't br. ¶ 21).

are marked as conforming signals; there is no evidence that the government objected to these reportings (R4, tab 283 at 24). There is similar test data across the lots; signals showed smoke display times longer than their respective originally stated maximum display times but less than 25 seconds and were not marked as failures on the individual test data sheets (see, e.g., R4, tab 193 at 10, tab 282 at 51, tab 283 at 68). In some instances, a government representative's initials appear at the bottom of the individual test data sheets (see, e.g., R4, tab 282 at 51). However, the scope of the change implemented by the incorporation of RFD 13 into the contract became an issue during the performance of Interfix 4 (see findings 147-48).

- 44. In describing the purpose of the maximum smoke display time cap in the contract, Mr. Bowen testified that the cap is to ensure that the smoke expelled is robust and thick enough that it can be seen from a reconnaissance craft even if disbursed by wind. Mr. Bowen also testified that around 30 seconds had always been a working maximum smoke display time on accepting an extended display times. (Tr. 3/166) However, PSI personnel testified that throughout contract performance they were under the impression, as a result of comments from government personnel including Mr. Bowen, that signals burning a "little longer" were not a problem and may even be helpful to the signal user, provided the smoke display was consistent and robust (tr. 2/62-63, 3/9, 30).
- 45. Lot 1-5 passed all inspections and was accepted by the government (ex. A-5). There is no evidence in the record about the smoke display times of the MK 124 samples tested during Lot 1-5's LAT.
- 46. In March 2007, Lot 1-6 failed to meet the test requirements due to long smoke display times during low temperature function testing. The LAT report provides:

Twenty signals (S/N [serial number] 41-60) were tested and were not in conformance with the requirements.... The following defect was noted.

(a) A total of 15 signals had smoke display times greater than the 25 second maximum and failed to meet the requirement of [Specification 13697N] paragraph 3.5.1.1 with the application of [Deviation 30606-8476-D013 (RFD 13)]. [10] The failure is classified as a major (M103) defect,

The LAT report suggests that RFD 13 changed the maximum smoke display time for low temperature preconditioned samples. However, the Test Reference for Table I table as originally provided in Specification 13697N allowed a maximum smoke display time of 25 seconds for low temperature function

with an acceptance criterion of accept 2, reject 3 in accordance with [Spec 13697N] table I.

(R4, tab 283 at 23) The longest smoke display time was 33.2 seconds (R4, tab 283 at 24). PSI submitted RFD No. 30606-8476-D014 (RFD 14), dated 20 April 2007, requesting to extend the maximum display time to 34 seconds for Lot 1-6. The RFD was approved, and Lot 1-6 was accepted on deviation (R4, tab 56).

- 47. According to Mr. Bowen, Lot 1-7 was rejected due to tight trigger assemblies. The MK 124 is designed to be one hand operable. During testing of Lot 1-7, two signals were determined to be noncompliant because they could not be triggered by a thumb or a forefinger; the government classified this problem as a workmanship issue. After the initial failure, PSI performed a 100% screen on the lot to cull all tight trigger assemblies, reducing the quantity of Lot 1-7. The units that passed the screen were resubmitted for limited testing to establish that the cull had been successful and tight trigger assemblies had been removed from the lot. PSI then submitted a proposal to rework the trigger assemblies of the signals removed during the screening process, which the government approved. PSI performed the rework and submitted the reworked lot, designated Lot 1-7 Alpha (A); the term Alpha is used to indicate that the lot was previously submitted, reworked and then resubmitted. When a sample from Lot 1-7A was tested, a couple of trigger assemblies were still tight. Accordingly, PSI performed a second 100% screening and culling operation, after which Lot 1-7A was accepted. (Tr. 3/145-47)
- 48. Lot 1-8 was submitted and failed the LAT in June 2007 due to long smoke display times during low temperature function testing. Five units out of a sample of 20 units had smoke display times of greater than the 25 second maximum. The longest smoke display time was 26.61 seconds. PSI submitted RFD No. 30606-8476-D015 (RFD 15), dated 26 June 2007, requesting that the government accept Lot 1-8 with the five time failures. The government approved RFD 15 and Lot 1-8 was accepted on deviation. (R4, tab 57 at 3)
- 49. Lot 1-9 passed the LAT and was accepted by the government (ex. A-5). There is no evidence in the record about the smoke display times of the MK 124 samples tested during Lot 1-9's LAT.

testing (see finding 17). RFD 13 made no change to the maximum smoke display time for function tests performed on samples that had undergone low temperature preconditioning.

¹¹ From the beginning of contract performance, the maximum smoke display time for low temperature preconditioning function testing was 25 seconds (see findings 17, 46 n.10).

- 50. Mr. Terry Goodrich, a manufacturing engineer for appellant on the MK 124 contract in 2006, testified that PSI continued to experience problems with leakers throughout Interfix 1 (tr. 2/155). PSI implemented a process of in-house testing all manufactured signals for leaking prior to submitting a lot for the LAT, and during the in-house tests, it continued to discover leakers (tr. 2/155-56, 3/173).
- 51. Appellant alleges that the LATs for Lots 1-2 through 1-9 also found leakers during the sealing test. Mr. Goodrich testified that during Interfix 1, when a lot failed the sealing test, PSI performed a 100% screening to check for leaks. This screening was either observed by a QAR or Mr. Bowen or, if unobserved, following the screening, the government would pull a sample from the reworked lot and test again. (Tr. 2/157) Mr. Goodrich's testimony is the only evidence offered to support appellant's allegation that the sealing tests for Lots 1-2 through 1-9 revealed leakers. Mr. Bowen contradicted Mr. Goodrich's testimony; Mr. Bowen testified that no leakers were identified during the LATs for Lots 1-2 through 1-9 (tr. 3/149). Furthermore, there is no contemporaneous documentation in the record that indicates that Lots 1-2 through 1-9 failed the sealing test. Accordingly, we find that there is insufficient evidence of failures of the sealing test during the LATs for Lots 1-2 through Lot 1-9, and thus no need for the government to agree to PSI screening the lots for leakers with government witnesses present.
- 52. PSI submitted Lot 1-10 for the LAT. The LAT revealed multiple leakers during the sealing test. Concurrently there were long ignition times ¹² during the function test. PSI attempted to rescreen the lot to cull the leakers. (Tr. 3/150) There is no contemporaneous documentation in the record concerning this rescreening, and it is unclear whether the government approved the process. Regardless, neither party disputes that PSI performed a 100% screening of Lot 1-10 for leakers following the LAT but continued to find leakers when it internally screened the reworked lot. The government rejected Lot 1-10. (Tr. 2/158, 3/86, 149-51)
- 53. Following the failure of Lot 1-10, PSI stopped further production of Lot 1-11 and submitted the lot, as it was, for the LAT. Lot 1-11 failed the LAT due to leakers and was rejected by the government. (Tr. 2/158, 3/86, 149-51)
 - B. Transition from Interfix 1 to Interfix 2: The Disk Change
- 54. PSI became concerned that the root cause of the leaking defects was the 433L disk. At the time, PSI believed that the production of the 433L disk had changed and

¹² This is the time from when a signal is triggered to when smoke or flare displays (tr. 2/158; see finding 17).

that, as a result, the disks they were receiving were of a poorer quality and causing the leakers.¹³ (Tr. 3/86-87)

- 55. PSI began conducting engineering tests to look for an alternative sealing disk. PSI created three sample sets of 100 MK 124s. Each set was manufactured using a different sealing disk. One set was manufactured using the 433L disk, used during Interfix 1. The two alternative sealing disks were the 3M 363L High Temperature Aluminum Foil/ Glass Cloth Tape (363L disk) and the 3M 427 Aluminum Foil Tape. PSI then tested the samples in accordance with some of the LAT test procedures, including the sealing test, in the presence of an NSWC Crane engineering representative. (R4, tab 210 at 2; tr. 2/158-59) As a result of the testing, PSI determined that the 363L disk worked well (tr. 2/158).
- 56. The 363L disk has an adhesion strength of 67 ounces per inch width and a total thickness of 7.3 mils (R4, tab 210 at 3). In comparison, the 433L disk used to manufacture Interfix 1 has an adhesion strength of 38 ounces per inch width and a total thickness of 3.5 mils (ex. G-1).
- 57. On 5 November 2007, PSI submitted RFD No. 30606-8476-D017 (RFD 17). In Box 22, Description of Deviation/Waiver, it stated:

We respectfully request, at no cost to the Government, Variance of Average Material thickness from 3.4 Mil. to 7.3 Mil. Further, confirm that Average characteristics noted in table (other than thickness) are minimums, not nominal.

In Box 23, Need for Deviation/Waiver, it stated:

Recommended product (3M 433L) is no longer compliant with drawing requirements. Alternate product(s) have been found that meet/exceed the noted thickness consensus interpretation of characteristics are as minimums (except thickness) product data sheets and report from Engineering/Qualification Testing performed by PSI and witnessed by NSWC Crane are attached.

(R4, tab 210 at 1) Attached to RFD 17 was a brief summary of the engineering testing PSI performed on potential replacement sealing disk candidates. It provides that "testing was performed...to assure capability of new material to be used on all future

¹³ Although it was believed by PSI that 3M's production facility had relocated to Mexico (tr. 3/86-87), this was later determined to be untrue (R4, tab 289 at 1).

manufacture of [the MK 124 under the contract]." PSI reported the testing results as follows:

All Units functioned within limits except for the two (2) noted below.

Note: we had one (1) misfire due to ice on the striker assembly (Cold test) and one short candle burn on the Smoke side. Both were utilizing the 427 Aluminum Foil Tape material.

Neither failure was a result of the Sealing Disk Material.

(R4, tab 210 at 2)

58. By letter dated 26 November 2007, the government approved RFD 17 and agreed to incorporate the change into the contract. The letter stated:

Enclosed are RFDs 30606-8476-D016, PAN R07Y7009 entitled: requirement to dry heat pad in vacuum oven; and RFD 30606-4876-D017 [RFD 17], PAN R07Y7010 entitled: change in material for foil tap [sic], drawing 211366 [sic]. These RFDs are forwarded for incorporation into the contract in accordance with the Changes Clause subject to changing the classification to "Minor" in blocks 6, and 14c to correct typographical errors.

An authorized representative of your company is required to sign a copy of the letter and return it to the Procuring contracting Officer (PCO)^[14] as acknowledgement and acceptance of the above terms and changes as described above. Signature waives any and all claims for equitable adjustment attributed to such facts and circumstances resulting from the changes. These changes are effective on the date the following is executed....

¹⁴ The CO is often referred to as the procuring contracting officer (PCO) in contract documents and in the parties' correspondence (see, e.g., R4, tab 85 at 2).

PSI's engineer manager signed the letter on 29 November 2007. (R4, tab 62 at 1)

- 59. The parties bilaterally executed Modification No. P00021 (Modification P00021) in January 2008. The modification revised the delivery schedule and incorporated two RFDs, including RFD 17, into the contract. It provided in part:
 - 1. THE PURPOSE OF THIS MODIFICATION IS TO DO THE FOLLOWING:

••••

B. INCORPORATE RFDS 30606-8476-D016 PAN R07Y7009 REQUIRING TO DRY HEAT PAD IN VACUUM OVEN, AND RFD 30606-8476-D017 [RFD 17] PAN R07Y7010 TO CHANGE MATERIAL FOR FOIL TAPE UNDER DRAWING 2113661 AT NO ADDITIONAL COST TO EITHER PARTY. SEE HQ, ASC LETTER DATED 26 NOVEMBER 2007 INCORPORATED AT ATTACHMENT 043.

The modification included attachments and enclosures. The modification included an approved copy of RFD 17 as Enclosure 2, and it included the signed copy of the 26 November 2007 letter as Attachment 043. (R4, tab 63 at 3, 25-26, 28)

C. Interfix 2

- 60. PSI began a second round of production using the 363L disk in the manufacture of the MK 124. The second round of production was called Interfix 2. (Tr. 3/152-53, ex. A-5)
- 61. PSI submitted Lot 2-1 for the LAT in January 2008 (R4, tab 282 at 44). PSI submitted Lot 2-2 for the LAT at the same time (id. at 32). The LAT reports for Lot 2-1 and Lot 2-2 are both dated 17 April 2008 (id. at 32, 44).
- 62. Both lots failed the temperature and humidity (T&H) test. During Lot 2-1's LAT 10 units from a sample size of 20 units failed the T&H function test. During Lot 2-2's LAT, 13 units from a sample of 20 units failed the T&H function test. The cover letters of both LAT reports addressed the T&H failure in the same way. The letters stated:

Sealing Disk failed to withstand Temperature & Humidity Testing.

This constitutes a Lot rejection as specified in WS 13697N, Table I Inspection Plan, "A" plan with paragraphs 4.5.2.4 and 4.5.1.1.

(R4, tab 282 at 32-33, 44-45)

- 63. PSI's Lot 2-1 LAT report also indicated that "Two (2) minors were noted; Igniter assemblies separated from the can, post function" (R4, tab 282 at 45). The attached individual test data shows a total three notations indicating that the trigger assembly separated from the MK 124 canister. On the TV test data sheet there is a notation reading "TRIG ASSM OFF." There are two "Trip Assembly came off" notations on the outside function test data sheet. (Id. at 46-47)
- 64. The Lot 2-2 LAT report similarly indicated that "One (1) minors [sic] was noted; Igniter assemblies separated from the can, post function, when the expended unit was tossed and hit the ground" (R4, tab 282 at 32). The attached individual test data shows a total two notations recording that the trigger assembly separated from the MK 124 canister. There is one notation on the TV test data sheet and one notation on the individual test data sheet for the outside function test. (Id. at 34-35)
- 65. The parties dispute the timing of the trigger assembly separations observed during the LATs for Lots 2-1 and 2-2. The government alleges that all separations occurred post function, after the flare end of the MK 124 had stopped burning. Appellant alleges there was one separation during function observed in each lot's LAT. Three individuals testified about their recollection of the separations observed during the testing of Lots 2-1 and 2-2.
- 66. The responsibilities of PSI's lead test technician, Mr. Darryl Suber, during the MK 124 LATs included observing the tests and recording the results. Government personnel, particularly Mr. Bowen, directed Mr. Suber to make notes on the test data sheets, like the trigger assembly notes. (Tr. 3/6-7, 13, 17) Mr. Suber testified that he remembered at least one flare burning for approximately 15 seconds and then a trigger fell off, after which the flare continued to burn. He also testified that he witnessed two separations during an LAT; one separation occurred after functioning, and the other occurred during functioning. Mr. Suber was not certain but to the best of his recollection, he believes that these instances occurred during the LAT for Lot 2-2. (Tr. 3/6-7, 13-15)
- 67. Mr. Goodrich recalled one trigger assembly falling off "at the end of the burning on the flare side" during the LAT for Lot 2-1 (tr. 2/160).
- 68. Mr. Bowen also witnessed trigger assemblies falling off during the LATs for Lots 2-1 and 2-2. He testified that all separations occurred post function.

- (Tr. 3/111-12) He also testified that if the separations had occurred during function, the samples would have been marked as failures (tr. 3/117). Additionally, Mr. Bowen testified that having witnessed the separations in testing Lots 2-1 and 2-2, he initiated a conversation with PSI's engineering manager during which he informed PSI that separation did constitute a failure but that the government's enforcement of the specification concerning separation was limited by the language of the specification that prohibited only separation during function. During this conversation it was determined that PSI would make a notation of the separation and identify it as a minor defect. (Tr. 3/111-12)
- 69. We find that there is no evidence that the government was aware of a separation during functioning of an MK 124 during the LATs for Lots 2-1 and 2-2. PSI included no such detail in the LAT reports submitted to the contract specialist. Furthermore, Mr. Bowen's testimony shows that he was concerned about the separations post function but felt that the language of the specification did not prohibit a separation after functioning (tr. 3/111-12).
 - 70. Both lots were accepted on deviation under Condition Code B (ex. A-5).
- 71. Lot 2-3 failed the LAT in February 2008 due to short burn times (tr. 3/153; ex. A-5). During manufacture of Lot 2-3, PSI lost its calibration control on the press operation used to manufacture the flare. As a result the flares produced lacked the appropriate quality and density of material. This resulted in multiple flares burning for less than the required minimum burn time. (Tr. 3/153) The government ultimately accepted the lot under Condition Code B as part of a settlement agreement between the parties (R4, tab 78 at 3).
- 72. Following Lot 2-3's failure, on 6 May 2008, the government issued a stop work order (R4, tab 78 at 3; tr. 2/15, 3/177, 4/17). During the suspension of work under the stop work order, PSI laid off the majority of its workforce hired for the contract (tr. 2/16-17).
- 73. The government lifted the stop work order by letter dated 13 January 2009 (R4, tab 70 at 3). PSI hired a new work force at the restart of production under the contract (tr. 2/16-17).

D. Interfix 3

- 74. PSI restarted production under Interfix 3 (tr. 2/15). Production of the MK 124s under Interfix 3 utilized the 363L disk (ex. A-5).
- 75. Due to the halt in production under the stop work order, the first lot produced under Interfix 3, Lot 3-1, was tested in accordance with FAT procedures

rather than LAT procedures (tr. 3/155). Lot 3-1 passed the FAT and was accepted by the government (tr. 2/15, 3/155).

76. PSI submitted Lot 3-2 for the LAT on 15 September 2009. The lot failed due to the observation of one leaker during the sealing test. PSI's LAT report states:

One unit s/n 110 of the Static Ambient group failed the Seal Integrity test. This failure is criteria for lot failure. It is hereby recommended that the entire lot be subjected to Water Submersion testing with 100% DCMA QAR witnessing.

(R4, tab 193 at 7)

77. There are two notations on the Lot 3-2 LAT report's individual test data sheet for the high temperature and low temperature function tests that state "Housing fell off" (R4, tab 193 at 17). This indicates a trigger assembly separation (tr. 3/117). There is no indication of the timing of the separation. The two samples with this notation were not marked as failures. (R4, tab 193 at 17)

78. Lot 3-2 was initially rejected by the government (tr. 3/155). PSI submitted RFD No. 30606-8476-D023 (RFD 23) to the government requesting that it be allowed to perform a 100% leak test screening of the lot to be witnessed by DCMA (R4, tab 73 at 3; tr. 3/155-56). RFD 23 proposed: "Following this screening, if the leak test passes, this lot to be considered as passing." Box 23, Need for Deviation/Waiver of the RFD, states: "This lot was rejected due to failure of one unit of the Lot Acceptance Test Sample, s/n 110. This failure was caused by a missing O-ring." PSI described the Corrective Action taken in Box 24 providing "[r]epr[i]mand of responsible employees. Simplification and reorganization of operation instruction sheets for clarity, to assist operators in proper execution at assembly." (R4, tab 73 at 3) PSI proposed a process for the leak testing; it mirrors the sealing test procedures described by Specification 13697N (id. at 5-6).

¹⁵ It appears that by no later than Lot 3-2, all testing, with the exception of T&H testing, was performed at PSI's test lab in Georgia. On 27 August 2007, the parties bilaterally modified the contract to move Plan B testing from the government testing facility to PSI's facility (R4, tab 60 at 3). At some point, Plan A and FAT testing were also moved to PSI's facility. The record does not include a contract modification changing the location for these tests. However, the LAT and FAT reports all state that testing was performed at PSI (see, e.g., R4, tabs 282 at 2, 131). The T&H test continued to be performed at the government's facility after the other tests changed location (R4, tab 282 at 8).

- 79. The government approved PSI's request in exchange for additional units of the MK 124, and the change was incorporated into contract (R4, tab 73 at 1, tab 77 at 3).
- 80. Due to the need to coordinate the schedules of PSI and the government witnesses for the tests, it was approximately two months before PSI could begin the proposed leak screening. Screening took approximately 80 hours. (Tr. 3/156) After PSI's screening, Lot 3-2 was accepted (ex. A-5).

1. Lot 3-3

81. During the function test of Lot 3-3's LAT, one signal exhibited a critical defect of the separation requirement (R4, tab 194; tr. 2/16, 3/118; see finding 17). PSI's quality assurance and technical director described the incident in an email to the CO. He stated:

During routine testing operations, at about 10:30 am, one unit, local s/n 21 failed to properly function. Upon initiation of the Smoke end of this signal, the contents of the smoke candle disintegrated, resulting in ejection of the candle and most of the internal components. Parts & candle debris were scattered over approximately a 14 ft. distance down range. The outer tube with associated attached parts was located approximately 141 feet downrange. No injuries or property damage occurred.

(R4, tab 194 at 1) Four additional signals in the sample group exhibited separation during function but with less extreme displays (R4, tab 208 at 2).

- 82. Following the failure, Lot 3-3 was rejected, and DCMA issued CAR No. 9295-0098 (R4, tab 208). PSI suspended production activities in accordance with the Critical Characteristics clause of the contract (R4, tab 194 at 1, tab 208 at 2; tr. 3/119; see finding 7).
- 83. PSI conducted a failure analysis and determined the sole root cause was poor crimping of the MK 124 on the flare end (R4, tab 209 at 1; tr. 2/16). PSI determined that its new employees, those hired when MK 124 production was restarted for Interfix 3, were short cycling the press leading to improper crimps (tr. 2/16-17).
- 84. PSI submitted a response, dated 3 December 2009, to DCMA's CAR. In its response, PSI requested "permission to rework Lot 003-003 by recrimping 100% to bring the rounds within engineering specification" and concurrently requested "permission from the PCO to restart production on the next lot." PSI proposed the

following as part of the corrective actions to be taken by PSI to prevent recurrence of the root cause of the deficiency: "An operation sheet is being created that requires 100% torque of the units to verify proper crimp [as part of PSI's production], rather than performing the current sample torque." (R4, tab 209 at 1) PSI also altered the crimp machine to automatically cycle to prevent the short cycling of the press (R4, tab 195 at 6; tr. 2/34).

- 85. PSI submitted rework procedures for Lot 3-3 for government approval. The CO conditionally approved the rework procedures by letter dated 8 February 2010. (R4, tab 195 at 2-3)
- 86. Sometime after the testing of Interfix 3, the government approached PSI about working with it to develop an alternate sealing disk for the MK 124, and the government engaged PSI in a separate joint contract with SAIC to find and qualify an alternative sealing process and/or sealing material for the MK 124 (R4, tab 200 at 5; tr. 2/30, 3/134-36). Mr. Hirst testified that the primary purpose of the project was "to get a sealing disk in place that would pass all the contract test requirements consistently" (tr. 2/30).

2. Lot 3-3A

- 87. After receiving the government's approval, PSI began to rework Lot 3-3; the rework procedures focused primarily on recrimping the MK 124 in order to solve the separation issue (R4, tab 195; tr. 2/34). The QARs observed the recrimping of the MK 124s (tr. 2/34).
- 88. As part of the rework process, PSI performed a torque test on all the recrimped signals. This torque test was performed internally by PSI during the manufacturing process before the lot was resubmitted for a modified LAT. During the torque test, a test technician would hold the signal by the middle of the outer container and then attach a torque wrench to the trigger assembly (tr. 3/107). The torque wrench was set to 20 inch pounds, in accordance with Note 10 of Drawing 3139733 (tr. 3/107; see finding 28). Once attached, the wrench would rotate until 20 inch pounds was achieved at which point the torque wrench would click free (tr. 3/107).
- 89. The torque test was not one of the tests required by Specification 13697N (R4, tab 22; tr. 3/179-80). Rather it appears to have been a test performed by PSI as part of its own quality inspections (R4, tab 195 at 7; tr. 3/96, 4/11). Mr. Hirst testified that the purpose of the torque test was to check that the requirement at Note 10 of

Drawing 3139733¹⁶ was met (tr. 2/133-34). During the rework, PSI performed the torque test on all MK 124s produced as a means to check that the MK 124s were crimped properly (R4, tab 195 at 3-7; tr. 2/35). It appears that prior to the LAT for Lot 3-3, PSI performed the torque test on a limited sample of MK 124s produced during a manufacturing cycle. After Lot 3-3's failure, PSI changed this internal inspection process to require torque testing on all MK 124s. (See finding 84)

- 90. The rework procedures, which included torque testing MK 124s after they were crimped before they moved to the next manufacturing operation, were conditionally approved by the government (R4, tab 195 at 2, 7). Mr. Cowart testified that he was aware of the torque test prior to the rework of Lot 3-3. He testified that he had witnessed the torque test while performing his sampling duties, wherein he randomly witnessed lot production and pulled MK 124s for testing. (Tr. 3/207-08) However, there is no evidence that the torque test was reviewed or approved by the government at any time prior to Lot 3-3's rework. The record does not include a proposed or approved quality management plan or AIE submission, ¹⁷ and no government witness could remember the torque test being submitted for approval (see tr. 3/179-80, 4/11).
- 91. Following the rework, the lot was resubmitted as Lot 3-3A for a modified LAT (R4, tab 196). Mr. Bowen testified that during the modified LAT, PSI chose to perform, at their own risk, a torque test on all LAT units prior to the function test (tr. 3/106). Similarly, Mr. Cowart testified that PSI chose to perform a torque test on the test rounds in the low and high temperature sample groups, after they were conditioned hot and cold. He testified that he had a conversation with PSI's lead test technician during which the technician informed Mr. Cowart that PSI had decided to do a torque test on the sample rounds. In response, Mr. Cowart stated that the test would be an unauthorized test and at the risk of the contractor. (Tr. 3/211) Furthermore, Mr. Hirst testified that due to his concerns about another separation occurring, "each and every one of those rounds was torque tested in the presence of the Government personnel watching the test...to demonstrate that...these samples were crimped correctly" (tr. 2/35).
- 92. Based upon the findings at ¶¶ 88-91, we find that prior to the modified LAT for Lot 3-3A, PSI performed the torque test during lot production as part of its crimping procedures, prior to submissions of lots for either an LAT or FAT. The criteria that trigger assemblies be capable of withstanding a torque of 20 inch-pounds

¹⁶ Note 10 states: "After crimping, [both igniters] shall not be damaged and shall be capable of withstanding a torque of 20 inch-pounds min with [the outer container] without relative movement" (see finding 28).

¹⁷ The contract defines the AIE as "Acceptance Inspection Equipment" (R4, tab 1 at 23, ¶E-4). The government did direct PSI to update its AIE after the torque test procedure was revised during Interfix 4 (R4, tab 137; see findings 114-15).

was in the contract (see finding 28), but there was no test specified in the contract to check for compliance with the requirement (see generally R4, tab 22). The first time a torque test was performed during a LAT was during the modified LAT for Lot 3-3A. PSI proposed running the torque test in front of government witnesses to demonstrate that the MK 124s met the torque requirements in the contract. At that time, it was PSI's decision to perform the torque test, and the government did not authorize performance of the torque test during the modified LAT.

93. Mr. Cowart testified about the risk of performing PSI's torque test on low and high temperature preconditioned MK 124s. He stated:

[W]hen you have, especially cold rounds and you have a rubber seal [the O-ring] against a metal container and they're frozen....[and] you try to torque it, you break the seal between that rubber and the metal casing.

(Tr. 3/211)

- 94. During the modified LAT there were two nonconformities. The government rejected the lot, and DCMA issued CAR No. 10075-0098, dated 29 March 2010. The CAR describes the nonconformities as follows:
 - 1. On Tuesday, March 23, 2010, during the Lot Acceptance Test (LAT), the following nonconformance was noted; MK 124 round Serial number 66 failed to pass the leak test; Accept on 0, Reject on 1
 - 2. On Wednesday, March 25 2010, during the Lot Acceptance Test (LAT), the following round number 24 had a flare igniter assembly come off during function. This is a critical and the same non-conformance that was found during the initial testing of this lot. See CAR number 9295-0098.

(R4, tab 197 at 2) The Critical Characteristics clause was again implemented and the government instructed PSI to perform a root cause analysis and required corrective action be taken by PSI (id.; see finding 7).

95. PSI responded to the CAR by letter dated 9 April 2010. The response stated in pertinent part:

Issue 1

The leak test failure was due to a defective o-ring. PSI has issued a Supplier Corrective Action Request accordingly. The supplier's corrective action will be made available to the government upon receipt.

Issue 2

Lot 003-003 was recrimped 100% to meet drawing requirements, with oversight from DCMA. Before function testing of the LAT sample, the extra prove-out of torquing the rounds 100% to verify proper crimp was performed in the presence of Kevin Bowen, Dean Cowart, and Jimmie Berryman.^[18]

Unit # 24 was tested smoke-end first. The smoke end functioned properly. The unit was then reconditioned (hot) for flare testing. The flare housing worked itself off as the flare end burned. Otherwise, the unit functioned properly.

PSI proved before the testing commenced that the crimp conformed to drawing requirements. The units were built to meet all requirements, yet the flare housing still detached itself from the outer container. This defect is a design flaw, and out of PSI's control. PSI's manufacturing process did not create this defect, nor does PSI have ownership of the product's design to correct the issue.

PSI also disputed the CAR's description of the separation deficiency. It stated:

Note: DCMA's description of the deficiency likens this failure to the one experienced on this lot pre-rework (ref CAR 9295-0098.) The two are <u>not</u> the same. The cause of the original failure is understood to be bad crimps dispersed in the lot....

No bad crimps were discovered after the rework. All LAT samples were field verified for secure crimps by the government representatives with the torque tool prior to firing. All units functioned properly during the retest LAT.

¹⁸ The government disputes that Jimmie Berryman was present (R4, tab 197 at 6).

Past test history indicates that the flare igniter housing working itself free is a recurring problem. It has been witnessed during testing in previous LATs, and was not cause for lot rejection.

PSI will submit a request for waiver for this lot.

(R4, tab 197 at 3-4)

96. DCMA disputed some of PSI responses as they related to the separation issue. In a letter dated 12 April 2010, DCMA stated, in relevant part:

DCMA's response: DCMA did not approve or agree to the additional retorquing test after conditioning. DCMA did agreed [sic] with the Navy Representative, Kevin Bowen, that the additional test was not in the specification but would allowed [sic] PSI to continue at risk.

In response to PSI allegations that the separation issue was a design flaw and had been witnessed in previous LATs, DCMA responded:

PSI has built approximately 12 previous lots prior to this critical non-conformity. In **NO OTHER LOT** did this non-conformity occur during LAT testing. It [sic] no other lot was this non-conformity brought to our attention or reported.

(R4, tab 197 at 5-7)

97. The government disputes the efficacy of PSI's torque test to establish that PSI properly crimped the MK 124s. Mr. Bowen testified that PSI's torque test would be able to show a gross failure of the contract requirement that there be no "relative movement" between the trigger assembly and the outer container. However, he asserts that, as there was no datum collected to verify the absence of movement, the test would not reveal actual compliance with the relative movement requirement. (Tr. 3/107-08) He further testified that his understanding of the no relative movement requirement was that "[w]hen you torque the ignition assembly with twenty inch pounds it shall not...have relative movement. Movement here being relative of the trigger assembly relative to the outer container." He emphasized that no movement was an absolute requirement. (Tr. 3/96)

- 98. Based upon our findings in ¶¶ 88-97, there is insufficient proof that the torque testing performed by PSI during the modified LAT proved proper crimps.
- 99. PSI submitted RFD No. 8476-D024R01 (RFD 24R1), dated 13 April 2010, for Lot 3-3A. In Box 23, Need for Deviation/Waiver, it stated:

Separation of the Igniter housing during burning did not interfere with the proper ignition and burning of the flare, therefore should not be considered a defect.

Leakage due to a defective 'O'-ring is a rare occurrence and cannot be prevented by the contractor.

(R4, tab 198 at 3)

- 100. The government disapproved RFD 24R1, by letter dated 13 May 2010, stating that "[t]he basis for this disapproval is that this lot failed a critical requirement (Trigger Assembly shall not separate during function) after being reworked to specifically correct this flaw" (R4, tab 198 at 2).
- 101. PSI continued to assert that Lot 3-3A was a conforming lot and request that the government accept the lot (R4, tab 199). PSI maintained this position throughout the rest of the contract's performance (see, e.g., R4, tab 82).
- 102. By letter dated 11 November 2010, PSI submitted an additional response to CAR No. 10075-0098 concerning Issue 2. The letter reiterates many of PSI's statements made in the 9 April 2010 response. It also included the following additional statements:

PSI has determined the root cause of the discrepancy is due to the Sealing Disk. The thickness of the disk creates too much back-pressure, which caused the flare igniter assembly to work free regardless of crimp.

PSI holds a MK124 contract with Science Applications International Corp (SAIC) to assist the government in correcting technical issues with the design of the MK124 round, specifically to develop a solution for the problems and test failures associated with MK124 sealing disks. This contract is to produce prototypes of government provided design or subcontractor developed design of

MK124's using alternate production methods to modify and/or replace the component Sealing Disk. Please see attached test reports for further information. (Three test reports total.)

PSI's root cause correction for the housing coming loose will be to use an alternate Sealing Disk once Engineering testing is complete, and new disks have been qualified. Currently, two disks are being evaluated for use on the contract. A thinner disk will create less pressure build-up, and will minimize the chance of the defect recurring.

(R4, tab 197 at 10-11)

103. DCMA rejected PSI's second response to the CAR because PSI did "not address the documented root cause and corrective action." DCMA rejected the response in part because PSI had not submitted any test reports to support its conclusion that "too much back pressure" was the root cause of the separation issue. DCMA's rejection also noted:

This CAR is an opportunity to document Root Cause and analysis of a detected and reported non-conformity. PSI's contract with SAIC came after this non-conformity occurred and is not part of the corrective action at this time.

The government instructed PSI to resubmit its corrective actions by no later than 8 December 2010. (R4, tab 200 at 6)

E. Restart of Production

- 104. Beginning in late 2010, there appears to have been a desire by both parties to restart production under the contract as quickly as possible due to certain Air Force funds attached to contract line item numbers (CLINs) under the contract that were set to expire on 30 September 2011 (R4, tab 175; tr. 2/45).
- 105. Around the same time, Mr. Ryan Pierce was assigned as the new CO to the contract (tr. 4/22-23).
- 106. By letter dated 13 January 2011, CO Pierce outlined the steps PSI needed to complete in order to receive approval to restart production. The steps included (1) performance of a root cause investigation into the test failures; (2) submission of a report on the investigation including recommended corrective actions; and (3)

submission of a request to restart production. The letter also informed PSI that "due to the production lapse of greater than 90 days, the Government is requiring a full First Article Test (FAT)" and required PSI to submit an FAT plan and schedule for review. (R4, tab 81)

107. PSI submitted a third response to CAR No. 10075-0098 on 28 January 2011. PSI's response reiterated many of PSI's statements submitted in earlier responses to CAR No. 10075-0098. It also stated:

PSI's root cause correction for the igniter assembly separation is to use an alternate Sealing Disk 3M 433 foil with higher adhesion strength. Based on a series of Engineering tests, this disk has demonstrated a lower bursting pressure with little or no igniter assembly movement after functioning. Use of a thinner disk will create less pressure build-up, and will minimize the chance of the defect recurring. The adhesion strength will be certified to 40 oz/in to assure a strong bond of the disk to the primer holder assembly.

(R4, tab 82 at 2-3)

108. PSI submitted a series of documents in conjunction with its 28 January 2011 response including a Foil Seal Evaluation Test Report, a Root Cause and Corrective Action Report, and a Sealing Disk Engineering Test Report (R4, tabs 82, 83). PSI also submitted a request to restart production and provided a FAT plan and schedule (R4, tab 82 at 17, 22). PSI conditioned its request to restart production upon the government's approval of the 3M 433 High Temperature Aluminum Foil Tape (433 disk) (R4, tab 82 at 22). The proposed FAT plan and schedule is as follows:

Detail inspections of piece parts – 4 weeks Build FAT samples – 2 weeks FAT test – 1 week Ship T&H samples to Crane – 1 week Conduct T&H test – 2 weeks

Total time is 10 weeks after government approval to proceed.

(R4, tab 82 at 17)

109. The 433 disk is similar to the 433L disk used during production of Interfix 1. The primary differences between the two items is the backing material used

on the foil tape and the adhesion strength. (Tr. 3/90-91, 93-94) The 433 disk has an adhesion strength of 40 ounces per inch width – compared to the 38 ounces per inch width of the 433L disk (ex. G-1). The 433 disk also has a different backing material that allows for validation of the adhesion strength (tr. 3/93-94). Otherwise the two disks have virtually identical characteristics (tr. 3/94; ex. G-1).

- 110. On 7 February 2011, DCMA rejected PSI's 28 January 2011 response to the CAR. DCMA found that "PSI did not effectively show how the back pressure was measured [during its testing] and did not show any other investigation of other possibilities" of causes of the trigger assembly separation defect. DCMA determined: "Based upon the data submitted root cause in this instance is not conclusive. The test data as presented appears to show more of a quality deficiency with the production line than a sealing disc issue." (R4, tab 84 at 2)
- 111. By letter dated 11 February 2011, the CO approved PSI's request to proceed with the FAT. The approval letter stated:

This FAT will serve as objective evidence of effective implementation of necessary corrective actions for causes associated with previous critical defect failures. PSI will need to implement all necessary corrective actions before producing FAT samples. FAT samples shall be produced utilizing processes, equipment, and suppliers that will be used to manufacture scheduled CLIN deliveries. PSI will have successfully met all FAT requirements once the FAT report has been approved by the PCO.

- (R4, tab 85 at 2) However, the letter also stated that it did not change the government's position relative to CAR No. 10075-0098 as communicated by DCMA's 7 February 2011 letter (id. at 3).
- 112. The CO's letter also requested an updated/tentative production and delivery schedule for the CLINs remaining on the contract and PSI's agreement to allow a government team on site at PSI to review implementation of corrective actions and to plan for the FAT (R4, tab 85 at 3).
- 113. PSI submitted an updated delivery schedule on 25 February 2011 setting forth the following schedule:

FAT Complete	<u>Date</u> 22-Apr-11	Quantity
Lot 1 Lot 2	17-Jun-11 29-Jul-11	5,400 8,000
Lot 3 – Priority CLINs complete	9-Sep-11	8,000
Lot 4 Lot 5	21-Oct-11 12-Dec-11	8,000 10,000
Lot 6	20-Jan-12	9,876
Accept 003-003A	20-Jan-12	8,537
[Total]		57,813

(R4, tab 88)

114. On 1-2 March 2011, the government conducted an on-site visit at PSI's facilities. The agenda for the meeting included the following items: discuss FAT planning and scheduling; discuss/review previous product failures; and review corrective action implementation efforts to address identified root causes (R4, tab 89). During the visit, the parties changed the date of the FAT to 29 April 2011 (R4, tab 91). The parties also discussed how they would examine the MK 124's compliance with Drawing 3139733's Major characteristic requiring that all trigger assemblies (igniters) be capable of withstanding a torque of 20 inch-pounds minimum "without relative movement" (tr. 2/47; see finding 28). The government proposed drawing a line on the MK 124 canister during PSI's torque test in order to have a visual aid to examine for relative movement. Other than drawing the line, the torque test procedures were not changed. PSI expressed concerns with the line drawing and ran torque tests and function tests in the presence of the government personnel present in order to examine the efficacy of the proposed line drawing. (R4, tab 99; tr. 2/47-50, 3/108, 4/42)

115. By letter dated 17 March 2011, the CO addressed the torque test requirements, stating:

[T]he government does not agree with PSI's assessment that drawing a witness mark on the igniter housing and case prior to torque testing is a "new requirement". Testing on March 1 and 2, 2011 at your facility demonstrated that a visual inspection is not sufficient to see if there is relative movement between the two parts, a requirement that has been in the Technical Data Package (TDP) from the beginning of the contract.... The witness

mark is simply an aid to ensure that this long standing requirement is being met, not a completely new requirement. Therefore, this method is still a requirement during the FAT to ensure that the units meet the requirements of the TDP. To ensure the requirement is met, the Government recommends utilizing an ultra-fine permanent marker to draw lines perpendicular to the crimped seal across both the smoke and flare ends of the signal, as performed during the testing at PSI on 1-2 March 2011. Each line should be drawn using a straight edge, be continuous from the igniter housing to the outer case, and be of sufficient length to visually indicate movement relative to each other.

In response to your request to recrimp any torque failures, it is the Government's position that it is a variation from normal production procedures. Since the FAT samples are supposed to be representative of the production units, your request to recrimp any torque failures is hereby disapproved.

(R4, tab 99)

PSI draw a line on the MK 124s during PSI's torque test. Mr. Cowart testified that the government did not have a problem with the PSI torque test process to assess the crimping process until the trigger assemblies started separating (tr. 4/10). CO Pierce testified that he issued the 17 March 2011 letter to communicate that the visual inspection performed during the torque tests up through the production of Lot 3-3A "was not sufficient to validate that there was no relative movement between the two parts" (tr. 4/30). Mr. Bowen testified that the government determined that the line drawing method, in conjunction with the torque wrench procedure, was the best method to test the relative movement requirement without having to resort to costly and/or destructive testing (tr. 3/95-96, 183-84). Mr. Hirst testified that PSI considered the line drawing to be a new test because the government stated that any movement of the line during the torque test would be considered a failure (tr. 2/49).

117. On 14 March 2011, PSI provided its proposed delivery schedule itemized by CLINs (R4, tab 96). On 17 March 2011, the government accepted PSI's schedule change for the completion of FAT units by 8 April 2011 (R4, tab 99).

118. Bilateral Modification No. P00034 (Modification P00034) was executed by the parties on 25 March 2011. The modification revised the delivery schedule and established the FAT schedule. It provided:

Detail inspection of piece parts-4weeks. Complete by 03/22/2011.

Build FAT samples-3 weeks. Complete by 04/08/2011.

Send T+H sample to Crane- Complete by 04/08/2011.

FAT test-1 week. Complete by 04/15/2011.

FAT Report- Submitted by 04/20/2011.

Conduct T&H test-Complete by 05/06/2011.

(R4, tab 105 at 3)

- 119. Prior to final execution of Modification P00034, the parties negotiated the language of Paragraph B of the modification. As originally proposed by the government, Paragraph B stated:
 - B. Revise the delivery schedule for CLINs 0001AQ...as delineated in the following section B. As consideration for revising the delivery schedule, only NON-Air Force CLINs will be accepted under Condition Code: B status. All remaining Air Force CLINs Must be Condition Code: A material. Both parties agree that any Air Force CLINs/Quantities that have not been produced/invoiced by 09 Sep 2011 will be removed from the contract at no cost to the Government.

(R4, tab 100 at 3) PSI specifically requested the removal of Paragraph B (id. at 1). PSI also proposed revising the third sentence to provide: "In the event that Pyrotechnic Specialties Inc. cannot produce/invoice Condition Code A units for the Air Force by 09 Sept. 2011 they will be removed from the contract with no financial obligation to PSI for unliquidated progress payments" (R4, tab 101). As executed, Paragraph B of Modification P00034 did not contain such language. It provided, "Revise the delivery schedule for CLINs 001AQ...as delineated in the following section B," but did not address either party's financial obligation relating to items not produced or invoiced as Condition Code A by 9 September 2011. (R4, tab 105 at 3)

F. Interfix 4

120. PSI began production of Interfix 4 using the 433 disk in the manufacture of the MK 124 (tr. 2/51, 3/90).

121. PSI submitted 185 signals on 5 April 2011 as a first article sample lot, Lot 4A-1. The FAT was conducted from 12 April 2011 through 14 April 2011. PSI submitted the FAT report on 21 April 2011. (R4, tab 129 at 4) The report provided:

No failures beyond the allowed quantities have been experienced at this point, [19] with the exception of the following:

- Forty two (42) units failed initial [Sealing] Test on the Flare End.
- Twenty one (21) units failed [Sealing] Test on the Flare End after being subjected to the Transportation Vibration Test.
- Three (3) units failed [Sealing] Test after being subjected to the 5 Foot Drop Test.

(R4, tab 129 at 9)

- 122. In its email accompanying the FAT Report, PSI asserted the root cause of the leakers was that the parts were crimped at 900 psi. The contractor indicated that it had conducted limited testing in front of government witnesses and ascertained that the leakers could be stopped by reducing the crimp pressure to the 700-750 psi range. The contractor proposed that the government permit PSI to submit an additional test sample of 59 signals, to include the 7 signals successfully tested on 12 April 2012. Under the proposal, the additional sample would be tested for "crimp integrity, leakage and separation after function." (R4, tab 129 at 1)
- 123. Following directions from the CO to submit its proposal in writing and provide additional detail about why additional testing was the best option, PSI submitted a written request to perform retesting by letter dated 27 April 2011 (R4, tabs 131-32). The request provided the following additional information:

We are certain that the root cause of the leaking is that the parts were crimped at 900 psi. Extreme care was taken to produce units with impeccable crimp integrity. This was achieved. All samples passed the torque test.

¹⁹ The 40 foot drop test and the T&H test had not been performed at the time PSI produced the FAT report (R4, tab 129 at 9).

It was later found that crimping the parts at 900 psi places excessive pressure on the primer holder on the flare side of the MK 124. This can cause the primer holder to slightly bow and create a leak path.

....

...PSI proposes an additional test be conducted of 59 samples. These units will be crimped at 700-750 psi. We request that the 7 samples successfully tested on 4/12/11 be counted toward the total test sample. We will build the balance -52 units and test for crimp integrity, leakage and separation after function.

PSI believes that a successful outcome of this test coupled with the LAT results will clearly prove that all previous manufacturing issues related to this contract have been addressed and that we are ready to resume production.

(R4, tab 132) PSI proposed scheduling the proposed modified FAT for 16 May 2011 (id.).

124. Crimping at 900 psi was an anomaly for PSI. Mr. Karlson testified:

[PSI was] so wrought up about this new requirement of relative movement in this line [drawing a line during the torque test], that we decided we were going to increase the crimp pressure. Normally those rounds were crimped under a pressure of 700 to 750 psi. These rounds were purposely crimped at a higher crimp pressure, 900 psi.

(Tr. 2/51)

125. On 4 May 2011, CO Pierce advised PSI that it had failed the FAT for Lot 4A-1 due to the leakers. However, the CO also approved PSI's request to submit another sample for a modified FAT, subject to a number of conditions and changes to PSI's proposed modified FAT. The CO required PSI to produce sixty samples for the modified FAT; PSI was not permitted to use the seven signals tested on 12 April 2011 as part of the sample lot. The CO also designated the tests to be performed during the modified FAT and defined the sample size for each test; the CO identified more tests to be performed than PSI had initially proposed. The CO provided test procedures and stated that "[t]here will be no re-crimping permitted. If a unit fails the torque test requirements, that data will be documented as a failure." The CO also required that

"the Government witness 100% of the assembly and testing of this modified FAT." (R4, tab 133 at 4)

- 126. By letter dated 9 May 2011, PSI provided a schedule for the FAT. It proposed testing from 31 May 2011 through 2 June 2011. PSI also stated the production schedule would be impacted by the additional FAT; the first lot of signals would be completed by 22 July 2011. (R4, tab 135)
- 127. PSI objected to the CO's prohibition on re-crimping during the modified FAT. It stated: "Our approved production process allows for re-crimping units that fail this test. It is our belief that the FAT should mirror the production process" and requested that the CO reconsider. (R4, tab 135)
- 128. The only approved production process in the record is the conditionally approved procedures for the rework of Lot 3-3, dated 18 January 2010. It provides for the following steps to be completed after the crimps are visually inspected:
 - 11. Transfer each tray of completed assemblies to the PSI-P-0877 inspection station and perform the torque test on each completed assembly. Notify supervision immediately of any failure to pass this inspection.

 The crimp ring must be replaced immediately and the part re-crimped, prior to continuing to the next operation.
- (R4, tab 195 at 6-7) It is unclear from the record whether the CO's disallowance of recrimping precluded the recrimping described at Step 11 of PSI crimping process during lot production or if it only disallowed recrimping if an MK 124 failed a torque test performed during the modified FAT, what PSI referred to as the crimp integrity testing.
- 129. The CO disapproved, by letter dated 12 May 2011, PSI's request to recrimp units for the modified FAT. The CO further required that a reference line be drawn on the MK 124 during torque testing to identify any relative movement; this is the same procedure that was followed during the initial FAT for Interfix 4. (R4, tab 137) PSI agreed to conduct the modified FAT according to the CO's instructions (R4, tab 138).
- 130. Due to a delay in the delivery of the sealing disks to PSI, the modified FAT was postponed to 13 June 2011. When PSI notified the government of the delay, it also indicated that the production schedule would be impacted; the delivery date for the first production lot was changed to 5 August 2011. (R4, tab 139)

131. On 19 May 2011, the government requested that PSI provide a new schedule for the balance of deliverables under the contract (R4, tab 140 at 1). By memorandum dated 23 May 2011, the CO further provided:

PSI still owes the Government a proposed production schedule revision as a result of the FAT delay. As you are aware, funding for 21,112 units will expire for disbursement on 30 September 2011.... [U]sing the lead-times from the original schedule adjusted to account for receiving the modified FAT report on 22 June, it appears as though only 13,370 units will be delivered by the END of September 2011. Expiring CLINs must be invoiced by 9 September 2011.... Any production invoiced after 9 September 2011 MUST be applied to non-expiring CLINs as there will be insufficient time to process payment against expiring CLINs after this date.

Request PSI provide an updated, more realistic schedule based upon your current component inventory and updated FAT schedule.

(R4, tab 141)

132. On 26 May 2011, PSI proposed a new delivery schedule.

FAT Complete	<u>Date</u> 16-Jun-11	Quantity
Lot 1	5-Aug-11	5,400
Lot 2	2-Sep-11	8,000
Lot 3	21-Oct-11	6,000
Lot 4	13-Jan-12	10,000
Lot 5	2-Mar-12	10,000
Lot 6	13-Apr-12	9,876
Accept 003-003A	2-Sep-11	8,537
[Total]		57,813

(R4, tab 142) By letter dated 9 June 2011, CO Pierce stated that he would not accept Lot 3-3A unless PSI could provide adequate documentation that the critical defects were removed from the lot or submitted a plan to remove the defects. The letter also

required submission of a delivery schedule, broken down by CLIN, not including Lot 3-3A. (R4, tab 144 at 2, 4)

133. On 14 June 2011, PSI informed the government of the need to change the delivery schedule because PSI could not meet the total requirement for the 2 September 2011 deliveries due to the long lead time required to manufacture outer containers. PSI proposed the following delivery schedule:

8/5/11 - 5,400 9/2/11 - 13,600 1/13/12 - 10,000 3/2/12 - 10,000 4/13/12 - 8,925

(R4, tab 146 at 1)

134. PSI conducted the modified FAT from 14 June 2011 to 16 June 2011. The 60 signals submitted for the modified FAT were designated Lot 4A-2. (R4, tab 147 at 3) Lot 4A-2 failed the modified FAT (R4, tab 151). The FAT report noted the following failures:

Function, M101 TV and High Temp. – Two Smoke End units [out of a sample of 20 units] did not function (Dud) in Transportation Vibration, reject on 2 failures. Two Smoke End units [out of a sample of 20 units] did not function in the High Temp Function group, reject on 2 failures.

<u>Delay M101 Cold</u> – Ten Smoke End Low Temperature units [out of a sample of 20 units] failed the 3 second Delay time, reject on 3 failures

<u>DISPLAY Time M103 Cold</u> – Nine Low Temperature units [out of a sample of 20 units] exceeded the 25 second maximum Display time, reject on 3 failures.

The longest smoke display time was 28 seconds. (R4, tab 147 at 6, 15-16)

135. PSI addressed the failures and asserted that the cause of all failures was the age of the ignition disks. PSI proposed replacing the ignition disks with new materials and running limited testing to show that the age of the ignition disks caused the failures during the FAT. PSI also proposed that "production of the first lot in the

delivery schedule commence[] immediately after it has been proven that the age of the ignition disks caused the failures." (R4, tab 149)

- 136. DCMA issued CAR No. 30606-20110014 on 23 June 2011 and requested a response by 7 July 2011 (R4, tab 150).
 - 137. CO Pierce issued a cure notice on 29 June 2011. It stated, in part:

You are notified that the Government considers your recent failure to pass consecutive First Article Tests to be a condition that is endangering performance of the contract. Therefore, unless the condition is cured within ten (10) days after receipt of this notice, the Government may terminate for default under the terms and conditions of clause 52.249-8, Default (Fixed-Price Supply and Service), of the contract. You are hereby requested to advise Ryan Pierce, Contracting Officer...as to how and when the problem will be cured. The response must outline a detailed plan of action for successful contract performance and completion, to include PSI's proposed delivery schedule for remaining/undelivered contract CLINs.

(R4, tab 152)

138. PSI responded to the cure notice on 11 July 2011. PSI reiterated that the age of the ignition disks caused the FAT failures. It also provided a summary of the results of testing that it had performed using new ignition disks. PSI reported:

The no function Dud problem has been cured by using new ignition disks. Remaining old ignition disks in storage will be scrapped.

The delay and display time issue with the smoke end at Cold Temperature remains to be solved. The smoke candles used in the Modified FAT and PSI testing were made on May 16, 2011. The smoke candles that successfully performed at the initial FAT in April, 2011 were produced on February 8, 2011. The May 16, 2011 candles are bad and will be removed from inventory.

(R4, tab 156 at 2-3)

139. PSI's response also detailed its plans to conduct further testing and included an action plan for contract completion. It stated:

Further testing will be conducted this week to determine the integrity of the smoke candles in inventory. The effect of more thorough and vigorous brushing of the bore of the smoke candle will be evaluated. It is expected that the cure of the smoke delay and display problem at cold temperature to be in place by July 15, 2011.

PSI will remain in production and start assembling Lot 1 the week of July 15, 2011.

ACTION PLAN FOR CONTRACT COMPLETION

• • • •

The Air Force CLINs will be completed by the September 2, 2011 requirement. Inventories of candles and subassemblies have been built ahead. The quantity required will be manufactured with an experienced crew of 10 employees.

PSI will recruit, hire and train additional employees over the next three months to meet the manpower requirements of the remaining part of the schedule.... Each employee will have to meet a qualification standard of job proficiency before working on the production line.

All suppliers are able [sic] deliver raw materials to meet the requirements of the schedule provided below.

SCHEDULE

Lot 1 - 5,400 - Complete 8/5/11 Lot 2 - 17,128 - Complete 9/2/11 Lot 3 - 10,000 - Complete 1/13/12 Lot 4 - 10,000 - Complete 3/2/12 Lot 5 - 5,397 - Complete 4/13/12

(R4, tab 156 at 3-4)

140. The CO requested, by letter dated 13 July 2011, additional information from PSI concerning its plan to scrap old ignition disk and how PSI would identify the bad candles. The government also raised concerns about PSI's proposed delivery schedule, particularly the size of Lot 2.²⁰ The letter also provided:

Should the Government accept PSI's proposed schedule, Lot 1 shall be tested via a combined FAT/LAT. This will entail testing in accordance with FAT requirements, less the 40' Drop test.

(R4, tab 157 at 2-3)

141. On the same day, CO Pierce was copied on an email from a product quality manager (PQM) involved in the contract to his boss, Ms. Miner. The email was sent in response to Ms. Miner's inquiry about whether it was important for her to attend an integrated product team (IPT)²¹ meeting concerning the MK 124. (R4, tab 290; tr. 4/116) In his response, the PQM stated:

From the QA [quality assurance] perspective our recommendation is for the IPT to take necessary steps to terminate our contract with PSI. We will support the IPT and PCO in any direction necessary to protect Government rights in that process. To that effect we have been told that accepting PSI latest response and moving forward will give us the strongest case if the LAT scheduled for the first week of August fails.

If PSI happens to pass an LAT, the test requirements are stringent enough to assess the quality of each lot.

The PQM also noted that there was "no time for additional testing not connected to production." (R4, tab 290) There is no indication in the record that CO Pierce ever responded to the PQM's email.

²⁰ The proposed size of Lot 2 was 17,128 signals (R4, tab 156 at 4). Specification 13697N states that the maximum allowable size of a production lot is 10,000 signals (see findings 22, 35).

An integrated product team (IPT) is a team of various government representatives from different functional areas that can be formed in relation to a particular government program. The team, if formed, will meet to discuss contract performance issues relating to that program. The MK 124 program had an IPT. (Tr. 4/24-25)

142. PSI provided supplemental clarifications and a new proposed schedule on 14 July 2011. The government agreed to PSI's revised schedule via email on 18 July 2011. (R4, tab 159 at 1-2, 5) The agreed upon schedule is as follows:

<u>Production</u> Accept				
	Quantity	Complete	LAT Date	Date
Lot 1	5,400	8/5/2011	8/9/11-	8/17/2011
			8/11/2011	
Lot 2	9,416	8/19/2011	8/23/11-	8/31/2011
			8/25/2011	
Lot 3	7,712	9/2/2011	9/6/11-	9/14/2011
	•		9/8/2011	
Lot 4	10,000	1/13/2012	1/1 7 /12-	1/25/2012
			1/19/2012	
Lot 5	10,000	3/2/2012	3/6/12-	3/14/2012
			3/8/2012	
Lot 6	5,397	4/13/2012	4/10/12-	4/18/2012
	-		4/12/2012	

(Id. at 5) PSI provided a breakdown of the schedule by CLIN on 18 July 2011 (R4, tab 162).

- 143. The CO approved PSI's restart of production of the MK 124 under the contract by letter dated 19 July 2011 (R4, tab 163).
- 144. The parties bilaterally executed Modification No. PT0035, effective 25 July 2011 (R4, tab 165 at 1). The modification accepted PSI's responses to the cure notice. It also revised the delivery schedule. The incorporated schedule was the schedule proposed by PSI on 14 July 2011 broken down by CLIN. (R4, tab 165 at 3-12; see finding 142) The modification also provided instructions for the FAT/LAT combination test. It provided:

THE GOVERNMENT AGREES TO A FAT/LAT COMBINATION FOR LOT 1 WHICH IS SCHEDULED TO BE DELIVERED 17 AUGUST 2011 UNDER CLIN 0003AA. SAMPLING REQUIREMENTS FOR THE COMBINED FAT/LAT WILL BE IN ACCORDANCE WITH WS-13697N REQUIREMENTS, MINUS THE 40 FOOT DROP TEST REQUIREMENT.

(R4, tab 165 at 3)

145. The delivery dates established by Modification No. PT0035 were in effect when the contract was later terminated.

1. Lot 4-1

- 146. The first lot produced following the restart of production was designated Lot 4-1.²² The lot underwent the FAT/LAT test during the week of 8 August 2011. (R4, tabs 167-68) Lot 4-1 failed the FAT/LAT due to long display times from the smoke end of the MK 124. Seven out of the sample of 30 signals produced displays longer than the maximum display time of 25 seconds during low temperature function testing. (R4, tabs 170, 284 at 7) The longest smoke display time was 30.40 seconds (R4, tab 284 at 11).
- 147. PSI submitted RFD No. 30606-8476-D025 (RFD 25) on 25 August 2011 requesting to extend the maximum smoke display time to 30 seconds for Lot 4-1 for low temperature testing (R4, tab 170 at 2). CO Pierce required PSI to update the RFD to reflect that four units failed the TV function test due to long smoke display times. Via email on 17 August 2011 the CO stated:

[PSI] did not address the failures in the Transportation and Vibration (T&V) units. 4 units failed for exceeding the maximum burn time of 19 seconds as required by paragraph 4.5.2.3 in WS 13697N. The accept/reject criteria is accept on 3/reject on 4.

I believe PSI assumes that the older RFD (RO7U7055) [RFD 13] pertains to the T&V portion of the testing. RFD RO7U055 only pertains to the Sealing Function (paragraph 4.5.2.7).... It does not change the requirements for any T&V times.

(Id. at 1; see finding 17) According to the individual test data sheets, the longest smoke display time during the TV function test was 23.20 seconds (R4, tab 284 at 14). The CO instructed PSI as to how to revise the RFD, including providing guidance as to the language to include in the RFD (R4, tab 170 at 1).

148. CO Pierce's 17 August 2011 email marks a change in the government's interpretation of RFD 13 and the extent to which it altered the test reference table at

²² In some documents it is designated as Lot 4A-1, and in some documents it is referred to as Lot 4-1 (R4, tabs 168, 170). One of the FAT sample lots was also designated Lot 4A-1 (finding 121). We will refer to the lot submitted for testing in August 2011 as Lot 4-1.

¶ 3.5.1.1 of Specification 13697N (see finding 17). During Interfixes 1, 2 and 3, the parties mutually treated RFD 13 as changing the maximum smoke display times for all signals, regardless of preconditioning environment, to 25 seconds (see finding 43). The practical effect of this interpretation was to change the last column of the test reference table at ¶ 3.5.1.1 to read:

TEST REFERENCE OF TABLE I	FLARE	(SEC)	SMOKE	(SEC)
	Min	Max	Min	Max
Five Ft Drop (4.5.2.1)	16	23	12	25
Transportation Vibration (4.5.2.3)	16	23	12	25
Temperature and Humidity (4.5.2.4)	16	23	12	25
High Temperature (4.5.2.5)	16	23	11	25
Low Temperature (4.5.2.6)	16	23	15	25
Sealing Function (4.5.2.7)	16	23	12	25

(See findings 17, 43) Beginning with CO Pierce's email, the government treated the effect of RFD 13 on the last column of the test reference table at \P 3.5.1.1 to be as follows:

TEST REFERENCE OF TABLE I	FLARE	(SEC)	SMOKE	(SEC)
	Min	Max	Min	Max
Five Ft Drop (4.5.2.1)	16	23	12	19
Transportation Vibration (4.5.2.3)	16	23	12	19
Temperature and Humidity (4.5.2.4)	16	23	12	22
High Temperature (4.5.2.5)	16	23	11	18
Low Temperature (4.5.2.6)	16	23	15	25
Sealing Function (4.5.2.7)	16	23	12	25

During Interfix 4 testing, the QARs required PSI to mark signals not meeting the maximum smoke display time requirements of Specification 13697N, adjusted as indicated above, as failures (tr. 2/80-81, 3/26). The QARs and CO also required any RFDs submitted for consideration to list the maximum smoke display times in accordance with the times listed in Specification 13697N, with the exception of the sealing function which the government understood to be 25 seconds (R4, tab 170; tr. 2/80-81, 3/26-27).

- 149. PSI revised RFD 25 in accordance with the CO's guidance and resubmitted it to the CO (R4, tabs 170, 177 at 4-5). By letter dated 25 August 2011, the CO approved the revised RFD (R4, tab 177 at 2). Lot 4-1 was accepted on deviation (ex. A-5).
- 150. On 19 August 2011, PSI proposed a revised delivery schedule. It proposed reducing the size of Lot 2 by approximately 4,000 signals and producing

only 4,985 signals for the LAT scheduled for 23 August 2011. The schedule proposed increasing the number of signals produced for Lots 3 and 6 to make up for the reduction in the size of Lot 2. (R4, tab 172) PSI later pushed the test schedule back for Lot 2; PSI requested the LAT be performed from 30 August 2011 through 1 September 2011 (R4, tab 174).

- 151. By letter dated 24 August 2011, CO Pierce stated that "[t]he Government is amenable to modifying the current contractual schedule, subject to the following terms and conditions, which will be memorialized in a modification to PSI's referenced contract." In discussing the government's conditions, the CO noted that under the revised schedule, 2,150 signals were designated to be completed after the date the funds backing the signals would expire. In order to modify the schedule, the CO required PSI to agree to "hold the Government harmless from any costs related to any work done and/or preparations made for the terminated portion of the contract.... In other words, the 2,150 each signals will be terminated for convenience at no cost to the Government." (R4, tab 175)
- 152. On 29 August 2011, PSI proposed a second revised delivery schedule (R4, tab 179). It proposed reducing the size of Lots 3 and 6 and postponed the LAT for Lot 3 until 13 September 2011 (id. at 3). The proposed schedule resulted in a shortfall of 5,015 signals. The proposal stated: "It is my understanding that the 5,015 rounds will be Terminated for Convenience from the contract." (Id. at 2) PSI later clarified that it understood that if the parties modified the schedule any termination for convenience would be at no cost to the government (R4, tab 180²³).
- 153. While discussed, the contract was never modified to incorporate either of PSI's proposed revised delivery schedules (tr. 4/74). CO Pierce testified that the contract was never modified to include a revised delivery schedule nor was it changed to incorporate an agreement to terminate the contract for convenience at no cost to the government because subsequently "there was a Lot failure that placed the Contract in delinquent status which essentially made this conversation kind of overcome by events" (tr. 4/123-24). He testified that his offer to terminate the contract for convenience at no cost to the government was based on the assumption that PSI would continue to produce acceptable lots (tr. 4/70).

2. Lot 4-2

154. PSI submitted Lot 4-2 for the LAT on 29 August 2011 (R4, tab 180 at 3). The LAT tests were performed at PSI's facilities in Byron, Georgia (id. at 3; see also

²³ Tab 180 as originally provided in the government's Rule 4 file included subtabs a, b and c. The subtabs were ordered removed during the hearing (tr. 4/76).

finding 76 n.15). Discussed below are the defective signals reported in PSI's LAT report, dated 6 September 2011.²⁴

155. Only signal number 40, from a sample size of 135 signals, failed the sealing test (R4, tab 180 at 6). The acceptance criteria was accept on 0 reject on 1 (finding 24). Mr. Hirst testified that after signal number 40 failed the sealing test, PSI decided to continue to test the sample for "informational purposes." According to Mr. Hirst's testimony, the government witnessed the "informational tests" performed on signal number 40. (Tr. 2/143) According to the LAT report, signal number 40 was designated as part of the 5-foot drop test sample group (R4, tab 180 at 6, 15). After signal number 40 was subjected to the 5-foot drop test, it passed the subsequent sealing test (id. at 6). We find that it was PSI's decision to continue testing signal number 40.

156. One signal, sample number 109, from a sample size of 20 signals, failed the sealing test following the TV test "due to a hole in the sealing disc on the Flare End" (R4, tab 180 at 6). According to Mr. Hirst's testimony, this defect was caused by mishandling during testing rather than a manufacturing defect. Mr. Hirst testified that "we [PSI] made an error in how we tested it." PSI's test technicians failed to resecure the end caps on the MK 124 before the TV test, which caused a sealing disk to tear during the test. (Tr. 2/144-45) Mr. Cowart sent an email, dated 2 September 2011, to CO Pierce and other government personnel about the testing of this lot. It stated, in relevant part:

Several disparities discussed, PSI left test area with round serial #109 to take pictures. "Product presented to the government for acceptance is the property of the government and under our control." We lost control of that one round for a short time when the round left for the photography session. PSI inadvertently repeated the horizontal drop test twice. PSI removed the TV rounds

²⁴ The LAT report does not discuss the results of the modified torque test, with the government-proposed line drawing methodology.

²⁵ It is unclear from the record whether signal number 40 could have been replaced by a different sample signal for subsequent testing after it failed the sealing test. The Board notes that the sample lot pulled for the LAT totaled 135 signals; however, according to Specification 13697N's Table 1, only 115 signals are required for the tests performed subsequent to the sealing test under testing Plan A. This leaves 20 signals within Lot 4-2's sample lot potentially available to serve as a replacement for signal number 40. (R4, tab 180 at 6; finding 24) The government granted a request to replace test samples during Lot 4-1's FAT/LAT (R4, tab 168).

from the cans without government oversight and they also removed the TV soaker rounds from the soak after we instructed them not to without Government oversight.

(R4, tab 180 at 20)

- 157. Nineteen signals in a sample of 20 signals produced smoke displays times longer than 25 seconds during the low temperature function test (R4, tab 180 at 7). The longest display time was 41.48 seconds (*id.* at 11).
- 158. Three signals from a sample size of 20 signals were reported as producing long display times from the smoke end of the MK 124 during high temperature function testing. The reported display times of the nonconforming signals were 21.36 seconds, 19.05 seconds, and 18.31 seconds respectively. (R4, tab 180 at 7, 10)
- 159. Four signals, from a sample of five signals, displayed long smoke display times following the 5-foot drop test. The reported display times of the nonconforming signals were 21.53 seconds, 23.19 seconds, 27.50 seconds, and 21.15 seconds respectively. (R4, tab 180 at 7, 15)
- 160. The government rejected Lot 4-2 on 2 September 2011 based upon the lot's failure to meet the requirements of Specification 13697N. A QAR summarized the reasons for the government's rejection in an email, dated 2 September 2011, and noted that the "Lot failed all tests except the Sealing Function (Ambient function) portion." (R4, tab 180 at 20) The LAT Report and the QAR summary reported that Lot 4-2 failed the sealing test, the low temperature function test, the high temperature function test, the 5-foot drop function test, and the TV sealing test (id. at 6-7, 10-11, 15, 20).
- 161. PSI submitted RFD No. 30606-8476-D026 (RFD 26), dated 7 September 2011, requesting that the government accept Lot 4-2 on deviation. The request sought a deviation for all test samples that were a basis for the government's rejection of the lot. In Box 23, Need for Deviation/Waiver, it stated:
 - 1. Sample number 40 failed the initial sealing test, but it passed a subsequent informational sealing test, the sealing test after 5 Ft. Drop, and the functioning test after 5 Ft. Drop with a 17.06 second Display Time.
 - 2. During Low Temperature functioning, nineteen (19) Display Times were in excess of 25 seconds, but the average Display Time of all 20 signals was still less than 30 seconds.

- 3. During High Temperature Functioning, three (3) Display Times were in excess of 18 seconds, but 2 of the 3 were less than 20 seconds, and the average Display Time for all 20 signals was less than 16 seconds.
- 4. During 5 Ft. Drop functioning, four (4) Display Times were in excess of 19 seconds, but the average Display Time of all 5 samples was still less than 23 seconds.
- 5. During Sealing testing after Transportation Vibration, one (1) sample leaked due to a hole in the sealing disc on the Flare End. This also resulted in a dud on the Flare End during Functioning. This hole appeared to be due to improper handling of the signal.

In Box 24, Corrective Action Taken, it stated:

Since the majority of issues relate to excessive Display Times on the Smoke End, PSI is in the process of analyzing the Smoke Candle process and performing in-process Display Time testing in an effort to reduce the average Smoke End Display Time in all phases and to control the amount of variation in these times. PSI will also review the procedure for performing the Transportation Vibration Test to look for ways to minimize the possibility of damage occurring during handling/testing.

(R4, tab 180 at 25)

162. The CO issued a show cause notice, dated 9 September 2011, to PSI based upon its "fail[ure] to deliver acceptable product in accordance with the delivery schedule for [the contract]" requiring 9,416 MK 124s by 31 August 2011. The show cause notice informed PSI of its opportunity to present, in writing, any facts bearing upon the question of whether PSI's failure to timely perform arose out of causes beyond PSI's control and without fault or negligence on the part of the contractor. The response was due within 10 days after PSI's receipt of the notice. (R4, tab 181)

3. Lot 4-3

- 163. PSI submitted Lot 4-3 for the LAT on 12 September 2011 (R4, tab 284 at 22).²⁶ During the visual examination audit of the sample lot, the QAR found a critical defect with the alignment pin. The alignment pin of the igniter was not in the alignment pin hole of the smoke primer and holder, a failure of the requirement appearing at Note 13 of Drawing 3139733. (*Id.* at 24; see finding 28) The entire lot was subsequently screened for this defect and two additional defects were found (R4, tab 284 at 24).
- 164. Lot 4-3 also failed the sealing test. One leaker out of a sample of 135 signals was observed during the sealing test. (R4, tab 284 at 25)
- 165. The LAT report for Lot 4-3 also reported multiple long display times from the smoke end of the MK 124. PSI reported that 4 signals out of a sample of 20 signals produced displays longer than 19 seconds during the TV function test. The longest smoke display time was 24.20 seconds. (R4, tab 284 at 25-26) Ten out of a sample of 20 signals produced smoke displays longer than the maximum display time of 25 seconds during the low temperature function test. The longest smoke display time was 36.18 seconds. (Id. at 26)
 - 166. PSI recommended that Lot 4-3 be accepted on deviation.²⁷
- 167. DCMA issued CAR No. 30606-20110017 following Lot 4-3's failure of the LAT (R4, tab 182 at 2). PSI responded to the CAR to address the alignment pin defect. It stated that the root cause of the defect was that "[d]uring the crimping process, the igniter on the smoke end probably came out of the casing and was re-inserted into the casing with the alignment pin pressed into the adjacent vent hole instead of in the alignment pin hole of the smoke primer holder." PSI proposed changing its Production Work Instructions relating to the transportation of MK 124s to the crimping station and requiring visual inspection of the alignment pin during the torque test in order to prevent the defect from occurring in the future. (*Id.* at 2)

IV. Termination for Default of the Contract

168. PSI submitted a response, dated 14 September 2011, to the government's 9 September 2011 show cause letter (see finding 162). The contractor initially

²⁶ In accordance with the direction of the CO, PSI had produced Lot 4-3 concurrent with the testing of Lot 4-2 (R4, tab 157 at 3).

²⁷ The LAT report does not discuss the results of the modified torque test, with the government proposed line drawing methodology. Mr. Hirst testified that he remembered Lot 4-3 passing the relative movement test (tr. 2/78).

responded by communicating its surprise at the issuance of the show cause notice and at the rejection of Lot 4-2. PSI stated that it was led to believe by government personnel present during Lot 4-2's LAT that the lot would be accepted on deviation. It also indicated that it thought any shortfall of production of MK 124s designated for the Air Force would be terminated for convenience at no cost to the government. (R4, tab 183 at 3)

- 169. PSI's response also offered the following excuses for the delays of the delivery schedule.
 - 1. The root cause of delinquency on the contract is clearly due to the problem with the 3M 363 L sealing disk in the TDP....
 - 2. PSI successfully resolved the problem with the sealing disk [through a contract with SAIC]. The 3M 433L foil disk...was determined to be a suitable sealing disk. It was introduced into production when we restarted the contract in July 2011. The new disk has performed perfectly. The problem with separation has been solved....
 - 3. It took PSI until March of 2011 to complete work on qualifying the new disk. Therefore, the earliest PSI could have resumed work [on] the contract was April of this year. The government imposed a FAT requirement prior to production. Realistically, this created a window of opportunity to complete the Air Force CLINs of about 90 days. Therefore, the delay in the schedule is primarily attributable to the time it took to find a suitable replacement for the faulty 3M 363L sealing disk in the TDP.

PSI's response did not provide any excuses for the delays that occurred after the delivery schedule was modified in July 2011. (R4, tab 183 at 3-4)

- 170. In accordance with the requirements of FAR 49.402-5 and 49.402-3(f) and (g), CO Pierce drafted a memorandum, dated 21 September 2011, in support of his decision on termination. The memorandum outlines the facts leading to the decision to terminate the contract for default and discusses the various considerations taken into account by CO Pierce. (R4, tab 185)
- 171. Among other factors, the CO considered the rationale and excuses provided by PSI in response to the 9 September 2011 show cause notice and found

them to be "unavailing and insufficient to justify the contractor's failures under the contract" (R4, tab 185 at 5). The CO testified that he was not satisfied by PSI's excuses because these failed to focus on the "specific failures of the most recent lot" or to address the "delinquency towards the schedule that was most recently incorporated into the contract" (tr. 4/84).

- 172. At the time CO Pierce made his decision to terminate the contract, the government was developing a new version of the MK 124 (Mod 1) and anticipated awarding a contract for production of Mod 1 signals (R4, tab 185 at 6). The Mod 1 is the functional equivalent of the MK 124 produced by PSI under the contract. However, the candle composition of the Mod 1 was altered to reduce the presence of hazardous components such as red lead and xylene. (Tr. 3/198) According to CO Pierce's 21 September 2011 memorandum, it was uncertain whether any defaulted signals under PSI's contract could be added to the expected Mod 1 contract (R4, tab 185 at 6).
- 173. CO Pierce's 21 September 2011 memorandum addressed the following additional considerations:

c. The availability of the supplies from other sources.

At least one potential alternate supplier exists, but it is not clear at this time if they would be willing to produce the remaining quantity. There is a new version of the MK124 being developed (Mod 1); it is also possible that the remaining quantity of the current version (Mod 0) could be produced under the resultant Mod 1 contract.... There is no impact to Army or USCG readiness. The USAF remaining inventory should hold the Services over until Mod 1 contract deliveries commence in August 2013. USAF FMS orders are being denied at this time.

- e. The degree of essentiality of the contractor in the Government acquisition program and the effect of a termination for default upon the contractor's capability as a supplier under other contracts.
- (1) Termination for Default of this contract will adversely impact Pyrotechnic Specialties Inc.'s ability to compete on future acquisitions for the MK124 Signal.

- (2) Past Performance information, to include this termination action, will be entered into the CPARs program for use for evaluations in future Government contracts which may have some effect on Pyrotechnic Specialties' ability to compete on other programs they are involved in.
- (3) The PCO has considered the degree of essentiality of the Contractor in the Government acquisition program and does not find that this is a reason to forego termination of the current contract.

The memorandum ultimately concluded:

The Contracting Officer has determined that failure of Pyrotechnic Specialties to perform is NOT beyond the control and without the fault of [sic] negligence of Pyrotechnic Specialties Inc. Default is not as a result of defaults of subcontractors at any tier.

6. Therefore, based upon the above rationale, in conjunction with proper legal counsel, it is hereby determined to be in the best interest to the Government to terminate for Default Contract W52P1J-04-C-0098 for a quantity of 48,719 MK124 Signals for a total dollar amount of \$1,850,496.52.

(R4, tab 185 at 5-6)

- 174. The CO testified that he considered the input of the various services and then used his independent judgment in making the decision to terminate the contract for default (tr. 4/94).
- 175. The Navy did not agree with the CO's decision to terminate the contract. In the Navy's 22 September 2011 email voicing its disagreement, it further stated that "[i]f the PCO decides to pursue termination for default, the USN requests to make the option available to accept the two (2) most recent production lots at a negotiated cost as part of the termination settlement" (R4, tab 288). The CO testified that the other services involved with the contract concurred with the decision to terminate for default (tr. 4/94).

²⁸ The record does not reflect whether the government entered into such an arrangement.

176. On 26 September 2011, the CO issued a final decision providing a notification of termination for default to PSI. The CO determined that termination for default was proper due to the contractor's failure to deliver acceptable lots of the MK 124 in accordance with the contract's revised delivery schedule. (R4, tab 186) The determination states in pertinent part:

The Government has reviewed all the information and matters relevant to the Cure Notice and Show Cause letters and PSI's response to the same.... As a result of this review, it is the determination of the Contracting Officer that [the contract] is hereby terminated for default, pursuant to the Default Clause FAR 52.249-8 of the contract. The reasons therefore and further instructions...are set forth below.

...

f. The Government has reviewed the facts provided in PSI letter dated 14 September 2011 and have found that PSI did not provide a detailed response sufficient to demonstrate that your failure to perform arouse [sic] out of causes beyond your control and without fault or negligence on your part.

The following is the Government's response to the assertions in [PSI's response dated 14 September 2011]:

PSI's claim that the delinquency is "clearly" due to the sealing disk is unfounded/irrelevant, particularly as it pertains to the CURRENT contractual schedule, which was revised on 25 July 2011.... As PSI states...the sealing disk issue has apparently been successfully resolved since the new disk was introduced into production in July 2011.... If the sealing disk issue has been solved since July, then the most recent quality issues/failures cannot be blamed on a defective TDP.... The delinquency against the CURRENT schedule is due to the aforementioned contractor quality-related failures and not a defective TDP, regardless of what may have happened in the past under this contract.

PSI's numbered paragraph 3 discusses the window of opportunity to complete Air Force CLINs, which

implies that the Show Cause notice was issued primarily because PSI could not finish the expiring CLINs quickly enough, which is not the case. The Show Cause notice was issued due to quality workmanship/procedural problems exhibited by PSI on every single FAT/LAT conducted in recent history....

While it is true that Lot 1 was accepted on deviation for ONE long display time on the smoke end of the signal, that was the extent of the quality problems on that lot. Lot 2, however, encountered significantly more problems.... Further, during the quality production surveillance for Lot 3 LAT, a critical escape was discovered by the DCMA QAR. The smoke end striker did not line up with the primer holder.... Even after this issue was resolved the lot failed the test in two categories.... Multiple signals (on the smoke side) from the low temperature subgroup and the ambient subgroup exceeded the burn time requirement of 25 seconds which results in a failure to meet the LAT requirements.... Again, Lot I was accepted on RFD because there was only one long display time, whereas Lots 2 and 3 were rejected by DCMA due to several failure modes. There is no evidence that a Government employee with authority to bind the Government, i.e. a Contracting Officer, ever said that Lots 2 or 3 would be accepted....

II. Government Termination Decision

Based upon Pyrotechnic Specialties failure to show the Government reasonable cause not to terminate their contract for default, this letter is a Notice of Termination of [the contract] for the remaining quantity of 48,719 MK124 Signals for a total dollar amount of \$1,850,496.52. The Government exercises its right under contract clause 52.249-8 Default (Fixed-Priced Supply and Service) of the [contract].

(R4, tab 187 at 1-4) The letter further states that PSI's failure to deliver acceptable product in accordance with the delivery schedule violated the terms of the contract and thereby constituted default. It also advises PSI of its appeal rights. (*Id.* at 4-5) The government modified the contract by Modification No. P00036, effective 28 September 2011, to incorporate the contracting officer's determination to terminate for default and decrease the contract value (R4, tab 188 at 2).

177. On 29 September 2011, the CO issued a demand letter to PSI for repayment of unliquidated progress payments under the contract in the amount of \$1,433,315. The CO demanded repayment within 30 days.²⁹ (R4, tab 189)

V. ASBCA No. 57890

178. By letter dated 15 December 2011, PSI filed a timely notice of appeal from the contracting officer's determination to terminate the contract for default. The Board docketed the appeal as ASBCA No. 57890 on 16 December 2011.

VI. ASBCA No. 58335

179. By letter dated 10 January 2012, PSI submitted a certified claim to the CO demanding \$802,589 in compensation for the allegedly improper rejection of Lot 3-3A (R4, tab 204 at 6). The claim discussed PSI's experience with leakers during Interfix 1 and PSI's decision to change the sealing disk used to manufacture the MK 124 (R4, tab 204 at 2-3; see findings 52-57). It then discussed the separation issues experienced over the course of the contract. The claim provided, in pertinent part:

During the LATs for Lots 02-001, 02-002, 03-002,...several flare trigger assemblies dropped off. All of these occurrences were witnessed by Mr. Bowen and QAR, Dean Cowart and in each instance the defect was not considered to be a critical defect. All lots were accepted and shipped, without a waiver being required. This acceptance was given without waiver despite the fact that the trigger assembly separation was technically a defect under Specification WS 13697N, § 3.5.1.1.e. Therefore, as a result, the Government had established, through its continuing course of conduct, that the defect experienced during the above referenced LATs was not a critical defect and therefore cannot be the basis for rejection of a lot. However, this same defect became a major issue during the subsequent LAT of Lot 03-003A, which resulted in the wrongful rejection of the Lot.

The contractor filed a notice of appeal from the demand letter, which the Board docketed as ASBCA No. 58234 on 16 July 2012. Appellant submitted a request to withdraw the appeal in February 2013, and the Board dismissed ASBCA No. 58234 on 20 February 2013.

Prior to the scheduling of the retest of the corrected Lot (now Lot 03-003A) PSI was notified by Mr. Bowen that any type of trigger assembly separation would now be considered as a critical defect. This notification of the change in the acceptance criteria was made despite the fact that the relevant specification did not delineate that the type of separation experienced under Lots 02-001, 02-002 and 03-002 were to be considered as a critical defect....

....

[D]uring the retest a flare side trigger assembly dropped off only one of the samples. As a result, based upon the newly and improperly asserted inspection criterion, the Lot was again rejected. This defect was...identical to the defect that had occurred in Lots 02-001, 02-002, and 03-002, which had been accepted by the Government without waiver.

(R4, tab 204 at 4-6; see findings 87, 91, 94-96) PSI's claim asserted that rejection of the lot on the basis of the one separation was improper and provided cost data to support the quantum amount of its claim. The claim did not address the leaker observed during the sealing test. (R4, tab 204; see finding 94)

180. The CO issued a contracting officer's final decision (COFD), dated 25 July 2012, denying PSI's claim. The COFD provided the basis for the CO's denial of the claim. The CO disagreed with PSI's assertion that the separation issue experienced during the LAT for Lot 3-3A was the same as the separation issues experienced in the LATs for earlier accepted lots. The CO also asserted that the government had not utilized an unstated inspection criterion and disagreed with the allegation that the root cause of the separation issues was that the TDP was defective. The COFD further provided:

Table I – Inspection Plans...defines the Sealing test Acceptance Criteria as "Accept on 0, Reject on 1". One unit failed the stated sealing test requirements above; therefore, the Government had proper justification for rejecting Lot 003-003A.

(R4, tab 206 at 3)

181. PSI filed a timely notice of appeal from the 25 July 2012 COFD with the Board by letter dated 21 September 2012. The Board docketed the appeal as ASBCA No. 58335 and consolidated the appeal with ASBCA No. 57890 on 26 September 2012.

VII. ASBCA No. 59103

182. By letter dated 20 September 2013 PSI submitted an "Amended and/or Supplemental Claim" to the CO. PSI explained the reasoning for its submission of the amended/supplemental claim as follows:

On or about January 10, 201[2] PSI submitted a certified Claim for Equitable Adjustment.... In addition to making the general allegation that the lot was improperly rejected, it also included a detailed argument regarding one of the grounds for the Lot rejection, specifically the trigger assembly separation. Government Counsel advised that the original Claim failed to address the other ground for the rejection of the lot.... While PSI alleges that the original Claim was sufficient,...this amended/supplemental claim is being submitted for the purpose of providing additional justification for its original Claim.

(R4, tab 211 at 2) The claim sought the same equitable adjustment, in the amount of \$802,589 as a result of the allegedly improper rejection of Lot 3-3A, as was asserted in the 12 January 2012 claim (id. at 5). Certification for the claim was provided by separate correspondence dated 20 September 2013 (R4, tab 212).

- 183. The supplemental/amended claim asserted two bases for its reasoning that the rejection of Lot 3-3A based upon the one leaker was improper:
 - a) ...[T]he leakage was caused by a hole in the units o-ring, which was a manufacturing defect of the supplier and was not caused by any failure of PSI's processes.... Since the failure was beyond the control of PSI and resulted in a corrective action being taken that would preclude any other such failures, the rejection of this Lot was improper....
 - b) The Government, on two other occasions, had accepted lots under deviation when minimal leak failures occurred (Lot 01-007A and 03-002). On both these occasions, the lots were accepted on deviation after they were screened for additional defects.... [G]iven the fact that there was

only one leak failure, which was traced to a supplier manufacturing anomaly, the Government should have ordered the screening of the Lot to insure that there were no other failures, instead of using this isolated failure as grounds for the lot rejection.

(R4, tab 211 at 4-5)

184. The CO issued a COFD, dated 19 November 2013, denying PSI's amended/supplemental claim for equitable adjustment. The COFD asserted much of the same reasoning for denial of PSI's supplemental claim as was asserted in the 25 July 2012 COFD. It provided the following, in pertinent part, in response to the new arguments raised in PSI's supplemental/amended claim:

PSI alleges that this leak test failure was due to a defective o-ring. PSI further stated that a Supplier Corrective Action was issued and that the response would be made available to the Government upon receipt. To date, the Government has yet to receive any such documentation.... Regardless, as the Prime contractor, PSI is responsible for the quality of the final end product. For example, PSI Purchasing Procedure 7003, para 4.5 states, "upon receipt, PSI QA will perform a receiving inspection to ensure that the purchased product meets specified purchase requirements...." [I]t is evident that PSI did not follow its own written procedure....

In the amended claim, PSI also noted two prior lots that were purportedly accepted under deviation by the Government when leak failures had occurred (Lots 01-007A and 003-002). According to Government records, only one of these two lots, Lot 003-002, was accepted on deviation where leakers were concerned.... When the Government accepted Lot 003-002 after being 100% Leak Tested (with Government witnessing), part of the corrective action taken by PSI was to ensure 100% compliance with that requirement. It appears as though this corrective action was not properly implemented on the production floor.

Again, PSI alleges that the rejection of Lot 003-003A on the basis of the isolated leaker was improper. With an acceptance criterion of Accept on 0/Reject on 1,

all it takes is one sealing test failure to reject the lot. The Government is not obligated to "order" or allow 100% rescreening (a process which is estimated to take 80-100 hours of Government witness), as alleged by PSI. Further, the failure of Lot 03-003A was not limited to an "isolated" sealing test failure/leaker; as previously discussed, there was also a repeat critical defect on the very lot in question.

(R4, tab 213 at 4)

185. PSI filed a timely notice of appeal from the 19 November 2013 COFD with the Board by letter dated 20 December 2013. The Board docketed the appeal as ASBCA No. 59103 and consolidated the appeal with ASBCA Nos. 57890 and 58335 on 30 December 2013.

DECISION

PSI produced four interfixes of the MK 124s before the contract was terminated for default (findings 36, 60, 74, 120). During Interfix 1, PSI manufactured the MK 124s using the 433L sealing disk and produced eleven lots. Interfix 1 ended after the last two lots failed the LAT's due to leakers, which are defective units that failed the sealing test. (Findings 19, 36, 52-53) During Interfix 2, PSI manufactured the MK 124s using the 363L sealing disk and produced three lots. Interfix 2 ended after PSI lost calibration control on its press operation, which resulted in short burn times, and the government issued a stop work order. (Findings 60-61, 71-72) During Interfix 3, PSI manufactured the MK 124s using the 363L disk. PSI produced three lots during Interfix 3 with the last lot being reworked and resubmitted. Interfix 3 ended after the last lot, both as originally submitted and as reworked, had problems with trigger assemblies separating from the MK 124 canister, described as a separation defect. (Findings 74-76, 81, 91, 94) PSI addressed the separation defect by changing the sealing disk again (finding 107-08). During Interfix 4, PSI manufactured the MK 124s using the 433 sealing disk and produced two first article sample lots and three production lots (findings 120-21, 134, 146, 154, 163). All production lots during Interfix 4 experienced problems with long smoke display times (findings 146, 157, 159, 165). The last two production lots also reported sealing test failures, and the last production lot had alignment pins out of place (findings 155-56, 163-64).

I. ASBCA No. 57890

Following the failure of the last two lots in Interfix 4, the government terminated the contract for default (finding 176). Appellant filed a notice of appeal from the COFD, which the Board docketed as ASBCA No. 57890 (finding 178).

Appellant makes three arguments about why the government's termination for default is improper and should be converted to a termination for convenience. First, PSI argues that its default is excused due to the government's breach of the warranty of adequacy of its drawings and specifications. Second, appellant argues that the decision to terminate the contract for default was arbitrary and capricious. Finally, the contractor argues that the government breached the contract through its bad faith actions surrounding the administration and termination of the contract. (App. br. at 64-65) Before addressing appellant's arguments, we first consider whether the government has demonstrated a justification for the termination for default.

A. Standard of Review of a Termination for Default

Termination for default is a drastic sanction that should be imposed only for "good grounds and on solid evidence." J.D. Hedin Construction Co. v. United States, 408 F.2d 424, 431 (Ct. Cl. 1969). The government bears the burden of proving the propriety of the default termination. Lisbon Contractors, Inc. v. United States, 828 F.2d 759, 765 (Fed. Cir. 1987). If the government satisfies its burden of proving that the termination for default was justified, then appellant must prove that its default was excusable, caused by the government's material breach, or that the CO's termination decision was arbitrary, capricious or an abuse of discretion. U.S. Coating Specialties & Supplies, LLC, ASBCA No. 58245, 15-1 BCA ¶ 35,957 at 175,707; see also United Healthcare Partners, Inc., ASBCA No. 58123, 16-1 BCA ¶ 36,374 at 177,312; and Lan-Cay, Inc., ASBCA No. 56140, 12-1 BCA ¶ 34,935 at 171,761.

B. Propriety of the Default Determination

The default clause of the contract establishes the possible grounds for a termination for default. AEON Group, LLC, ASBCA Nos. 56142, 56251, 14-1 BCA ¶ 35,692 at 174,751. The contract incorporates FAR clause 52.249-8 which provides that the government has the authority to terminate the contract if the contractor fails to "[d]eliver the supplies or to perform the services within the time specified in this contract or any extension" (finding 8). "A contractor's failure to make timely delivery of agreed-upon goods establishes a prima facie case of default." DayDanyon Corp., ASBCA No. 57611 et al., 14-1 BCA ¶ 35,507 at 174,039 (citing Nuclear Research Corp. v. United States, 814 F.2d 647, 650 (Fed. Cir. 1987)). Modification No. PT0035 established the modified delivery schedule for Interfix 4 (finding 145). Under the schedule, Lot 4-2 was due by 31 August 2011, and Lot 4-3 was due by 14 September 2011 (finding 142). Under the terms of the contract, rejection of a lot constitutes a failure to make timely delivery (finding 6). The government rejected Lot 4-2 on 2 September 2011 (finding 160). Accordingly, when the CO issued the show cause notice on 9 September 2011, PSI had failed to deliver Lot 4-2 in accordance with the delivery schedule (findings 160, 162). At the time of the CO's decision to terminate

the contract, PSI had also failed to deliver Lot 4-3 by the established delivery date (findings 167, 170, 176).

Appellant asserts that prior to the scheduled delivery date for Lot 4-2, the government agreed to alter the delivery schedule. Appellant relies on the discussions that occurred between the parties in late August 2011 to support its assertion that delivery of less than 9,416 MK 124s on 31 August 2011 was excusable. (App. reply br. at 8-9) We found that on 19 August 2011, PSI proposed revising the delivery schedule and reducing the size of Lot 4-2 (finding 150). We also found that, initially, CO Pierce responded that the government would be amenable to modifying the contract's delivery schedule, subject to conditions. One of the conditions was that the parties reach an agreement to terminate for convenience, at no cost to the government, a portion of the contract, specifically 2,150 signals, that under the contractor's proposed modified schedule would be completed after the funds backing the signals were set to expire. ³⁰ (Finding 151) PSI responded by proposing that 5,015 signals be terminated for convenience at no cost to the government (finding 152).

However, the contract was never modified to incorporate a new delivery schedule. CO Pierce testified that Lot 4-2's failure of the LAT ended any conversation about the possibility of modifying the delivery schedule. (Finding 153) The Board notes that the parties' discussion in August of 2011 concerned reducing the size of Lot 4-2, but there is no evidence that the parties ever discussed wholly excusing delivery of Lot 4-2 (see findings 150-53). CO Pierce even testified that his offer regarding termination of a portion of the contract at no cost to the government was based on the assumption that the contractor would continue to produce acceptable lots (finding 153). PSI failed to deliver Lot 4-2 when the lot was rejected (see findings 6, 160). There is no evidence of an agreement between the parties to revise the delivery schedule or to excuse PSI's failure to deliver of Lot 4-2 or Lot 4-3. Accordingly, the government has made a prima facie showing of default.

The government having made a prima facie showing of default, we next address appellant's arguments that the termination for default should be converted to a termination for convenience.

This marked the second time that the government had proposed terminating for convenience, at no cost to the government, a portion of the contract. In March 2011, PSI specifically requested the removal of language from Modification P00034 that provided: "Both parties agree that any Air Force CLINs/Quantities that have not been produced/invoiced by 09 Sep 2011 will be removed from the contract at no cost to the government" (finding 119).

C. Defective Specifications

1. The Parties' Contentions

PSI alleges that its default is "excusable as a result of the defective TDP and design drawings incorporated into the Contract" (app. br. at 86). Appellant alleges that the contract's specifications were defective both as a basis for excuse of the termination for default and as a basis for entitlement to an equitable adjustment relating to the rejection of Lot 3-3A (see app. br. at 86, 96-97). Appellant's affirmative claims, which underlie ASBCA Nos. 58335 and 59103, concern Interfix 3, while the termination occurred during Interfix 4. The change from Interfix 3 to Interfix 4 occurred because PSI changed the sealing disk it was using to produce the MK 124 following the testing of Lot 3-3 and Lot 3-3A³¹ (findings 35, 108, 120). Appellant's defective specifications arguments specifically concern the sealing disk specifications (app. br. at 88-89). Accordingly, since appellant's defective specifications arguments specifically concern the sealing disk and since the sealing disk used and thereby the respective sealing disk characteristics changed between Interfix 3 and Interfix 4, we address the defective specifications claim concerning Lot 3-3A separately.

At this time we address only appellant's allegation of defective specifications as it relates to Interfix 4 and the assertion that the government-provided defective specifications are a basis for finding the default excusable. Appellant argues that compliance with design drawing specifications, specifically the sealing disk specifications, precluded the units from consistently passing the LATs (app. br. at 88-89). Particularly, appellant contends that the sealing disk specifications are the cause of the long smoke display times³² and PSI's problems with leakers during Interfix 4 (app. br. at 89). Appellant asserts that it substantially complied with the contract's

³¹ The suggested source of supply is the 433L disk, which was used to produce MK 124s during Interfix 1 (findings 13, 36). PSI switched to the 363L disk for Interfixes 2 and 3 before changing to the 433 disk used during Interfix 4 (findings 60, 74, 120).

The contract specifications required that smoke display times during function testing fall within a stated maximum and minimum display time (finding 17). The purpose of the maximum smoke display time cap is to ensure that the smoke expelled from the MK 124 is robust and thick enough that it can be seen from a reconnaissance craft even if disbursed by wind (finding 44). During Interfix 4 long smoke display times were established in accordance with the original maximum smoke display times listed in Specification 13697N, with the exception of the sealing function test, which the government understood to have a maximum smoke display time of 25 seconds due the incorporation of RFD 13 into the contract (finding 148).

specifications, and attempts to immediately shift the burden to the government to prove that PSI performed improperly (app. reply br. at 9-10). The government stated that appellant has failed to establish that "it assembled the signals in the lots at issue in compliance with the drawing and specifications" and further asserts that PSI's problems during production were a result of PSI's poor quality control (gov't br. at 55-56).

2. <u>Defective Specifications Discussion</u>

The law is well settled that the government has a right to obtain "precisely what is specified in the contract" including strict compliance with any contract specifications. American Mechanical, Inc., ASBCA No. 52033, 03-1 BCA ¶ 32,134 at 158,886. It is also well established that when the government requires goods to be manufactured "in accordance with Government specifications, there is an implied warranty that if the specifications are followed, a satisfactory product will result." Hol-Gar Manufacturing Corp. v. United States, 360 F.2d 634 (Ct. Cl. 1966) (citing United States v. Spearin, 248 U.S. 132 (1918)). "Because the implied warranty protects contractors who fully comply with the design specifications, the contractors are not responsible for the consequences of defects in the specified design." White v. Edsall Construction Co., 296 F.3d 1081, 1084-85 (Fed. Cir. 2002) (citing Spearin, 248 U.S. at 136). Accordingly, if the contractor can prove that government-provided drawings or specifications are defective, the defective specifications may excuse the contractor's default. Magna Enterprises, Inc., ASBCA No. 51188, 02-1 BCA ¶ 31,660 at 156,421; see also Astro Dynamics, Inc., ASBCA No. 28381, 88-3 BCA ¶ 20,832 at 105,363 (citing Switlick Parachute Co. v. United States, 573 F.2d 1228 (Ct. Cl. 1978) ("[I]f an appellant shows that its failure to make timely delivery arose out of causes 'beyond the control and without the fault or negligence of the contractor', including impossibility of performance or reliance on defective specifications, it is held that such causes are excusable under the provision of the DEFAULT clause of the contract.").

To establish that the government-provided specifications are defective, a contactor must prove that it "substantially complied with the government's plans and specifications, and reached an unsatisfactory result." Hanley Industries, Inc., ASBCA Nos. 54315, 56383, 08-2 BCA ¶ 33,932 at 167,917; see also SPS Mechanical Co., ASBCA No. 48643, 01-1 BCA ¶ 31,318 at 154,692 (quoting C.L. Fairley Construction Co., ASBCA No. 32581, 90-2 BCA ¶ 22,665). Appellant has the burden of proving that its nonperformance was excusable. DCX, Inc. v. Perry, 79 F.3d 132, 134 (Fed. Cir. 1996); see also AEON Group, 14-1 BCA ¶ 35,692 at 174,755 ("Appellant has the burden of proving that its default was actually caused by its alleged excuses.").

PSI offers little evidence to support its assertion that it substantially complied with the specifications. PSI has established that the 433 sealing disk used during

Interfix 4 substantially complied with Drawing 2113661. At the time of the termination, PSI was using this disk. The 433 disk substantially complies with the average physical properties for an appropriate sealing as detailed in Drawing 2113661 and has very similar characteristics to the suggested source of supply for the sealing disk. (Findings 13, 56, 109, 120) PSI offers little evidence to prove that it substantially complied with the other specification requirements.

The contractor alleges the 433 disk inherently causes long smoke display times.³³ Appellant's brief focuses only on demonstrating that the sealing disk specifications are the cause of the long smoke display times. To this end, appellant solely relies upon the correlation that long smoke display times occurred while PSI was using the 433L disk and the 433 disk, both of which are thinner than the 363L disk used during Interfixes 2 and 3.34 (App. br. at 90) The Board agrees that there is no evidence of long smoke display times during either Interfix 2 or Interfix 3 (see findings 62-64, 71, 75-76, 81, 94). However, the absence of long smoke display times during Interfix 2 and Interfix 3 is not sufficient to prove that the 433 sealing disk inherently causes long smoke display times. During Interfix 4, PSI identified the cause of the long smoke display times as either flaws in the smoke candle inventory or possibly improper brushing of the bore of the smoke candle during assembly (findings 138-39). No evidence was offered by PSI to prove that its process of installing the smoke candle was substantially compliant with the TDP or to otherwise rule out the smoke candle subassemblies as the cause of the long smoke display times. PSI offered no evidence to demonstrate that that its own manufacturing process was not the root cause of the long smoke display times. The evidence of the timing of the smoke display times is insufficient to demonstrate the sealing disk as the cause of long smoke display times where appellant has failed to address and rule out alternative assertions of the root cause stemming from the contractor's actions.

Similarly, the contractor has failed to establish that the leakers were caused by defective specifications. Appellant presented testimony during the hearing that the prior producer of the MK 124 experienced problems with leakers during manufacturing (finding 29). With respect to the sealing test failures, testimonial evidence demonstrated that the prior producer of the MK 124 experienced problems with leakers but no evidence that the prior producer was unable to pass Specification 13697N's sealing test. The Board was also presented with testimonial evidence that

fall within a stated maximum and minimum display time (finding 17). The purpose of the maximum smoke display time cap is to ensure that the smoke expelled from the MK 124 is robust and thick enough that it can be seen from a reconnaissance craft even if disbursed by wind (finding 44).

³⁴ The 433L disk and 433 disk are approximately half as thick as the 363L disk (findings 56, 109).

the prior producer was able to successfully produce more than one million MK 124s. (Finding 29) Little evidence was presented about PSI's own performance of the instant contract and how it complied with the contract's specifications. Throughout performance of the contract at issue in this appeal, leakers were variously attributed by PSI to one of three causes: (1) a problem with the sealing disk; (2) a defect in the O-ring; and/or (3) an improper crimp of the MK 124 canister (finding 20). As already established above, the 433 disk, which was used during Interfix 4, substantially complied with the contract's specifications. There is no evidence from PSI's FAT or LAT reports that defective O-rings were present in the signals tested during Interfix 4 (findings 123, 134, 147, 161).

However, appellant has failed to carry its burden of proving that its crimps were proper and were not the cause of the failure. The record in the current appeal provides scant information about the contract's specifications with respect to crimping or PSI's compliance with those requirements. The record before the Board establishes that a proper crimp, when combined with an O-ring and a compliant sealing disk, creates a hermetic seal on the MK 124 (findings 12, 14). The record also includes Drawing 3139733 on which appears Note 10 providing that "[a]fter crimping, [both igniters] shall not be damaged and shall be capable of withstanding a torque of 20 inch-pounds min with [the outer container] without relative movement" (finding 28). We found that during Interfix 4, PSI drew a line on the MK 124 canister and performed PSI's torque test to check compliance with the no relative movement requirement of Drawing 3139733, and the method of drawing a line on the canister was developed with the government (findings 28, 114-16).

It is unclear whether these are the only two crimping requirements in the TDP. Furthermore, it is unclear if compliance with the requirement at Note 10 is the only crimping standard that must be met in order to determine that the crimp is sufficient to hermetically seal the unit. Crimping of the MK 124 appears to serve two primary purposes in the MK 124 design. First, in combination with the sealing disk and the Oring, it creates the hermetic seal on the MK 124 (finding 14).

Second, crimping secures the trigger assembly to the MK 124 canister and keeps the trigger assembly from blowing off the MK 124 canister during functioning. Hence, after PSI experienced problems with separation defects, the government became interested in reviewing PSI's torque test process. (Findings 91, 116) No evidence was presented about the efficacy of the torque test to prove proper crimps for both purposes, and the record raises serious questions about the torque test's ability to demonstrate that a MK 124 is crimped sufficiently to hermetically seal the signal. For instance, based upon PSI's own report concerning Lot 4A-1, we know that over crimping of the MK 124s could result in signals passing the torque test but failing the sealing test (findings 121, 123). Appellant does not furnish proof that it complied with all relevant TDP requirements for crimping. Nor did PSI advise the Board regarding

what crimping procedures the contractor utilized during Interfix 4, particularly during production of Lots 4-2 and 4-3, and the record does not contain PSI's operational instruction sheets or crimping procedures.³⁵ Furthermore, even if Note 10 of Drawing 3139733 was the only crimping specification stated in the TDP, no substantial evidence was presented by PSI about whether or not Lot 4-2 and Lot 4-3 passed torque tests performed during the LATs.³⁶

The minimal evidence presented by appellant in this appeal is markedly different than the evidence before the Board in ABS Baumaschinenvertrieb GmbH. ASBCA No. 48207, 00-2 BCA ¶ 31,090 (ABS), a decision upon which appellant heavily relies in its post-hearing brief. In that appeal, the Board considered the termination for default of a contract for production of a coal crushing machine to be built in accordance with a combination of design and performance specifications provided with the government's invitation for bids (IFB). Evidence there before the Board established that (1) the specification in the IFB did not include a drawing, prepared by the developer of the specifications, that depicted the arrangement and assembly of the machine components; (2) the dimensions of components were based on brand name proprietary items that were not identified in the specifications; and (3) in one instance the wrong proprietary item was mistakenly used to create component dimensions. Id. at 153,507-08. The Board was also presented with standard industry formulae evidence demonstrating that a machine manufactured in strict compliance with the design specifications contained in the IFB would not have met the performance requirements specified in those specifications. *Id.* Based upon this body of evidence, the Board found that the specifications in that appeal were defective. *Id.* at 153,517.

The Board also notes that unlike the present appeal, where PSI maintains that it complied with the design specifications, the contractor in ABS did not attempt to produce a machine that complied with the design specifications in the contract at issue in the appeal. Rather, having determined that the design specifications conflicted with the performance requirements, ABS developed its own design to meet the performance requirements. Id. at 153,500. Consequently, ABS does not articulate the burden of proof before the Board in the present appeal, because the facts of that appeal were such that the contractor never attempted to prove that it had complied with the government's design specifications. The Board in ABS made its determination based

³⁵ The only approved production process in the record are the procedures for the rework of Lot 3-3. The procedures are dated 18 January 2010. There is no indication of how these procedures relate to those utilized by PSI during the production of any other lot during contract performance. (Finding 128)

³⁶ Mr. Hirst testified that he remembered Lot 4-3 passing the relative movement test (finding 166 n.27). Appellant adduced no testimony concerning Lot 4-2 (finding 154 n.24).

upon evidence about the preparation of the specifications and conflicts between the performance requirements and design specifications, which were apparent from the government-provided specifications.

In the present appeal, where the contractor alleges that it complied with the contract's specification, the contractor bears the burden of proving its compliance with the contract's specifications. PSI did not meet this burden. PSI's assertion that the contract's TDP was defective is not supported by the weight of the evidence. Appellant presents no evidence that it substantially complied with the contract's plans and specifications during Interfix 4. To the contrary, the record includes evidence of problems with PSI's crimping process at least during the production of Lot 4-3; PSI identified the crimping process as the cause of the misaligned alignment pins found in Lot 4-3 (finding 167). The contractor's opinions that the sealing disk specifications caused long smoke display times or leakers is unsupported by any detailed or credible analysis demonstrating a sound technical basis for the opinion. Furthermore, we found that PSI was able to successfully produce at least three lots of MK 124s capable of passing the contract's inspection requirements without need for deviation (findings 40, 45, 49). Accordingly, we find that appellant has failed to prove that the contract's specifications were defective. PSI has failed to demonstrate that its default is excusable on the basis of a defective TDP.

D. Appellant's Allegations that the Decision to Terminate was Arbitrary and Capricious

PSI contends there are multiple reasons why CO Pierce's decision to terminate the contract for default was arbitrary and capricious. It argues that Lot 4-2 was not properly assessed. Appellant also alleges that the CO failed to exercise independent judgment and that the CO failed to consider the appropriate factors in making his determination.

"The default article of [a] contract does not require the Government to terminate on a finding of default, but merely gives the procuring agency the discretion to do so, and that discretion must be reasonably exercised." Darwin Construction Co. v. United States, 811 F.2d 593, 596 (Fed. Cir. 1987). "[A] termination for default will be set aside if it is arbitrary or capricious, or constitutes an abuse of the contracting officer's discretion." McDonnell Douglas Corp. v. United States, 182 F.3d 1319, 1326 (Fed. Cir. 1999) (holding that the government may not use default as a pretext for terminating a contract for reasons unrelated to contract performance). Furthermore, the decision to terminate must be based on the CO's independent judgment. Fraya, S.E., ASBCA No. 52222, 02-2 BCA ¶31,975 at 157,951. In reaching a decision as to the propriety of the termination for default, we consider "the totality of the circumstances existing at the time of the termination." AEON Group, 14-1 BCA ¶35,692 at 174,752.

1. Allegations that the Decision to Terminate for Default was Based on Factual Inaccuracies Concerning Testing Results

We begin by examining appellant's allegations that the government inappropriately tightened its acceptance requirements for Lots 4-2 and 4-3 and that the misassessment of the lots caused the bases for the default determination to be materially inaccurate (app. br. at 79).

(a) Alleged that Long Smoke Display Times were Considered a Quality Issue Only during Interfix 4

PSI alleges that the government changed its position on long smoke display times, making them a quality issue for the first time during Interfix 4 and that prior to Interfix 4, "long smoke display times were not undesirable" (app. br. at 79). While there is disputed testimony about whether the government preferred longer smoke display times (see finding 44), there is no evidence to support appellant's claim that long smoke display times became a quality concern only during Interfix 4. Under the terms of the contract, smoke display times are classified as a Major characteristic and acceptable display times are prescribed (finding 17). Throughout contract performance, signals displaying long smoke display times were reported as failures/nonconformances. In accordance with the acceptance criteria in Table I of Specification 13697N, lots that exhibited too many long smoke display times during their respective FAT or LAT were rejected by the government. These lots were only accepted once a request for deviation was submitted and approved. (Findings 24, 39, 41, 46, 48, 134, 146, 157, 165)

While the government may have repeatedly chosen to accept lots with long smoke display times on deviation, there is no evidence that this was not treated as a quality issue. As late as July 2011, PSI was attempting to correct the long smoke display times (findings 138-39). This attempt to address long smoke display times occurred prior to the government's first determination to disapprove a deviation for a lot with long smoke display times (see findings 138, 176). Throughout all interfixes, the government treated long smoke display times as a quality issue and treated failure to conform to smoke display time specifications as a basis for rejection of a lot.

The primary difference with respect to Lot 4-2 and Lot 4-3 was that the government opted not to approve PSI's requests for deviation (finding 176). PSI alleges that the CO's failure to consider PSI's requests for deviation prior to making his default determination renders the CO's decision to terminate arbitrary and capricious (app. br. at 81). The CO was not required to consider the request for deviation prior to making his termination decision. See Kurz-Kasch, Inc., ASBCA No. 32486, 88-3 BCA ¶ 21,053 at 106,334 ("The Government is not obligated to wait and see if the deviation should be allowed before terminating a tardy contractor for

default."). However, in this instance, the CO's final decision that terminated the contract for default details the CO's consideration of PSI's requests for deviation and lists the CO's reasons for determining that Lots 4-2 and 4-3 would not be accepted on deviation (finding 176). His decision stated that the basis for denial of the deviation was that unlike Lot 4-1, which failed only the low temperature function test, Lots 4-2 and 4-3 failed multiple tests (see findings 146, 155-59, 163-65, 176). "The decision to grant or deny a deviation is within the sound discretion of the CO." M.A. Mortenson Co., ASBCA No. 53062 et al., 01-2 BCA ¶ 31,573 at 155,908 (citing Kurz-Kasch, 88-3 BCA ¶ 21,053). There is no evidence that the CO abused his discretion when he decided not to grant a deviation due to the lots' multiple test failures.

(b) Alleged that the Government Changed the Acceptance Criteria

PSI also alleges that the government changed the testing acceptance criteria for Interfix 4, specifically that the government changed the requirements for the maximum smoke display times (app. br. at 68-69). During Interfix 1, the parties bilaterally modified the contract to incorporate the approval of RFD 13 requesting "a [d]eviation from the requirement maximum of 19 seconds to a maximum of 25 seconds for the smoke burn" on the contract (finding 42). We found that during Interfixes 1, 2 and 3, the parties treated this modification as having raised the maximum smoke display times for all function tests to 25 seconds (finding 43). However, during Interfix 4, the new CO interpreted RFD 13 to pertain to only the sealing function test (findings 147-48). This changed the government's working interpretation of RFD 13.³⁷ During Interfix 4 testing, QARs required test failures to be determined according to the requirements originally established in Specification 13697N, with the exception that the maximum smoke display time for the sealing function test was adjusted to 25 seconds (findings 17, 148).

This change in interpretation resulted in more MK 124 samples being recorded as failures during the testing of Lot 4-2 and 4-3 (findings 148, 158-59, 165). For instance, during testing of Lot 4-2 four signals were recorded as displaying long smoke display times during the 5-foot drop function test. The display times were 21.53 seconds, 23.19 seconds, 27.50 seconds and 21.15 seconds. (Finding 159) The maximum smoke display time according to Specification 13697N for the 5-foot drop function test is 19 seconds (finding 17). Accordingly, when the QARs utilized the table in Specification 13697N, all four signals were marked as long display times. However, under the parties' original working interpretation of RFD 13, only the signal with a display time of 27.50 seconds would have been recorded as a failure (see findings 43, 148, 159). The 5-foot drop function test has an acceptance criteria of accept on 1, reject on 2 (finding 24). If the parties had continued with their earlier interpretation, Lot 4-2 would have passed the 5-foot drop function test.

³⁷ We make no determination as to the proper interpretation of RFD 13.

Under the government's changed interpretation of RFD 13, Lot 4-2 failed five tests during the LAT (findings 155-59). Under the parties' earlier interpretation of RFD 13, Lot 4-2 would have failed only three tests. One signal failed the sealing test; the acceptance criteria is accept on 0, reject on 1 (findings 24, 155). One signal failed the TV sealing test, the acceptance criteria is accept on 0, reject on 1 (findings 24, 156). Additionally, 19 signals had smoke display times longer than 25 seconds during low temperature function testing; all are failures under either interpretation of RFD 13 (findings 148, 157). The acceptance criterion is accept on 2, reject on 3 (finding 24). PSI further alleges that neither sealing test failure was due to leakers and, therefore, should not have been treated as test failures and a basis for rejection of Lot 4-2 by the government (app. reply br. at 6-7). Even if PSI were correct in this argument, the low temperature function test failure, on its own, creates sufficient grounds for rejection of Lot 4-2.

(c) Alleged that the Government Should Not Have Relied on the Sealing Test Failures as a Basis for Rejection of Lot 4-2

Appellant argues that neither of the sealing test failures in Lot 4-2 were caused by defective signals and, therefore, should not have been relied upon by the government as bases for rejection of the lot (see app. reply br. at 6-7). The Board determines that there was no error in the government's treatment of these tests as failures.

PSI first argues that signal number 40 should not have been classified as a leaker because while "the unit exhibited signs of leaking during the initial seal test[,]...the same unit showed no signs of leaking in multiple subsequent seal tests" (app. reply br. at 6). We found that signal number 40 failed the sealing test (finding 155). We also found that PSI chose to then subject signal number 40 to the 5-foot drop test and a subsequent second sealing test after the 5-foot drop preconditioning. Mr. Hirst, an employee of PSI, described this test as an informational test. Signal number 40 passed this second sealing test. (Finding 155) There is no evidence of signal number 40 undergoing any other sealing tests besides the initial required sealing test and this second "informational" sealing test. The term "informational test" was also never defined or sufficiently explained to the Board.

Appellant's argument amounts to contending that the first test failure should be excused because another test was passed. Under the testing plan in the contract, samples designated for the 5-foot drop test are required to pass two sealing tests, one prior to the 5-foot drop test and one afterwards. The acceptance criteria for both sealing tests is accept on 0, reject on 1. (Finding 24) This means that a single failure of either test is a sufficient basis for rejection of the lot. Even if we assume *arguendo* that the second sealing test was a required test, there is nothing to suggest that a signal passing one sealing test forgives the signal failing a separate, required sealing test.

Rather, Specification 13697N requires that signals designated for the 5-foot drop test pass both sealing tests.

PSI also argues that signal number 109 should not have been classified as a leaker because the unit's leaking was due to the contractor's faulty testing technique rather than a manufacturing defect (app. reply br. at 6-7). We found that testing for Lot 4-2 was performed at PSI's facilities and that tests at PSI's facilities were performed by contractor personnel (findings 30, 154). Mr. Hirst testified that PSI made an error and failed to resecure end caps on signal number 109's canister, as required by Specification 13697N, before the signal was put through the TV test, allowing the sealing disk to tear during the TV test (findings 19, 156). After the TV test, PSI performed the sealing test on signal number 109 in accordance with Specification 13697N (findings 24, 156). The contractor admits that the testing error was caused by its own personnel's failure to follow contract required test procedures, and there is no evidence that failure to follow procedures was due to government action (see findings 19, 156). PSI furnishes no legal authority, and we are aware of none, to support appellant's position that the government must disregard failure of a test required by the contract because the contractor failed to conduct the test in accordance with contractually required procedures.

The classification of signal number 40 and signal number 109 as leakers was appropriate under the contract's testing requirements, and there is no error in the government's reliance on these test failures as alternative bases for rejection of Lot 4-2.

(d) Effect of the Proven Factual Inaccuracies Underlying the Termination Decision

While we agree that there was a change to the acceptance criteria for Interfix 4, there are other valid grounds that justify the government's rejection of both Lot 4-2 and Lot 4-3 that are consistent with the parties' earlier interpretation of RFD 13. For Lot 4-2, there were three test failures. First, the lot failed the sealing test (finding 155). Second, the lot failed the TV sealing test (finding 156). Finally, the lot failed the low temperature function test due to 19 signals that had smoke display times longer than 25 seconds; 25 seconds was the maximum smoke display time for low temperature function tests throughout contract performance, irrespective of RFD 13's interpretation (findings 46 n.10, 157). Each of these failures creates sufficient grounds for rejection of Lot 4-2 even if the maximum smoke display time stated in RFD 13 is applied to all function tests (see finding 24).

There were also three bases for rejection of Lot 4-3. First, an alignment pin was found not in the alignment pinhole; this was a critical defect (findings 28, 163). Next, the lot failed the sealing test (finding 164). Finally, the lot failed the low temperature function test due to 10 signals that had smoke display times of greater than 25 seconds (finding 165). Each failure on its own creates sufficient grounds for

rejection of Lot 4-3. The Board agrees that the government changed the acceptance criteria during Interfix 4 with respect to RFD 13. However, when the testing results are analyzed under the methodology from RFD 13 used during Interfixes 1, 2, and 3, there are additional bases for the government to reject the lots. Since there were additional contractual bases for the rejection of the lots, the alleged errors in recording other failures in the lots are not material.

2. Alleged Contracting Officer Failure to Exercise Independent Judgment

We next consider appellant's argument that the termination for default should be converted to a termination for convenience because the CO allegedly failed to exercise his independent judgment in deciding to terminate the contract (app. br. at 78). Appellant's assertion that the 13 July 2011 email from a PQM demonstrates that CO Pierce failed to exercise his independent judgment in deciding to terminate the contract for default is unpersuasive (see finding 141). Appellant characterizes this email as a set of instructions from the IPT to the CO directing the CO to terminate the contract and directing what steps the CO should take to do so (app. br. at 78-79).

We take issue with this characterization for a number of reasons. First, the email that appellant relies upon was not from the IPT and was not addressed to the CO. Instead, it is an email from a PQM to his boss, advising whether she needs to attend an upcoming IPT meeting. The CO is only copied on the email. (Finding 141) Second, while the email does recommend terminating the contract, we fail to see any directive to the CO to do so. The email appears to discuss how testing will proceed should the contract not immediately be terminated and the ability of testing to properly screen the lots from a quality assurance standpoint (see finding 141). We fail to see any evidence that the email was intended to provide a set of instructions to the CO or that upon being copied on the email, the CO abdicated all independent decision making in the administration of this contract. At the same time, the record does provide evidence that CO Pierce exercised his independent judgment in deciding to terminate the contract for default. We found that the armed services disagreed about whether the contract should be terminated for default, and the CO testified that he used his independent judgment in deciding to terminate the contract for default over the Navy's objections (findings 174-75). The fact that the CO terminated the contract for default over the objections of one of the contract's customers (see finding 1), in conjunction with CO Pierce's testimony, is convincing evidence that CO Peirce exercised his independent judgment in determining to terminate the contract for default.

3. Alleged CO Failure to Consider FAR 49.402(f) Factors

Finally, we consider appellant argument that the CO's decision to terminate the contract for default was arbitrary and capricious because the CO failed to consider the

factors outlined in FAR 49.402-3(f) (app. br. at 82-83). FAR 49.402-3(f) requires a contracting officer to consider various factors "in determining whether to terminate a contract for default." However, the factors "are not a prerequisite to a valid termination," and "the regulation does not confer rights on a defaulting contractor." DCX, 79 F.3d at 135. PSI alleges that the CO's decision in the instant appeal is arbitrary and capricious because certain factors weighed against terminating the contract for default, such as the availability of the item elsewhere, the urgency of the need for the product, and the effect of the termination upon the contractor (app. br. at 83-84).

Appellant points to no case law which suggests that all factors must weigh in favor of termination in order for a decision to terminate for default to be considered reasonable, and furnishes no evidence of the legal relevancy of those to the CO's determination here. It is only required that before exercising his/her discretion to terminate under the Default clause, the CO should consider all relevant factors.

Kostmayer Construction, LLC, ASBCA No. 55053, 08-2 BCA ¶ 33,869 at 167,655; see also Walsky Construction Co., ASBCA No. 41541, 94-2 BCA ¶ 26,698 at 132,786 (quoting Jamco Constructors, Inc., VABCA Nos. 3271, 3516T, 94-1 BCA ¶ 26,405) (stating that it is expected that a CO will face contradictory information in reaching a decision to terminate for default).

4. Totality of the Circumstances at the Time of the CO's Decision to Terminate for Default

Taking into consideration appellant's particular arguments, the Board examines the totality of the circumstances existing at the time of the termination in reaching a decision on the propriety of the termination for default. The contract called for rejection of a lot upon the failure of a single test prescribed by Specification 13697N (finding 24). Throughout contract performance, the contractor continuously failed to produce acceptable lots (findings 39, 41, 46-48, 52-53, 62, 71, 76, 81, 146, 160, 163). Each failure to produce an acceptable lot placed the contractor in default status pursuant to the terms of the contract (see findings 6, 8).

Yet, the government repeatedly tried to work with PSI and allowed the contractor time to resolve the problems it encountered during production of the MK 124 (see findings 38, 42, 47, 57-58, 73, 78-79, 84-85, 106, 111). Ultimately, the contractor could not produce as required, and by Interfix 4 its problems had increased. Among the circumstances before the CO at the time of the termination were: (1) PSI's most recent lots had shown multiple failures and the longest smoke display times to date³⁸ (findings 41, 46, 48, 155-57, 163-65); (2) multiple services supported the decision

³⁸ The longest smoke display time for Lot 4-2 was 41.48 seconds (finding 157). Prior to Lot 4-2, the longest smoke display time recorded was 33.2 seconds (finding 46).

terminate (finding 175); and (3) PSI's response to the show cause notice failed to address the CO's concerns about PSI's failure to meet the current delivery schedule and instead focused on the problems with the 363L disk used during Interfix 3, prior to the establishment of the delivery schedule in effect at the time of the termination (findings 144-45, 169, 171). In light of these considerations, the CO's decision was neither arbitrary nor capricious but based upon PSI's failure to meet specification requirements.

E. Bad Faith

Appellant further argues that "not only were the Government's actions both arbitrary and capricious..., they reach the heightened level required for a bad faith determination" (app. br. at 65). PSI alleges that there was a specific intent to injure PSI and describes the bad faith administration and termination of the contract as a breach of the contract. The contractor points to action taken by the QARs and the CO as evidence of the government's bad faith. (App. br. at 66-75) The government asserts that the Board lacks jurisdiction over appellant's bad faith allegation because it constitutes a new claim that was not presented to a CO prior to the filing of these appeals (gov't reply br. at 26-27). We address the Board's jurisdiction first.

1. The Board's Jurisdiction over Appellant's Allegation of Bad Faith

The Board's jurisdiction is derived from the CDA. Accordingly, the scope of our jurisdiction is determined by the claims before us on appeal. American General Trading & Contracting, WLL, ASBCA No. 56758, 12-1 BCA ¶ 34,905 at 171,639. "The Board lacks jurisdiction over claims raised for the first time on appeal." U.S. Coating Specialties, 15-1 BCA ¶ 35,957 at 175,706 (citing Optimum Services, Inc., ASBCA No. 57575, 13 BCA ¶ 35,412 at 173,726). However, the "assertion of a new legal theory of recovery, when based upon the same operative facts as the original claim, does not constitute a new claim." Dawkins General Contractors & Supply, Inc., ASBCA No. 48535, 03-2 BCA ¶ 32,305 at 159,844 (citing Trepte Construction Co., ASBCA No. 38555, 90-1 BCA ¶ 22,595 at 113,385-86). "If the Board 'will have to review the same or related evidence to make its decision, then only one claim exists." Lael Al Sahab & Co., ASBCA Nos. 58344, 59009, 15-1 BCA ¶ 35,809 at 175,130 (quoting Placeway Construction Corp. v. United States, 920 F.2d 903, 907 (Fed. Cir. 1990)).

There are multiple claims, including the contractor's affirmative claims, before the Board in these consolidated appeals. For the bad faith allegation, appellant asks that we examine the change in the inspection criteria during Interfix 4, the QAR's issuance of CARs during Interfix 4, the allegation of fraud by government personnel relating to a separate contract, PSI's discussions with the CO about the possibility of termination for convenience, and an email between government personnel from August 2011 (app. br. at 68-75). Many of these facts are already before the Board in relation to appellant's

arguments that the CO's decision to terminate was arbitrary and capricious. Treating appellant's bad faith allegation as an affirmative claim³⁹ and assuming *arguendo* that this concerns the same operative facts as the claims underlying ASBCA Nos. 58335 and 59103, appellant's bad faith claim still fails for lack of proof.

2. Merits of Appellant's Bad Faith Claim

"Government officials are presumed to act in good faith in discharging their contracting duties. The presumption can be overcome only by clear and convincing evidence of a specific intent on their part to injure the contractor." R.L. Bates General Contractor Paving & Associates, Inc., ASBCA No. 53641, 10-1 BCA ¶ 34,328 at 169,542 (citing Am-Pro Protective Agency, Inc. v. United States, 281 F.3d 1234, 1240 (Fed. Cir. 2002)); see Plum Run, Inc., ASBCA No. 46091 et al., 97-2 BCA ¶ 29,193 at 145,230 ("The burden of proving bad faith by the Government is a very onerous one."). "The Court of Appeals for the Federal Circuit has defined clear and convincing evidence as 'evidence which produces in the mind of the trier of fact an abiding conviction that the truth of a factual contention is highly probable." IMS Engineers-Architects, P.C., ASBCA No. 53471, 07-1 BCA ¶ 33,467 at 165,917 (citing Am-Pro Protective Agency, 281 F.3d at 1239-40).

Appellant has failed to present sufficient credible evidence to meet this heavy burden. There is no specific evidence that the change in the maximum smoke display time acceptance criteria during Interfix 4, which resulted from the government changing its interpretation of RFD 13, arose from an intent injure PSI. As already discussed above, the Board agrees that there was a change to the maximum smoke display time acceptance criteria. The Board also found that this change resulted in more MK 124 samples being recorded as test failures during the LATs for Lots 4-2 and 4-3 (findings 148, 156, 158-59). The change in interpretation of RFD 13 was instigated by the CO who was newly assigned to administer the contract; he was the first to indicate that PSI was to report failures in accordance with Table I of Specification 13697N for all preconditioning environments except for sealing (findings 105, 147-48). There is no evidence to suggest that CO Pierce's interpretation was the result of anything more than unfamiliarity with past performance and a differing interpretation of the RFD. Furthermore, the change in interpretation was ultimately immaterial. The decision to reject the lots for more than one test failure is still grounded in factual bases even when the controversial test failures for the length of smoke display times are removed from the test data (see findings 155-57, 163-65).

³⁹ The government's argument that appellant's bad faith allegations are not based upon the same operative facts as other claims before the Board presents a complication as to whether to treat the allegations as an affirmative claim or an affirmative defense. Since there appears to be an overlap, we treat this as a claim.

Similarly, we have already disagreed with appellant's interpretation of the 13 July 2011 email from a PQM to his boss as evidence of a plan to terminate PSI before Interfix 4 even began (see finding 141). PSI would have the Board regard this email as evidence of a plan, made prior to the production of MK 124s during Interfix 4, amongst the IPT and the CO to terminate PSI for default. The Board, however, has already discussed that the email appears to be the recommendation of a single individual to terminate the contract for default. There is no evidence that the IPT at large or the CO concurred in this opinion. The email is not, as appellant contends, credible evidence of a government plan to induce PSI to produce MK 124s while harboring an intent to terminate the contract for default, regardless of how PSI performed during Interfix 4. Furthermore, the Board has already determined that during Interfix 4 PSI, in actuality, failed to meet multiple specifications requirements of the contract.

The contractor also alleges that CO Pierce's actions in August of 2011, when the parties discussed the possibility of amending the delivery schedule, is evidence of bad faith actions by the government. Appellant alleges that the parties had an agreement to terminate any shortfall units for convenience and that CO Pierce led PSI to believe that he had accepted PSI's proposed revised delivery schedules, dated 19 August 2011 and 29 August 2011. (App. br. at 71-72, 74) The Board has already determined that there is no evidence of an agreement between the parties to revise the delivery schedule. We found that in response to the contractor's proposal, dated 19 August 2011, to revise the delivery schedule, the CO opened a discussion about the possibility of amending the schedule subject to many conditions. At that time, CO Pierce stated that any amendment to the schedule would be memorialized by a modification to the contract, and proposed terminating for convenience at no cost to the government the option for 2,150 signals. (Findings 150-51) PSI responded on 29 August 2011 by providing a second proposed delivery schedule and proposing 5,015 signals be terminated from the contract for convenience (finding 152).

The Board already found that these discussions alone were not sufficient evidence of an agreement to amend the delivery schedule. We also find no evidence of an agreement to terminate for convenience any shortfall of signals by PSI. CO Pierce made an offer to terminate for convenience at no cost to the government the production of 2,150 signals (finding 151). PSI did not accept but rather countered by proposing that 5,015 signals be terminated for convenience (finding 152). There is no evidence that the government accepted PSI counteroffer or entered into an agreement to terminate for convenience at no cost to the government any shortfall in PSI production.

The Board also notes that PSI specifically rejected, in March of 2011, an offer from the government to remove Air Force quantities not invoiced by 9 September 2011 from the contract at no cost to the government (findings 119-20). As a result of PSI's actions, the parties never entered into an agreement to either modify the delivery schedule or to terminate the contract for convenience. On two occasions the government

made an offer to terminate for convenience at no cost to the government portions of the contract, and, in August 2011, the government offered to amend the schedule subject to conditions. PSI never accepted these offers. We find no evidence of bad faith in the government's attempts to work with the contractor to execute such agreements.

Furthermore, while PSI provided some admissible testimony with respect to the problems between the QARs and PSI on other contracts, insufficient proof was offered to show by clear and convincing evidence that there was a specific intent to injure PSI on this contract (see findings 30-34). Appellant established through testimony that one or more QARs made fraud allegations against PSI. However, the Board found that none of the allegations related to the contract at issue in this appeal. (Finding 31) Furthermore, there is evidence that one QAR involved in the allegadly problematic contracts was involved in this contract, but evidence of his actions on this contract fell short of a specific intent to injure (finding 33). There is no evidence that the CARs were issued for other than contract performance reasons; all appear to relate to failures of Major or Critical performance requirements under the contract (findings 82, 94, 134, 136, 167).

Having reviewed the evidence of the actions of the CO and the QAR, we find that PSI has failed to meet the burden of demonstrating by clear and convincing evidence that the government proceeded with the administration and termination of the contract with a specific intent to injure PSI.

II. ASBCA Nos. 58335, 59103

A. The Claims

Following the rejection of Lot 3-3 due to a critical defect, the parties entered into an agreement to allow PSI to rework the lot and resubmit it for testing (findings 81-82, 84-85, 87). The reworked lot was submitted as Lot 3-3A (finding 91). The lot was rejected because of two nonconformances found during the LAT. First, the lot failed the sealing test. Second, the government determined that a flare igniter assembly came off during functioning, the same nonconformance found during testing of Lot 3-3. (Finding 94)

Appellant filed two affirmative claims asserting that the government improperly rejected Lot 3-3A and that, as a result, PSI is entitled to all costs and damages relating to the wrongful rejection of the lot (findings 179, 182). Appellant first submitted a claim on 10 January 2012; this claim did not specifically address the leaker observed during the sealing test (finding 179). After the CO issued a COFD denying the claim and PSI's appeal from the COFD was docketed as ASBCA No. 58335, government counsel raised questions about the sufficiency of the claim due to PSI's failure to address the leaker as a cause for rejection of the lot (finding 182). In response, PSI filed an amended/supplemental claim on 20 September 2013 to specifically address the sealing test failure while maintaining that the original claim was sufficient (findings 182-83).

Both claims seek the same amount of \$802,589 for the allegedly improper rejection of Lot 3-3A, and both claims were properly certified (findings 179, 182). The government argues that ASBCA No. 58335 should be dismissed for failure to state a claim upon which relief can be granted because the claim underlying the appeal did not address the leaker as a valid alternative basis for rejection of Lot 3-3A (gov't br. at 65). The Board, however, need not determine whether ASBCA No. 58335 states a claim concerning the government's rejection of Lot 3-3A upon which relief may be granted at this time. Appellant's 20 September 2013 amended/supplemental claim does specifically address why the leaker was not a valid basis for rejection of Lot 3-3A and is consolidated with ASBCA No. 58335 (findings 183-85).

B. The Parties' Contentions

The contractor asserts that the rejection of Lot 3-3A was improper on two bases. Appellant asserts that the rejection of Lot 3-3A was improper because the government's specifications were defective (app. br. at 99-100). Appellant also asserts that the rejection of Lot 3-3A was improper because the government erroneously changed the acceptance criteria under the contract for Lot 3-3A, which resulted in the lot's failure (id. at 102). PSI's allegations about the alleged changed acceptance criteria concern the government's treatment of both the separation defect and the leaker, the two alternative bases for the government's rejection of the lot. Appellant alleges that although "the separation experienced in Lot 003-003A was the exact same type of separation occurring throughout Interfix 2 and during Lot 003-002, all of which the Government previously accepted without waiver," the government changed the acceptance criteria in relation to trigger assembly separations prior to testing of Lot 3-3A (id. at 102-03). The contractor further alleges that "prior to Lot 003-003A, the parties had a joint understanding that the Government would allow PSI to rescreen lots in which a leaking unit was discovered" (app. reply br. at 14).

The government asserts that appellant's affirmative claims are barred by accord and satisfaction and, alternatively, because appellant released the claims (gov't br. at 61-64). Appellant contends that the government waived these defenses by failing to timely raise them and asserts that the government should have raised its defenses in response to PSI's claims (app. reply br. at 19, 23). However, Board Rule 6(b) states that the government's answer to the complaint "shall admit or deny the allegations of the complaint and shall set forth simple, concise, and direct statements of the Government's defenses to each claim asserted by the appellant, including any affirmative defenses." The government filed two separate answers relating to appellant's affirmative claims, one for ASBCA No. 58335 and one in ASBCA No. 59103. In both answers, the government raised the affirmative defenses of accord and satisfaction and release (ASBCA No. 58335, answer ¶ 132-54; ASBCA No. 59103, answer ¶ 141-62). The government's assertion of its affirmative defenses was in accordance with the Board's rules and timely. We will consider the

government's contention that Modification P00021 bars appellant's affirmative claims by accord and satisfaction and release (see finding 59).

C. Accord and Satisfaction and Release

Accord and satisfaction and release are separate affirmative defenses. Holland v. United States, 621 F.3d 1366, 1377 (Fed. Cir. 2010). An accord and satisfaction occurs "when some performance different from that which was claimed as due is rendered and such substituted performance is accepted by the claimant as full satisfaction of his claim." Bell BCI Co. v. United States, 570 F.3d 1337, 1340-41 (Fed. Cir. 2009) (quoting Community Heating & Plumbing Co. v. Kelso, 987 F.2d 1575, 1581 (Fed. Cir. 1993)). The Board explained:

The accord is "an agreement by one party to give or perform and by the other party to accept, in settlement or satisfaction of any existing or matured claim, something other than that which is claimed to be due." The satisfaction is "the execution or performance of the agreement, or the actual giving and taking of some agreed thing."

Edward H. Foran, ASBCA No. 51596 et al., 01-1 BCA ¶ 31,323 at 154,721 (citing Chesapeake & Potomac Telephone Co. of Virginia v. United States, 654 F.2d 711, 716 (Ct. Cl. 1981)). "To prove accord and satisfaction, the government must show '(1) proper subject; (2) competent parties; (3) a meeting of the minds of the parties; and (4) consideration." Bell BCI, 570 F.3d at 1341 (quoting O'Connor v. United States, 308 F.3d 1233, 1240 (Fed. Cir. 2002)).

In comparison, "[a] release is a contract whereby a party abandons a claim or relinquishes a right that could be asserted against another." Holland, 621 F.3d at 1377 (quoting Koules v. Euro-American Arbitrage, Inc., 689 N.E.2d 411, 414 (Ill. App. Ct. 1998)). As a release is contractual in nature, it must be interpreted in the same manner as any other contract term or provision. Korte-Fusco Joint Venture, ASBCA No. 59767, 15-1 BCA ¶ 36,158 at 176,455 (citing Bell BCI, 570 F.3d at 1341). "The inquiry regarding releases should focus on the intent of the parties at the time the release is executed, and this intent should be sought from the whole and every part of the instrument." Optex Systems, Inc., ASBCA No. 58220, 14-1 BCA ¶ 35,801 at 175,097 (quoting Futuronics Corp., ASBCA No. 29324, 85-2 BCA ¶ 18,137 at 91,045). We first examine the plain language of the release. Bell BCI, 570 F.3d at 1341. If the provisions of the release "are clear and unambiguous, they must be given their plain and ordinary meaning." Id. (quoting Alaska Lumber & Pulp Co. v. Madigan, 2 F.3d 389, 392 (Fed. Cir. 1993)). "Only in the event of an ambiguity may

we examine extrinsic or parol evidence." *Id.* (citing *McAbee Construction Inc. v. United States*, 97 F.3d 1431, 1434 (Fed. Cir. 1996)).

1. Accord and Satisfaction Discussion

Modification P00021 cannot serve as an accord and satisfaction of appellant's affirmative claims because there is no evidence that appellant knew of its potential improper rejection claims at the time the parties executed the modification or agreed to accept the government's actions pursuant to Modification P00021 terms in satisfaction of that claim. The doctrine of accord and satisfaction serves to bar claims where a party has already accepted some alternative performance as a remedy for that claim. Accord and satisfaction can only be effected where there is an agreement between the parties, and that agreement must involve a meeting of the minds between the parties about the claim or claims being satisfied by the proffered substituted performance. Modification P00021 was bilaterally executed by the parties in January 2008 (finding 59). The executed modification changed the terms of the contract to permit PSI to use a thicker sealing disk (findings 57, 59). The government argues that allowing PSI to utilize a different sealing disk was the substituted performance offered to satisfy the contractor's claims (gov't br. at 62-63). However, appellant's affirmative claims concern the rejection of Lot 3-3A in March 2010, more than two years after the government agreed to change the contract terms (findings 59, 94).

Performing in accordance with the changed contract terms did not create a substituted performance that satisfied appellant's claims. At the time the parties executed Modification P00021, PSI did not assert that it was due \$802,589 from the government for the alleged improper rejection of Lot 3-3A (see finding 59).

The Board finds there is no basis to establish that the parties agreed, at the time of execution of the modification, that the appellant was accepting the government's agreement to change the sealing disk specifications of the contract as satisfaction of the contractor's assertion of a right to costs associated with an allegedly improperly rejected lot. Since the Board finds no evidence that the parties reached a meeting of the minds that the change to the sealing disk specifications was intended to satisfy future improper rejection claims, Modification P00021 cannot serve as a bar to appellant's claims based upon accord and satisfaction.

2. Release Discussion

However, the language of Modification P00021 is clear and unambiguous on its face, and qualifies as a release of all claims attributable to the change in thickness of the sealing disk. The modification provides that the change to the sealing disk⁴⁰ will

⁴⁰ The modification refers to the sealing disk as foil tape (finding 59).

be at no cost to the government (finding 59). Furthermore, the modification specifically attaches the 26 November 2007 letter signed by Mr. Trotter, PSI's engineer manager. The attached signed letter states, "Signature waives any and all claims for equitable adjustment attributed to such facts and circumstances resulting from the changes." (Findings 58-59) Both the letter and the reference to the letter in the description section of Modification P00021 refer to RFD 17, indicating that the waiver language is intended to apply to the change made by RFD 17 (see id.). The modification also encloses a copy of RFD 17 describing the deviation as a change to the average material thickness to the sealing disk (findings 57, 59). Based upon the unambiguous language of the release, PSI released any affirmative claim attributable to the change in the thickness of the sealing disk when it signed the 26 November 2007 letter and bilaterally executed Modification P00021 incorporating the change and the letter into the contract.

The release, however, only bars PSI's claim to the extent its claim is attributable to the variation in the thickness of the sealing disk. One of appellant's alternative legal theories for its claim states that "PSI is entitled to all costs incurred as a result of the Government's defective specifications" (app. br. at 100). In its brief, appellant asserts that the 363L disk was flawed and, specifically, that due to its thickness, the 363L disk caused trigger assembly separations during function and post function (id. at 100-01). The 363L disk was used during Interfixes 2 and 3 (findings 60, 74). PSI submitted RFD 17 for approval after determining that the 363L disk worked well in the production of MK 124 because the 363L disk was thicker than the average material thickness provided for in the contract's specifications (findings 55-57). We find that this aspect of appellant's claim is based upon the change attributable to RFD 17 and Modification P00021, and, therefore, appellant is barred from asserting it by its release of any claim to equitable adjustment attributable to the change in variable thickness. Appellant's allegation that the TDP, as modified by Modification P00021, was defective is barred by the doctrine of release, and the Board will not consider it.

We will, however, still consider appellant's alternative theory that the government changed the acceptance criteria for Lot 3-3A. The contractor's 10 January 2012 claim seeking an equitable adjustment due to the government's alleged improper rejection of Lot 3-3A asserted that the trigger assembly separation experienced during testing of Lot 3-3A was not a critical defect and, therefore, could not serve as the basis for rejection of the lot (finding 179). The question of how the government treated trigger assembly separations during the LATs over the course of the contract does not relate to the change in the thickness of the sealing disk. The release effected by Modification P00021 does not bar appellant's right to assert that the acceptance criteria changed. Similarly, appellant's assertion that the government should have allowed PSI to screen the entire lot for leakers rather than reject the lot, is not attributable to the changes made by the execution of Modification P00021 (see finding 183).

D. The Claim Underlying ASBCA Nos. 58335, 59103

"To receive an equitable adjustment from the Government, a contractor must show three necessary elements – liability, causation, and resultant injury." Servidone Construction Corp. v. United States, 931 F.2d 860, 861 (Fed. Cir. 1991) (citing Wunderlich Contracting Co. v. United States, 351 F.2d 956, 968 (Ct. Cl. 1965)). Having considered appellant's claim of improper rejection on the basis that the government changed the acceptance criteria, we find that appellant has failed to prove liability in that it has failed to prove that the government changed the acceptance standards for separation defects or for leakers for Lot 3-3A.

1. Separation Defects

Appellant alleges that the trigger assembly separation witnessed during the LAT for Lot 3-3A was the same as the separations experienced in Lots 2-1, 2-2, and 3-2 (app. br. at 102). The government, on the other hand, contends that the separation witnessed during Lot 3-3A was different than the separations in the referenced lots because the separation during Lot 3-3A occurred during functioning rather than after functioning (gov't br. at 59-60). The core of the dispute is a factual disagreement about the timing of the separations experienced in Lots 2-1, 2-2, and 3-2. One of the contract's function requirements is the safety function; it is marked as a critical characteristic. The safety function requires that "[d]uring function igniter shall not separate from the outer container." (Finding 17) While the government contends that all separations in Lots 2-1, 2-2, and 3-2 occurred after functioning, appellant contends that some separations occurred during functioning (app. br. at 102-03). The LAT reports for Lots 2-1 and 2-2 recorded igniter assembly separations. In both instances, the reports stated that "[i]gniter assemblies separated from the can, post function." (Findings 63-64) The summary LAT report for Lot 3-2 did not mention a trigger assembly separation. However, the individual test data sheets included notations stating that "housing fell off," which indicates a trigger assembly separation. There is no indication about the timing of the separation. (Finding 77)

Appellant has failed to prove that the government was aware of separations during functioning in the LATs for Lots 2-1, 2-2 or 3-2. While one witness, an employee of PSI, testified that he witnessed a trigger assembly separation during function in Interfix 2, we found that there was no evidence that the government was aware of a separation during functioning of an MK 124 during the LATs for either Lot 2-1 or Lot 2-2 (findings 66, 69). For Lot 3-2, the LAT report did not indicate the timing of the noted separations and no testimony was offered during the hearing to establish that the government witnessed a separation during functioning of those signals that were marked as trigger assembly separations. Appellant has failed to prove that prior to Lot 3-3A, the government knowingly failed to object to trigger assembly separations like the one witnessed during Lot 3-3A.

2. Rescreening for Leakers

Appellant also fails to prove that there was a joint understanding between the parties or that the government was otherwise required (based upon course of dealing) to allow PSI to rescreen Lot 3-3A for leakers. PSI contends that having allowed PSI to 100% rescreen Lot 3-2 for leakers following a failure of the sealing test, the government should have allowed it to similarly rescreen Lot 3-3A for leakers (app. br. at 103-04). During the LAT for Lot 3-2, one leaker was observed during the sealing test (finding 76). PSI notified the government that the leaker was due to a missing O-ring and requested that it be allowed to rescreen the entire lot for leakers (finding 78). The government agreed to the rescreen in exchange for additional units of the MK 124 (finding 79). We found that the rescreening took approximately 80 hours, and that government witnesses had to be present during this period of time (finding 80). This evidences an agreement to allow PSI to rescreen Lot 3-2, but we see no indication that the parties entered into a wider agreement that PSI would always be permitted to rescreen lots any time there was a sealing test failure. The government agreed to allow PSI to rescreen Lot 3-2 in exchange for additional MK 124s. After having done so, the government had the discretion to determine that the benefit of additional units was not worth the time of the government employees to witness the screening.

Furthermore, to the extent that appellant argues that based upon course of dealing the parties had a joint understanding that the government would allow PSI to rescreen lots in which a leaking unit was discovered, appellant has failed to meet its burden of proof. A prior course of dealing, if established, can extinguish an otherwise explicit contractual requirement. *Comptech Corp.*, ASBCA No. 55526, 08-2 BCA ¶ 33,982 at 168,085. A course of dealing requires "a sequence of previous conduct between the parties to an agreement which is fairly to be regarded as establishing a common basis of understanding for interpreting their expressions and other conduct." RESTATEMENT (SECOND) OF CONTRACTS § 223(1) (1981). To establish a course of dealing, nullifying the government's ability to reject a lot for failing the sealing test pursuant to the requirements of Specification 13697N and instead requiring that the contractor be permitted to rescreen any lot failing the sealing test, based upon conduct, appellant must show:

[A]ctual knowledge by both parties of consistent conduct by one party in its contract dealings with the other over an extended period of time regarding a particular contract provision upon which the other is reasonably entitled to rely.

Comptech, 08-2 BCA ¶ 33,982 at 168,086.

Appellant attempts to establish a prior course of dealing by alleging that PSI was permitted to rescreen lots for leakers throughout Interfix 1 and that PSI was permitted to rescreen Lot 3-2 (app. reply br. at 14). There is clear evidence that the government approved PSI's request to rescreen Lot 3-2 for leakers, following the lot's failure of the sealing test, in exchange for additional units of the MK 124 (findings 78-79). With respect to appellant's allegations concerning Interfix 1, the Board made the following findings about the government's conduct during Interfix 1 with respect to leakers and the alleged rescreening of lots by the contractor. The Board found that Lot 1-1 failed the LAT due to leakers and was rejected. There is no evidence that the government permitted PSI to rescreen this lot. (Finding 37) The Board found that there was insufficient evidence to find that Lots 1-2 through 1-9 failed the sealing test (finding 51). As a result, there is no evidence upon which to conclude that rescreening would have been necessary even if the government may have been amenable to such a procedure. The only evidence of rescreening during Interfix 1 concerned Lot 1-10. While we found that rescreening occurred, we also found insufficient evidence to establish that the government approved the contractor's rescreening of this lot. (Finding 52)

Based upon the evidence presented to the Board, appellant has proven only two instances of rescreening, once during Lot 1-10 and once during Lot 3-2. These two instances are insufficient to establish consistent conduct by the government in its contract dealings with the contractor over an extended period of time. Not only is there evidence of only two instances of rescreening, the process preceding the two instances is markedly different. In one instance, there is no evidence that PSI formally requested permission to rescreen or that government witnesses were present during the rescreening (see finding 52). In the other instance, PSI formally requested a deviation and schedules were coordinated to ensure the screening occurred in the presence of government witnesses (see findings 78-80). We conclude that appellant has presented insufficient evidence to establish a prior course of dealing requiring the government to allow PSI to rescreen lots with leakers.

Appellant has failed to prove that the government changed the acceptance criteria for Lot 3-3A.

CONCLUSION

For the reasons explained above, the appeals are denied.

Dated: 13 March 2017

REBA PAGE

Administrative Judge Armed Services Board of Contract Appeals

(Signatures continued)

I concur I concur MARK N. STEMPLER RICHARD SHACKLEFORD Administrative Judge Administrative Judge Acting Chairman Vice Chairman Armed Services Board Armed Services Board of Contract Appeals of Contract Appeals I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 57890, 58335, and 59103, Appeals of Pyrotechnic Specialties, Inc., rendered in conformance with the Board's Charter. Dated: JEFFREY D. GARDIN

> Recorder, Armed Services Board of Contract Appeals

NOTE: This order is nonprecedential.

United States Court of Appeals for the Federal Circuit

PYROTECHNIC SPECIALTIES, INC., Appellant

 \mathbf{v} .

SECRETARY OF DEFENSE,

Appellee

2019-2024

Appeal from the Armed Services Board of Contract Appeals in Nos. 57890, 58335, 59103, Administrative Judge Mark N. Stempler, Administrative Judge Reba Page, Administrative Judge Richard Shackleford.

ON PETITION FOR PANEL REHEARING

Before O'MALLEY, CLEVENGER, and TARANTO, Circuit Judges.

PER CURIAM.

ORDER

Pyrotechnic Specialties, Inc. filed a petition for panel rehearing.

Upon consideration thereof,

Page: 2 Filed: 03/23/2021

2 PYROTECHNIC SPECIALTIES, INC. v. SECRETARY OF DEFENSE

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The mandate of the court will issue on March 30, 2021.

FOR THE COURT

/s/ Peter R. Marksteiner March 23, 2021 Date

Peter R. Marksteiner

Clerk of Court

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ж	В	Supplies or Services and Prices/(Costs	5		Part III -	- List Oí	Documents, Exhibits,	And Other At	tachments
х	С	Description/Specs./Work Statem	ent	12	х	J	List	of Attachments		43
х	D	Packaging and Marking		18				entations And Instruct		
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Reference No. of Document Being Continued

PHN/SHN W52P1J-04-C-0098

MOD/AMD

Page 2 of 43

Name of Offeror or Contractor: Pyrotechnic specialties inc.

SECTION A - SUPPLEMENTAL INFORMATION ITEM: MK124 SIGNAL, SMOKE AND ILLUM NSN: 1370-01-144-3561 AND 1370-01-030-8330 (30, 55 B - 58 C)

1. THE PURPOSE OF THIS PROCUREMENT ACTION IS TO DO THE FOLLOWING:

- A. AWARD 42,228 EACH OF 1370-01-144-3561 AND 18,330 EACH OF 1370-01-030-8330 AT A UNIT PRICE OF \$46.21 EACH; WITH FIRST ARTICLE, F.O.B. ORIGIN FOR A TOTAL CONTRACT AMOUNT OF \$2,79885.18.
 - B. NOTE THAT CLAUSE I-72 "EVALUATED OPTION FOR INCREASED QUANTITY" IS FOR A 150 PERCENT OPTION AT A UNIT PRICE OF \$42.00 EACH.
- 2. THEREFORE THE TOTAL CONTRACT VALUE IS \$2,798,385.18.
- 3. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED IN FULL FORCE AND EFFECT.

*** END OF NARRATIVE A 005 ***

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

A-1	Regulatory Cite 52.215-4501	ARSENALS AS SUBCONTRACTORS	
A-2	LOCAL AMC	AMC-LEVEL PROTEST PROGRAM	DEC/2000
			·

(End of clause)

(AM7010)

52.252-4500 FULL TEXT CLAUSES LOCAL

SEP/1997

- 1. This contract incorporates one or more clauses and provisions by reference, with the same force and effect as if they were set forth in full text. Upon request the Contracting Officer will make their full text available.
- 2. The entire body of full text regulatory and command unique clauses and provisions will no longer be included in solicitations or contracts. These clauses and provisions have the same force and effect as if the entire full text was included in the solicitation/contract. Where text has been incorporated by reference three astericks are put in its place (***).
- 3. You can view or obtain a copy of the clauses and provisions on the internet at: www.osc.army.mil/ac/aais/icc/clauses/index.htm. Click on command unique first to locate the clause. If it is not located under command unique click on regulatory to find.
- 4. All full text clauses have a 6 or 7 as the third digit of the clause number (i.e. AS7000).

(End of clause)

(AS7001)

EXECUTIVE SUMMARY

ITEM: SIGNAL, ILLUMINATION AND SMOKE MK124 MOD G

NSN: 1370-01-144-3561 (L283)

QTY: 47436 CLIN: 0001

ITEM: SIGNAL, ILLUMINATION AND SMOKE MK124 MOD 0

NSN: 1370-01-030-8330 (L203)

CONTINUATION SHEET	Reference No. of Document Be	Page 3 of 43					
CONTINUATION SHEET	PHN/SHN W52P1J-04-C-0098	MOD/AMD					
Name of Offeror or Contractor: pyrotechnic specialogies inc							

QTY: 20,354 CLIN: 0003

- 1. THE PURPOSE OF THIS SOLICITATION IS TO PROCURE THE ABOVE ITEM BY SOLICITING PRICING ON A WITH FIRST ARTICLE, F.O.B. CRIGIN BASIS.
- 2. PROGRESS PAYMENTS ARE AUTHORIZED.
- 3. THE SOLICITATION CONTAINS AN EVALUATED OPTION CLAUSE FOR ONE HUNDRED FIFTY PERCENT(150%). THE OPTION EXTENDED AMOUNT (OPTION UNIT PRICE TIMES THE OPTION QUANTITY WHICH IS THE SOLICITATION QUANTITY TIMES 150%) WILL BE INCLUDED WITH THE SOLICITATION EXTENDED AMOUNT (SOLICITATION UNIT PRICE TIMES THE SOLICITATION QUANTITY) TO COME UP WITH THE TOTAL EVALUATED PRICE PROPOSED BY THE CONTRACTOR.
- 4. ANARD WILL BE MADE TO THE OFFEROR WHO PROVIDES THE EEST VALUE TO THE GOVERNMENT. RECENT, RELEVANT PAST PERFORMANCE, MANUFACTURING PLAN, SMALL BUSINESS UTILIZATION AND PRICE ARE THE FACTORS THAT WILL BE EVALUATED TO DETERMINE THE BEST VALUE. A CONTRACT CAN BE AWARDED TO OTHER THAN THE LOW OFFEROR. PLEASE READ SECTIONS L AND M CAREFULLY TO MAKE SURE YOU SEND THE GOVERNMENT THE REQUESTED INFORMATION AND TO SEE HOW THE GOVERNMENT INTENDS TO EVALUATE THE OFFERS.
- 5. AWARD MAY BE MADE FROM THE INITIAL OFFER WITHOUT DISCUSSIONS.
- 6. THE ITEMS HAVE BEEN DETERMINED TO BE HAZARDOUS AND A PRE-AWARD SAFETY AND PHYSICAL SECURITY SURVEY WILL BE REQUIRED. A POST-AWARD MEETING WILL ALSO BE REQUIRED.
- 7. PLEASE NOTE THE REQUIREMENTS OF CLAUSE ES6001 ENTITLED "HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT" (FAR 52.246-11).
- 8. NOTE: CONTRACTORS WILL HAVE TO MEET THE REQUIREMENTS OF THE POLLOWING:
 - A. DOD CONTRACTOR'S SAFETY MANUAL, DOD 4145.26M
 - B. DOD PHYSICAL SECURITY STANDARDS FOR SENSITIVE CONVENTIONAL ARMS, AMMUNITION AND EXPLOSIVE MANUAL, DOD 5100.76M.
 - C. ALL FEDERAL, STATE, CITY AND COUNTY SAFETY AND SECURITY REQUIREMENTS THAT MAY BE REQUIRED FOR THEIR OWN AREA.

PLEASE NOTE THE REQUIREMENTS OF CLAUSE (IA6200) ENTITLED "SAFEGUARDING SENSITIVE ARMS, AMMUNITION, AND EXPLOSIVES" (252.223-7007 DFARS).

- 9. PLEASE PROVIDE YOUR PRICES ACROSS FROM CLINS 0001 AND 0003 "WITH FIRST ARTICLE". THERE ARE NO CONTRACTORS ELIGIBLE FOR WAIVER OF FIRST ARTICLES. PLEASE DISREGARD THE PRICENCE LINE FOR CLIN 0001AA.
- 10. Offerors are responsible for including sufficient details to permit a complete and accurate evaluation of the proposal. The Government will not make assumptions concerning an offeror's intent, capabilities, facilities or experience. Clear identification is the sole responsibility of the offeror.
- 11. Offerors are cautioned to ensure that their proposals are complete, including all fill-ins and blanks in the solicitation. This also includes written approval from the cognizant Contracting Officer for use of Government Owned Facilities and Equipment if applicable.
- 12. Offerors are directed to the provision in Section L regarding Central Contractor Registration (CCR). Failure to register in the CCR will preclude an offeror from receiving an award under this solicitation.
- 13. This executive summary is provided as an administrative convenience and is not intended to alter the terms and conditions of the solicitation in any way. Any inconsistencies between this executive summary and other solicitation provisions shall be resolved in favor of the other solicitation provisions.
- 15. If necessary, the Government reserves the right to request cost and pricing data.
- 16. GOVERNMENT PURNISHED MATERIAL (GFM) M2A1 METAL BOXES, WILL BE PROVIDED FOR CLEN 0001 FOR A QUANTITY OF 2,788 EACH AND AT A RATE THAT WILL SUPPORT THE DELIVERY SCHEDULE.
- 17. Your proposal must be submitted and received at HQ, ARMY FIELD SUPPORT COMMAND (AFSC), AMSFS-CCA-M. BLDG 350, 5TH floor, North Bay, between Post number C3 and C4, Rock Island, IL 61299-6500 by 23 JULY 2004 at 2:00PM CENTRAL TIME. Your attention is directed to instructions set forth in cluase L67:00 of this solicitation. Packages cannot be delivered on weekends (Saturday and Sunday) and Holidays. Offers will be valid for sixty (60) days unless the offeror clearly indicates otherwise in their proposal.

CONTINUATION SHEET	Reference No. of Document Be	Page 4 of 43						
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Name of Offeror or Contractor: pyportechnic specialities ind								

*** END OF NARRATIVE A 001 ***

- 1. THE PURPOSE OF THIS AMENDMENT IS TO EXTEND THE DELIVERY SCHEDULE 60 DAYS DUE TO LONG LEADTIME ITEMS AS DELINEATED ON THE FOLLOWING SECTION B.
- 2. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.
- 3. THE DATE FOR RECEIPT OF PROPOSALS REMAINS THE SAME AT 1400 23 JULY 2004.

*** END OF NARRATIVE A 002 ***

ITEM: MK124 SIGNAL SMOKE AND ILLUM

NSN: 1370-01-030-8330

CLIN: 0003

- 1. THE PURPOSE OF THIS AMENDMENT IS TO DO THE FOLLOWING;
 - A. INCREASE THE QUANTITY OF CLIN 0003 BY 80 EACH AS DELINEATED IN THE FOLLOWING SECTION B.
 - B. INCORPORATE ATTACHMENT 019 THAT WAS INADVERTENTLY OMITTED FROM THE BASIC SOLICITATION.
- 2. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.
- 3. THE DATE FOR RECEIPT OF PROPOSALS HAS NOT CHANGED AND REMAINS AT 1400 CENTRAL TIME 23 JULY 2004.

*** END OF NARRATIVE A 003 ***

1. THE PURPOSE OF THIS AMENDMENT IS TO PROVIDE THE FOLLOWING AS CLARIFICATION ON DRAWING 2151776:

Drawing 2151776 "Plastic Material, Pressure Sensitive Adhesive" Rev Al states "When applied to the assembly or component on which usage is intended, there shall be no peeling, fading, cracking, blistering, diffusion or bleeding of color, loss of adhesion or wrinkling after MIL-STD-331 test 105". This requirement will be verified by the manufacturer by sampling using SQAP 402-004, page 6, Table I, Level VI. The SQAP in included in the TDP.

- 2. THE DATE FOR RECEIFT OF PROPOSALS REMAINS UNCHANGED AT 1400 23 JULY 2004.
- 3. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

*** END OF NARRATIVE A 004 ***

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC. ITEM NO SUPPLIES/SERVICES QUANTITY UNIT PRICE UNIT AMOUNT SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS 0001 NSN: 1370-01-144-3561 FSCM: 10001 PART NR: 5532237 SECURITY CLASS: Unclassified 0001AA DATA ITEM 1 LO ** NSP ** \$___ ** NSP ** NOUN: FIRST ARTICLE TEST REPORT With First Article Approval Delivery Shall be FOB Carrier's Equipment, Wharf or Freight Station (at the Government's option) at or near the Contractor's plant at a specified city or shipping point. (End of narrative B001) Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD QUANTITY DEL REL CD DEL DATE 29-APR-2005 001 FOR POINT: Destination SHIP TO: FREIGHT ADDRESS (Z55555) SEE SECTION E 0001AB PRODUCTION QUANTITY 648 EA 46.21000 S NOUN: SIGNAL, SMOKE&ILLUM MK124-0

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC. ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT PRON: R14A0F534I PRON AMD: 01 ACRN: AA AMS CD: 41476038030 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 N490654086001B W53XMD J
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 16~JUL-2005
 FOB POINT: Origin SHIP TO: PARCEL POST ADDRESS (WS3XMD) SU W39Z MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-5099 TRANSPORTATION (FDT/TAC) CODE: N82B (End of narrative F001) 0001AC PRODUCTION QUANTITY 30600 ĽА 46.21000 \$ 1,414,026.00 NOUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: R14A0R894I PRON AMD: 01 ACRN: AA AMS CD: 41476038030 CUSTOMER ORDER NO: N4802904MPA4B21 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 N490654086002B W53XMD J 3,783 17-AUG-2005 FOB POINT: Origin

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Name of Offeror or Contractor: pyrotechnic specialties inc.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SHIP TO: PARCEL POST ADDRESS (W53XMD) SU W39Z MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-5099				
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	SHIP TO: PARCEL POST ADDRESS (NO0109) ATLANTIC ORDNANCE COMMAND P O BOX 410 YORKTOWN VA 23691-0410				
	DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TF CD 003 N490654086004B N47615 J 3 DEL REL CD QUANTITY DEL DATE 001 2,434 16-SEP-2005				
	002 10,000 17-QCT-2005			 	
	003 600 15-NOV-2005				
	FOB POINT: Origin				
	SHIP TO: PARCEL POST ADDRESS (N47615) NAVAL WEAPONS STATION SEAL BEACH 800 SEAL BEACH BLVD SEAL BEACH CA 90740-5000				
	TRANSPORTATION (FDT/TAC) CODE: N826	,			
	(End of narrative F001)			: :	
0001AD	PRODUCTION QUANTITY	5868	BA	\$ 46.21000	\$271,160
	NCUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: R14A0F424I PRON AMD: 01 ACRN: AA AMS CD: 41476039030 CUSTOMER ORDER NO: N0007404MPDFQ32				1

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

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	SEAL BEACH CA 90740-5000				
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	(End of narrative FCG1)				
	TRANSPORTATION (FDT/TAC) CODE: N82B				
	(End of narrative F002)		į	ļ	
0001AE	PRODUCTION QUANTITY	5112	EA	\$ 46.21000	\$ 236,225
	NOUN: SIGNAL, SMOKE&ILLUM MK124-0		}	1	}
	PRON: R14A0F554I PRON AMD: 01 ACRN: AA				
	AMS CD: 41476038030 CUSTOMER ORDER NO: N4802904MPA3B20				
	Packaging and Marking				
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Name of Offeror or Contractor: Pyrotechnic Specialties inc.

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	FOR POINT: Origin				
	SHIP TO: PARCEL POST ADDRESS				
	(W53XMD) SU W39Z MAC CRANE ARMY AMMO ACT				
	WHOLESALE SUPPLY ACCOUNT				
	ELDG 13 300 HWY 361 CRANE IN 47522-5099	,	ļ		
	CRANE 1N 4/322-3099				
	TRANSPORTATION FDT/TAC CODE: N\$2B				
	(End of narrative F001)				
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	TRANSPORTATION FDT/TAC CODE: N82B				
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0002	DATA ITEM			\$ ** NSP **	\$ ** NSP
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	NOUN: 1423 CDRL DATA				
	SECURITY CLASS: Unclassified		-		
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	Inspection and Acceptance				
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0003	NSN: 1370-01-030-8330 FSCM: 10001				
	PART NR: DL3139734				
	SECURITY CLASS: Unclassified		1		
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0003AA	PRODUCTION QUANTITY	18252	EA	\$46.21000	\$ 843,424.
	NOUN: SIGNAL, SMOKE & ILLUM, MK124-0 PRON: U14A0K194I PRON AMD: 01 ACRN: AA				
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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC. ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT AMS CD: 41476038030 CUSTOMER ORDER NO: FD20200418018 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 FW2C2632612007 W22PVK L DEL L. 15-DEC-2005 DEL REL CD QUANTITY 001 8,420 9,832 002 06-JAN-2006 FOB POINT: Origin SHIP TO: PARCEL POST ADDRESS (W22PVK) XU MUNITIONS STORAGE POINT BLUE GRASS ARMY DEFOT 2091 KINGSTON HWY RICHMOND KY 40475-5000 TRANSPORTATION (FDT/TAC) CODE: F8D1 (End of narrative F001) 0003AB PRODUCTION QUANTITY 78 ĒΑ 46.21000 \$___ 3,604.38 NOUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: W14A0M864I PRON AMD: 01 ACRN: AA AMS CD: 41476038030 CUSTOMER ORDER NO: MIPR4F0SC10109 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 W81YWB4155A654A W53XMD J
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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	NIT PRICE AMOUNT		
	SHIP TO: PARCEL POST ADDRESS (W53XMD) SU W39Z MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-5099						
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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

Regulatory Cite ______ Title _____ Date

C-1 52.210-4501 LOCAL DRAWINGS/SPECIFICATIONS

MAR/1988

In addition to the drawing(s) and/or specifications listed below, other documents which are part of this procurement and which apply to Preservation/Packaging/Packing and Inspection and Acceptance are contained elsewhere.

The following drawing(s) and specifications are applicable to this procurement.

THE FOLLOWING IS APPLICABLE TO CLIN 0001:

Drawings and Specifications in accordance with enclosed AUTOMATED DATA LIST (ADL) 5532237 with revisions in effect as of 7/28/1995 (except as follows):

THE FOLLOWING DRAWINGS, SPECIFICATIONS AND DOCUMENTS ARE APPLICABLE TO THIS PROCUREMENT: AUTOMATED DATA LIST 5532237, REV D, DATED 28 JUL 1995 AND REVISIONS OF DOCUMENTS THEREON. IN ADDITION SUPPLEMENTAL QUALITY ASSURANCE PROVISIONS 402-004 APPLY.

THE FOLLOWING ADL CHANGE NOTICES APPLY:

5532237D001, DATED 11/14/95 5\$2237D002, DATED 3/25/04

THE FOLLOWING IS APPLICABLE TO CLIN 0003:

Drawings and Specifications in accordance with enclosed AUTOMATED DATA LIST (ADL) 3139734 REV G with revisions in effect as of 15 JUN 94 AND REVISIONS OF DOCUMENTS THEREON. IN ADDITION, SUPPLEMENTAL QUALITY ASSURANCE PROVISIONS 402-004 APPLY AND ADL CHANGE NOTICE 3139734GG01 DATED 3/25/04 APPLIES:

(C\$6100)

C-2 52.247-4503 STATEMENT OF WORK - TRANSFORTATION SECURITY REQUIREMENTS MAR/2004

LOCAL

Supplies produced under this contract are identified as SENSITIVE CATAGORY IV, requiring Transportation Protective Service (TPS) in accordance with DoD 5100.76M (Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives) and DoD 4500.9R, Defense Transportation Regulation, parts II and III, as added to or amended by applicable military service policies in accordance with guidance provided by Defensé Logistics Agency (DLA)/Defense Contract Management Agency (DCMA) or other components assigned to provide contract administration services (CAS) within designated/delegated geographic areas as specified under DOD 4105.59H, DOD Directory of Contract Administration Service Components, dated January 1985, and subsequent issues thereof for offshore/OCONUS procurements.

(End of statement of work)

(C\$6101)

C-3 52.225-4502 STATEMENT OF WORK-ENGLISH LANGUAGE DOCUMENTATION FEB/1992

All contractor prepared material to be furnished under this contract shall be written in the English language.

(End of statement of work)

(CS7103)

C-4 52.246-4506 STATEMENT OF WORK FOR STATISTICAL PROCESS CONTROL FEB/1999

LOCAL

In accordance with DI-MGMT-30004 and contract clause 52,246-4506, the following supplemental information shall be considered

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

and used when designing your general and detailed SPC plans.

1.0 General Management Plan

This section shall define management's SPC responsibilities and involvement and shall include management's commitment to continuous process improvement. The plan shall embrace a total commitment to quality and shall be capable of standing on its own merit.

- 1.1 Policy/Scope: Describe the Contractor's policy for applying SPC, including goals and management commitment to SPC.
- 1.2 Applicable Document: List documents that are the basis for the contractor's SPC program (i.e., ANSI standard, textbooks, Government documents).
- 1.3 SPC Management Structure: Define the SPC management structure within the organization. Identify and include interrelationships of all departments involved in SPC (i.e., Production, Quality, Engineering, Purchasing, etc.). Identify by job title or position all key personnel within departments involved in the application of SPC. Describe which functions are performed by key personnel and when these functions are performed (i.e., include personnel responsible for performing inspections/audits, charting and interpreting data; personnel responsible for determining, initiating and implementing corrective action upon detecting assignable causes, etc.).
- 1.4 SPC Training: Identify by job title or position the primary individual responsible for overseeing that SPC training is accomplished. Describe the qualification program required and in use for all personnel utilizing SPC techniques, including the qualification of trainers. Identify who is to be trained and the type, extent and length of such training (i.e., on-the-job, classroom, etc.). Identify when refresher training is required and how personnel using SPC techniques are monitored.
- 1.5 Manufacturing Controls: Identify the criteria for performing SPC gage capability studies and describe how and when these studies should be applied. Repeatability and accuracy of gages should be addressed.
- 1.6 Determination of SPC Use: Describe how the process/operation parameters are determined appropriate for SPC application and explain what actions are taken if SPC is not deemed appropriate for critical, special and major process/operation parameters (i.e., Pareto analysis, analysis of characteristics with tight tolerances, etc.),
- 1.7 Process Stability and Capability:
- a. Identify the criteria for performing process capability studies and describe how and when these studies are applied. Describe how the process capability index is calculated and include the frequency of these calculations. Describe what actions are taken as methodologies when process capability is for variable and attribute data. To determine a capable process, the process/operation parameters shall meet the following requirements:
- (1) Variable data: Process capability (Cp) shall be determined. Process performance index shall be greater than or equal to 1.33 (Cpk). For critical parameters/characteristics, the process performance index shall be greater than or equal to 2.0 (Cpk).
- (2) Attribute data: Process capability/performance shall be the percent beyond the upper/lower specification limit less than or equal to .003 percent (Cpk = 1.33).
- b. Describe what actions will be taken if process/operation is sub-marginal or marginal (Cpk less than 1.33 or 2.0 for criticals or grand average fraction defective is greater than .003 percent).
 - c. Include analysis of statisical distributions and define all formulas and symbology utilized.
- 1.8 Control Chart Policy:
- a. Type of charts to be used (i.e., x bar/R x bar/S, etc.) and rationale for use; the criteria for selection of sample size, frequency of sampling and rational subgroups.
 - b. Procedures for establishing and updating control limits, including frequency of adjustments.
- c. Criteria for determining out-of-control conditions (i.e., trends, points beyond control limits, etc.) and the corrective action taken, to include failure analysis when the process is unstable or when nonconforming product has resulted from unstable processes. Illustrate out-of-control tests.
- d. Describe the method of recording pertinent facts on control charts such as charges in raw material, machines, manufacturing methods and environment, and corrective actions taken and describe how control charts are traceable to the product.
- 1.9 Vendor/Subcontractor Purchase Controls: Identify whether suppliers are required to utilize SPC and describe the extent the vendor's policies and procedures are consistent with in-house procedures of the prime contractor. Describe the following: methods utilized to

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determine that suppliers have adequate controls to assure defective product is not produced and delivered; the system utilized to audit suppliers, what will be audited and how often, what action will be taken when out-of-control conditions exist at subcontractor/vendor facilities.

- 1.10 SPC Audit System: At a minimum, the contractor's SPC Audit System shall consist of auditing compliance with the planned arrangements specified in the general and detailed SPC plans followed by a review and analysis of the outcome to include implementation of necessary corrective action.
- 1.11 SPC Records: Identify various records to be used in support of SPC and describe their use. Identify retention periods.
- 2.0 Detailed Plan:

This section shall detail specific manufacturing process/operation parameters under control.

- 2.1 Control of Process/Operation Parameters or Characteristics:
 - a. Identify the following for each process/operation by name or characteristic under control:
- (1) Identify process/operation by name or characteristic and provide rationale for selection; justification for nonselection if the parameter or characteristic is identified as critical, special and/or major.
- (2) Describe how the characteristic is proceduced; the chain of events, type and number of machines involved, location of manufacturing facility, tolerances maintained, etc.
- (3) Production and inspection machinery used. Includ the production rate, number of shifts and length of shifts plus whether inspection is fully or semi-automatic or manual. If manual, identify the type of gages in use.
- (4) Identify the type of charts to be maintained and whether the process/operation is performed in-house or subcontracted oupt; identify facility/vendor where process/operation parameters are targeted for SPC.
- 2.2 Reduction or Elimination of Inspection/Test: The Procuring Contracting Officer (PCO) will accept submissions of requests for reduction or elimination of final acceptance inspection/testing when the requirements of the SPC contract clause and this SOW are met. Each request shall contain and/or address the following: control charts documenting twenty (20) consecutive production shifts or more for the same process/operation parameter under control; type of control chart utilized; control chart limits and process average or grand average fraction defective (as applicable); definition of out-of-control condition and corrective actions taken during out-of-control conditions; specification and part number.

(End of statement of work)

(CS7100)

C-5 52.246-4535 STATEMENT OF WORK - AMMUNITION DATA CARDS AND REPORT OF CONTRACTOR AUG/2002 LOCAL BALLISTIC TESTING

Ammunition Data Cards shall be prepared in accordance with MTL-STD-1168 and shall follow the format required by the world wide web application identified as WARP or Worldwide Ammunition-data Repository Program. The Report of Contractor Ballistic Testing is prepared IAW DI-MISC-80246. Additional details on both of these WARP applications are provided below. Prior to gaining access to WARP contractor/facility personnel involved in the preparation of ammunition data cards shall obtain a userid and password for the Army Electronic Product Support (AEPS) network. Instructions and help for obtaining an AEPS userid and password are as follows:

AEPS Access Procedures

The Army Electronic Product Support (AEPS) is a Department of Defense logistics website. Entering AEPS will allow you access to the SECURED AREA of the Army Electronic Product Support Network. A username and password are required to enter this area. Only authorized DoD personnel and contractors with current active contracts with DoD will receive access into the AEPS website. If you have a requirement for the AEPS website, you must fill out and submit the AEPS Access Request Form found at the following web address:

http://aeps.ria.army.mil/aepspublic.cfm

You must click on "Access Request Form" and continue through the steps until completion and click on SUBMIT. You are required

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Name of Offeror or Contractor: Pyrotechnic specialties inc.

to provide a supervisor name, email and phone number if you are a DoD civilian or military. Government contractors are required to provide CAGE code, Contract Number and COR/COTR with "Government" email address. All requestors must provide their Information Assurance Security Officer's (TASO, formerly ISSO) name, email, DSN phone and commercial phone.

After submitting the request, your supervisor/COR/COTR will be emailed a copy of your request and will be asked to verify your information before a user ID will be issued. ARPS User ID and ARPS Login Name mean the same. Your supervisor must REPLY back to the email provding the following:

Approval? (YES/MO) Supervisor Name Supervisor E-Mail Supervisor Phone

The COR/COTR must also provide the same information stated above in his/her REPLY plus provide the Contract Expiration Date (format - MM/DD/YYYY).

Upon notification from your supervisor/COR/COTR, you will be emailed an AEPS User Login Name and instructions for logging into the AEPS website. You will use the AEPS password that you assigned to yourself when you filled out the access request form.

Once you gain access to the AEPS website, you can change your personal information when needed to keep your file current.

AEPS HELP-DESK and Problem Reporting Procedures

Reporting Problems - The AEPS Help Desk has several means of reporting problems:

Call 1-888-LCG-HELP (1-888-564-4357) to speak to an AEPS representative

Contact the AEPS Help-Desk at Comm. (309) 782-0699 or DSN 793-0699 or (309) 782-1426 or DSN 793-1426

Contact the AEPS Help-Desk by FAX: (309) 782-1426 or DSN 793-1426

Contact the AEPS Webmaster by Email: Webmaster (martinj@ria.army.mil)

Each phone call, email or fax is handled in a prompt and courteous manner. Responses to problems are provided by phone and/or email.

Other means to help assist you in identifying your problems can be found on the AEPS Help Section at web link:

http://aeps/ria.army.mil/help.cfm

Here you will find Questions and Answers by clicking in either of the two FAQ subcategories reflected under the HELP tab:

FAQs - AEPS Access Request Process or SSL FAQs - Secured Socket Layer

You may also check out our new Frequently Asked Questions (https://aeps.ria.army.mil/aepsqa.cfm) page to get answers on access problems as another means of assistance.

The AEPS Help Section screen http://aeps.ria.army.mil/help.cfm also reflects two other topics that can be clicked on to provide further assistance:

"Password Problems or Request Status" at https://aeps.ria.army.mil/request/info/UserScreen.cfm
"Ask the AEPS Public Help Knowledge Base" at http://aeps.ria.army.mil/help/aepshelpmain.cfm

Worldwide Ammunition-data Repository Program (WARP)

Once you have obtained an AEPS userid and password allowing entry to the secured area of AEPS you can access the WARP application by scrolling to the bottom of the list of AEPS applications. The WARP opening main page and all subsequent pages contain multiple navigational aids to guide you through the process of imputting information necessary for creating a new ammunition data card. An online users manual will provide additional help in the development of an ammunition data card and it is recommended that you download and read the users manual prior to imputting your initial data card. The user's manual also contains screen shots, which depict what the imputter will see during the ADC input process.

Ammunition Data Card Input

ADC input allows current contractors and government facilities the capability to create, and submit for approval, ADCs which meet the format requirement of MIL-STD-1168B. ADCs are automatically forwarded to the respective Governmental Agency Responsible for Acceptance (GARA). The GARA, in most cases the Defense Contract Management Agency (DCMA) Quality Assurance Representataive (QAR), reviews contractor input for accuracy and completeness, and after updating the disposition code for the

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specific lot, submits the ADC to the database. The inputter is granted access only to ADCs identified with its specific manufacturing code, as identified in MIL-HDBK-1461A, Manufacturer's Symbols. The use of previously inputted ADCs through the TEMPLATE option, significantly reduces input effort, while increasing accuracy and consistency of data.

Email Notification

WARP provides immediate, automated notification to process participants when actions are required. When the producer has completed an ADC submission, an email message is routed to the GARA advising that an ADC awaits review and approval. If the GARA approves the ADC as submitted, the ADC is released to the base and an email, with approved data card, is routed back to the originator. If the ADC requires modification or correction to be in accordance with MIL-STD-1168B requirements, an email is provided to the ADC originator advising that corrective action is required prior to approval.

Information Updates

It is important that the System Administrators are apprised when a producer receives a new contract. The producer shall notify OSC-WARP@osc.army.mil within 30 days after receipt of a new contract. Information to be included shall be the contract number, item, GARA, Manufacturer's identification symbol and the names of the individuals who will be inputting ADCs into the system. If you are a new producer and do not have a Manufacturer's identification symbol, you can obtain one by sending an email to OSC-WARP@osc.army.mil. The email must contain manufacturer's name, address where performance of the contract will take place, and a point of contact.

Report of Contractor Ballistic Testing Module

In addition to its ADC function, WARP also servces as a repository for reports of contractor ballistic (or functional) testing. Whenever the contract requires contractor performance of ballistic testing, the results of such testing shall be captured by you, the performing contractor, within a specially designed Lot Acceptance Test Report (LATR) module.

Within the LATR module, you are required to provide a report of any contractor ballistic testing and to submit the report in electronic fashion via the WWW. The report must be a .pdf file for the upload process to work.

The LATR tab on the WARP opening page provides access to the upload process.

An online users manual will provide additional help in the upload process for a Report of Contractor Ballistic Testing. It is recommended that you download and read the users manual prior to uploading your initial Report of Contractor Ballistic Testing. The users manual also contains screen shots which depict the upload process.

The upload process is simple and direct. After inputting several key pieces of information (contract number, noun, etc.) on the LATR initial page the inputter selects the upload button and the LATR module will browse the inputter's hard drive until the correct file is found. At the click of a button the file is uploaded to WARP and the process is complete.

(End of statement of work)

(CS7200)

C-6 52.248-4502

CONFIGURATION MANAGEMENT DOCUMENTATION

MAY/2001

The contractor may submit Engineering Change Proposals (ZCPs), Value Engineering Change Proposals (VECPs) (Code V shall be assigned to an engineering change that will effect a net life cycle cost), including Notices of Revision (NORs), and Requests for Deviation (RFDs) for the documents in the Technical Data Package (TDP). The contractor shall prepare these documents in accordance with the Data Item Descriptions cited in block 04 on the enclosed DD Form 1423, Contract Data Requirements List.

Contractor ECPs/VECPs shall describe and justify all proposed changes and shall include NORs completely defining the changes to be made. Contractors may also submit RFDs, which define a temporary departure from the TDP or other baseline documentation under Government control. The contractor shall not deliver any units incorporating any change/deviation to Government documentation until notified by the Government that the change/deviation has been approved and the change/deviation has been incorporated in the contract.

If the Government receives the same or substantially the same VECPs from two or more contractors, the contractor whose VECP is received first will be entitled to share with the Government in all instant, concurrent, future, and collateral savings.

Duplicate VECFs, which are received subsequently, will be returned to the contractor(s) without formal evaluation, regardless of whether or not the first VECP has been approved and accepted by the Government.

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(End of clause)

(C\$7600)

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SECTION D - PACKAGING AND MARKING

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

Regulatory Cite Title Date

D-1 52.211-4508

PACKAGING REQUIREMENTS

JUL/1997

LOCAL

THE FOLLOWING APPLIES TO CLIN 0001:

Packaging shall be in accordance with 2128249 revision C, dated 17 JUL 1995 AND 7223910, REVISION - DATED 9 NOV 95.

When lot numbering is required, no more than one lot shall be packaged in an outer shipping container.

Marking shall be in accordance with 2128249, REVISION C DATED 17 JUL 1995 AND 7223910, REVISION -, DATED 9 NOV 95.

EXCEPTION: 5. The following shall apply to drawing 2128249, REVISION C, DATED 17 JUL 95:

EXCEPTION TO DOCUMENTATION found on the ADL applies to this drawing.

2D bar marking shall be applied in accordance with MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

IDENTIFICATION MARKING: Correct quantity from "18 Signal," to "36 Signal,"

PROPER SHIPPING MARKING: Correct to "SIGNAL DEVICES, HAND UN 0191".

PERFORMANCE ORIENTED PACKAGING:

The United Nations (UN) Performance Oriented Packaging (PCP) marking provided on drawing 2128249 does not apply to this procurement. Prior to shipment, the manufacturer shall make sure the container has been tested for compliance with UN POP requirements in accordance with Title 49 Code of Federal Regulations. Test shall be at a sufficient weight to more than cover the actual gross weight of the box. All performance test requirements shall be supported by certificates and reports attesting to the date and the data results obtained from performance oriented packaging testing. The contractor, if not a selfcertifier, shall be responsible for assuring that third party sources providing performance testing services are in fact, registered with the Department of Transportation. All certificates and reports shall be available for inspection by authorized government representatives, for a period of three years. All exterior containers will be marked with the UN POP marking provided by the contractor in accordance with Title 49 Code of Federal Regulations and MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING (POP) VERIFICATION: In no case shall a container be shipped if the gross weight marked on the package is greater than the POF certified weight. If the average gross weight of the packed containers (determined by weighing two representative samples and averaging the weight) is greater than the certified weight, container marking operations shall cease and the procuring activity shall be contacted immediately.

EXCEPTION TO PERFORMANCE CRIENTED PACKAGING (POP) MARKINGS: If manufactured outside the USA, contractor shall not apply the UN POP certification marking provided on drawing 2128249. Contractors (outside the USA) are responsible to perform UN POP tests on packaging requirements provided in this contract and apply UN POP certification marking authorized by the Competent Authority of the state (country) of manufacture.

HEAT TREAT WOOD QUALITY MARKING:

All non-manufactured wood used in packaging shall be heat treated to a

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core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box manufacturer and the manufacturer of wood used as inner packaging, shall be affiliated with an inspection agency accredited by the American Lumber Standards Committee. The box manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment. Each box shall be marked to show the conformance to the International Plant Protection Convention Standard. Boxes and any wood used as inner packaging made of non-manufactured wood shall be heat treated. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program.

METALLIC SEAL: Use 8794342, Rev AB.

The following shall apply to drawing 7223910, revision -, dated 9 NOV 95:

2D bar marking shall be applied in accordance with MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING MARKING: Correct from "4A1" to "4A".

PROPER SHIPPING MARKING: Correct to "SIGNAL DEVICES, HAND UN 0191".

UN POP markings may be marked on the top of the M2A1 container if sufficient space is not available on the side opposite the nomenclature.

THE FOLLOWING APPLIES TO CLIN 0003:

Packaging shall be in accordance with 3139738 revision R, dated 17 MAR 94

When lot numbering is required, no more than one lot shall be packaged in an outer shipping container.

Marking shall be in accordance with 3139738 revision R, dated 17 MAR 94.

The following shall apply to drawing 3139738, REVISION R, DATED 17 MAR 94:

2D bar code markings are required in accordance with MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING (POP) VERIFICATION: In no case shall a container be shipped if the gross weight marked on the package is greater than the POP certified weight. If the average gross weight of the packed containers (determined by weighing two representative samples and averaging the weight) is greater than the certified weight, container marking operations shall cease and the procuring activity shall be contacted immediately.

EXCEPTION TO PERFORMANCE ORIENTED PACKAGING (POF) MARKINGS: If manufactured outside the USA, contractor shall not apply the UN POF certification marking provided on drawing 3139730. Contractors (outside the USA) are responsible to perform UN POF tests on packaging requirements provided in this contract and apply UN POF certification marking authorized by the Competent Authority of the state (country) of manufacture.

HEAT TREAT WOOD QUALITY MARKING:

All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box manufacturer and the manufacturer of wood used as inner packaging, shall be affiliated with an inspection agency accredited by the American Lumber Standards Committee. The box manufacturer and the manufacturer of wood used as

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inner packaging shall ensure traceability to the original source of heat treatment. Each box shall be marked to show the conformance to the International Plant Protection Convention Standard. Boxes and any wood used as inner packaging made of non-manufactured wood shall be heat treated. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program.

(End of clause)

(DS6303)

D-2 52.247-4517 LOCAL PALLETIZATION INSTRUCTION

MAR/1992

THE FOLLOWING APPLIES TO CLIN GOOT:

Palletization shall be in accordance with 19-48-4116/107S, revision 1, dated OCT 88 AND 19-48-4116 REV 8, DATED JUNE 2003. MARKING SHALL BE IN ACCORDANCE WITH DRAWING ACV00561, REV C, DATED 11 JULY 2003, HEAT TREAT REQUIREMENTS FOR ALL KON-MANUFACTURED WOOD USED IN THE PALLATIZED LOAD APPLIES TO THIS CONTRACT.

THE FOLLOWING APPLIES TO CLIN 0003:

Palletization shall be in accordance with 19-48-4116/107H, revision 2, dated AUG 94 AND 19-48-4116 REV 8, DATED JUNE 2003. MARKING SHALL BE IN ACCORDANCE WITH DRAWING ACV00561, REV C, DATED 11 JULY 2003. HEAT TREAT REQUIREMENTS FOR ALL NON-MANUFACTURED WOOD USED IN THE PALLATIZED LOAD APPLIES TO THIS CONTRACT. FOREIGN MANUFACTURERS SHALL HAVE THE HEAT TREATMENT OF NON-MANUFACTURED WOOD PRODUCTS VERIFIED IN ACCORDANCE WITH THEIR NATIONAL PLAN T PROTECTION ORGANIZATIO COMPLIANCE PROGRAM.

(End of clause)

(DS6204)

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SECTION E - INSPECTION AND ACCEPTANCE

CONTINUATION SHEET

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DoD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated herein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schools as

Any company/individual wishing to purchase a copy of the Federal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402

(EA7001)

	Regulatory Cite	Title	Date
E-1	52.246-2	INSPECTION OF SUPPLIES-FIXED-PRICE	AUG/1996
E-2	52.246-16	RESPONSIBILITY FOR SUPPLIES	APR/1984
2-3	52.209-4511 LOCAL	FIRST ARTICLE TEST (GOVERNMENT TESTING)	MAY/1994

- a. The first article shall consist of: IN ACCORDANCE WITH THE SPECIFICATION; which shall be examined and tested in accordance with contract requirements, the item specification (s), the Quality Assurance Provisions (QAPS) and drawings listed in the Technical Data Package.
- b. The first article shall be delivered to: NSWC, CRANE IN. The first article shall be delivered by the Contractor Pree on Board (FOB) destination except when transportation protective service or transportation security is required by other provision of this contract. If such is the case, the first article shall be delivered FOB origin and shipped on Government Bill of Lading.
- c. The first article shall be representative of items to be manufactured using the same processes and procedures as contract production. All parts and materials, including packaging and packing, shall be obtained from the same source of supply as will be used during regular production. All components, subassemblies, and assemblies in the first article sample shall have been produced by the Contractor (including subcontractors) using the technical data package provided by the Government.
- d. Frior to delivery, each of the first article assemblies, subassemblies, and components shall be inspected by the Contractor for all contract, drawing, QAF and specification requirements except for any environmental or destructive tests indicated below: NONE. The Contractor shall provide to the Contracting Officer at least 15 calendar days advance notice of the schedule date for final inspection of the first article. Those inspections which are of a destructive nature shall be performed upon additional sample parts selected from the same lot(s) or batch(es) from which the first article was selected. Results of contractor inspections (including supplier's and Vendor's inspection records when applicable) shall be verified by the Government Quality Assurance Representative (QAR). The QAR shall attach to the contractor's inspection report a completed DD Form 1222. One copy of the contractor's inspection report with the DD Form 1222 shall be forwarded with the first article; two copies shall be provided to the Contracting Officer. Upon delivery to the Government, the first article my be subjected to inspection for all contract, drawing, specification, and QAP requirements.
- e. Notwithstanding the provisions for waiver of first article, an additional first article sample or portion thereof, may be ordered by the Contracting Officer in writing when (i) a major change is made to the technical data, (ii) whenever there is a lapse in production for a period in excess of 90 days, or (iii) whenever a change occurs in the place of performance, manufacturing process, material used, drawing, specification or source supply. When conditions (i), (ii), or (iii) above occurs, the Contractor shall notify the Contracting Officer so that a determination can be made concerning the need for an additional first article sample or portion thereof, and instructions provided concerning the submission, inspection and notification of results. Costs of the first article testing resulting from production process change, change in the place of performance, or material substitution shall be borne by the Contractor.
- f. Rejected first articles or portions thereof not destroyed during inspection and testing will be held at the government first article test site for a period of 30 days following the date of notification of rejection, pending receipt of instructions from the Contractor for the disposition of the rejected material. The Contractor agrees that failure to furnish such instructions within said 30 day period shall constitute abandonment of said material by the Contractor and shall confer upon the Government the right to destroy or otherwise dispose of the rejected items at the discretion of the Government without liability to the Contractor by reason of such destruction or disposition.

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(End of clause)

(E\$6033)

E-4 52.245~4537 LOCAL ACCEPTANCE INSPECTION EQUIPMENT (AIE)

FEB/2002

- a. Acquisition, maintenance, and disposition of Acceptance Inspection Equipment (AIE) shall be in accordance with ANSI/NCSL Z540-1 or ISO 10012-1. AIE shall be used to assure conformance of components and end items to contract requirements. AIE shall include all types of inspection, measuring, and test equipment whether Government furnished, contractor designed, or commercially acquired, along with the necessary specifications, and the procedures for their use.
- b. The Contractor shall provide all Acceptance Inspection Equipment (AIE) necessary, except for the Government Furnished Equipment (GFE) listed in paragraph (g.8). The GFE shall be provided in accordance with the Government Property clause of this contract. The Contractor is responsible for contacting NSWC Corona at least 45 days in advance of the date the GFE is required to schedule delivery. Government furnished AIE shall not be used by the contractor or his subcontractor in lieu of in-process or work gages.
- c. Contractor AIE designs, specifications, and procedures for Critical, Major, Special, and Minor characteristics shall be submitted to the Government for review and approval in accordance with the Contract Data Requirements List, DD Form 1423. All Contractor AIE documentation requiring Government approval shall contain sufficient information to permit evaluation of the AIE's ability to test, verify or measure the characteristic or parameter with the required accuracy and precision. Contractor designed AIE requiring Government approval shall be made either in accordance with the equipment drawings specified in section C of contract (Description/Specification Section), or in accordance with any other design documentation provided that it is approved by the Government. The Government will approve the AIE documentation or provide requirements for approval within 45 days of receipt. The Contractor shall be responsible for any delays resulting from late submission of AIE documentation to the Government for approval, and any delays resulting from the submission of inadequate or incomplete AIE documentation.
- d. The contractor must ensure that all AIE is approved and available for use prior to First Article Submission, if First Article is required, or prior to initiation of production under this contract.
- e. Resubmission of AIE design, specification, and procedure documentation for approval on a follow-on contract is not required provided inspection characteristic parameters specified in the current technical data package and the previously approved AIE documentation remain unchanged. The contractor shall provide the contract number and identify previously approved AIE documentation that meets the above prerequisites.
- f. The Government reserves the right to disapprove at any time during the performance of this contract, use of any AIE not meeting the requirements of the approved design, specification, or procedure documentation.
 - g. Navy Special Interface Gage Requirements (NSIG)
- 1. The Navy Special Interface Gages listed under this clause will be forwarded to the Contractor for joint use by the Contract Administration Office (CAO) and the Contractor.
- 2. The Contractor may substitute contractor designed and built AIE for the NSIG noted as applicable in paragraph g.8. However, the designs require Government approval and the contractor AIE hardware requires Government certification. AIE designs shall be submitted in accordance with paragraph c. The contractor shall notify NSWC Corona prior to submission of AIE for certification. Two copies of each Government approved contractor AIE drawing shall accompany the contractor AIE hardware sent to the Government for certification. The Government shall perform the contractor AIE certification, return the hardware and provide notification of acceptance or rejection to the Contractor within 45 days of receipt of the contractor AIE. The contractor shall be responsible for any delays resulting from late submission of documentation or hardware. The Contractor shall also submit the calibration periods for each contractor AIE for approval. The Government shall affix Calibration stickers to the contractor AIE for Quality Assurance Representative (OAR) identification.
- 3. The NSIGs are provided for verification of selected interface dimensions and do not constitute sole acceptance criteria of production items or relieve the Contractor of meeting all drawing/specification requirements under the contract.
- 4. Items that fail to be accepted by the applicable NSIGS may be inspected by another means to determine acceptance or rejection, provided the alternate inspection method is acceptable to the government approval authority.
- 5. The Government shall not be responsible for discrepancies or delays in production items resulting through misuse, damage or excessive wear to the NSIGs.
- 6. Calibration and repair of the NSIGs shall only be performed as authorized by the Naval Surface Warfare Center (NSWC), Corona Division. Repair is at no cost to the Contractor unless repair is required due to damage to the gages resulting from Contractor fault

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or negligence. Damaged, worn, or otherwise unserviceable NSIGs shall be brought to the immediate attention of the CRO and NSWC Corona. The Contractor shall not make any adjustments, alterations or add permanent markings to NSIG hardware unless specified by the NSIG operating instructions or authorized by the Designated Technical Activity.

- 7. Within 45 days after final acceptance of all production items, the NSIGs shall be shipped to NSWC, Corona Division, ATTN: Receiving Officer, Bldg 575, Gage Laboratory, 1999 Fourth St., Norco, CA 92860-1915. The following specifications are applicable:
 - (i) Shipping, MIL-STD-2073, "DOD Standard Practice for Military Packaging"
 - (ii) Marking, MIL-STD-129, "Marking for Shipment and Storage".
 - 8. The following NSIGs shall be provided and are mandatory for use except as noted by an (x) for paragraph (g.2) applicability.

Para.

g, 2

applies Drawing Rev Char NSIG Qty Dimensions Weight Value

(End of clause)

(ES6032)

E-5 52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT

FEB/2004

- (a) Definition. "Contract date", as used in this clause, means the date set for bid opening; or if this is a negotiated contract or a modification, the effective date of this contract or modification.
 - (b) The Contractor shall comply with:
 - () ISO 9002
 - (X) ISO 9001-2000; only design/development exclusions permitted
 - () ISO 9001-2000; no exclusions permitted

or an alterate program/system approved by the activity listed in block 7 of the Standard Form 33, in effect on the contract date and which is hereby incorporated into this contract.

(End of clause)

(ES6001)

E-6 52.246-4506 STATISTICAL PROCESS CONTROL (SPC)

FEB/2004

- a. In addition to the quality requirements of the technical data package, the Contractor shall implement Statistical Process Control (SPC) in accordance with a government accepted SPC Program Plan. Control chart techniques shall be in accordance with the American National Standards Institute (ANSI) B1, B2 and B3. Alternate SPC charting methods may be proposed and submitted to the Government for review.
- b. The SPC Program Plan developed by the contractor shall consist of a general plan and a detailed plan. The plans shall be structured as delineated on the Data Item Description referenced in the DD Form 1423. The general and the detailed plans shall be submitted to the government for review per DD Form 1423 requirements. Notification by the Government of acceptance or nonacceptance of the plans shall be provided in accordance with the timeframes specified on the DD Form 1423. Once a general plan for a facility has been approved by this Command, the approval remains in effect for subsequent contracts as long as the contractual requirements remain

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substantially unchanged from contract to contract. Therefore, resubmission of a previously accepted general SPC plan is not required if current SPC contract clause and Data Item Description (DID) requirements are fulfilled. If this Command has previously accepted the general SPC plan under essentially the same SPC contractual requirements, so indicate by providing the Contracting Officer with the following information:

Date	οf	Acceptance	
Cont:	cact	Number(s)	

- c. The contractor is responsible for updating the general plan to current SPC contractual requirements. If errors or omissions are encountered in a previously accepted SPC general plan, opportunities for improvement will be identified by the Government, and corrective action shall be accomplished by the contractor.
- d. A milestone schedule will be submitted for those facilities who do not have, or have never had, a fully implemented SPC program and will not have a fully operational SPC program once production is initiated. The milestones shall provide a time phased schedule of all efforts planned relative to implementation of an SPC program acceptable to the Government. A milestone schedule shall include implementation start and complete dates for those SPC subjects addressed in the Statistical Process Control Statement of Work located in Section C. The milestone schedule shall only include those actions that can not be accomplished prior to first article or the initiation of production, if a first article is not required. Milestones shall be developed for each commodity identified for SPC application. Milestones shall be submitted through the Government Quality Assurance Representative to the Contracting Officer for review and acceptance. Any deviations from the accepted milestones, to include justification for such deviations, shall be resubmitted through the same channels for review. The Government reserves the right to disapprove any changes to the previously accepted milestones. Notification by the Government of the acceptance or nonacceptance of the milestones shall be furnished to the Contractor by the Contracting Officer.
- e. The Contractor shall review all process and operation parameters for possible application of SPC techniques. This review shall include processes and operations under the control of the prime contractor and those under the control of subcontractor or vendor facilities. A written justification shall be included in the detailed plan for each process and operation parameter that controls or influences characteristics identified as critical, special, or major which have been deemed impractical for the application of SPC techniques. A pamphlet on application of SPC for short production runs is available through the Contracting Officer.
- f. Statistical evidence in the form of control charts shall be prepared and maintained for each process or operation parameter identified in the detailed plan. These charts shall identify all corrective actions taken on statistical signal. During production runs, control charts shall be maintained in such a manner to assure product is traceable to the control charts. At the conclusion of the production run, a collection of charts traceable to the product, shall be maintained for a minimum of 3 years. The control charts shall be provided to the Government for review at any time upon request.
- g. When the process or operation parameter under control has demonstrated both stability and capability, the Contractor MAY request, in writing, through Administrative Contracting Officer (ACO) and Contracting Officer (CO) channels to the Product Assurance and Test Directorate, that acceptance inspection or testing performed in accordance with contract requirements be reduced or eliminated. Upon approval by the CO, acceptance shall then be based upon the accepted SPC plan, procedures, practices and the control charts.
- h. The Government will not consider requests for reduction or elimination of 100% acceptance inspection and testing of parameters or characteristics identified as critical in the technical data package, specifications or drawings of this contract if any one of the following conditions exist:
- (1) The existing process currently utilizes a fully automated, cost effective, and sufficiently reliable method of 100% acceptance inspection or testing for an attribute-type critical parameter or characteristic.
 - (2) The Contractor utilizes attribute SPC control chart methods for the critical parameter or characteristic.
- (3) The critical parameter or characteristic is a first order, single point safety failure mode (nonconformance of the critical parameter or characteristic in and of itself would cause a catastrophic failure).
- i. The Government will only consider reduction or elimination of the 100% acceptance inspection or test requirement for other critical parameters or characteristics if either of the following conditions are met:
- (1) The process is in a state of statistical control utilizing variable control chart methods for the critical parameter or characteristic under control and the process performance index (Cpk) is at least 2.0. The Contractor shall maintain objective quality evidence through periodic audits that the process performance index is being maintained for each production delivery.
- (2) The critical parameter or characteristic is conclusively shown to be completely controlled by one or more process or operation parameters earlier in the process, and those parameters are in a state of statistical control utilizing variable data, and the product of the probability of the conformance for each earlier parameter associated to the critical characteristic is better than or equal to a value equivalent to that provided by a Cpk of at least 2.0. The Contractor shall maintain objective quality evidence through periodic

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audits that the process performance indexes are being maintained for each production delivery.

- j. For characteristics other than critical, requests for reduction or elimination of acceptance inspection and testing shall be considered when the process performance index is greater than or equal to a Cpk of 1.33 for variables data. Requests shall be considered for attributes data when the percent beyond the specification limits is less than or equal to .003 (Cpk=1.33).
- k. Process or operation parameters under reduced or eliminated inspection or testing that undergo a break in production less than 6 months in length, may continue to operate under reduced or eliminated inspection or testing provided there has been no degradation below a Cpk of 1.33 (2.0 for criticals). Any break in production greater than 6 months shall require resubmission of the request for reduction or elimination of inspection or testing through the same channels cited in paragraph g above.
 - 1. Not used.
- m. Immediately following a change to a process or operation parameter under reduced or eliminated inspection, the process capability (Cp) or process performance indexes (Cpk) shall be recalculated and documented for variable data; the grand average fraction defective shall be recalculated for attribute data. If any of these values have deteriorated, immediate notification shall be made to the Government along with the associated documentation. Return to original inspection and test requirements may be imposed as stipulated in
- n. The Government reserves the right to withdraw authorization to reduce or eliminate final acceptance inspection or testing and direct the Contractor to return to original contract inspection or test procedures at any indication of loss of process control or deterioration of quality.

(End of clause)

(ES6034)

E-7 52.246-4530 SUBMISSION OF PRODUCTION LOT SAMPLES (GOVERNMENT TESTING) MAY/1994

a. A lot acceptance test sample is required to be submitted by the Contractor from each production lot tendered to the Government for acceptance. This sample shall consist of: AS REQUIRED BY THE MK124 SPECIFICATION. The sample units shall be delivered by the Contractor Free on Board (FOB) destination, except When transportation protective service of transportation security is required by other provision of this contract. When such is the case, the sample units shall be delivered FOB origin and shipped to the test facility identified below on a Government Bill of Lading for the following tests:

REQUIREMENTS SAMPLE AS REQUIRED BY THE MK124 SPECIFICATION

TEST FACILITY: NSWC CRANE, IN

b. When the production lot sample consists of components parts which require uploading at a Government Load, Assemble, and Pack (LAP) facility, and a shipping address is provided below, the contractor shall ship the sample units as specified above directly to the LAP facility. The LAP facility, upon completion of the uploading, will be responsible for shipping the samples to the tests facility indicated above in paragraph a.

LAP FACILITY:

- c. The sample units shall be randomly selected from the entire lot by or in the presence of the Government Quality Assurance Representative. Unless otherwise specified, the sample units are considered to be destructively tested and are in addition to the units deliverable under the contract.
- d. Prior to selection of the sample units, the lot shall have been inspected to and meet all other requirements of the contract. A sample shall not be submitted from a lot rejected for nonconformance to the detailed requirements of the specifications) and drawing(s) unless authorized by the Contracting Officer.
- e. Unless authorized by the Contracting Officer, the lot from which the samples are drawn shall not be shipped until official notification has been provided by the Contracting Officer that the tested units have satisfactorily met the established requirements. Final acceptance of the lot shall not proceed until such notification has been provided.
- f. If the production lot sample contains samples for ballistic testing, the test samples shall be identified as such on the outer packs and the applicable Ballistic Test Request (BTR) number shall be stenciled on all outer packs and included on all shipping documents.

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Name of Officer or Contractors		

- g. The Contracting Officer shall by written notice to the Contractor within 45 days after receipt of the sample units by the government, approve, disapprove, or conditionally approve the lot acceptance sample.
- h. If the production lot sample fails to meet applicable requirements, the Contractor may be required at the option of the Government, to submit an additional production lot test sample for test. When notified by the Government to submit an additional production lot test sample, the Contractor shall at no additional cost to the Government make any necessary changes, modifications, or repairs and select another sample for testing. The additional test sample shall be furnished to the Government under the terms and conditions and within the time specified in the notification. The Government shall take action on this test sample within the time limit specified in paragraph g above. All costs associated with the additional testing shall be borne by the Contractor.
- i. If a ballistic test sample fails to meet contractual performance or functional requirements, the Contractor shall reimburse the Government for transportation costs associated with the failing sample, including the cost of transportation protective service and transportation security requirements when such security is required by other provision of this contract. An exception to this requirement for reimbursement of Government transportation costs will occur if the Government determines that the functional test samples failed to meet contractual performance requirements through no fault of the contractor.
- j. If the Contractor fails to deliver any production lot test sample(s) for test within the time or times specified, or if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract. Therefore, this contract may be subject to termination for default. Failure of the Government in such an event to terminate this contract for default shall not relieve the contractor of the responsibility to meet the delivery schedule for production cuantities.
- k. In the event the Contracting Officer does not approve, conditionally approve, or disapprove the production lot test sample(s) within the time specified in paragraph g above, the Contracting Officer shall equitably adjust the delivery or performance dates, or the contract price, or both, and any other contractual provision affected by such delay in accordance with the procedures provided in the Changes clause. Failure to agree to any adjustment shall be a dispute concerning a question of the fact within the meaning of the clause of this contract entitled Disputes.

(End of Clause)

(ES6035)

E-8 52.245-4545 MIL-STD-1916 LCCAL

OCT/2000

The Department of Defense (DoD) Preferred Methods for this Acceptance of Product, MIL-STD-1916, shall be used for this procurement action. All references to MIL-STD-105, MIL-STD-414, MIL-STD-1235, and ANST 21.4 appearing in the Technical Data Package (TDP) are replaced by MIL-STD-1916. Verification Levels (VL) shall replace AQLs and shall be VL IV for major characteristcs and VL II for minor characteristics.

(End of clause)

(ES7650)

REWORK AND REPAIR OF NONCOMFORMING MATERIAL 52.246-4528 **E-9** LOCAL

MAY/1994

- a. Rework and Repair are defined as follows:
- (1) Rework The reprocessing of nonconforming material to make it conform completely to the drawings, specifications or contract requirements.
- (2) Repair The reprocessing of nonconforming material in accordance with approved written procedures and operations to reduce, but not completely
- eliminate, the nonconformance. The purpose of repair is to bring nonconforming material into a usable condition. Repair is distinguished from rework in that
- the item after repair still does not completely conform to all of the applicable drawings, specifications or contract requirements.
- b. Rework procedures along with the associated inspection procedures shall be documented by the Contractor and submitted to the Government Quality Assurance
- Representative (QAR) for review prior to implementation. Rework procedures are subject to the QAR's disapproval.
 - c. Repair procedures shall be documented by the Contractor and submitted on a Request for Deviation/Waiver, DD Form 1694, to the

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Traile of Official of Contractor - PEROTECHNIC SPECIALTIE

Contracting Officer for

review and written approval prior to implementation.

d. Whenever the Contractor submits a repair or rework procedure for Government review, the submission shall also include a description of the cause

for the nonconformances and a description of the action taken or to be taken to prevent recurrence.

e. The rework or repair procedure shall also contain a provision for reinspection which will take precedence over the Technical Data Package

requirements and shall, in addition, provide the Government assurance that the reworked or repaired items have met reprocessing requirements.

(End of clause)

(ES7012)

E-10 52.246-4532 DESTRUCTIVE TESTING

a. All costs for destructive testing by the Contractor and items destroyed by the Government are considered as being included in the contract unit price.

MAY/1994

- b. Where destructive testing of items or components thereof is required by contract or specification, the number of items or components required to be destructively tested, whether destructively tested or not, shall be in addition to the quantity to the delivered to the Government as set forth in the Contract Schedule.
- c. All pieces of the complete First Article shall be considered as destructively tested items unless specifically exempted by other provisions of this contract.
- d. The Contractor shall not reuse any components from items used in a destructive test during First Article, lot acceptance or improcess testing, unless specifically authorized by the Contracting Officer.
- e. The Government reserves the right to take title to all or any items or components described above. The Government may take title to all or any items or components upon notice to the Contractor. The items or components of items to which the Government takes title shall be shipped in accordance with the Contracting Officer's instructions. Those items and components to which the Government does not obtain title shall be rendered inoperable and disposed of as scrap by the Contractor.

(End of clause)

(E\$7011)

LOCAL

E-11 52.246-4550 CRITICAL CHARACTERISTICS FEB/2004

- a. The contractors processes shall be designed to prevent the creation or occurrence of critical nonconformances. The contractor shall establish, document and maintain specific procedures, work and handling instructions and process controls relating to any critical
- b. The contractor shall assure his critical processes are robust in design such that product and performance are relatively insensitive to design and manufacturing parameters. A robust design anticipates changes and problems. Robust processes shall be designed to yield less than one nonconformance in one million.
- c. An inspection/verification system shall be employed that will verify the robustness of your critical processes. Maximum use should be made of automated inspection equipment to accomplish verification of product quality. Mistake proofing techniques of your material handling and inspection systems are encouraged.
- d. Previous Practices/Special Characteristics. As a result of previous practices, the governments technical data may refer to Critical (not annotated with I or II) and Special characteristics. Characteristics classified as Critical (not annotated with a I or II) shall be subject to all requirements herein associated with Critical (I) characteristics and level I Critical nonconformances. Unless otherwise stated in Section C, characteristics classified as Special shall be subject to all requirements herein associated with Critical (II) and Level (II) Critical nonconformances.
- e. Contractor Identified Critical Characteristics List (CICCL). Not including critical characteristics defined in the governments technical data (drawings, specifications, etc.), the contractor shall identify and document all material, component, subassembly and assembly characteristics whose nonconformances may result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product. All additional critical characteristics identified by the contractor shall comply with the critical characteristic requirements of the technical data package, supplemented herein. The contractors additional critical characteristics

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

shall be classified as Critical (I) or Critical (II), and shall be reviewed and approved by the procuring activity prior to manufacturing (DI-SAFT-80970A). The following definitions are provided.

Level I critical nonconformance. A nonconformance of a critical characteristic that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product; or a nonconformance that judgment and experience indicate would prevent performance of the tactical function of a weapon system or major end item. The following (as a minimum) are classified as Level I critical nonconformances:

- (1) A nonconformance that will result in a hazardous or unsafe condition (often referred to as a single point failure).
- (2) A nonconformance that will remove or degrade a safety feature (such as those in a safe and arm device or fuzing system).
- (3) A nonconformance that will result in violation of mandatory safety policies or standards.

<u>Level II critical nonconformance</u>: A nonconformance of a critical characteristic, other than Level I. This includes the nonconformance of a characteristic that judgment and experience indicate may, depending upon the degree of variance from the design requirement, the presence of other nonconformances or procedural errors,:

- (1) result in a hazardous or unsafe conditions for individuals using, maintaining or depending upon the product, or
- (2) prevent performance of the tactical function of a major end item.
- f. In the event that a Critical nonconformance is found anywhere in the production process, the contractor, as part of his quality system, shall have procedures in place to ensure:
- (1) The nonconformance is positively identified and segregated so that there is no possibility of the item inadvertently reentering the production process. This control shall be accomplished without affecting or impairing subsequent defect analysis.
- (2) The operation that produced the defective component or assembly and any other operations incorporating that component or assembly is immediately stopped.
- (3) The government is immediately notified of the critical nonconformance (telephonically and electronic mail.) (DI-SAFT-R0970A)
- (4) Any suspect material (material in process that may contain the same defect) is identified, segregated and suspended from any further processing.
- (5) An investigation is conducted to determine the cause of the deficiency and required corrective actions. A report of this investigation shall be submitted to the government (DI-SAFT-80970A). The use of the DID report shall not delay notification to the government.
- (6) A request to restart manufacturing or to use any suspect material associated with the critical nonconformance is submitted to the government (DI-SAFT-80970A). Restart of production shall not occur until the investigations are complete or upon authorization from the procuring contracting officer. All objective evidence of the investigations to date shall be available for review at the time of restart. Suspect material found to be nonconforming shall not be used without Government approval.
- g. The contractor may develop alternative plans and provisions relative to government or contractor identified Critical level (I) and Critical Level (II) characteristics. The provisions shall be submitted to the government for advanced approval and shall address the following:
 - (1) Complete explanation of potential failure mode(s) together with supporting historical and statistical data.
- (2) Pre-established plan of action (POA) to be taken when a critical nonconformance occurs and a description of controls to ensure there is no possibility of the nonconforming item inadvertently entering the production process.
 - (3) Means of tracking nonconformance rate, investigative results and corrective actions taken.
- (4) Method to immediately verify that a produced critical nonconformance is consistent with the identified failure mode(s) and does not exceed the historical nonconformance rate.

The contractor can resume production without specific government approval based upon the pre-approved alternate plans and provisions for Critical (I) characteristics and level (I) Critical nonconformances and Critical (II) characteristics and level (II) Critical

- h. If a critical nonconformance is discovered during further processing or loading, the original manufacturer who introduced the critical nonconformance shall bear responsibility for the nonconformance.
- i. The Government Quality Assurance Representative will perform the surveillance actions necessary to ensure compliance with this clause.

(End of clause)

(ES7500)

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SECTION P - DELIVERIES OR PERFORMANCE

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DoD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated herein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schedule

Any company/individual wishing to purchase a copy of the Federal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402.

(FA7001)

	Regulatory Cite	Title	Date
F-1	52,211-17	DELIVERY OF EXCESS QUANTITIES	SEP/1989
F-2	52.242-15	STOP-WORK ORDER	AUG/1989
F-3	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-4	52.247-29	F.O.B. ORIGIN	JUN/1988
F-5	52,247-55	F.O.B. POINT FOR DELIVERY OF GOVERNMENT-FURNISHED PROPERTY	APR/1984
F-6	52.247-58	LOADING, BLOCKING, AND BRACING OF FREIGHT CAR SHIPMENTS	APR/1984
F-7	52.247-59	F.O.E. CRIGIN - CARLOAD AND TRUCKLOAD SHIPMENTS	APR/1984
F-2	52.247-61	F.O.B. ORIGIN-MINIMUM SIZE OF SHIPMENTS	APR/1984
F-9	252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA	MAY/2002
	DFARS		
F-10	52.247-4504	TRANSPORTATION SECURITY REQUIREMENTS FOR CONTRACTOR-TO-CONTRACTOR	MAR/2004
	LOCAL	SHIPMENTS	

- (a) Supplies procured or furnished under this contract/subcontract, which are shipped between two or more contractors, and which are qualified as sensitive in accordance with DoD 5100.76-M (Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives), or are shipped as DOT Class A or B Explosives, require special Transportation Protective Service (TPS) during shipment from all points of origin to all destinations. TPS will be equivalent to the DoD security standard for the applicable sensitive category or explosive class identified under DoD 4500.9R, Defense Transportation Regulation, parts II and III, as added to or amended by applicable military service policies in accordance with guidance provided by Defense Logistics Agency (DLA)/Defense Contract Management Agency (DCMA).
- (b) Shipper's Defense Contract Management Agency (DCMA) transportation offices will furnish assistance in providing the sensitive category of items to be shipped, determining the TPS required, and obtaining the TPS from commercial carriers as necessary.
 - (c) This clause must be entered in all contracts/subcontracts at any tier.

(End of clause)

(FS7115)

F-11 52.247-4531 COGNIZANT TRANSPORTATION OFFICER MAY/1993 LOCAL

- (a) The contract administration office designated at the time of contract award, or the office servicing the point of shipment if subsequently designated by the original office, will be the contact point to which the contractor will:
- (1) Submit, as necessary, DD Form 1659, Application for U.S. Government Bill(s) of Lading/Export Traffic Release, in triplicate at least ten days prior to date supplies will be available for shipment;
 - (2) Obtain shipping instructions as necessary for F.O.B. Destination delivery, and
- (3) Furnish necessary information for MILSTRIP/MILSTAMP or other shipment documentation and movement control, including air and water terminal clearances.
 - (4) For FMS, at least ten days in advance of actual shipping date the contractor should request verification of "Ship

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to" and "Notification" address from the appropriate DCMAO.

- (b) The contract administration office will provide to the contractor data necessary for shipment marking and freight routing.
- (c) The contractor shall not ship directly to a military air or water port terminal without authorization by the designated point of contact.

(End of clause)

(F\$7240)

F-12 47.305-15(B) SPECIAL TRANSPORT/LOADING REQUIREMENTS (HAZARDOUS)

FEB/1996

- (a) In addition to requirements set forth under General Provision, "Loading, Bracing, and Blocking of Freight Car Shipments," rail shipments will be loaded, blocked and braced in accordance with rules and methods contained in the current editions of Uniform Freight Classification, Association of American Railroads Pamphlet No. 14, Circular 42G and Rules Governing Loading of Commodities on Open Top Cars, Bureau of Explosives Tariff No. BOE 6000 publishing Hazardous Materials Regulations of the Department of Transportation, and Bureau of Explosives Pamphlets No. 6, 6A as applicable. Uniform Freight Classification may be procured from the regulatory classification agent covering territory from which shipment will be made. AAR Pamphlets, Circular and Rules may be procured from the Bureau of Explosives, 59 E. Van Buren St., Chicago, IL 60605. Bureau of Explosives Tariff No. BOE 6000 and Burea of Explosives pamphlets may be procured from the Burea of Explosives, Association of American Railroads, 1920 L Street, Washington, D.C. 20036. U.S. Army Defense Ammunition Center (USADAC) approved drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components is specifically applicable to rail loading, blocking and bracing of this item and may be secured by the Centracting Officer or the Defense Contract Management Agency (DCMA).
- (b) Truck shipments will be loaded, blocked and braced in accordance with rules and methods contained in the current editions of National Motor Freight Classification and American Trucking Association, Inc., Motor Carrier's Explosives and Dangerous Articles Tariff, as applicable and effective at the time of shipment. These publications may be procured from the American Trucking Association, Inc., Tariff Order Section, 1616 P St., N.W., Washington, D.C. 20036. USADACS approved drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components is specifically applicable to motor, loading, blocking and bracing of this item and can be secured from the Contracting Officer or DCMA.
- (c) TOFC "Piggyback" shipments will be loaded, blocked and braced in accordance with Bureau of Explosives Pamphlet No. 6C or AAR Circular No. 43, copies may be obtained from addresses given in para (a) above. USADAC approved drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components is specifically applicable to loading, blocking and bracing for TOFC shipments and may be obtained from the Contracting Officer or DCMA.
- (d) Container shipments will be loaded, blocked and braced in accordance with USADAC drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components which is specifically applicable to loading, blocking and bracing of container shipments and may be secured from the Contracting Officer or the DCMA.

Except as the carrier(s) may be liable, the contractor shall be liable to the Government for any loss or damage resulting from improper loading and/or furnishing and installing dunnage material by the contractor for shipments to be made under this contract.

(End of clause)

(FS7007)

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Name of Offeror or Contractor: Pyrotechnic specialties inc.												
SECTION G - CONTRACT ADMINISTRATION DATA												
INE	PRON/ AMS CD/ MIPR	ACRN	OBLG STAT	ACC!	חוואידווה	CLASSIFI	Catton		job Order Number	accounti Station	.NG	OBLIGATED AMOUNT
0001AE	R14A0F534I 41476038030 R14M42474IM	AA	2	21			06P41476026EB	S28017	4P1F53	W52P1J	\$	29,944.08
001AC	R14A0R894I 41476038030 N4802904MPA	AA 1B21	2	21	420340	000041B1B	06P41476026EB	\$28017	4P1R89	W52P1J	ş	1,414,026.00
CA1006	R14A0F424I 41476038030 N0007404MPD	AA FQ32	2	21	420340	00041B1E	06P41476026EB	S28017	4P1F42	W52P1J	\$	271,150.28
001AE	R14A0P554I 41476038030 N4802904MPA	AA 3820	2	21	420346)0 0 041B1B	06P41476026EB	\$28017	4P1F55	W52P1J	\$	236,225.52
AAE000	U14A0X194I 41476038030 FD202004180	AA 18	2	21	420340	000041B1E	06P41476026EB	526017	4P1K19	W52P1J	\$	843,424.92
003AB	W14A0M864I 41476C38030 MIPR4F0SC10	AA 109	2	21	42034	000041B1E	306 P41476026E B	\$28017	4P1M86	W52P1J	\$	3,604.38
										TOTAL	\$	2,798,385.1
SERVICE NAME Army		L BY AA	ACRN	<u>ACC</u> 21		CLASSIF1	<u>.CATION</u> 306P41476026EB	S28017	ACCO <u>STAT</u> W52P		\$ _	OBLIGATED AMOUNT 2,738,585.1.

TOTAL \$ 2,798,385.18

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SECTION H - SPECIAL CONTRACT REQUIREMENTS

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DOD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated berein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schedule.

Any company/individual wishing to purchase a copy of the Federal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402.

(WEZOOT)

	Regulatory Cite	Title	Date
H-1	223.370-	DISPOSAL OF REMAINING GFM AMMUNITION AND EXPLOSIVES FOLLOWING	JUN/1999
	4(A)(3) OSC	CONTRACT COMPLETION OR TERMINATION	
E-2	252.223-7001 DFARS	HAZARD WARNING LABELS	DEC/1991

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If none, insert "None") ACT

(End of Clause)

(HA3704)

H-3 245.7310-1 DEMILITARIZATION JUL/1996
DEARS

- (a) DEMILITARIZATION. Item(s) 0001 AND 0003 require demilitarization by the Furchaser in the manner and to the degree set forth below:
- (1) For property located in the United States insert item number(s) and specific demilitarization requirements for item(s) shown in Attachment 1. Part 2 of Defense, Demilitarization Manual;
- {2} For property located outside the United States, insert item number(s) and specific demilitarization requirements for item(s) shown in Attackment 1, Part 3 of DoD 4160.21-M-1, Defense Demilitarization Manual.
- (b) DEMILITARIZATION ON GOVERNMENT PREMISES. Property requiring demilitarization shall not be removed, and title shall not pass to the Furchaser, until demilitarization has been completed and approved by an authorized Contractor and Government representative. Demilitarization will be accomplished as specified in the contract. Components parts vital to the military or lethal purpose of the property shall be rendered unusable. The Purchaser agrees to assume all cost incident to the demilitarization and to restore the working area to its present condition after removing the demilitarized property.
- (c) DEMILITARIZATION ON NON-GOVERNMENT PREMISES. Property requiring demilitarization shall be demilitarized by the Purchaser under supervision of qualified Department of Defense personnel. Title shall not pass to the Purchaser until demilitarization has been completed by the Purchaser and approved by an authorized Contractor and Government representative. Demilitarization will be accomplished as specified in the contract. Component parts vital to the military or lethal purpose of the property shall be rendered unusable. The Purchaser agrees to assume all costs incident to the demilitarization.
- (d) FAILURE TO DEMILITARIZE. If the Purchaser fails to demilitarize the property as specified in the contract, the Contractor may,

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upon giving ten days written notice from date of mailing to the Purchaser --

- (1) Repossess, demilitarize, and return the property to the Purchaser. The Purchaser hereby agrees to pay to the Contract, prior to the return of the property, all costs incurred by the Contractor in repossessing, demilitarizing, and returning the property to the Purchaser.
- (2) Repossess, demilitarize, and resell the property, and charge the defaulting Purchaser with all excess costs incurred by the Contractor. The Contractor shall deduct these costs from the purchase price and refund the balance of the purchase price, if any, to the Purchaser. In the event the excess costs exceed the purchase price, the defaulting Purchaser hereby agrees to pay theses excess costs to the Contractor.
- (3) Repossess and resell the property under similar terms and conditions. In the event this option is exercised, the Contractor shall charge the defaulting Purchaser with all excess costs incurred by the Contractor. The Contractor shall deduct these excess costs from the original purchase price and refund the balance of the p; purchase price, if any, to the defaulting Purchaser. Should the excess costs to the Contract exceed the purchase price, the defaulting Purchaser hereby agrees to pay these excess costs to the Contractor.

(End of clause)

(HA6800)

52.242-4506 OSC

PROGRESS PAYMENT LIMITATION

MAR/1988

Prior to first article approval, only costs incurred for the first article are allowable for progress payments; however, such payments shall not exceed TEN percent (10%) of the initial award value of the contract.

(End of Clause)

(ES6002)

246.671 LCCAL

MATERIAL INSPECTION AND RECEIVING REPORTS (DD FORM 250)

JAN/1995

Material Inspection and Receiving Report (DD Form 250), required to be prepared and furnished to the Government under the clause of this contract entitled 'Material Inspection and Receiving Report', will be distributed by the Contractor in accordance with DOD FAR Supplement Appendix F, Part 4.

Send copies to:

- 1. Purchasing Office HQ, AFSC 1 ROCK ISLAND ARSENAL ATTN: AMSFS-CCA-M/JULIE COUGHLIN ROCK ISLAND, IL 61299-6500
- 2. Production Management

Purchasing Office но, лис 1 ROCK ISLAND ARSENAL ATTN: SFSJM-CDC/CLIFF DAY ROCK ISLAND, IL 61299-6500

3. Send additional copies to NSWC, CRANE IN in accordance with Table 1 and Table 2.

(End of clause)

(HA6025)

H-6 242-1107(B) INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PRODUCTION PROGRESS

JUN/1996

LOCAL REPORTS - AMMO (NAVY SPECIAL)

a. Production Progress Report (DD Form 375) and Production Progress Report Continuation (DD Form 375c) shall be prepared in

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accordance with instructions thereon. These forms shall be submitted as required for each separate contract item (identified by noun description not by line item number).

- b. The form(s) shall be submitted on a monthly basis within two workdays after each reporting period, beginning with the end of the first full month following contract date. In addition, the contractor shall promptly submit a DD Form 375 reporting any delay in the scheduled delivery or completion as soon as known or anticipated. The forms shall be distributed as follows:
 - 1. Purchasing Office:

HQ, AFSC

1 ROCK ISLAND ARSENAL

ATTN: AMSFS-CCA-M/JULIE COUGHLIN

ROCK ISLAND, IL 61299-6500

2. Administration Office:

See Award Document

3. Production Manager:

HQ, JMC

1 ROCK ISLAND ARSENAL
ATTN: SFSJM-CDC/CLIFF DAY
ROCK ISLAND, IL 61299-6500

- 4. Additional Distribution (As Indicated):
 - () a. Navy Ships Parts Control Center ATTN: Code 852 P.O. Box 2020 Mechanicsburg, PA 17055-0788
 - (X) b. Commanding Officer
 Naval Weapons Support Center
 ATTN: Code PM4
 Crane, IN 47500-5000
 - () c. Commanding Officer
 Naval Air Systems Command
 ATTN: AIR-11411
 Washington, DC 20361-1140
 - () d. Commander

 Naval Special Warfare Command

 ATTN: N9, NAB Coronado

 San Diego, CA 92155-5037
 - () e. Commander

 Naval Warfare Assessment Center
 ATTN: Code 2063

 Point Mugu, CA 93042-5000

(End of clause)

(HS6027)

H-7 252.247-7023

TRANSPORTATION OF SUPPLIES BY SEA

MAY/2002

DFARS

(f)(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM

CONTRACT

CONTENTE ATTOM CHARGE		Reference No. of	Document Being Continued	Page 35 of 43
CONTINUATION SHEET		PIIN/SUN W52P1J-04	PIIN/STIN W52P1J-04-C-0098 MOD/AMD	
Name of Offeror or Co	ntractor: pyrotechn	IC SPECIALTIES INC.		
DESCRIPTIO	N LIN	E ITEMS QUANTITY		
CATAL				
		(End of Clause)		
HA7502)				
H-8 252.24	17-7024 NOTIFIC	ATION OF TRANSPORTATION OF	SUPPLIES BY SEA	NOV/1995
**		(End of clause)		
HA7503)				
	7-4545 PLACE O	F CONTRACT SHIPPING POINT,	RAIL INFORMATION	MAY/1993
OSC he bidder/offercr is	to fill in the 'Sh:	ipped From' address, if dif	ferent from 'Place of Perfo	ormance' indicated elsewhere in
ection.				
Shipped Fro	m:			
or contracts involvi	ng F.O.B. Origin sh	ipments furnish the follow	ing rail information:	
Does Shippi	ng Point have a pri	vate railroad siding////	YES NO	
If YES, giv	e name of rail carr	ier serving it:		
If NO, give	name and address o	f nearest rail freight stat	tion and carrier serving it	:
Rail Freigh	at Station Name and	Address:		
Serving Car	rrier:			
		(End of Clause)		
(HS7600)				

PHN/SHN W52P1J-04-C-0098

MOD/AMD

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

CONTINUATION SHEET

SECTION I - CONTRACT CLAUSES

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

1-2 \$3,200-3 GRACUTITIES		Regulatory Cite		Date
1-1	I-1	52.202-1	DEFINITIONS	DEC/2001
1-6				APR/1984
1-6	-		·	APR/1984
1-6				JUL/1995
MARGORE ACTIVITY				JUL/1995
1-8 \$2.203-10 FRICE OR FER ADJUSTMENT FOR ILLEGAL OR IMPROVES ACTIVITY	1-6	52.203-8		JAN/1997
1-8	1-7	52.203-10		.TAN/1997
1-9				
1-10 \$2,204-7 CHRTAIL CONTRACTOR REGISTRATION CCT/2005 C				•
1-11 S2.209-6 PROTECTING THE GOVERNMENT'S LITEREST WEEN SUDCONTRACTING NITH JUL/1935				
CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT 1-14 52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS SEP/1990 1-14 52.215-2 AUDIT AND RECORDS - NEGOTIACTON 1-15 52.215-8 ORDER OF PRICEDENTS AND ALLOCATION REQUIREMENTS 1-16 52.215-8 ORDER OF PRICEDENT-CUNFORM CONTRACT FORMAT OCT/1997 1-16 52.215-14 INTEGRITY OF UNIT PRICES 1-17 52.219-6 NOTICE OF TOTAL SHALL BUSINESS SET-ASIDS 1-18 52.215-6 NOTICE OF TOTAL SHALL BUSINESS CONCERNS 1-19 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS 1-19 52.222-19 CHILD LABOR-COOPERATION WITH ATTHORICIES AND REMEDIES 1-20 52.222-10 MALSH-HEALEY FUBLIC CONTRACTS ACT 1-21 52.222-35 EQUAL OPPORTURITY 1-22 52.222-35 EQUAL OPPORTURITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2001 1-23 52.222-36 AFFERMATIVE ACTION FOR NOWNERS WITH DISABILITIES 1-24 52.222-37 BEFLOOPEN FOR NOWNERS WITH DISABILITIES 1-25 52.222-37 BEFLOOPEN FOR NOWNERS WITH DISABILITIES 1-26 52.222-3 PEDERAL, STATE, AND LOCAL TAKES 1-27 52.223-1 ENTREST 1-28 52.223-1 ENTREST 1-29 52.223-1 ENTREST 1-29 52.223-1 ENTREST 1-20 52.223-1 PAYMENTS 1-20 52.223-1 PAYMENTS 1-21 EXTRES 1-22 52.223-1 PAYMENTS 1-23 52.222-25 PROMPT FRAMENTS 1-24 EXAMPLE OF THE PROPERTY PAYMENT 1-25 52.223-1 PAYMENTS 1-26 52.223-3 PEDERAL, STATE, AND LOCAL TAKES 1-29 ASSIGNMENT OF CLAIMS (JAN 1986) - ALTERNATE I MAR/2001 1-35 52.232-25 PROMPT PAYMENTS 1-36 52.232-35 PROPERS PROPERTY PAYMENT 1-37 52.232-11 ENTREST 1-38 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.232-25 PROMPT PAYMENTS 1-39 52.233-1 DISCOUNTS FOR PROP				
1-13 52 211-15 DEFENSE PRICATITY AND ALLOCATION PRQUIREMENTS SEP/1996 I-14 52 215-2 AUDIT AND RECORDS - NEGOTIACTON TUM/1998 I-15 52 215-3 ORDER OF PRECEDENCE-UNIFORM CONTRACT FORMAT OCT/1997 I-16 52 215-4 NOTICE OF TOTAL SUBLINESS SET-ASIDS OCT/1997 I-18 52 219-6 NOTICE OF TOTAL SUBLINESS SET-ASIDS JUM/2000 I-19 52 219-6 UTILIZATION OF SMALL BUSINESS CONCERNS MAY/2004 I-19 52 222-19 CHILD LABOR-COOPERATION NITH AUTHORITIES AND REMEDIES JUM/2007 I-20 52 222-20 WALSH-REALEY PUBLIC CONTRACTS ACT DEC/1996 I-21 52 222-26 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2007 DEC/1997 I-22 S2 222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2007 UTILITY END FROM PROFILE SUBJECT FROM SUBJECT S		54.243 4		000, 2335
1-14 \$2, 215-2 AUDIT AND RECORDS - NEGOTIACION	I-12	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
1-15 52.215-14 ORDER OF PRECEDENCE-UNIFORM CONTRACT FORMAT OCT/1997 1-16 52.215-14 INTEGRITY OF UNIT PRICES OCT/1997 1-17 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE JUN/2001 1-18 52.219-6 UTILIZATION OF SMALL BUSINESS CONCERNS MAY/2004 1-20 52.222-19 CHILD LABOR-COOPERATION WITH AUTHORITIES AND REMEDIES JUN/2001 1-21 52.222-26 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2001 1-22 52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2001 1-23 52.222-36 APPIRADITY ACTION FOR NORMERS WITH DISABILITIES JUN/1994 1-24 52.222-37 EMPLOYMENT REFORMS OF THE DEC/2001 1-25 52.223-6 APPIRADITY ACTION FOR NORMERS WITH DISABILITIES JUN/1994 1-26 52.222-37 EMPLOYMENT REFORMS OF THE DEC/2001 1-26 52.223-6 DRUG-FREE MORNELAGE MAY/2001 1-27 52.232-1 EMPLOYMENT REFORMS OF THE DEC/2001 1-28 52.232-6 DRUG-FREE MORNELAGE MAY/2001 1-29 52.232-1 EMPLOYMENT SATELY AND LOCAL TAXES APR/2001 1-29 52.232-1 EMPLOYMENT SATELY AND LOCAL TAXES APR/2001 1-29 52.232-1 EMPLOYMENT SATELY AND LOCAL TAXES APR/2001 1-20 52.232-1 EMPLOYMENT SATELY AND LOCAL TAXES APR/2001 1-20 52.232-1 EMPLOYMENT SATELY AND LOCAL TAXES APR/2001 1-21 52.232-2 ASSESSMENTS OF CLAIMS (UAN 1986) - ALTERNATE I MOR/2001 1-21 52.232-3 APR/2001 1-22 52.232-3 APR/2001 1-23 52.232-3 APR/2001 1-24 52.242-1 EMPLOYMENT OCT/2001 1-25 52.233-1 FROMEDIT SATELY AND LOCAL TAXES APR/2001 1-26 52.233-1 FROMEDIT SATELY AND LOCAL TAXES APR/2001 1-27 52.242-2 APR/2001 1-28 52.243-1 CAMPADENT OF CLAIMS (UAN 1986) - ALTERNATE I JUN/2001 1-29 52.243-1 EMPLOYMENT OCT/2001 1-20 52.243-1 EMPLOYMENT OF CLAIMS (UAN 1986) - ALTERNATE I APR/1994 1-27 52.243-1 EMPLOYMENT OF CREEKE FROMES APR/1994 1-28 52.243-1 CAMPADENT OF CREEKE FROMES	I-13	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
1-16 \$2,215-14	I-14	52.215-2	AUDIT AND RECORDS - NEGOTIACION	JUN/1999
1-17	I-15	52.215-8	ORDER OF PRECEDENCE-UNIFORM CONTRACT FORMAT	OCT/1997
1-18	I-16	52,215-14	INTEGRITY OF UNIT PRICES	OCT/1997
1-19 52,222-19	I-17	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	JUN/2003
1-20 52.222-20	1-18	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	MAY/2004
1-21 52.222-26	I-19	52.222-19	CHILD LABOR-COOPERATION WITH AUTHORITIES AND REMEDIES	JAN/2004
1-21 52.222-35	I-20	52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	DEC/1996
VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	1-21	52.222-26	EQUAL OPPORTUNITY	APR/2002
1-23 52.222-36 AFFIRMATIVE ACTION POR WORKERS WITH DISABILITIES JUN/1996 1-24 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE DEC/2001 VISTAMA BEA, AND OTHER ELIGIBLE VETERANS VETERANS OF THE DEC/2001 VISTAMA BEA, AND OTHER ELIGIBLE VETERANS VETERA	I-22	52.222-35	•	DEC/2001
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VIETNAM ERA, AND OTHER ELIGIBLE VETERANS				
1-26	1-24	\$2,222-37	·	DEC/2001
I-27	I-25	52.223-6	DRUG-FREB WORKPLACE	MAY/2001
I-28 52.232-8	1-26	52.229-3	FEDERAL, STATE, AND LOCAL TAXES	APR/2003
I-29	1-27	52.232-1	PAYMENTS	APR/1984
I-30 52.232-16 PROGRESS PAYMENTS (APR 2003) - ALTERNATE MAR/2001 I-31 52.232-17 INTEREST JUN/1991 I-32 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986) - ALTERNATE APR/198- OCT/2001 I-34 52.232-23 PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR OCT/2001 I-34 S2.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR OCT/2001 I-35 S2.233-1 DISPUTES JUL/2001 I-36 S2.233-1 PROTEST AFTER AWARD AUG/1991 I-37 S2.242-2 PRODUCTION PROGRESS REPORTS APR/1991 I-38 S2.242-12 REPORT OF SHIPMENT (REPSHIP) JUN/2001 I-39 S2.242-13 BANKRUPTCY JUL/199 I-40 S2.243-1 CHANGES - FIRED PRICE AUG/1981 I-41 S2.243-7 NOTIFICATION OF CHANGES APR/1981 I-42 S2.244-5 COMPETITION IN SUBCONTRACTING DEC/1991 I-43 S2.246-1 CONTRACTOR INSPECTION REQUIREMENTS APR/1981 I-44 S2.246-23 LIMITATION OF LIABILITY FEB/1991 I-45 S2.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) MAY/2001 I-46 S2.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) APR/1981 I-49 S2.253-1 COMPUTER GENERATED FORMS JAN/1991 I-50 S25.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT- RELATED FEIGHNES JAN/1991 I-50 S25.203-7002 DISPLAY OF DOD HOTLINE POSTER DEC/1991 DE	I-28	52.232-8	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
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1-33 52.232-25	I-31	52,232-17	INTEREST	JUN/1996
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REGISTRATION	I-33	52.232-25	PROMPT PAYMENT	OCT/2003
1-35 52.233-1	I-34	52,232-33		OCT/2003
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RELATED FELONIES 1-51 252.203-7002 DISPLAY OF DOD HOTLINE POSTER DEC/199 DFARS				MAR/1999
I-51 252.203-7002 DISPLAY OF DOD HOTLINE POSTER DEC/199 DFAR9				
	I-51			DEC/1991
	I-52		DISCLOSURE OF INFORMATION	DEC/1991

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Reference No. of Document Being Continued

PIIN/SHN W52P1J-04~C-0098

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

	Regulatory Cite	Title	Date
	DFARS		
1-53	252.204-7003 DFARS	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-54	252.204-7004 DPARS	REQUIRED CENTRAL CONTRACTOR REGISTRATION	NOV/2003
I- 5 5	252.205-7G00 DFARS	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
I-56	252.209-7000 DFARS	ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ON-SITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (IMF) TREATY	NOV/1995
1-57	252.219-7011 DFARS	NOTIFICATION TO DELAY PERFORMANCE	JUN/1998
I-58	252.223-7002 DFARS	SAFETY PRECAUTIONS FOR AMMUNITION AND EXPLOSIVES	MAY/1994
I-59	252.223-7003 DFARS	CHANGE IN PLACE OF PERFORMANCE-AMMUNITION AND EXPLOSIVES	DEC/1991
I-60	252.223-7004 DFARS	DRUG-FREE WORK FORCE	SEP/1988
I-61	252.225-7012 DFARS	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	MAY/2004
Ţ-62	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	OCT/2003
1-63	252.231-7000 DFARS	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
I-64	252.232-7003 DPARS	ELECTRONIC SUBMISSION OF PAYMENT REQUESTS	JAN/2004
I- 6 5	252.232-7004 DFARS	DOD PROGRESS PAYMENT RATES	QCT/200
I-66	252.242-7000 DFARS	POSTAWARD CONFERENCE	DEC/199
1-67	252.242-7004 DFARS	MATERIAL MANAGEMENT AND ACCOUNTING SYSTEM	DEC/2006
I-68	252.243-7001 DFARS	PRICING OF CONTRACT MODIFICATIONS	DEC/199
1-69	252.245-7001 DFARS	REPORTS OF GOVERNMENT PROPERTY	MAY/199
I-70	252.246-7000 DFARS	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/200
I-71	52.209-4	FIRST ARTICLE APPROVAL-GOVERNMENT TESTING	SEP/198

(a) The Contractor shall deliver *_unit(s) of Lot/Item * within ** calendar days from the date of this contract to the Government at NSWC CRANE, IN for first article tests. The shipping documentation shall contain this contract number and the Lot/Item identification. The characteristics that the first article must meet and the testing requirements are specified elsewhere in this contract.

(b) Within 60 calendar days after the Government receives the first article, the Contracting Officer shall notify the Contractor, in writing, of the conditional approval, approval, or disapproval of the first article. The notice of conditional approval or approval shall not relieve the Contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the Contractor. A notice of disapproval shall cite reasons for the disapproval.

* (See instructions regarding submission of First Article clause)

** (See Schedule B)

(End of clause)

(IF8003)

1-72 52.217-6

EVALUATED OPTION FOR INCREASED QUANTITY

MAR/1989

CONTINUATION SHEET	Reference No. of Document Be	Page 38 of 43	
CONTINUATION SHEET	PHN/SHN W52P1J-04-C-0098	MOD/AMD	
Name of Offeror or Contractor: PYROTECHNIC	SPECIALTIES INC.		

- a. This solicitation includes an evaluated option (See Section M).
- b. The Government reserves the right to increase the quantity of item(s) 0001 AND 0003 by a quantity of up to and including but not exceeding 150 percent as an evaluated option at the price(s) quoted below.
- c. If the Contractor does not quote a price hereunder, the lowest price offered/bid in the Schedule for item(s) 0001 AND 0003 shall be the price used for evaluation/award of any option quantities. All evaluation factors identified in the solicitation, except F.O.B. origin transportation costs, will be applied to the option quantity for evaluation purposes.
- d. The Contracting Officer may exercise the evaluated option at any time preceding ACCEPTANCE OF 80% OF THE BASIC CONTRACT QUANTITY by giving written notice to the Contractor.
- e. Delivery of the items added by exercise of this option shall continue immediately after, and at the same rate as delivery of like items called for under the contract, unless the parties agree otherwise.
 - f. Subject to the limitations contained in this clause, the Government may exercise this option on one or more occasions.
 - g. Offered Unit Prices for the Option Quantities are:

Unit Price

Evaluated Option
(F.O.B. Origin) \$42.00 CLIN 0001

Varying prices may be offered for the option quantities actually ordered and the dates when ordered. In as much as the unit price for the basic quantity may contain starting, load, testing, tooling, transportation or other costs not applicable to option quantities, offerors are requested to take these factors into consideration while setting forth the unit price(s) for the option quantities. The option price is expected (but not required) to be lower than the unit price for the initial quantity.

(End of Clause)

(IF6080)

I-73 52.243-7 NOTIFICATION OF CHANGES

APR/1984

- (a) Definitions. "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer. "Specifically Authorized Representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this paragraph and shall be issued to the designated representative before the SAR exercises such authority.
- (b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within ______ (to be negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state-
 - (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
 - (3) The identification of any documents and the substance of any oral communication involved in such conduct;
 - (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including-
 - (i) What contract line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
- (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
- (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

CONTINUATION SHEET

Reference No. of Document Being Continued

MOD/AMD

Page 39 of 43

Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

(c) Continued performance. Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

PHN/SHN W52P1J-04-C-0098

- (d) Government response. The Contracting Officer shall promptly, within 15 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either-
- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
 - (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under paragraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.
 - (e) Equitable adjustments.
- (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made-
 - (i) In the contract price or delivery schedule or both; and
 - (ii) In such other provisions of the contract as may be affected.
- (2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

Note: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to costreimbursement or incentive contracts, or to combinations thereof.

(End of clause)

(IF6250)

1-74 52 246-17 WARRANTY OF SUPPLIES OF A NONCOMPLEX NATURE

JUN / 2003

- (b) Contractor's obligations.
- (1) Notwithstanding inspection and acceptance by the Government of supplies furnished under this contract, or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that for 1095 DAYS AFTER ACCEPTANCE. __
 - (c) Remedies available to the Government.
- (1) The Contracting Officer shall give written notice to the Contractor of any breach of waxranties in paragraph (b)(1) of this clause within 45 days after discovery of the defect.

(End of clause)

(IF6070)

1-75 252,223-7007 SAPEGUARDING SENSITIVE CONVENTIONAL ARMS, AMMUNITION, AND EXPLOSIVES

SEP/1999

Reference No. of Document Being Continued Page 40 of 43 CONTINUATION SHEET PHN/SHN W52P1J-04-C-0098 MOD/AMD Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC. (a) Definition. Arms, ammunition, and explosives (AA&E), as used in this clause, means those items within the scope (chapter 1, paragraph B) of DoD 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives. (b) The requirements of DoD 5100.76-M apply to the following items of AA&E being developed, produced, manufactured, or purchased for the Government, or provided to the Contractor as Government-furnished property under this contract: NOMENCLATURE NATIONAL STOCK NUMBER SENSITIVITY/CATEGORY MK124-0 SIGNAL 1370-01-144-3561 AND ĮΨ 1370-01-030-8330 (c) The Contractor shall comply with the requirements of DoD 5100.76-M, as specified in the statement of work. The edition of DOD 5100.76-M in effect on the date of issuance of the solicitation for this contract shall apply. (d) The Contractor shall allow representatives of the Defense Security Service (DSS), and representatives of other appropriate offices of the Government, access at all reasonable times into its facilities and those of its subcontractors, for the purpose of performing surveys, inspections, and investigations necessary to review compliance with the physical security standards applicable to this contract. (e) The Contractor shall notify the cognizant DSS field office of any subcontract involving AA&E within 10 days after award of the subcontract. (f) The Contractor shall ensure that the requirements of this clause are included in all subcontracts, at every tier (1) For the development, production, manufacture, or purchase of AA&E; or (2) When AA&E will be provided to the subcontractor as Government-furnished property. (g) Nothing in this clause shall relieve the Contractor of its responsibility for complying with applicable Federal, state, and local laws, ordinances, codes, and regulations (including requirements for obtaining licenses and permits) in connection with the performance of this contract. (End of clause) (IA6200) I-76 52.209-3 FIRST ARTICLE APPROVAL -CONTRACTOR TESTING (SEP 89) - ALTERNATE I JAN/1997 (End of clause) (IF7019) AUTHORIZED DEVIATIONS IN CLAUSES APR/1984 (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of ''(DEVIATION)'' after the date of the clause. (b) The use in this solicitation or contract of any DOD FAR SUPPLEMENT (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of ''(DEVIATION)'' after the name of the regulation.

(End of clause)

(IF7016)

I-76 252.211-7005 SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS FEB/2003

(a) Definition. SPI process, as used in this clause, means a management or manufacturing process that has been accepted previously by the Department of Defense under the Single Process Initiative (SPI) for use in lieu of a specific military or Federal specification or standard at specific facilities. Under SPI, these processes are reviewed and accepted by a Management Council, which includes representatives of the Contractor, the Defense Contract Management Agency, the Defense Contract Audit Agency, and the military departments.

COMEDIA	Reference No. of Document Be	Page 41 of 43	
CONTINUATION SHEET	PHN/SHN W52PlJ-04-C-0098	MOD/AMD	
Name of Offeror or Contractor: PYROTECHNIC	SPECIALTIES INC.		<u> </u>
(b) Offerors are encouraged to propolicitation. A listing of SPI processes attp://www.dcma.mil/onebook/7.0/7.2./7.2.6			
clicitation shall (1) Identify the specific m (2) Identify each facility specifications or standards cited in the specifications of standards cited in the specification of specifications	ine items, subline items, components, cess has been accepted at the facility	andard for which the SPI he specific SPI process i or elements affected by that which it is proposed	process has been accepted; n lieu of military or Federal he SPI process; and for use, but is not yet listed
(d) Absent a determination that an processes in lieu of military or Federal s	SPI process is not acceptable for this pecifications or standards:	procurement, the Contrac	tor shall use the following SP
Offeror insert information for each SPI p	rocess)		
SPI Process:			
facility:			
Military or Federal Specification or Stand	ard:		
Affected Contract Line Item Number, Sublir	ne Item Number, Component, or Element:		
process is an acceptable replacement for roofferor (1) May submit the information offer; but	s to obtain, prior to the time specifications or state of the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting officer at least to the contracting of the contracti	standards required by the	solicitation, the prospective
	(End of clause)		
(IA7015)			
I-79 252.243-7002 REQUESTS DFARS	FOR EQUITABLE ADJUSTMENT		MAR/1998
(b) In accordance with 10 U.S.C. 24 acquisition threshold shall bear, at the the request on behalf of the Contractor:	10(a), any request for equitable adjustime of submission, the following cert	tment to contract terms t ifficate executed by an in	hat exceeds the simplified dividual authorized to certify
	quest is made in good faith, and that to the best of my knowledge and belie		
	(Official's Name)		·

CONTINUATION SHEET

Reference No. of Document Being Continued

MOD/AMD

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Name of Offeror or Contractor: PYRCTECHNIC SPECIALTIES INC.

(Title)

PHN/SHN W52P1J-04-C-0098

(End of clause)

(IA7035)

1-80

52.201-4500

AUTHORITY OF GOVERNMENT REPRESENTATIVE

FEB/1993

OSC

AUTHORITY OF GOVERNMENT REPRESENTATIVE 52.201-4500 OSC

(FEB 1993)

The Contractor is advised that contract changes, such as engineering changes, will be authorized only by the Contracting Officer or his representative in accordance with the terms of the contract. No other Government representative, whether in the act of technical supervision or administration, is authorized to make any commitment to the Contractor or to instruct the Contractor to perform or terminate any work, or to incur any obligation. Project Engineers, Technical Supervisors and other groups are not authorized to make or otherwise direct changes which in any way affect the contractual relationship of the Government and the Contractor.

(End of clause)

(IS7025)

<u>MK 124</u> LAT RESULTS

	Test	<u>Test</u>	Smoke Display	Smoke Display	<u>Igniter</u>	Accept on	Comments
Interfix #1	<u>Date</u>	Result	<u>Failures</u>	<u>Average</u>	Separation	Deviation	
01 -001		Fall	Unknown	Unknown	Unknown	No	
01-002	Nov-06	Fall	12/20 - Cold	26.17	0	Yes	
01-003		Pass	0		0	N/A	
01-004	Jan-07	Fail	19/50 -Ambient		0	Yes	
01-005	Feb-07	Pass Pass	0		0	N/A	
01-006	Mar-07	Fail	15/20 -Cold	27.83	0	Yes	
01-007	Apr-07	Fail	0		0		2 no fire smoke function.
01-007A	Jun-07	Pass	N/A	N/A	0		
01-008	Jun-07	Fail	4/20 - Cold	23.46	0	Yes	
01-009	Jul-07	Pass	2/20 - Cold		0		
01-010	Aug-07	Fail			0	No	4 long ignition times + 3 leakers
01-011	Nov-07	Fail			0	No	9 leakers
Interfix #2							
02-001	Feb-08	Fail	0		3-Flare	Yes	Accept code B failed T&H
02-002	Feb-08	Fail	0		2-Flare	Yes	Accept code B failed T&H
02-003	Feb-08	Fail	0		0	Yes	Accept code B. 13 fast flare burn times.
Interfix #3							
03A-001	Apr-09	Pass	1/20 - Cold		0		
03-002	Sep-09	Fail	2/20 - Cold		2-Flare	Yes	1 leaker in LAT - 100% screen.
03-003	Oct-09	Fail					Critical defect - smoke candle ejected.
03-003A	Mar-10	Fail			1-Flare	No	
Interfix #4							
04A-001	Aug-11	Fail	7/20 - Cold	22.47	0	Yes	
04-002	Aug-11	Fail	19/20 - Cold	29	0	No	
04-003	Aug-11	Fail	10 20 - Cold	25.88	0	No	
0.000	0 ==						

Notes:

Interfix # 1 = 3M 433L sealing disk mln, adhesion 20 oz./ in. width.

Interfix # 2, #3 = 3M 363L sealing disk.

Interfix # 4 = 3M 433 sealing disk min. adhesion 40 oz /in. width.

P. 001/002

Julie anomula 1/9/02

Martin Electron

FROM-Martin Electronics, inc.



Headquarters U.S. Army Operations Support Command Attn: AMSOS-CCC-L/M. Adams Rock Island, IL 61299-6000

VIA FAX @ 309-782-5328 (two pages)

Subject: Lot Acceptance Testing

Reference: Contract DAAA09-00-C-0059, MK124 Signal

Dear Ms. Adams,

Martin Electronics Inc. is very concerned with the recent results of lot acceptance testing under the reference contract. The reported failures of the first three MEI production lots has put the contract in serious delinquency and places the continued performance of the contract at significant risk. Currently, MEI has manufactured approximately 30% of the units required by contract with only about 4% accepted for delivery. Through failure analysis conducted to date, MEI is of the belief that all units manufactured have been done so in strict adherence with the Technical Data Package, and that elements of the lot acceptance test (LAT) failures may have been test-induced as opposed to product-related. In order to have reasonable opportunity to successfully continue with performance of the contract, MEI requests the Government to participate in discussions and an exchange of ideas, data, and information regarding MEI production processes and Government lot acceptance testing. We request that these discussions take place during the next two weeks so as to proceed into the new year with a plan for favorable contract performance.

As a result of reports of unfavorable test results at NSWC Crane, MEI has performed certain segments of the LAT plan in an attempt to duplicate and analyze the test failures. This testing at MEI, which was witnessed by the Government QAR, has indicated that the MK124 will pass the lot acceptance testing under certain test procedures, but will fail under other procedures. Specifically, MEI has identified two elements of Crane's test procedures that could induce failure or distort performance data. The first of these two elements is Crane's practice of extinguishing the burning flare in water before proceeding with testing of the smoke end. Through our own testing, MEI has seen that this may induce a type of thermal shock when testing at cold temperature, and cause the introduction of moisture to the smoke end prior to testing. The result of this is that the smoke end primer, heat pad, and candle can be affected by the presence of moisture. causing ignition failures and long delay and display times. The second element is

> 10625 Puckett Road, Perry. Florida 32348 Telephone 850-584-2634 . FAX No. 250-584-2044



ARMED SERVICES BOARD OF CONTRACT APPEALS

SKYLINE SIX 5109 LEESBURG PIKE FALLS CHURCH, VIRGINIA 22041-3201

OFFICIAL TRANSCRIPT OF PROCEEDINGS

FILE NO: 57890, 58335, 59103

In the Matter of: Pyrotechnic Specialties, Inc.

Under Contract No: W52P1J-04-C-0098, et al

Place: Macon, Georgia

Date: Tuesday, October 21, 2014

Pages: 1-1 to 1-153

NEAL R. GROSS & CO., INC. 1323 RHODE ISLAND AVENUE, NW WASHINGTON, D.C. 20005 TELEPHONE (202) 234-4433

UNITED STATES OF AMERICA

+ + + + +

ARMED SERVICES BOARD OF CONTRACT APPEALS

+ + + + +

HEARING

IN THE MATTER OF:

The Appeal of

: ASBCA NOS.

57890 58335

Pyrotechnic Specialties, Inc.

59103

Under Contract No. W52P1J-04-C-0098, :

et al.

Tuesday, October 21, 2014

VOLUME I

Courtroom B U.S. Federal Courthouse 475 Mulberry Street Macon, Georgia

The above-entitled matter came on for hearing, pursuant to notice, at 10:00 a.m.

BEFORE:

THE HONORABLE REBA PAGE Administrative Judge

APPEARANCES:

On Behalf of the Appellant:

DAVID KARLSON

CEO

of: Pyrotechnic Specialties, Inc.

1661 Juniper Creek Road

Byron, Georgia (478) 956-6313

ps12@windstream.net

and

ROBERT HIRST

Vice President and General Manager

of: Pyrotechnic Specialities, Inc.

102 Stonebridge Crossing

Perry, Georgia 31069

(478 956-6330

psi.bobhirst@windstream.net

On Behalf of the Respondent:

ROBERT B. NEILL, ESQ. CAPTAIN TYLER DAVIDSON

of: U.S. Army Legal Services Agency

9275 Gunston Road

Suite 2100

Fort Belvoir, Virginia 22060-5546

(703) 693~1172 ext. 223

robert.b.neill2.civ@mail.mil

WITNESSES:

DAVID KARLSON RICHARD PROFETA

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WITNESSES

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David Karlson Richard Profeta	18 117	101 128		
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Appellant's Exhi Appellant's Exhi				41 53

PROCEEDINGS

1 2

(9:57 a.m.)

According the board's notice of hearing dated 11 September 2014, this is the time and place set by the board's notice for hearing of the appeals of Pyrotechnic Specialties Incorporated docketed at ASBCA's numbers 57890, 58835 and 59103 under contract numbers W52P1J-04-B-0098 et al. The record will show that Judge Reba Page, a duly appointed member of the board is presiding.

At this time I will ask for appearances. Where there is more than one attorney or representative, designate lead counsel or representative. By whom will appellant be represented?

MR. KARLSON: David Karlson

MR. HIRST: Robert Hirst.

JUDGE PAGE: Mr. Karlson, will you be lead representative?

MR. KARLSON: Yes.

JUDGE PAGE: As you know the board does permit a corporation to represent itself. An individual appellant may represent his or interests before the board. A corporation may be represented by one of its officers, etc. This is Board Rule 15(a). Let me confirm Mr. Karlson and Mr. Hirst you are officers of

1	the corporation.
2	MR. KARLSON: Yes.
3	JUDGE PAGE: And Mr. Karlson, what is your
4	title?
5	MR. KARLSON: I'm the President.
6	JUDGE PAGE: And Mr. Hirst, what is your
7	title?
8	MR. HIRST: Vice President and General
9	Manager.
10	JUDGE PAGE: Vice President and General
11	Manager. All right, thank you very much. By whom will
12	the government be represented?
13	MR. NEILL: Your Honor, Robert Neal, U.S.
14	Army Legal Services Agency and I'm lead counsel.
15	MR. DAVIDSON: And Capt. Tyler Davidson, also
16	with the U.S. Army Legal Services Agency, Your Honor.
17	JUDGE PAGE: All right, counsel, thank you
18	very much. The board acts as the authorized
19	representative of the Secretary of the Department
20	concerned in this case, it is the Department of the Army
21	to hear and determine appeals by contractors from
22	contracting officer decisions under the contract
23	disputes clause or pursuant to the Contracts Dispute Act
24	of 1978.
25	Since this is an administrative proceeding

and we have no jury, the board does not expect any trivial or technical objections to the evidence offered 2 or to any other matters at this hearing. We have before 3 us a Rule 4 file. As I noted earlier, not all of my 4 documents have yet arrived. I had all that I believe 5 volume four and the government has kindly lent me a copy 6 7 of that. Is that correct? MR. KARLSON: That's correct, your honor. 8 JUDGE PAGE: All right, let me ask at this 9 10 time whether either side has any objections to documents in the Rule 4 file. Excuse me just a moment. Let me--11 may I help you gentlemen? Are you here for the appeal 12 13 of Pyrotechnics, the hearing of Pyrotechnics? UNKNOWN: Yes, ma'am. 14 All right, please be seated 15 JUDGE PAGE: Let me return to my question I asked earlier. 16 then. Are there any objections to the documents in the Rule 4 17 file? 18 No, Your Honor. 19 MR. KARLSON: 20 JUDGE PAGE: Government? MR. NEILL: Yes, Your Honor, the government 21 had previously submitted a number of objections to 23 documents in the Rule 4 file. We submitted those objections in writing and I can reiterate those. 24

JUDGE PAGE:

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If you would, please sir, since

my files are not with me at the moment.

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MR. NEILL: All right.

JUDGE PAGE: Please reiterate those objections.

MR. NEILL: The government objects to the admissibility of the following documents contained in the Appellant's Supplement to the Rule 4 file for the reasons that I'll go through. The documents at Rule 4 Tabs, 214 through 240 and also Tabs 244 through 281 as 287 consist of documents that well as Tab inadmissible because they do not contain elements relevant to the claims or defenses that issue in the Federal Rule of Evidence 402 provides that appeals. irrelevant evidence is not admissible.

The documents that I've mentioned do not pertain to the performance of the contract for the Mark 124 Mod 0 Smoke and Illumination Signal that is at issue in these appeals. Or two incidents, or the documents may pertain to incidents completely unrelated to the termination of the contract and to the government's rejection of Lot 3-3A which are really the only two issues in the appeal.

None of the documents relate to the appellant's contentions and its claims and complaints that Lot 3-3A should not have been rejected or that the

termination for default was not warranted. that the Mark 124 Mod 0 specification was defective or that by waiving defects in prior Mark 124 production lots, the government relaxed the requirements of this specification. Moreover admission of these documents will likely confuse the issues and, and waste time in the administrative proceeding.

I would also like to note that a number of the documents contain hearsay, for which, I guess if they're considered, we would have checked on, on that ground. But, in addition, the documents in Rule 4, Tab 241, 242 and 243 although they do pertain to the contracted issue in the appeals, are similarly inadmissible because they do not contain evidence relevant to the claims or defenses at issue.

None of the documents relate to appellant's contentions in its claims and pleadings that Lot 3-3A should not have been rejected. That the termination for default was not warranted, that the specification in the contract was defective or that by waiving defects in prior Mark 124 production lots, the government relaxed the requirements of the specification through a prior course of dealing. And similarly, admission of these irrelevant documents would likely only confuse the issues and, and unnecessarily waste time. So their

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admissions should also be precluded by Rule of Evidence 403 even if they are tangentially relevant. And lastly, I had two more categories.

The documents at Tabs 267 and 287 in addition to being inadmissible because they are irrelevant appear to include inadmissible evidence of other acts or other bad acts aimed simply at attacking the character of government witnesses, Dean Cower and Kevin Bowen. These documents are inadmissible pursuant to Federal Rule of They do not pertain to the claims or Evidence 404(b). defenses at issue in the appeals. Also the documents at Rule 4, Tabs 215, 216, 217, 218 and 223 are deposition transcripts that according to Board Rule 8(b) and the, the former Board Rule 14(d) should not be considered as part of the evidence in the hearing until the witnesses testimony is offered and received in evidence at the And so there's really been no foundation hearing. established for admissibility of any of those deposition transcripts. Those are all the objections to the documents, Your Honor.

JUDGE PAGE: Thank you, sir. Mr. Karlson, I'll give you a chance to respond and then I'll rule.

MR. KARLSON: We believe these matters are relevant to what happened. They want to very narrowly define why the contract was terminated. We think it's

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a broader issue than that, Your Honor.

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Neill, as you also know, the bar for relevance is extremely low. Federal Rule of Evidence provides that evidence is relevant if (a) it has any tendency to make a fact more or less probable than it would be without the evidence and (b) the fact is of consequence in determining the action. Again, a fairly low bar. Sir, I note your objections for the record. I will ask that you renew them at the appropriate time.

I will tell you that it is my inclination and, in fact, I will now so rule that I will admit those documents subject to your objections. I will note them for the record and the board will accord the appropriate weight for those documents considering your objections in, at the time we make our ruling. There are other objections that you have noted including hearsay and use of deposition testimony. Again, I'll ask you to renew that at the appropriate time if those documents are considered. And by considered at this juncture, I mean if they are used during the hearing. So you may do so. You mentioned that there are certain documents that you believe have criticism, if you will, of government employees that is not relevant. correctly Dο Ι interpret your remarks and your objections to

through 218 and 223?

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MR. NEILL: Yes, Your Honor, and also that's it Rule 404(b) evidence simply attacking the character of the witness, presumably for some purpose that we have yet to see but that's, that's the only purpose that I can define from the documents in the record.

documents are introduced at the time of the hearing. I'll ask that you renew your objection. Mr. Karlson, while other acts may or may not be relevant, and I cannot say at this time, we are not at the appropriate point in the proceeding. Where there is criticism of others, we treat that very carefully.

MR. KARLSON: I understand, Your Honor.

JUDGE PAGE: It's admitted if it's If it's merely an ad hominem remark, we appropriate. will not give it that consideration. You should understand that when you write your briefs after this, I will look at the evidence that you cite. if you have already provided it foundation here at the hearing. When you write your briefs, if there is evidence in the record that neither party relies upon, do not expect the board to hunt it out and find it for you to support your case. In short, if there is evidence in the record that you do not cover

during the hearing that is useful to you, you should cite it. Thank you, Mr. Neill. Is there anything further?

MR. NEILL: No, Your Honor.

JUDGE PAGE: All right, since the appellant is being represented by corporate officers which is perfectly appropriate, I relate to an earlier conversation that we had in a telephone conference call and I ask appellant to affirm for the record that questioning of witnesses will be done using the question and answer format that we previously discussed. Mr. Karlson, is that correct?

MR. KARLSON: Yes, Your Honor.

JUDGE PAGE: And Mr. Hirst?

MR. HIRST: Yes, Your Honor.

JUDGE PAGE: All right. When an objection is made, the moving party should state the grounds and the opposing party may be asked to reply to that objection before ruling is made. Proposed testimony and documentary evidence will often be accepted subject to the objections of record so that the other judges participating in the decision may consider the validity of the objection or as it is more usual, consider the objection in determining what weight, if any, should be given to the evidence.

Smoking, eating, and drinking other not permitted in the hearing room. is The parties' representatives may sit orstand while questioning the witnesses. It is optional whether you will stand when you are addressing the board. We will take periodic recesses during the hearing. However, if for any reason you need, you need a recess at a particular time during the proceeding, you may request it. Only one person should speak at a time. The court reporter is instructed to politely interrupt proceedings any time if the transcript would otherwise be unclear.

Typically the appellant bears the burden of proof. This is a different situation because the government terminated Pyrotechnics contract for default. The government bears the burden of proof in showing that that termination was appropriately done. Mr. Karlson, even though you will be going first today, understand that you have the right to rebut the government's assertions regarding the propriety of the termination. Have you any questions, Mr. Karlson?

MR. KARLSON: No, no, Your Honor.

JUDGE PAGE: All right. Mr. Neill?

MR. NEILL: No, your honor.

JUDGE PAGE: All right. Mr. Karlson, you

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have indicated a willingness and a desire to provide an opening statement, sir. You may do so now.

MR. KARLSON: Your Honor, my testimony will be in the form of a timeline of events starting with the contract award. The questioning will involve matters we believe directly resulted in the termination of default of this contract. It wasn't one contract that was terminated; it was two. We won't spend much time talking about the other which was with the same PCO, the same contract specialist, and the same QARs and which was converted to a termination for convenience here last year.

This matter is the last of a series of legal problems PSI has had to deal with over the past decade. We believe strongly that they are related and connected. There have been numerous civil lawsuits, civil enforcement actions and criminal charges against the company and many individuals. We will not be wasting the Court's time by re-litigating them. We don't need to re-litigate them because we won them all.

There was a serious accident involving a flash-bang grenade in a car with three FBI agents, one, one month after the award of this contract in 2004. PSI had no involvement or responsibility for this accident other than to have been the manufacturer of the device

the U.S. Navy designed under a U.S Navy contract. It was from Lot 10 which cop, passed its Lot acceptance test and was shipped to all fifty-five, fifty-six FBI field offices as directed by the Navy. As such under the law, a contractor is indemnified from civil lawsuits. The only exceptions are for fraud and negligence.

We will show a concerted effort to prove fraud was undertaken directly involving the DCMA QARs. These were the individuals assigned to perform oversight of contract performance at the plant. They had an affirmative obligation under the delegation from the PCO to do so on a fair and impartial and cooperative manner. The evidence will show that this did not occur during the period of performance of these terminated contracts.

The Court will hear unambiguous testimony from a government employee sent to the plant to work on technical problems with another product with a determined effort by the QARs to put PSI out of business. The evidence will also show that the well was poisoned with Rock Island, the buying command for these disputed contracts by these individuals and events causing the termination for defaults.

Unfortunately, winning in Court isn't always enough to resolve a problem. When a black cloud is put

over a company, it isn't automatically dispelled by a dismissal. No one in the government stood up and said 2 3 we were wrong or we made a mistake. They're not very 4 good at that. They weren't anxious to admit false grand testimony, fabricated criminal 5 charges and 6 concealing exculpatory evidence to which defendants are 7 entitled under the law. So it is not surprising that Rock Island, unaware of these facts would terminate its 8 contracts with such a contractor. 9 detrimental and highly pejorative 10 These events were coupled with a contract which took six years 11 of research and development to correct technical data 12 package shortcomings which I believe the government will 13 acknowledge. And then with the added pressures of 14 15 expiring government funds prove to be а fatal combination for PSI in this contract. 16 JUDGE PAGE: Thank you, Mr. Karlson. You may 1.7 now call your first witness. 18 19 MR. KARLSON: That'll be myself, Your Honor, 20 and Mr. Hirst will do the questioning. 21 All right. Mr. Hirst, you may JUDGE PAGE: 22 call your first witness. 23 MR. HIRST: Mr. Karlson. JUDGE PAGE: As you can see, we have made 24

arrangements for the witness to use this stand.

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1	believe the documents are all ready for examinations.
2	Is that correct, Mr. Neill?
3	MR. NEILL: I believe so, Your Honor. Mr
4	JUDGE PAGE: Mr. Karlson. Excuse me, sir; I
5	have to swear in the witness.
б	Mr. Karlson, if you would, sir, please raise
7	your right hand.
8	WHEREUPON,
9	DAVID KARLSON
10	was called as a witness, and having been
11	first duly sworn, assumed the witness stand, was
12	examined and testified as follows:
13	JUDGE PAGE: Thank you, sir. Mr. Hirst, you
14	may question Mr. Karlson.
15	MR. HIRST: Thank you.
16	DIRECT EXAMINATION
17	BY MR. HIRST:
18	Q Mr. Karlson, please describe your
19	professional background.
20	A I've been at PSI in senior management for the
21	past 23 years and previous to the thirteen previous
22	years in manufacturing supervision and management at
23	other companies.
24	MR. NEILL: Your honor, I'm sorry to
25	interrupt but it appears that the witness is testifying

1	from a piece of paper in his hand. It hasn't been
2	marked as an exhibit.
3	JUDGE PAGE: Mr. Karlson, that can be a
4	difficulty. Generally when questioning is done, it's
5	useful for the purpose or of testing the witness's
6	memory. Do you need that piece of paper? And did you
7	MR. KARLSON: I have notes on it that I'd
8	like to have available.
9	JUDGE PAGE: We are, we do allow
10	MR. KARLSON: I don't like I'll give it to
11	Mr. Neill, if he
12	JUDGE PAGE: We do allow the use of documents
13	to refresh your memory. However, do you have an extra
14	copy of this that you would be willing to share with Mr.
15	Neill?
16	MR. KARLSON: Yes, I do. I think I do, yes.
17	JUDGE PAGE: Mr. Neill, would that be a
18	suitable solution?
19	MR. NEILL: Yes, Your Honor. That's fine.
20	JUDGE PAGE: Thank you. Mr. Hirst, if you'll
21	provide that document to Mr. Neill and Capt. Davidson.
22	MR. KARLSON: Let me, get it because
23	MR. NEILL: If you read it -
24	(Simultaneous speaking.)
25	MR. KARLSON: I guess you'll have a copy,

right? 1 MR. HIRST: I have a copy of this. 2 I think Mr. Hirst has the only MR. NEILL: 3 copy, Your Honor. 4 5 JUDGE PAGE: Then let's give Mr. Neill the opportunity to examine it now -б 7 MR. HIRST: We can make him a copy. 8 JUDGE PAGE: --and we will have you make and furnish a copy to Mr. Neill. Is that an acceptable 9 solution, Mr. Neill? 10 MR. NEILL: Yes, Your Honor. 11 JUDGE PAGE: Certainly. Thank you. 12 While Mr. Neill is looking at the document 13 being used by Mr. Karlson, I will ask Mr. Neill to 14 15 consider whether this needs to be admitted as a hearing exhibit? Mr. Neill? You don't have to answer right now. 16 I just want you to understand my purpose in letting you 17 18 examine the Exhibit. I will also remind those present court sensitive reporter has very 19 that our some microphones set up around the room. They are intended 20 21 to pick up all noises. Please be thoughtful. And the court reporter, thank you. If you have any difficulty 22 at any time, let us know. Mr. Neill? 23

notes to refresh his recollection about the events.

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MR. NEILL:

These appear to be witness's

JUDGE PAGE: Have you any objection to Mr. 1 2 Karlson using those notes? MR. NEILL: I would prefer that he'd testify 3 from his own knowledge. 4 MR. KARLSON: Well, I will be but, that's so 5 б I don't forget things. Mr. Neill,--7 JUDGE PAGE: MR. NEILL: I'd prefer to have these marked 8 9 as Exhibit--JUDGE PAGE: I was going to say, would you 10 like to have--11 MR. KARLSON: (Simultaneous speaking) 12 JUDGE PAGE: --them marked as an exhibit. 13 All right. 14 Thank you, Mr. Neill. Mr. Karlson, if you 15 don't mind, if I may see those notes. 16 Sure. MR. KARLSON: 17 JUDGE PAGE: Mr. Karlson, I'm going to mark 18 this as an Exhibit. I will tell you that it is unusual 19 as Mr. Neill has pointed out. Typically we have 20 witnesses to testify from their memory. However, since 21 22 we do not have counsel and you are appearing as an the corporation, also party 23 officer οf as representative, although at the moment, you are only a witness, I'm going to give you some leeway. Mr. Neill 25

1	and Capt. Davidson, I appreciate your consideration in
2	that regard. If at any time though you have an
3	objection, I will expect you to register it. Is that
4	sufficient, Mr. Neill?
5	MR. NEILL: Yes, Your Honor. Thank you.
6	JUDGE PAGE: All right. Thank you. If you
7	will kindly tell me the last number in the Rule 4 file
8	Tabs, I will make this an additional Tab to the Rule 4
9	file unless there is objection. I prefer to do that to
10	having it labeled as a Hearing Exhibit, simply because
11	if you reference it in your briefs, it is easier if it
12	is collected as part of the Rule 4 file.
13	MR. NEILL: The last tab is 290, Your Honor.
14	So this could be 291.
15	JUDGE PAGE: Mr. Neill, have you any
16	objection to my entering it as Rule 4 file, tab 291.
17	MR. NEILL: No objection at
18	JUDGE PAGE: Subject to any objections you
19	may have during the testimony.
20	MR. NEILL: Mr. Karlson's notes to
21	relevance and so forth, certainly.
22	JUDGE PAGE: Certainly. Mr. Karlson, I have
23	marked this document as Rule 4, Tab 291.
24	(Whereupon, the above-referred to document
25	was marked as Rule 4 Tab 291 for identification.)

JUDGE PAGE: After you are finished 1 testifying, I will ask that you provide a copy to the 2 government and a copy to me. I will note again that 3 this is not the usual process, but I'm giving you 4 considerable leeway. I'm sure you will be respectful of 5 the bounds of that leeway and if at any time the б will certainly take 7 government objects, I objections very seriously. Note that merely because a 8 9 document has been incorporated into the Rule 4 file, it does not signal the weight to be accorded to that 10 That is something that will be revealed 11 document. through the testimony and creditability of the witness 12 and also to the board's later assessment. Have you any 13 questions on that, Mr. Neill? 14 MR. NEILL: No, Your Honor. 15 All right. Mr. Karlson? JUDGE PAGE: 16 MR. KARLSON: No questions. 17 JUDGE PAGE: All right. Very well then I'll 18 allow you to continue with the document you're using to 19 refresh your memory which I have now marked as Rule 4, 20 Tab 291. And again it will be accorded due weight to be 21 22 determined by the board. Mr. Karlson, I Mr. Hirst, you may resume. 23 remind you, you remain under oath as long as you are on 24

the stand.

MR. HIRST: Thank you.

BY MR. HIRST:

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Q My next question. Please provide an overview of PSI to the Court.

PSI is a company built, built on a old Nike Α missile base. It's got approximately 120 buildings with different, typically hazardous operations manufacturing business, conducted. The the are employment runs around 200 people plus orminus depending on the workload.

Q Thank you. What were the circumstances related to PSI receiving the Mark 124 contract?

A I was award in September 2004, was a best value award. We had a reasonably good rating from Rock Island goods and fairs. That would have been in the summer time of 2004 when they did that evaluation. We were turned down by the local DCMA in, as part of that award, but it was overruled at Rock Island which is some, somewhat unusual. We had a contract with the same PCO at the time, it was the M49 contract and it was running reasonably well at that time, and normally, and so, they awarded us a fall on contract for a different item, this item the 124.

JUDGE PAGE: Forgive me for interrupting.

I'm going to ask that you speak just a little more

slowly. 1 2 MR. KARLSON: Okay. JUDGE PAGE: And a little more loudly. 3 MR. KARLSON: Okay. 4 If at any time, Mr. Neill and 5 JUDGE PAGE: Capt. Davidson, you have any difficulty understanding 6 the witness, please let me know. I just want to make 7 sure the record is very clear. 8 BY MR. HIRST: 9 Mr. Karlson, would you like to share with the 10 court the documents that endorsed that we received good 11 12 rating from Rock Island? Well, I have them right in my notes and I'll 13 be citing them in the brief. I don't, I can testify 14 without actually reading the book, reading the document. 15 All right, forgive me, Mr. JUDGE PAGE: 16 Karlson and Mr. Hirst. I'm a bit confused. 17 referring to documents that are already in the record? 18 MR. KARLSON: Yes, for example, the award is 19 in the record and how the evaluation is in the record. 20 So I've testified to it. In our brief we'll cite it in 21 the book. 22 Typically when a document is JUDGE PAGE: 23 referred to that is a part of the Rule 4 file, you will 24 give me and Mr. Neill and Capt. Davidson a moment to 25

1	pull that document out and take a look at it.
2	MR. KARLSON: Here today?
3	JUDGE PAGE: Pardon me?
4	MR. KARLSON: Here today?
5	JUDGE PAGE: Here today.
6	MR. KARLSON: Yes
7	JUDGE PAGE: That's correct.
8	MR. KARLSON: So I would call your attention
9	to the Rule 4 book, 241, Section 241, page 1.
10	JUDGE PAGE: All right. Rule 4 file, Tab
11	241.
12	MR. KARLSON: Page 1.
13	JUDGE PAGE: Page 1. Give us just a moment.
14	MR. KARLSON: Sure.
15	JUDGE PAGE: When you do cite a document,
16	please give me the Rule 4 file reference, and give both
17	the government and me the opportunity to find it.
18	Government, do you have that document before you?
19	MR. NEILL: Yes, Your Honor.
20	JUDGE PAGE: All right. Mr. Karlson, if you
21	don't mind, I will ask that you too find that document
22	and refer to it particularly where you give us a
23	reference to a specific page. It will be helpful if
24	there are features on that page that you can draw to our
25	specific attention, a particular paragraph, or portion.
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1	MR. KARLSON: Robert, I need that sixth book,
2	Bob. Thank you.
3	JUDGE PAGE: Mr. Karlson, you may testify as
4	you are ready. Is there a question for Mr. Hirst?
5	MR. HIRST: No ma'am. I just would like Mr.
6	Karlson to recap what the document says.
7	MR. KARLSON: I point out that in the section
8	c.
9	JUDGE PAGE: Forgive me. Forgive me. When
10	you refer to a document, and I have it before me as does
11	government counsel, I need you to identify that document
12	and put it in some context. So when you do your
13	questioning and provide your answers, make sure that the
14	record is clear with respect to what that document is
15	and as, as necessary and appropriate, identify its
16	relevance to the appeals before us.
17	MR. KARLSON: Bob.
18	JUDGE PAGE: Mr. Hirst, I'll ask you to ask
19	your question again.
20	MR. HIRST: Phrase the question
21	JUDGE PAGE: Again forgive me, but the record
22	must be very clear later what we are doing.
23	BY MR. HIRST:
24	Q You mentioned that it was a Best Value Award
25	and the company received good ratings by Rock Island, in
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that endorse that? 2 contracting 3 Yes. it's the officer's determination of contractor responsibility and I would 4 call your attention to Section C where it states the 5 6 proposed contractor has a satisfactory record of integrity which is something that they determined at 7 Section D which says well 8 time, as as 9 contractor has a satisfactory record of performance and it explains that in some detail in paragraph E. And I, 10 and I mentioned that the local DCMA had turned us down 11 for this award, so I would turn your attention to 12 Section 242 of the book where it says in the--13 JUDGE PAGE: Excuse me, sir; is this Rule 4, 14 Tab 242? 15 Yes, Your Honor. MR. KARLSON: 16 JUDGE PAGE: All right. Again, if you'll 17 identify the document for us--18 MR. KARLSON: Yes, Your Honor. 19 20 JUDGE PAGE: --before you provide any testimony. 21 MR. KARLSON: This is a document signed by 22 the Pre-Award Survey Manager and the first line of it 23 award based on unsatisfactory 24 says, recommend no findings on the quality assurance capability factor. 25

document R4-241-1. Could you please read the sections

1	JUDGE PAGE: Mr. Neill.
2	MR. NEILL: Your Honor, both 241 and 242 are
3	documents that we objected to because of relevance.
4	They don't pertain to any of the claims or defenses that
5	are at issue in the appeals. The contractor's
6	responsibility at award is not an issue. And I don't
7	believe the state of the contractor's quality assurance
8	system at the time of award is at issue either. So we
9	would renew our objection to those documents.
10	JUDGE PAGE: Mr. Hirst, have you any
11	response?
12	MR. KARLSON: Your Honor, I'll respond to the
13	government
14	JUDGE PAGE: No, Mr. Karlson, you're sitting
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16	MR. KARLSON: Okay. Okay.
17	JUDGE PAGE:as a witness at the moment.
18	I
19	appreciate that this is a difficult situation
20	because it is unfamiliar to you. But there are
21	formalities that we have to observe. Mr. Hirst, do you
22	have a response to Mr. Neill?
23	MR. HIRST: Yes, I would restate that we feel
24	it's relevant because it outlines the negative cloud
25	that the company was under when the contract. Mark 124

1	contract was carried out. This is the background
2	information that the court needs to hear.
3	JUDGE PAGE: Let me ask you this Mr. Hirst,
4	is the contract that is referred to here the contract
5	that is currently at issue? Is this the contract we're
6	looking at in this appeal?
7	MR. HIRST: No ma'am.
8	MR. KARLSON: No, yes.
9	MR. HIRST: Well the contract we're looking
10	at right now is Mark 124.
11	MR. KARLSON: And that's what this is.
12	JUDGE PAGE: And this is 0098, is that
13	correct?
14	MR. HIRST: Yes.
15	JUDGE PAGE: Contract number W52P1J-04-B-
15 16	JUDGE PAGE: Contract number W52P1J-04-B-0098. It's a different contract, is that correct Mr.
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16	0098. It's a different contract, is that correct Mr.
16	0098. It's a different contract, is that correct Mr. Hirst?
16 17 18	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just
16 17 18	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just described in the narrative that Mr. Karlson provided, I
16 17 18 19 20	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just described in the narrative that Mr. Karlson provided, I misspoke. Those are all relevant to this current
16 17 18 19 20 21	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just described in the narrative that Mr. Karlson provided, I misspoke. Those are all relevant to this current contract, the Mark 124 Module contract.
16 17 18 19 20 21	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just described in the narrative that Mr. Karlson provided, I misspoke. Those are all relevant to this current contract, the Mark 124 Module contract. JUDGE PAGE: All right, Mr. Hirst, I'm trying
16 17 18 19 20 21 22	0098. It's a different contract, is that correct Mr. Hirst? MR. HIRST: No, the documents that were just described in the narrative that Mr. Karlson provided, I misspoke. Those are all relevant to this current contract, the Mark 124 Module contract. JUDGE PAGE: All right, Mr. Hirst, I'm trying to understand how they're relevant. If it is a

1	MR. KARLSON: It's not a different contract.
2	JUDGE PAGE: It is part of this appeal. Is
3	that correct?
4	MR. HIRST: Right.
5	MR. KARLSON: This is the contract.
6	MR. HIRST: I misspoke. I apologize.
7	JUDGE PAGE: Thank you. That's what I needed
8	to hear.
9	All right. Thank you.
10	MR. HIRST: Okay.
11	JUDGE PAGE: Mr. Neill. I note your
12	objection. I will admit the document for its probative
13	value and for the benefit of Mr. Hirst and Mr. Karlson.
14	When a document is admitted for probative value, that is
15	really almost a provisional ruling. It means I will go
16	back later I will look at all the testimony and the
17	other evidence in context and determine whether it has
18	any weight whatsoever. Mr. Hirst, you may proceed.
19	MR. HIRST: Thank you.
20	BY MR. HIRST:
21	Q Mr. Karlson please brief, briefly describe
22	the Mark 1, 120, Mark 124 item to the Court.
23	A I'd like you to hand that to me.
24	JUDGE PAGE: Mr. Hirst, if I may, forgive me.
25	I will not continue to do this, but let me just turn to
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Mr. Neill. I note an objection coming. 1 MR. NEILL: Yes, Your Honor. The government 2 objects. Mr. Hirst just handed Mr. Karlson an object, 3 looks like it might be an inert model of a Mark 124 4 signal, but I haven't seen it. It hasn't been shown to 5 us so we didn't discuss this. It hasn't been admitted 6 as a Hearing Exhibit or anything like that. So we would 7 request an opportunity to look at it and have it 8 9 identified as a Hearing Exhibit for this hearing. Thank you Mr. Neill. I will JUDGE PAGE: 10 sustain that objection. Mr. Hirst. 11 12 MR. HIRST: Yes. It is not inappropriate to use JUDGE PAGE: 13 physical objects like that, but because they have not 14 been shown to the government or to the board before 15 hand, what I'll ask you to do is retrieve it from Mr. 16 Karlson. Hand it to Mr. Neill. Give him the chance to 17 If you wish to go off the record for a few 18 look at it. minutes to take a look at it. We can do that. 19 I would, Your Honor, if you NEILL: 20 MR. wouldn't mind. Just one or two minutes. 21 JUDGE PAGE: Off the record. 22 (Whereupon, the above-entitled matter went 23 off the record at 10:35 a.m. and resumed at 10:40 a.m.) 24 JUDGE PAGE: Let the record reflect that the 25

1	Appellant has brought a number of physical objects as
2	well as some Exhibits that you wish to use at the
3	hearing. We have determined off the record that we will
4	give the government, which has not seen these items
5	before, the opportunity to look at them. They may have
6	some questions for you. Again, we will do this off the
7	record as they examine that. Let us stay off the record
8	until 11 o'clock. At that point government if you need
9	additional time, let me know, and certainly I will be
10	generous in granting it to you. Is that agreeable, Mr.
Ll	Neill?
12	MR. NEILL: Yes, Your Honor, that should be
13	sufficient. Thank you.
L4	JUDGE PAGE: And Mr. Hirst, are you
15	comfortable with that arrangement?
16	MR. HIRST: Yes, I am, Your Honor.
17	JUDGE PAGE: Very well, we will go off the
18	record. We will return at 11 o'clock.
19	(Whereupon, the above-entitled matter went
20	off the record at 10:41 a.m. and resumed at 11:05 a.m.)
21	JUDGE PAGE: Thank you, sir. Mr. Hirst, Mr.
22	Neill during our brief recess, the government was
23	allowed to examine the Exhibits that had been brought to
24	the hearing by the appellant. Mr. Neill, have you any

25 comments or you Capt. Davidson with respect to those

items. Mr. Neill.

MR. NEILL: Yes, Your Honor. We have some comments and, so we'd just to like to start addressing each in turn.

JUDGE PAGE: Would you like to do that now or would you prefer to do it when they are proffered as an Exhibit?

MR. NEILL: Um.

JUDGE PAGE: It will be your choice, sir.

MR. NEILL: I would like to just go ahead and do it now. Maybe we can get that taken care of and might speed things up later.

JUDGE PAGE: All right, that's fine, Mr. Neill. Thank you. And Mr. Hirst, after Mr. Neill has made an observation or objections, since I can't anticipate what he will have to say, I will give you the opportunity to respond. Mr. Neill.

MR. NEILL: Yes, Your Honor. The appellant has two, has brought to the courtroom, two, what are represented to be inert Mark 124, Mod 0 Signals that were the type of item that was produced for the contract. And we have a comment about those. We have no objection to using them in the hearing other than they're not marked or identified in any way as being inert.

There's no apparent drilling through them or they're not labeled as they're inert. And Mr. Hirst has represented that they in fact are; we'll take him at his word. But we have a concern that if these are manipulated in the courtroom, the trigger assembly could cause the thing to eject smoke or flame if, in fact, they are not inert. That was the comment.

With respect to the inert model parachute flare, we would object to that. It's not the type of item that was manufactured in this contract, and it's not at all relevant and we can't see how that how that would be helpful, to the board even in understanding testimony. The same thing with respect to the inert, I can't recall what, what it the Mark 141 item. The same objection.

JUDGE PAGE: All right, Mr. Neill, if I may, let me stop you now. I will make individual rulings at the time that they are proffered but let me make the observation to the appellant that Mr. Neill has raised the issue of safety and I will have you affirm on the record that these items are, in fact, inert and are not dangerous. Is that the case Mr. Hirst?

MR. HIRST: Yes, Your Honor. We have two samples with us; one of them is marked inert. If it makes the court more comfortable, we'll with, withdraw

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the one that's not marked inert, but they both are inert. There's markings on one that says it is inert.

JUDGE PAGE: Mr. Neill, are you comfortable with Mr. Hirst's representations?

MR. NEILL: Yes, Your Honor.

JUDGE PAGE: All right. And I'm going to take an unusual step. I don't normally do this. I do, from time to time, receive purportedly inert munitions, but I need to make special arrangements to have them sent back to me because Postal Service, Fed Ex, UPS, etc. are very particular in how those items are transported. Mr. Neill, would you have any objection if I put the onus on the Appellant to have those items shipped to me after the hearing?

MR. NEILL: No, Your Honor.

JUDGE PAGE: All right. Mr. Hirst and Mr. Karlson then for your benefit, I'm going to allow you to use those items in the courtroom. When they are handed to a witness, you will first show them to Mr. Neill. I'll ask Mr. Neill whether he has any objection regarding that particular item. You'll show it to me before you hand it to the witness. I will assign an exhibit number. We will use it here in the courtroom. I will entertain any objections Mr. Neill may have. When we are finished with those items and any cross-

examination regarding those items that Mr. Neill might 1 have, at the close of the trial, I will return all of 2 those items to you and have you make the necessary 3 arrangements to ship these exhibits to the board. 4 Mr. 5 Neill, have you any objection to that process? 6 MR. NEILL: No, Your Honor. All right. Mr. Hirst, will you 7 JUDGE PAGE: 8 accept that responsibility? 9 MR. HIRST: I will. JUDGE PAGE: All right. Thank you, sir. 10 Mr. Neill, forgive the interruption. That dealt with 11 12 those items that are potentially dangerous but we are assured are inert and no longer in a dangerous status. 13 There was a separate item I believe that you questioned 14 15 the relevance because it is not an item that is produced 16 under contract and is not in controversy. Was this --? 17 correct? MR. NEILL: 18 Yes. JUDGE PAGE: --the parachute flare? 19 20 The parachute flare and also the MR. NEILL: flash-bang grenade. 21 All right, at the appropriate 22 JUDGE PAGE: time when Mr. Hirst proffers those to Mr. Karlson, I'll 23 allow you to raise those objections. I will admit them 24

provisionally subject to those objections. I can't now

anticipate what that ruling will be. Now, there were additional objections that you had Mr. Neill. I'm trying to go through them one by one to get them clear for the record

MR. NEILL: The appellant had two large demonstrative exhibits, one is a diagram, a cut-away diagram of a Mark 124, Mod 0 Signal Flare and we have no objection to, to the use of that during the hearing. It may facilitate the hearing aside from there were two comments having to do with the adhesion strength of foil, that it's in the left hand side of the diagram that we don't understand and think may be misleading and we could certainly raise that objection at the time, Your Honor, but, generally, we don't have any, any objection to the use of that diagram. The appellant also had a large--

JUDGE PAGE: Excuse me, if I may stop you there. I'm trying to go through these stepwise fashion. On the document, you generally have no objection; however, you do have questions and potential concerns regarding commentary that is provided therein. I will allow Mr. Hirst to illicit testimony from Mr. Karlson regarding those observations and I will allow Mr. Neill at that time, once that testimony has been given to us to renew your objection.

And, Your Honor, the appellant MR. NEILL: also had a large table listing the lots of signal flares produced for the contract and while, in general, we would agree with the proposition that that could be helpful, number of features of there are а appellant's chart that we believe are potentially misleading or incomplete and so we do object to that exhibit for those reasons and we can raise more specific objections at the time.

JUDGE PAGE: Thank you, Mr. Neill. I think that would be most appropriate. There is no bar to compiling evidence. Federal Rules ofEvidence, particularly 1006 allow you to do that on a exhibit to make it easier to understand the testimony that's being given. However, having said that, the opponent is allowed to question it, is allowed to bring up any shortcomings in it. I appreciate, Mr. Neill, Capt. Davidson that you are seeing it for the first time today at trial, that there may be additional concerns that you wish to raise in your brief. Because those exhibits have been enlarged but may not be large enough for all to see at one time, when you bring that exhibit to the attention of the witness, we'll take a brief pause on the record during which Mr. Neill, Capt. Davidson and I will all be able to look at

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particular document. I see we have an easel here.

Perhaps that would be the easiest vehicle for it. Mr.

Neill, have you any questions or concerns regarding that

process?

MR. NEILL: No, Your Honor. Thank you.

JUDGE PAGE: Thank you. Now, Mr. Neill, again forgive me for the many interruptions but I want to deal on each of your objections on a stepwise basis. Is there anything further?

MR. NEILL: No, Your Honor.

JUDGE PAGE: All right. Thank you, sir. Now, Mr. Hirst, you may resume your questioning of Mr. Karlson. I will ask that you forgive me for interrupting you periodically, but it's necessary.

MR. HIRST: Okay.

JUDGE PAGE: What I have later on is the record. There will be two judges that will review the decision that I write. They are not here and I must make sure that the record is clear. Both rulings of the two judges who will review my decision as well as potentially for the Appellate Court, should that happen, and the record must reflect everything that takes place, every exhibit that is produced must, there must be a very clear track and foundation. You may continue Mr. Hirst.

1	MR. HIRST: I would ask the Court, Your
2	Honor, if I could take an inert Mark 124, present it to
3	Mr. Karlson to explain the function of the Mark 124.
4	JUDGE PAGE: Are you offering that as an
5	Exhibit, sir?
6	MR. HIRST: Yes, Your Honor.
7	JUDGE PAGE: Mr. Neill.
8	MR. NEILL: I've got no objection, Your
9	Honor.
10	JUDGE PAGE: No objection. All right. Mr.
11	Hirst, you may do so, but
12	THE WITNESS: I've already got it, you Honor.
13	JUDGE PAGE: All right. Show it to Mr. Neill
14	first. We will need to find a way to attach an exhibit
15	number. I suggest this, but I don't have my stamp, but
16	I do have post-it-notes. Does our court reporter have
17	any exhibit stickers? Excellent. Excellent.
18	MR. HIRST: We can substitute this one. This
19	one is marked inert.
20	MR. NEILL: The one that's marked-
21	(Simultaneous speaking.)
22	JUDGE PAGE: If you would please. Let's mark
23	this as Appellant's Exhibit Number 1.
24	(Whereupon, the above-referred to object was
25	marked as Appellant's Exhibit Number 1.)

1	JUDGE PAGE: The court reporter is going to
2	affix the tab on it. Do not remove that tab. Keep it
3	on there. Make sure it's on there when you mail it to
4	me. Mr. Hirst, I'd like to see the exhibit. Thank you.
5	Thank you. Now, Mr. Hirst, you have handed that item to
6	Mr. Karlson. It's Exhibit A-1. Make sure that you
7	provide us with the foundation for that item and that
8	you have identified on the record by testimony from Mr.
9	Karlson exactly what that item is and then you may
10	proceed, subject to any objections, of course, by Mr.
11	Neill.
12	MR. HIRST: I have provided to Mr. Karlson an
13	inert version of the Mark 124 Signal and I would like to
14	ask the court to ask further questions of Mr. Karlson
15	using the exhibit to explain how the item works.
16	JUDGE PAGE: All right, Mr. Hirst, what you
17	will need to do is ask Mr. Karlson to confirm the
18	identity of the item.
19	BY MR. HIRST:
20	Q Mr. Karlson, the, the item I just handed you,
21	could you please identify it for me.
22	A a markup of a Mark 124 Signal.
23	JUDGE PAGE: Now you may proceed to ask Mr.
24	Karlson questions regarding that item.
25	BY MR. HIRST:

1	Q Would you please describe for me, Mr. Karlson
2	and the court how the item works.
3	A Yes, it's a day night signal, it has two
4	ends, one end is for day which generates red smoke if
5	you function it. The other end is for night which is a
6	bright white flare. It's used by downed pilots to
7	signal where they are so they can be picked up and
8	rescued by helicopter.
9	Q By pointing, can you identify which end of
LO	the item is the smoke end?
11	A The red is the red smoke and the white is the
12	white flare.
L3	JUDGE PAGE: All right and thank you, Mr.
14	Karlson, that's helpful. Let me just note that while
L5	pointing is very helpful, while we are here in the
16	courtroom, it also has to be reflected on the record, so
17	that any judges who review this will understand what
18	part of the exhibit and your description of it looking
19	at the red end versus the white end is exactly the type
20	of information that we need.
21	THE WITNESS: Okay.
22	JUDGE PAGE: Mr. Hirst, you may continue your
23	questioning.
24	BY MR. HIRST:
25	Q Thank you. I'm going to move to a different

Mr. Karlson, was there another important question. 1 event for PSI at about this time? 2 One month later in October of 2004, 3 there was an accident involving three FBI agents with a 4 Mark 124, a sample of which I'll hold up just to show 5 the court but it's not important as, as evidence. and 6 we, we were not aware of this accident at this time. 7 Objection, Your Honor. MR. NEILL: 8 9 JUDGE PAGE: Excuse me. Yes, yes, yes, Mr. Neill has objected. 10 THE WITNESS: Yes, right. 11 JUDGE PAGE: Let me, if I may, gentlemen, if 12 an item is not going to be used as an exhibit, you'll 13 need to establish a foundation for discussing it with 14 respect to, to relevance. 15 THE WITNESS: Yes, we really don't need it as 16 an exhibit, Your Honor. It was just to show you. 17 mean, we don't, need this. 18 JUDGE PAGE: If it's not an exhibit ---19 THE WITNESS: It doesn't need to be. 20 JUDGE PAGE: It doesn't need to be. If you 21 wish to make it as an exhibit, you may do so, after 22 showing it to Mr. Neill, and subject, of course, to any 23 objections. But if it is not an item that you intend to

rely upon, then I don't need to see it.

THE WITNESS: It's not. 1 JUDGE PAGE: All right then. Mr. Hirst you 2 may continue. 3 BY MR. HIRST: 4 like to, another question for Mr. 5 Q б Karlson. Ι want to clarify the accident that referred to with the FBI, what item was involved, 7 8 please. 9 Α It was a Mark 120--MR. NEILL: Objection. Relevance. This is 10 not at all pertinent to the claims or defenses at issue 11 12 in this appeal. JUDGE PAGE: Mr. Hirst, what is your response 13 to Mr. Neill's objection? 14 We feel it's very relevant HIRST: 15 MR. because it helps depict the cloud that the company is 16 operating under when the Mark 124 contract was in place. 17 Mr. Neill, I will note your JUDGE PAGE: 18 objection for the record. I will understand that it is 19 I will allow Mr. Hirst to lay a continuing objection. 20 foundation. objections You renew your 21 may 22 subsequently. Is that acceptable? Thank you, Your Honor. 23 MR. NEILL: Mr. Hirst, it is necessary for JUDGE PAGE: 24 you to lay a foundation to explain why this is relevant 25

1	to the matter before us now.
2	MR. HIRST: I think my further questions
3	will, Your Honor, will lay the foundation.
4	JUDGE PAGE: Thank you.
5	BY MR. HIRST:
6	Q Mr. Karlson, you mentioned DCMA. Can you
7	describe the relationship between PSI and that
8	organization?
9	A In 2000 and 4, PSI had one part time QAR who
10	covered our plant and other plants, two additional
11	inspectors were added in 2000 and 4 making three full
12	time inspectors. It was a relationship that was, was
13	deteriorating and which involved the company receiving
14	lots of CARs which are Corrective Action Reports, an
15	unusually high number.
16	JUDGE PAGE: Mr. Karlson, I'll ask you to
17	speak up just a little bit, please.
18	THE WITNESS: Yes, I'm sorry, Your Honor.
19	People at the plant started to see repeated allegations
20	of fraud from the QAR. I would point, Your Honor, to
21	Section 281 in our book.
22	JUDGE PAGE: This is Rule 4 file, Tab 281?
23	THE WITNESS: Yes. Yes, it's here, Your
24	Honor.
25	JUDGE PAGE: Give me a moment to turn to

that, Mr. Neill and Capt. Davidson as well. 1 So this is, this is one-THE WITNESS: 2 JUDGE PAGE: Just a moment. We need to let 3 the government find that first. 4 Your Honor, this is one of the 5 MR. NEILL: documents to which the government has objected. б 7 not at all relevant to the appeals of the claims or defenses at issue here and there are no allegations of 8 fraud at issue in this case, as well. 9 JUDGE PAGE: Mr. Hirst, are you offering this 10 11 document for the purpose of showing that there are assertions of a fraud associated with this contract. 12 MR. HIRST: No ma'am. 13 Why are you offering it then? 14 JUDGE PAGE: MR. HIRST: Again to, help give the court the 15 background of the environment that the company was 16 operating under at the time the Mark 124 contract was 17 being carried out. 18 All right. 19 JUDGE PAGE: Mr. Hirst, I appreciate that you wish to provide background 20 21 context and you may do so using Mr. Karlson's testimony. 22 Having said that, looking at this document, unless you can give me direct relevance to the matters at issue 23 24 here, then I will only allow you to examine Mr. Karlson 25 with respect to background in context and I will not

give this document any weight. I will sustain Mr. 1 Neill's objection. You'll need to give me that context 2 using Mr. Karlson's testimony in a question and answer 3 But let me ask you quickly. Why is this 4 particular document useful to the board in making a 5 determination? 6 Could I ask you, Your Honor, a MR. HIRST: 7 moment to pull my book out please and refer to it. 8 JUDGE PAGE: You may. 9 For the record our 4281 is the MR. HIRST: 10 document of the deposition of Michael King. We feel 11 it's relevant because it links some of the bad faith 12 actions of the QARs to the company and although it, the 13 bad faith continued on when the Mark 124 contract was being carried out. 15 Mr. Hirst, is Michal King a 16 JUDGE PAGE: witness in this matter? 17 MR. HIRST: He is not a witness. 18 JUDGE PAGE: He is not a witness. 19 MR. HIRST: For us. 20 JUDGE PAGE: All right. I'll sustain the 21 government's objection to Rule 4, Tab 281 as lacking 22 23 relevance in this appeal. Mr. Hirst, you may question Mr. Karlson regarding context in background, but I will 24

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not accept this document.

Please continue. 1 MR. HIRST: Mr. Karlson, let's go to the 2 raid, excuse me the 2005. What occurred of significance 3 on March 22, 2005, please? 4 THE WITNESS: I would call Your Honor's 5 attention to Rule 4, Section 245. 6 Tab 245. All right. If you'll 7 JUDGE PAGE: give me a moment and Mr. Neill and Capt. Davidson a 8 9 moment. MR. NEILL: That, Your Honor, the government 10 There's no foundation. renews its objection to 245. 11 It's not at all relevant to the claims or defenses at 12 issue in this appeal, and it's difficult to tell from 13 the context what it has to do with or to, to whom it's 14 from and to and so forth. 1.5 JUDGE PAGE: I will reserve a ruling. You 16 may renew it later. Mr. Hirst, I will need for you to 17 provide, as explained earlier, a foundation which means 18 background in context for the admissibility of this 19 document. Please continue. 20 THE WITNESS: Should I answer his question 21 22 or--23 JUDGE PAGE: I'll ask Mr. Hirst to repeat his question, please, just for the record. 24 BY MR. HIRST: 25

Q Please go to 2005, what occurred of significance on March 22, 2005, please.

Α A search warrant was affected at the company. Thirty agents from different federal agencies, a large bomb truck and a communications truck came to investigating, premises. They were looking for something which we did not know what, evidence of fraud. They, everybody in the company cooperated. was I answered every question that I interviewed. was asked. A lot of employees were interviewed. Two truckloads of documents were taken. I received a phone call at 4:00 that afternoon from Mary Adams who was the PCO on this contract. She told me she had been contacted by DCMA and that we're being, we were being shut down and she was asking me what, what I had to say about that. I told her we didn't know why these people were here; we didn't know what they were looking for. They weren't going to find There weren't any crimes. any crime and that we would be open for business tomorrow morning. And, and we were in fact, we were in fact open as normal the next day.

Q Okay. And please tell the court what occurred in April of that year.

A There were multiple fraud allegations by the QAR. Uh, I call your attention to Section 254-1 in the

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1 book. Is this Rule 4 file, Tab 254, JUDGE PAGE: 2 page 1, is that correct? 3 Yes, that's correct. THE WITNESS: 4 JUDGE PAGE: Mr. Neill. 5 I object to the question if it's MR. NEILL: б There are no allegations of fraud asking about fraud. 7 at issue in the, this appeal and this whole line of 8 questioning seems to have no pertinence to the claims or 9 defenses at issue in this appeal which simply involves 10 the, the termination of the Mark 124 contract for 11 failure to deliver a lot in accordance with the contract 12 schedule and also the rejection or alleged wrongful 13 rejection of another lot that was tendered to the 14 government, as Mark 124 Signals. So I just renew my 15 objection to the relevance of the question. 16 Mr. Hirst, let me ask you, do JUDGE PAGE: 17 these documents pertain to the contracts at issue in 18 this appeal? 19 Yes, they do. 20 MR. HIRST: And these are actions that were JUDGE PAGE: 21 taken during the time the contract was being performed? 22

objection at this point and admit the evidence for its

Yes.

MR. HIRST:

JUDGE PAGE:

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Mr. Neill, I will overrule your

probative value but I will allow you to renew your 1 objection subsequently. At this point Mr. Hirst is 2 merely laying a foundation as I understand it. Mr. 3 Hirst, you may continue. 4 BY MR. HIRST: 5 Mr. Karlson, have you completed your answer 6 Q. 7 for what occurred in April? No. But I have an inert model of a 583, I'd 8 Α like to offer it to Mr. Neill to, ah, examine it if he 9 10 so, so chooses to. JUDGE PAGE: Mr. Hirst, are you offering this 11 as an exhibit? 12 I am offering the 583 as an MR. HIRST: 13 exhibit to the court. 14 JUDGE PAGE: All right. Let's take a moment 15 then, allow Mr. Neill and Capt. Davidson to exhibit it 16 17 if they so choose. MR. NEILL: We've already looked at it, Your 18 Honor. 19 Have you any objections to it? 20 JUDGE PAGE: MR. NEILL: Yes, Your Honor, the model that, 21 of the 583 is a model of an item I quess, it is not the 22 item that was produced under the contract that's at 23 24 issue in this appeal, and we object to the admission of

It's not at all pertinent or relative or

this thing.

1	probative of any of the facts at issue in this
2	particular set of appeals.
3	JUDGE PAGE: All right. Thank you, Mr.
4	Neill. Mr. Hirst, I will at this time admit the item
5	for its probative value. I will allow you to question
6	Mr. Karlson regarding it. I would like to see that item
7	and I will, if you intend to use it as an exhibit, ask
8	the court reporter to mark it for the record. Are you
9	offering this as an exhibit?
10	MR. HIRST: Yes, I am, Your Honor.
11	JUDGE PAGE: And it is inert? Correct?
12	MR. HIRST: It is inert.
13	JUDGE PAGE: Thank you. I'll have the court
14	reporter affix a label to it then. It will now be
15	Exhibit A-2.
16	(Whereupon, the above-referred to document
17	was marked as Appellant's Exhibit Number 2.)
18	JUDGE PAGE: And if you will again Mr. Hirst,
19	please tell me exactly what it is?
20	MR. HIRST: The exhibit, that is presented
21	to the court is a Mark, excuse me, an M583 Illumination
22	Round.
23	JUDGE PAGE: All right. And I will have you
24	question Mr. Karlson and have him confirm your
25	identification of that item.

BY MR. HIRST:

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Q Mr. Karlson, can you please describe the item that you're holding in your hand please.

A It's a mock up of a Mark 583 Parachute Flare. It was brought to show the serial number to the court to make an explanation of a, of a fraud allegation that, more understandable to the court.

- Q Would you please explain what happened?
- A Yes. I received an email early in

the morning in April 2000 and 5 from Rock Island asking me to explain why the QAR had called them to report that we were substituting product into a 583 contract with Rock Island from rejected materials. had had a lot rejected in June of that year. The allegation was that we were taking that material and putting it into a lot being produced in December of that The QAR saw the markings on the unit being changed from a contract that ended in December of that It was for the Israeli government and it had year. lettering on it and that lot passed. production people in the plant took the remaining fifteen units that were left over from that contract that was completed and were re-marking them to become the first lot to be used for the contract for Rock The QAR assumed we were using rejected material

for that. The cartridge cases come in serialized from the manufacturer of the cartridge case. The cartridge cases from the rejected lot in June had come in in May. The cartridge cases for this item, for this lot, came in in November. So they could not possibly have come from the lot that had been rejected in June.

So it took me twenty minutes to respond to Rock Island to what had happened and the matter was then dropped. And it's just, a QAR should be able to read that just as anybody else could. This is a senior QAR and every time he saw something he would make it allegations of fraud. And typically they would go to Rock Island, many of them would go to Rock Island. And, if you notice in some of these emails which Mr. Neill objects to, this contract was not with Mary Adams who was the PCO of the 124 signal but she was still getting many of these emails relating to the 583 product which was not her contract.

So this constant barrage of fraud allegations, this being just one of them, I don't plan to go through all of them here, but I plan to go through a couple of them, to make it clear what was happening for, four years and, until finally there was an indictment in 2008. So that's the point and that's why it's relevant.

1	Q Were there any other circumstances of fraud
2	allegations you would like to discuss, Mr. Karlson?
3	A Yes.
4	MR. NEILL: Objection, Your Honor.
5	JUDGE PAGE: Yes.
6	MR. NEILL: That question, I mean there's
7	object to relevance, note, I don't understand the
8	relevance of that question.
9	JUDGE PAGE: Mr. Hirst, I'll ask, I will
10	sustain the objection and ask you to put specific
11	questions to the witness.
12	MR. HIRST: Okay. Let's move on then. Mr.
13	Karlson, again we're referring to circumstances that
14	happened in April of that year.
15	JUDGE PAGE: April of which year, sir.
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16	MR. HIRST: The April of 2004.
16 17	MR. HIRST: The April of 2004. THE WITNESS: 2005.
17	THE WITNESS: 2005.
17	THE WITNESS: 2005. MR. HIRST: 2005, excuse me.
17 18	THE WITNESS: 2005. MR. HIRST: 2005, excuse me. JUDGE PAGE: 2005, all right, thank you.
17 18 19 20	THE WITNESS: 2005. MR. HIRST: 2005, excuse me. JUDGE PAGE: 2005, all right, thank you. BY MR. HIRST:
17 18 19 20 21	THE WITNESS: 2005. MR. HIRST: 2005, excuse me. JUDGE PAGE: 2005, all right, thank you. BY MR. HIRST: Q Was there a Level IV, uh, CAR issued to the
17 18 19 20 21	THE WITNESS: 2005. MR. HIRST: 2005, excuse me. JUDGE PAGE: 2005, all right, thank you. BY MR. HIRST: Q Was there a Level IV, uh, CAR issued to the company?
17 18 19 20 21 22 23	THE WITNESS: 2005. MR. HIRST: 2005, excuse me. JUDGE PAGE: 2005, all right, thank you. BY MR. HIRST: Q Was there a Level IV, uh, CAR issued to the company? A Yes. Level IV CAR which is a very serious

1	may, just to make the record clear. What is a CAR? I
2	assume you're not referring to an automobile.
3	THE WITNESS: Correct. It's a Corrective
4	Action Report.
5	JUDGE PAGE: All right.
6	THE WITNESS: It's typically issued by DCMA.
7	I guess, I guess it could be issued, we also issue them
8	internally as part of the ISO system and it cites a
9	problem which needs to be corrected.
10	JUDGE PAGE: All right, then. CAR is an
11	acronym then for a Corrective Action Report.
12	THE WITNESS: Correct. Correct.
13	JUDGE PAGE: As you were using it in this
14	testimony, correct?
15	THE WITNESS: Correct.
16	JUDGE PAGE: All right, please continue, Mr.
17	Karlson.
18	THE WITNESS: Correct. There are four levels
19	of CARs, Level IV being the most serious and meaning
20	that they withdraw the government inspectors from the
21	plant and acceptance is ceased which effectively shuts
22	a company down if they are a government contractor
23	because you can't produce or ship with a Level CAR IV
24	having been issued.
25	JUDGE PAGE: All right, Mr. Hirst, you may
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1	resume your questioning of Mr. Karlson.
2	BY MR. HIRST:
3	Q How did the company respond to that
4	Corrective Action.
5	A It stayed in effect
6	MR. NEILL: Objection, Your Honor, this
7	question again the Level IV CAR, referred to in that
8	question is not at issue in this appeal so the witness's
9	testimony would not be at all probative of any fact that
10	would tend to prove or disprove the appellant's claim or
11	the government's, or defense.
12	JUDGE PAGE: Mr. Hirst, let me ask you and
13	then I'll have you use testimony to elicit a foundation
14	for this. Is this CAR relevant to the contract at hand?
15	MR. HIRST: We believe what's relevant is
16	that it was issued. The response to it is not
17	necessarily relevant.
18	JUDGE PAGE: Was it issued under this
19	contract?
20	MR. HIRST: It was not.
21	JUDGE PAGE: It was not. All right.
22	THE WINTESS: Yes.
23	JUDGE PAGE: Okay.
24	MR. HIRST: I'm sorry.
25	JUDGE PAGE: Let's back up. Mr. Hirst, what
i	I and the state of

1	I need you to do is ask very short pointed questions to
2	Mr. Karlson so that you can establish a foundation for
3	this CAR and we'll give Mr. Karlson a chance to answer.
4	You have heard the government's objection with respect
5	to relevance. At this point I am reserving my ruling,
6	but you need to ask short pointed questions to allow Mr.
7	Karlson to respond.
8	Remember that Mr. Karlson is the witness.
9	What you say, Mr. Hirst, since you are not on the
10	witness stand, is not regarded as testimony and cannot
11	be used by the board to substantiate a finding. Only
12	the testimony provided by the witness has that
13	authority. So short, to the point question.
14	MR. HIRST: I would like to request a short
15	recess then.
16	JUDGE PAGE: It is now quarter to twelve. It
17	is a bit early for lunch. I don't know how short a
18	recess you wish, but I am amenable to allowing an
19	adequate lunch break plus a recess tacked on at the same
20	time. Would that be appropriate, Mr. Hirst?
21	MR. HIRST: Yes.
22	JUDGE PAGE: Mr. Neill, have you any
23	objection?
24	MR. NEILL: No objection, Your Honor.
25	JUDGE PAGE: All right. We will do so.
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1	Parties, we can resume at 1:15 or 1:30. Which do you
2	prefer? Since you need time internally to confer, 1:15?
3	MR. HIRST: 1:15, 1:15 is adequate, Your
4	Honor.
5	JUDGE PAGE: Mr. Neill, any objection?
6	MR. NEILL: No objection.
7	JUDGE PAGE: Very well. We will recess for
8	lunch until 1:15 at which time, Mr. Hirst you will
9	resume your examination of Mr. Karlson using questioning
10	as I have suggested to you. Off the record.
11	(Whereupon, the above-entitled matter went
12	off the record at 11:44 a.m. and resumed at 1:11 p.m.)
13	JUDGE PAGE: Mr. Hirst, I'll allow you to
14	resume your questioning of Mr. Karlson.
15	MR. HIRST: Thank you, Your Honor.
16	BY MR. HIRST:
17	Q I'd like to continue on with my questioning
18	about events that occurred in April of 2005. Mr.
19	Karlson, can you continue relating the events that
20	occurred in April of 2005 for the court?
21	A After we received a Level IV warning, a
22	corrective action at our company and this was in my
23	response to that. This was the first time that I
24	requested in writing the removal of the lead QAR, Mike
25	King. And I was to request that many, many times, in

1	the future We believe that we were entitled to fair and
2	impartial inspectors and that that these folks were just
3	not capable of doing that. We didn't understand why but
4	they were spending their time with investigators and
5	investigating us and there was no cooperation; there was
6	no teamwork, uh, and it applied to all of our contracts.
7	Q : Mr. Karlson, could you please relay to the
8	court the contents of R4259-1?
9	JUDGE PAGE: Okay, that's Rule 4, Tab 259,
10	page 1, is that correct?
11	MR. HIRST: Yes, Your Honor.
12	JUDGE PAGE: All right.
13	MR. NEILL: Objection. No foundation.
14	JUDGE PAGE: Overruled. Mr. Hirst, I'll
15	allow you to provide a foundation which again is
16	background in context, identification of the individuals
17	involved. Mr. Neill, you may renew your objection
18	following the opportunity for the foundation.
19	MR. HIRST: The foundation contains to be
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21	JUDGE PAGE: Okay, Mr. Hirst, you can't testify. You
22	can only ask questions of Mr. Karlson and elicit his
23	testimony.
24	MR. HIRST: Fine.
25	THE WITNESS. So should I answer the

question?

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JUDGE PAGE: Let's wait till we have a question from Mr. Hirst.

MR. HIRST: There was a question. Let me repeat it.

JUDGE PAGE: Okay.

BY MR. HIRST:

Q Mr. Karlson, please relay to the court the contents of 259-1.

A 259-1 is an email from Mike King sent to his superiors who include the Fraud Council at DCMA Atlanta, telling them that he's going to be working with the Special Agent for the FBI as part of his investigation. There are a number of these. This is one as an example, just to make it clear that the QARs are working very diligently as part of an ongoing criminal investigation with the belief that we're involved with fraud and, and he's told in one of the earlier emails, that the U, which we, which we reviewed earlier, that the U.S. Attorney plans to indict us for fraud.

MR. NEILL: All right. I renew my objections. There's no foundation for fraud at that time. No evidence that the witness has any personal knowledge. He's not listed as a recipient or anything like that.

1	JUDGE PAGE: Mr. Hirst, before I rule, I'll
2	allow you to complete your foundation.
3	MR. HIRST: Continue with my questions?
4	JUDGE PAGE: Mr. Karlson, do you have any
5	personal knowledge of this email?
6	THE WITNESS: It was sent to us by the
7	government.
8	JUDGE PAGE: Was it sent to you?
9	THE WITNESS: It was sent to my attorney,
10	Your Honor.
11	JUDGE PAGE: Okay. Mr. Hirst, I have to have
12	a better foundation for Mr. Karlson's ability to testify
13	with respect to this email. Mr. Neill's objections do
14	not go to the legitimacy of the email, but only whether
15	Mr. Karlson has sufficient, personal knowledge and
16	involvement that he is competent to testify with respect
17	to this email. That's the kind of foundation I need you
18	to lay, if possible.
19	MR. HIRST: Your Honor, I have several
20	questions that are related to documents that are in the
21	Rule 4 file.
22	JUDGE PAGE: Before we move on to any other
23	documents, are you finished examining Mr. Karlson with
24	respect to this document?

I believe so, yes.

MR. HIRST:

JUDGE PAGE: Mr. Hirst, you must provide context in background and you must show that the witness you're questioning has sufficient information and involvement with respect to a document to speak with authority. Are you through questioning Mr.--

MR. HIRST: Your Honor, the witness, Mr. Karlson, indicated that this email was sent to his attorney. That's not sufficient of his personal knowledge of the contents of the email?

email. I need to know what Mr. Karlson's connection was with the email, the subject matter of the email. I need to show that he can speak with some authority with respect to this email. Otherwise, I will admit it for its probative value, but you should know that the weight that will be afforded documents that were not originated by Mr. Karlson on which he was not copied, on which he does not appear, you will have to show that there is a tie between Mr. Karlson and establish him as a competent witness to testify with respect to that particular document.

MR. HIRST: Okay, thank you, Your Honor. Mr. Karlson, I would like you to please review with the court, document 251-1 please.

JUDGE PAGE: That's Rule 4, Tab 251, page 1.

Is that correct?

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MR. HIRST: That's correct.

MR. NEILL: Your Honor, I just assert the same objection that I did to the last email. No evidence of any personal knowledge. Mr. Karlson's not copied on this, listed as a sender or recipient. In addition, does not, it's not relevant to the claims or defenses in the appeals.

of the objection, Mr. Hirst. I need you to show that Mr. Karlson is in a position of authority, has sufficient knowledge, and/or involvement with respect to this email to serve as a competent witness especially since he is, as Mr. Neill pointed out, not named in the email, not copied on the email. I'll give you the opportunity to lay the foundation for Mr. Karlson's authority to speak with respect to this document.

BY MR. HIRST:

- Q Mr. Karlson, how did you come in possession of this, of this document?
- A Well, I'm named in this document at the bottom. It's got my name, Dave Karlson.
 - Q Thank you. I'd like to move on as--
- 24 | A Well --

JUDGE PAGE: Mr. Hirst, are there any

particular questions you wish to ask Mr. Karlson? 1 2 MR. HIRST: I'd like to have Mr. Karlson review the contents of the document for me. 3 THE WITNESS: This is one of many documents 4 that I referred to earlier. This one named me where the 5 QAR in his word is either going to ask questions on 6 7 behalf of the investigators or snoop which means snoop around our offices, my office included in order to find 8 9 things that, they're looking for, whatever those might 10 be. MR. NEILL: 11 The government renews its 12 objection to this document and this testimony. will admit it 13 JUDGE PAGE: I probative value. Once more, Mr. Hirst, let me explain. 14 15 It does help that Mr. Karlson's name is at least mentioned, but you have not established that Mr. Karlson 16 received a copy of it in a timely fashion, was in any 17 18 way involved with this particular document. When I say it's admitted for its probative value, that can be great 19 20 or small. Failing to show that the witness had a substantial involvement with that particular document or 21 22 knowledge of it will hinder the value of this particular item. 23 Please continue. 24

BY MR. HIRST:

Mr. Karlson, in the book 270-1, what is your 1 Q personal knowledge of that document? 2 This is similar to the other documents, the 3 Α QAR discussing the investigation with the FBI. I don't 4 5 have any personal knowledge of it except having received it, as part of discovery, from the government. 6 7 Thank you. 0 MR. NEILL: I renew my objection, Your Honor, 8 there's no foundation and also have a concern about the 9 witness's response in, to the extent that it infers that 10 this was provided in discovery for this set of appeals. 11 Because it was not. This has no relation to this 12 document, this document has no relationship to this 13 contract or any other claims or defenses at issue in the 14 15 current set of appeals. All right. Mr. Hirst, let me JUDGE PAGE: 16 take Mr. Neill's objections. He points out that Mr. 17 Karlson was not a recipient, an addressee, or the writer 18 of this particular document. Is that correct? 19 MR. HIRST: That's correct. 20 Mr. Neill also founds his 21 JUDGE PAGE: objection on this document not being part of this 22 particular contract. Does the investigation referred to 23 here part of this particular contract? 24

Yes.

MR. HIRST:

1	JUDGE PAGE: It is?
2	MR. HIRST: I believe so.
3	JUDGE PAGE: Then you need to establish that
4	asking questions of your witness.
5	BY MR. HIRST:
6	Q Okay. Mr. Karlson, what were the prime
7	contracts that were, that PSI had secured in 2005? What
8	contracts, what prime contracts with the government?
9	A We had a contract for the 583. We had a
10	contract for the M49 and we had this contract for the
11	Mark 124.
12	Q At a point were we under contract for the
13	Mark 141.
14	A Yes, we also had contracts for the 141.
15	JUDGE PAGE: Let me ask a question, if I may,
15	JUDGE PAGE: Let me ask a question, if I may, of you, Mr. Hirst. Michael King, I believe he was the
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16	of you, Mr. Hirst. Michael King, I believe he was the
16	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted
16 17 18	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted to enter earlier. Is that correct?
16 17 18	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted to enter earlier. Is that correct? MR. HIRST: That's correct.
16 17 18 19 20	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted to enter earlier. Is that correct? MR. HIRST: That's correct. JUDGE PAGE: Did I understand from an earlier
16 17 18 19 20 21	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted to enter earlier. Is that correct? MR. HIRST: That's correct. JUDGE PAGE: Did I understand from an earlier remark by Mr. Karlson that Mr. King is deceased.
16 17 18 19 20 21 22	of you, Mr. Hirst. Michael King, I believe he was the subject of the deposition testimony that you attempted to enter earlier. Is that correct? MR. HIRST: That's correct. JUDGE PAGE: Did I understand from an earlier remark by Mr. Karlson that Mr. King is deceased. MR. HIRST: No ma'am.

we're not going to call him as a witness, but if the 2 government plans on it. JUDGE PAGE: What about Gil Ellenbass and Lee 3 Are they going to be witnesses? 4 Owens? MR. HIRST: No, Your Honor. 5 No, all right. Thank you. JUDGE PAGE: 6 BY MR. HIRST: 7 Mr. Karlson, are there any other events from Q 8 April 2005 you'd like to share with the court before we 9 move on to another question? 10 Α No. 11 My next question is, what key events occurred 12 13 in August 2005? The DCMA, QAR and his supervisor visited Rock 14 Island. They had a meeting out there with them. 15 I complained that they were going out there to poison 16 was told that it just 17 the well, Ι was 18 informational meeting that they, they do with all PCOs, a lot of PCOs, you know, any, any contractor and I 19 challenge that as being accurate. We were about to get, 20 21 in our, in our mind, two contracts from Rock Island. We did not get them in August. We were turned down for 22 both of them, one was for a fall-one contract for the 23 M49 where we had been doing up, up until 2000 and 4 a 24 very good job. 25

And then the other one was a 1 Both of these were Best Value awards and 2 contractor. ratings in awards 3 of the those we, dramatically different, lower from the ratings that we 4 were used to seeing and had seen as recently as 2000 and 5 4, as good, above average ratings. So it was very clear 6 to me that this campaign was starting to take a toll on 7 how we were being viewed at, at Rock Island. And this 8 is the first time that I hired an attorney to start to 9 push back on what had been now a year of abusive 10 treatment of my company and, and the employees of my 11 company by the QAR. 12 I'd like to ask a question, Mr. 13 Karlson, on document 264-1 please. 14

JUDGE PAGE: Rule 4, Tab 264, page 1, sir?

MR. HIRST: Yes, Your Honor.

JUDGE PAGE: Thank you.

BY MR. HIRST:

Q This document is dated 12-05-05.

A This document is an AMMO Data card that we entered into the WARP system at PSI. The WARP system is a fairly new system in 2000 and 5, computer generated ammunition data card system. This is the QAR accusing us of fraudulently signing his name to a AMMO Data card for a lot that had not passed its test. If you look in

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1	that middle paragraph, it says Inspector Mike King and
2	then signed. He interpreted that to mean that we had
3	signed his name. What it really is is the screen asking
4	for the signature which does not exist because it wasn't
5	signed and you can see from the verbiage in the first
6	paragraph, he's very excited about this. This is now
7	two years of making fraud allegations which are
8	patently, demonstrably, provably wrong and he's getting
9	agitated about it as you, as you can read from the from
10	the document.
11	MR. NEILL: I'd like to renewsorry.
12	JUDGE PAGE: Yes. Give us a moment here, Mr.
13	Hirst and Mr. Karlson. I believe Mr. Karlson referred
14	to a portion of this document that purports to have Mr.
15	King's signature. Did I understand that correctly?
16	THE WITNESS: He read this as, oh, I'm sorry.
17	JUDGE PAGE: No, let me ask Mr. Hirst, yeah.
18	MR. HIRST: Would you repeat the question,
19	please?
20	JUDGE PAGE: Did I understand Mr. Karlson to
21	testify that something about this infers, or implies
22	that Mr. King signed the
23	MR. HIRST: The document says that the
24	allegation from Mr. King is that his signature was
25	fraudulently placed on the document.

All right, is JUDGE PAGE: but there 1 I see that at the end of that sentence, 2 something. prior to all the exclamation marks. Is there something 3 in what is cut and pasted in here? Oh, I see down here. 4 5 Government Inspector Mike King, date signed and that's above what might be components and then a series of 6 Is that correct? 7 stars. THE WITNESS: Are you asking me, Your Honor? 8 JUDGE PAGE: All right, Mr. Karlson, I'll ask 9 10 you. THE WITNESS: Yes, we have a requirement to 11 put AMMO Data Cards into the system whether they pass or 12 This is one that did not pass. 13 14 JUDGE PAGE: On that did not pass. THE WITNESS: And he interpreted the word 15 meaning that we had signed his name and signed as 16 accused us of fraudulently doing it. 17 JUDGE PAGE: All right. Thank you, 18 Mr. Neill, did you have an objection? Karlson. 19 MR. NEILL: I did. I had, I'd like to renew 20 21 my objection to the document for relevance. Again, this appears to relate to production of a lot of the Mark 141 22 and the item that's at issue in the contract and appeals 23 that we're here for today is the Mark 124 Signal. 24

and this has no relevance to any of the claims or

1	defenses at issue in the appeals. And in addition, I
2	renew my foundation objection. Uh, Mr. Karlson's name
3	is not listed as a sender or recipient
4	THE WITNESS: We put this in the system.
5	JUDGE PAGE: Okay. Mr. Karlson, let Mr.
6	Neill finish.
7	MR. NEILL:lacks personal knowledge of
8	the, what the language in the email was intended to
9	convey by the sender.
10	JUDGE PAGE: Mr. Hirst, have you a response?
11	MR. HIRST: Yes, the relevance is that we
12	believe we're entitled to fair and impartial government
13	inspectors at our plant. And he promised that our QARs
14	at this time were operating in good faith is completely
15	wrong. They were incapable of this and we're entitled
16	to fair and impartial treatment.
17	JUDGE PAGE: All right. So let me make sure
18	that I understand. Are you saying then that this is an
19	example of conduct contemporaneous with the performance
20	of the contracts at issue here?
21	MR. HIRST: Yes.
22	JUDGE PAGE: Objection overruled. I'll admit
23	it for its probative value.
24	BY MR. HIRST:
25	Q And Mr. Karlson, I'd like to move in to

description of the working environment during this time 2 3 period? Yes, I had a list of words extracted from 4 5 different documents, mostly from governmental employees which I won't cite in the book. I'll have them be my 6 7 words for a description. Tense atmosphere, mocking, 8 zero confidence, you can't even begin to know my frustration with these people, friction, starting to 9 fester, hostile and argumentative nature, bad faith, QAR 10 grabbed it out of her hands, intimidation, threatening 11 imprisonment, terrified, sarcastic and negative 12 comments, harassment, called employee a liar, they were 13 yelling at each other. 14 15 MR. NEILL: Your Honor, I object, I'd like to object again. It appears that the witness is once again 16 17 reading from a document, it's not, in the course of his 18 testimony, it's not clear as to what document he's reading from. 19 20 THE WITNESS: That could be my testimony. 21 JUDGE PAGE: Okay, Mr. Karlson, hold on. THE WITNESS: I'm sorry. 22 Sorry. 23 JUDGE PAGE: Let Mr. Neill finish. One at a time. 24 25 MR. NEILL: I am also not, I don't believe

calendar year, 2006. Can you please give the court a

that we've got a copy of the notes that were marked 2 earlier in the proceedings if that in fact is the 3 document that Mr. Karlson's referring to, but 4 unclear. Yes, we, well--5 THE WITNESS: JUDGE PAGE: Is this the same document, Mr. 6 7 Karlson? THE WITNESS: Yes. We showed it to them and 8 9 you marked it. JUDGE PAGE: All right, but--10 THE WITNESS: And we promised to get them a 11 12 copy. All right. JUDGE PAGE: Make sure that Mr. 13 14 Neill has a copy by the end of the day. Now, let me, in 15 addition to your concern over whether you have or will obtain a copy of the document, do I understand you, Mr. 16 Neill, to be objecting to the source of the remarks that 17 are being made? 18 MR. NEILL: Yes, Your Honor, the source, it's 19 20 difficult to determine what that source is. 21 source is the piece of paper and those are Mr. Karlson's 22 notes, that's one thing. But it's, I haven't heard 23 anything in terms of a foundation established where 24 these remarks came from, who made them, what they refer

to, whether they have anything to do with the contract

1	or the issue, etc. And I renew my objection to that.
2	JUDGE PAGE: All right. Mr. Neill has raised
3	an objection, Mr. Hirst, regarding the source of the
4	documents, by whom they were made, how Mr. Karlson
5	obtained information about these documents, what
6	personal knowledge he has about these comments that were
7	made. I will give you the opportunity to lay a
8	foundation.
9	MR. HIRST: Okay.
10	JUDGE PAGE: And after that I will allow Mr.
11	Neill to either renew his objection or pass. Mr. Hirst.
12	BY MR. HIRST:
13	Q Let's go through the remarks you made, Mr.
14	Karlson, tense atmosphere. What was the source of that
15	statement. What is your personal knowledge of it?
16	A There is a visit from the Deputy Program
17	Manager, Kowalski. It may have been extracted from
18	that. I'll have to check that. I know several of them
19	were from that document. I don't remember if that
20	specific one was or not.
21	JUDGE PAGE: Okay, Mr. Karlson, are you
22	referring to another document here?
23	THE WITNESS: Yes, there's one in the book
24	that I can cite.
25	JUDGE PAGE: If these comments are derived
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from a document in the Rule 4 file, let's look at the 1 document in the Rule 4 file. 2 Okay. Okay. When we get to 3 THE WITNESS: that, we'll do that, Your Honor. 4 I think we are to that, sir. JUDGE PAGE: 5 THE WITNESS: Well, okay, but, what's that? 6 MR. HIRST: Here they are, Your Honor. 7 Tab, Tab 22, 224, Your Honor. 8 THE WITNESS: MR. HIRST: Okay. 9 JUDGE PAGE: All right. Tab 222? 10 THE WITNESS: 224. 11 JUDGE PAGE: 224, thank you. 12 13 JUDGE PAGE: Now, Mr. Hirst, before you begin to exam Mr. Karlson regarding this document, remember 14 that you have to lay it out and put a foundation 15 16 indicating Mr. Karlson's personal knowledge of this particular document. 17 BY MR. HIRST: 18 Mr. Karlson, what is your personal knowledge 19 Q of this document? 20 Well, I was a participant in some of the 21 А meetings that he's referring to here and I'm referenced 22 in the document as having discussions with Mr. Kowalski 23 This document is intended to be during his visit. 24 minutes of meetings that were held between Mr. Kowalski 25

1	and standardized QARS. This is his trip report of his
2	visit to PSI.
3	Q Okay.
4	MR. NEILL: Objection. Lack of foundation.
5	JUDGE PAGE: Mr. Hirst.
6	MR. HIRST: I don't understand why he doesn't
7	see the foundation. If you read it, it's a trip report.
8	It's listed as such.
9	JUDGE PAGE: Did Mr. Karlson write the trip
10	report?
11	MR. HIRST: No.
12	JUDGE PAGE: Was he given a copy to review
13	before it was finalized? Does he have any personal
14	involvement in this document?
15	MR. HIRST: I believe he said before he was
16	personally involved because he attended the meetings,
17	and in the minutes it references those meetings that he
18	was there at.
19	JUDGE PAGE: All right. Mr. Hirst, you may
20	examine Mr
21	MR. HIRST: Karlson.
22	JUDGE PAGE: Thank you. You may examine Mr.
23	Karlson regarding the meetings in which he participated.
24	That's very different from examining him with respect to
25	this document. And so to rule on Mr. Neil's objection,
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I'll give you the opportunity for a foundation, but if 1 you cannot establish a foundation, then you may still 2 exam Mr. KARLSON with respect to those meetings that he 3 participated in. 4 MR. HIRST: Why don't you do that then? Why don't I ask 5 this, Mr. Karlson, can you outline the key points of the 6 meetings that were held? 7 MR. NEILL: Objection, relevance. 8 JUDGE PAGE: Overruled. 9 BY MR. HIRST: 10 Α This gentleman visited PSI because he learned 11 that there were problems and wanted to understand what 12 13 those problems were and he came and discussed those with A number of actions were agreed to. There's a 14 15 paragraph on Page 224-3 that is entitled Programatic 16 Actions. Those are the things that he and I discussed because he was there for the 583 program, which was not 17 going well and changes needed to be made, including the 18 changes that needed to be made were changes to the QARs 19 and some changes were, in fact, made as a result of this 20 visit by Mr. Kowalski. 21 22 0 Elaborate on what those changes were. All right. If I may, just for 23 JUDGE PAGE: a moment, Mr. Karlson, do I understand that Mr., this 24

document which was authored by Mr. Kowalski, I'm not

asking you, I'm not allowing Mr. Hirst, until Mr. Hirst establishes a foundation, a direct connection between you and the document, you can testify with respect to the meeting, not with respect to the document. There's a difference.

THE WITNESS: Okay. We were going to do that. We got to that maybe --

JUDGE PAGE: Then please testify from your memory.

THE WITNESS: From in 2006--

JUDGE PAGE: Not from the document.

Mr. Kowalski visited us. He THE WITNESS: had indications of problems and he was the kind of person that would go and get on a plane and go and deal He met with DCMA for a period of time and with them. then he came and met with us. It was clear to him that we had a nonfunctioning working relationship with DCMA at that time. One of the QARs was removed immediately. He was there on a Friday. This visit from Mr. Kowalski That QAR did not go back to work on was on a Friday. Monday. He was sent somewhere else, I think to Atlant Mr. Karlson Mike King was replaced a couple months He assigned an engineer from his staff, a gentleman by the name of Rich Profeta to who will be a witness here later today or tomorrow, to speak from his

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own perception of what the assignment was and what the
problems were, but it was very clear to this gentleman
that there were fundamental problems. He wasn't getting
his product because of them and they needed to be
addressed. Part of addressing those problems was making
changes to the QAR staff, even though that wasn't
entirely sufficient for the company. What he did was
have his engineer be the person through which problems
with his products had to go, specifically CARs,
Corrective Action Requests. The QARs were using them.
They'd write a CAR, they wouldn't pull a lot sample.
You couldn't do testing. You couldn't ship the product.
Things were backing up. He needing the product. So one
of the changes he made was that CARs had to be written
by his representative who he would send to stay at the
plant for an extended period of time to fix the
technical issues and to fix the personal issues. Once
the CARs stopped and the QARs couldn't spend their time
trying to stop that program, they turned their attention
to other programs, including this program. But that
gentleman coming down solved the problem that the
company had companywide for his problem, for his product
only and it was effective. So he recognized these
problems and he dealt with them and those problems are
what I was trying to describe in my testimony of the

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different quotes that I read to describe the environment. He came and saw the environment and he did something about it and it was very effective.

BY MR. HIRST:

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Q Thank you. Next question, did your company have these difficulties with your other customers?

No, about half of our work does not involve Α the QARs and it does not involve Government source inspection and you know, have a warranty that we offer with our product. Occasionally, like once every year or two, somebody might have a quality problem related to something that we've produced but those products where there wasn't Government source or QAR oversight weren't They weren't delayed. They weren't impeded held up. and we have one population of employees, they work on Government jobs and non-Government jobs. It's not like the Government jobs get all the problem employees and we have all the quality problems. It was that the QARs were looking for problems constantly and they weren't involved with those other jobs and those jobs ran relatively normally. one staff for both We have Government jobs and non-Government jobs. We have ISO system for Government jobs and non-Government jobs so it was only where these QARs were involved that we had very significant constant problems that lasted for years and

all of which coincided with the period performance of 1 2 this contract. follow-up question, during this time 3 period do you recall approximately the percentage of 4 Government jobs that were held by PSI either on a prime 5 contract or subcontract versus those that were 6 7 non-Government jobs? Well, the percentage in terms of Government 8 А jobs are much larger so in terms of how much revenue 9 they are responsible for would be a high percentage, 10 like perhaps half or more than half. In terms of a 11 number of jobs, there were only a handful of jobs but 12 they would go on for multiple years. 13 For some of these other customers, customers 14 that their product would go to the Government where PSI 15 was functioning as a subcontractor? 16 General Dynamics, Aliqn A. Correct. 17 18 Systems, companies like that. How did those jobs qo? 19 Q They were relatively smooth. We had the 20 normal problems that any factory would have in producing 21 items. We didn't have this extra layer of intervention 22 and interference. 23 Next question, I want to take you to 24 Okav. O March of 2006. I'd like you to please relate some of 25

the key events that occurred during that time period, 1 please. 2 This was the month that the engineer that I Α 3 spoke of from Picatinny arrived at the plant. 4 also the month where the QAR went to Quantico, Virginia 5 to inspect a lot of the Mark 141s, which had been 6 7 shipped to the FBI. JUDGE PAGE: All right, Mr. Karlson, forgive 8 me for interrupting. It would be very helpful if you 9 would identify these individuals by name. 10 THE WITNESS: QAR, Mike King. 11 You mentioned --JUDGE PAGE: 12 THE WITNESS: Yes, I'm sorry. The engineer 13 14 JUDGE PAGE: The engineer from Picatinny and 15 It's very difficult to follow your that. 16 testimony. I do need the names. 17 I'm sorry. I'm sorry. 18 THE WITNESS: JUDGE PAGE: But I will give Mr. Neil was 19 rising to make an objection. 20 MR. NEILL: Yes, Your Honor, and I'd just 21 22 like to renew my objection. I don't mean to take up time in the record, but this line of questioning appears 23 to have to do with allegations of bias by DCMA QARs. 24 Those allegations are not raised in PSI's claims nor in 25

any of the defenses to the termination for default in this case. The facts of the case, the facts at issue in the rejection of Lot 3-3A that's at issue in one of the claims are really fairly not really contested. it has to do with the defects that was observed by PSI in the course of lot acceptance testing and reported and the claim has to do with whether the Government should or should not have accepted that lot given the existence of those things. This testimony has nothing to do with With respect to the termination for default, the that. key facts there have to do with whether or not PSI delivered a lot in accordance with the contract schedule and again, there are two lots that were, the Government contends were delivered or were not delivered on time. The issue there is that the lots did not conform to the contract specifications and there is no issue raised in PSI's claims in its pleadings anywhere about QAR bias or overzealous inspection or Government interference. So this whole line of questioning is irrelevant and I would just like to renew my objection to it.

JUDGE PAGE: Mr. Hirst, can you tie this line of testimony into it? All right. Then for the record

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MR. HIRST: I can and I will.

JUDGE PAGE: For the record then, to keep

matters moving smoothly, Mr. Neil, I will note your continuing objection. You need not register it every time but are welcome to do so. If there's something in particular that you think should be brought to my attention, please do so.

MR. NEILL: Thank you.

JUDGE PAGE: Mr. Hirst, having said that, I will admit it for its probative value and as I explained

will admit it for its probative value and as I explained to you earlier, the probative value will be high or low depending upon the level of connection you can make in the authority of the witness that you're using to testify about a particular event document, et cetera.

MR. HIRST: When I'm under oath as a witness, I will clearly make that connection for you, Your Honor.

JUDGE PAGE: I'm allowing you to continue with Mr. Karlson now, sir.

BY MR. HIRST:

Q Please continue, Mr. Karlson, March 2006.

A Yes, Mr. Rich Profeta at the direction of the deputy program manager for medium cal ammo came to the plant that started his assignment. That assignment would go for over the course of the next two years and unbeknownst to us at the time the lead QAR, Mike King, went to Quantico to inspect at the request of the FBI, a lot of grades that we had shipped to the FBI. He

1	claimed that we had salted the lot with good units and
2	bad units and that we had put bad, good units on top of
3	the bad units so as to deceive them at incoming
4	inspection. This was not the truth.
5	Q Okay. Bring your attention to the following
6	month, April 2006. Again, please continue on with some
7	of the key events pertaining to this case.
8	MR. NEILL: Objection, Your Honor. It's not,
9	there's no question there that I can discern.
10	MR. HIRST: I'll rephrase it for him.
11	JUDGE PAGE: Thank you, sir.
12	Q What occurred in April of 2006, Mr. Karlson?
13	A This was the visit from the deputy program
14	manager that I had talked about previously. I had met
15	I met with him. Among the things that he stated, both
16	PSI and DCMA have been locked in this battle. D Mark is
17	nonexistent. We will need to pull our delegation to
18	save PSI. The problems are more severe than originally
19	suspected and the criminal investigation is not going
20	away.
21	MR. NEILL: Objection, Your Honor. Again,
22	Mr. Karlson appears to be reading from a document
23	THE WITNESS: It's actually
24	JUDGE PAGE: Mr. Karlson, let Mr. Neil
25	finish.

THE WITNESS: Sorry, sorry.

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MR. NEILL: It is not at all clear that he's testifying from his own personal recollection or is simply looking at what might have been in this document that may or may not been authored by Mr. Kowalski and to which no foundation has been established.

Mr. Neil has raised a very JUDGE PAGE: serious objection. Mr. Karlson, I gave you considerable leeway this morning in allowing you to use Exhibit A-1, which I understand because I don't have a copy, I will tomorrow, I know as will Mr. Neil of that document, which you were using to refresh your memory. Such things are allowed on appropriate occasions. But I need you to testify not from a document that has not been demonstrated to be of your writing or in which you had any particular involvement in the document. We do have hearings to test your memory to get you to explain events. So I'll ask you to please let us know from your memory what is the answer to the questions that are being raised by Mr. Hirst.

MR. HIRST: Can I ask a question? Are we saying that Mr. Karlson, as we said before, cannot use his notes?

JUDGE PAGE: I'm not saying he can't use his notes, but he cannot testify from the document, forgive

me for not recalling the exact number it was--1 THE WITNESS: Well, I've got the wrong one. 2 That's the problem Your Honor it wasn't 224. I'm trying 3 to find it. 4 All right. 5 JUDGE PAGE: THE WITNESS: But it's the same issue. б 7 his letter, his trip report. JUDGE PAGE: All right. Mr. Hirst needs to 8 be the one to locate the document. If you need a brief 9 recess I'll give you one, but let me be clear, Mr. 10 Karlson, I need you to testify from your own memory. 11 You can be examined on a witness where you have 12 authority to speak, on a document where you have 13 authority to speak. Other than that, and with the 14 limited exceptions that I have given you, with respect 15 to Exhibit A-1 where you made some notes to refresh your 16 memory, you cannot put into useful testimony in the 17 trial words from documents that are not of your making 18 or involvement. It needs to come from your memory. Now 19 if you would like a brief recess, I will grant you one. 20 THE WITNESS: No, I'll find it later. 21 JUDGE PAGE: All right. 22 Thank you, Your Honor. THE WITNESS: 23

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ruled upon your objection to the extent I have ruled?

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JUDGE PAGE:

Mr. Neill, have sufficiently

1	I'm not certain I have.
2	MR. NEILL: I believe so, Your Honor.
3	JUDGE PAGE: I have given appellant a
4	caution. I will allow you to hold your objection in
5	advance in appellant. You cannot get in a document
6	merely by having Mr. Karlson or anyone else who had no
7	authority to testify with respect to that document by
8	having them read portions into the record. You can test
9	his memory of the meetings you say he attended. That's
10	fair. Mr. Hirst, please continue.
11	MR. HIRST: Mr. Karlson, from your memory, please
12	continue on April 2006.
13	JUDGE PAGE: I need a question. Give us a
14	question.
15	MR. HIRST: What occurred in 2006 from your
16	memory?
17	JUDGE PAGE: Relevant to this contract.
18	A I've testified about Mr. Kowalski's visit
19	already from my memory.
20	Q Anything else, Mr. Karlson?
21	A I was to have a phone conversation with him
22	each Thursday. That was one of the things that he
23	instituted as a communication tool.
24	Q Okay.
25	A And that took place for quite a number of
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months.

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Q Thank you. Again, for the Court's benefit, please tell us who Rich Profeta is.

A He is the engineer who works on the staff of Mr. Kowalski who he sent to straighten out what needed to be straightened out with his program. He instituted a requirement that CARs would go through him. Within six months the improvement of that program had improved dramatically and he will be testifying later as to more of his personal involvement.

MR. HIRST: Anything else, Mr. Karlson?

JUDGE PAGE: Mr. Hirst, I need a question.

- Q Is there anything pertaining to Mr. Profeta?
- A About Mr. Profeta, no, he'll speak for himself.
- Q Next question, what occurred on May 12th, 2006?

A The lead QAR, Mike King, was informed that the NCIS agent who has been leading the investigation has been reassigned. All the materials that had been taken from our plant during the raid in 2005 were sent from MacDill Air Force base to the FBI in Macon, FBI office in Macon. They were not going to drop this investigation even though the NCIS charges, they were the lead investigator had found no merit to any of them.

MR. NEILL: Renew my objection to that question for relevance. It's a not at all apparent that this has anything to do with a contracted issue in these appeals.

JUDGE PAGE: All right. At this time we're going to take a ten-minute recess until about a quarter after and I will go off the record and I would like to have a brief private meeting in the jury room with Mr. Hirst, Mr. Karlson, Mr. Neil, and Captain Davidson.

(Whereupon, the above-entitled matter went off the record at 2:03 p.m. and resumed at 2:51 p.m.)

JUDGE PAGE: Ι mentioned prior As returning to the record, I held a private conference palace party representatives Government counsel. During that time we discussed the fact that there had been numerous objections on the part of the Government and explanations on the part of the Particularly I have upheld a number of those board. objections regarding the rules of civil procedure and the rules of evidence which do apply to a trial. well aware that neither Mr. Hirst nor Mr. Karlson is an attorney, nor are you a practiced litigator. I want to make sure that we are entirely fair to you and that you are afforded every opportunity of due process of law. We talked а bit the proper approach about

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questioning a witness and introducing a document. I gave the appellant the opportunity, should you wish to 2 take the rest of the afternoon, which at this point is 3 really only about an hour-and-a-half but I intend to 4 5 wrap up the hearing each day at 4:30 and I will do that because marshals would like us to be out of the building 6 So we'll conclude at 4:30 to give you enough 7 8 time to pack up whatever documents you think appropriate and take with you and exit the premises. But in that 9 hour-and-a-half, Mr. Hirst, Ι gave 10 opportunity to go back and to review your questions that 11 I know you have developed to see if there were any 12 changes you wanted to make in light of our discussion or 13 I gave you the option of continuing Mr. Karlson. 14 15 do you wish to do, Mr. Hirst? MR. HIRST: We would like to continue, Your 16 Honor. 17 All right. Very well. 18 JUDGE PAGE: Thank Let me ask before we go forward, Mr. Neil, Captain 19 Davidson, whether there is anything you wish to offer 20 21 for purposes of the record? No, Your Honor, your summary is 22 MR. NEILL: fine. Thank you. 23

note in part that it appears that part of the conclusion

All right.

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JUDGE PAGE:

I will

Thank you.

on the part of appellant's party representatives came 1 from the fact that they previously participated in an 2 ADR, which I understand to have been a mediation, and in 3 that the rules of civil procedure and evidence are 4 In fact, they are not followed but they are 5 Mr. Hirst, you may examine or continue your here. б examination of Mr. Karlson. Mr. Karlson, I remind you 7 that you remain under oath. 8 BY MR. HIRST: 9 0 Thank you, Your Honor. Let's continue on, 10 Mr. Karlson. What occurred in October of 2006? 11 Α The company and myself and several other 12 13 individuals were served with six civil lawsuits from three FBI agents who had been injured in an accident in 14 For the first time we understood what was 15 2004. 16 happening and why we had been having so many problems with the Government. 17 What occurred in 18 Thank you. Let's move on. 19 January 2008, please? You were hired, from a competitor ammunition 20 company and by the spring you were to take over the Mark 21 124 contract. And you'll testify about that later. 22 What occurred in April of 2008? 23 0 The company and several individuals were 24

None of the numerous fraud allegations from

indicted.

the QAR Mike King at the plant are in the indictment. There are allegations, one two main about inspected at Quantico, shipped to the FBI inspected by Mike King, and falsely testified to at the grand jury and the other charge was about an umbrella contract that we were reported to have had with the FBI in which they claimed we violated. We did not understand the allegations at the time. We were not privy to the inspection of the units at Quantico, nor did we have an umbrella contract with the FBI. They had seized a lot of our documents during the search in 2005 and we assumed that there was an umbrella contract that we were not aware of.

MR. NEILL: Sorry to interrupt, but I'd like to renew my objection to the relevance of this as sort of a narrative response but the units, just to make sure that it's clear on the record, the units that Mr. Karlson is testifying about have nothing to do with the contract at issue in these appeals and that's my objection to the relevance of the testimony.

JUDGE PAGE: Mr. Hirst, do you have a response to that?

MR. HIRST: Yes. We believe that we are entitled to fair and impartial Government inspectors and the premises of the QARs were operating in good faith is

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They're incapable of this. completely wrong. We are 1 entitled to fair and impartial treatment. 2 3 JUDGE PAGE: All right. Now, Mr. Hirst, that's a legal argument, but what Mr. Neil is objecting 4 5 to and, Mr. Neil, correct me if I am mistaken, what Mr. is objecting to is the failure to 6 Neil lay 7 foundation to tie the events with respect to the FBI investigation and contract to the matter before us. 8 Does that summarize your objection, Mr. Neil? 9 10 MR. NEILL: Yes, the gist of it, Your Honor, yes, ma'am. 11 JUDGE PAGE: Mr. Hirst, I will give you the 12 13 opportunity to lay that foundation. If you do not lay 14 that foundation, Mr. Neil, I'll ask that you renew your objection and I'll rule on it. 15 16 MR. HIRST: I have nothing further to say on that. 17 MR. NEILL: I renew my objection, Your Honor. 18 Sustained. 19 JUDGE PAGE: For your benefit, Mr. Hirst and Mr. Karlson, when I sustain an objection 20 to particular testimony, then that testimony is not 21 accepted by the board. 22 BY MR. HIRST: 23 You had mentioned before, Mr. Karlson, 24 25 you sought to get clarity with respect to the

allegations that you described? How did you do that? 1 Α We asked to inspect the units at Quantico. 2 asked for the document, which was the umbrella 3 contract, which we were to allegedly have violated. 4 5 0 What was the result? The Federal judge ordered an inspection of Α 6 the units at Quantico and ordered a copy of the umbrella 7 contract be provided to us. 8 MR. NEILL: Your Honor, renew my objection. 9 The witness is testifying about the units and it's not 10 at all clear that these units have anything to do with 11 the contract at issue in these appeals. 12 Mr. Hirst, how do you respond? 13 JUDGE PAGE: I'll respond in this fashion, MR. HIRST: 14 15 that the witness has testified to actions by the quality 16 assurance representative in charge of the plant and his actions do have a bearing on the way the Mark 124 17 18 contract was handled. Let me ask you a couple of 19 JUDGE PAGE: questions then, Mr. Hirst. Is this the same QAR? 20 need to establish that. You need to show it's in the 21 same time frame. If you're trying to show a pattern of 22 Government - -23 24 Yes, it also, yes. MR. HIRST:

Hold on.

JUDGE PAGE:

1	MR. HIRST: Yes.
2	JUDGE PAGE: Hold on. If you're trying to
3	show a pattern of Government conduct, you need to
4	establish person, place, and time. I'm going to give
5	you the opportunity to lay that foundation. If you
6	cannot do so I'll expect Mr. Neil to renew his
7	objection.
8	MR. HIRST: I'd like to question the witness
9	to establish that foundation.
10	JUDGE PAGE: You must question the witness.
11	MR. HIRST: That's fine.
12	JUDGE PAGE: Specific questions.
13	BY MR. HIRST:
14	Q Mr. King, Mr. Karlson, he was, what was his
15	time that he was a QAR at Pyrotechnic Specialties?
16	A He was the lead QAR until July of 2006.
17	JUDGE PAGE: Excuse me. Could I have the
18	full name of Mr. King for the record?
19	MR. HIRST: To my knowledge it's Michael
20	King.
21	JUDGE PAGE: Ask your witness, please.
22	BY MR. HIRST:
23	Q What is the full name of Mr. King?
24	A Michael King, I believe.
25	Q Thank you. Mr. King was assigned to
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1	Pyrotechnic Specialties when?
2	A 2003 through 2006 and then again in 2013.
3	Q What prime Government, prime contracts was
4	PSI working on during this time period, please?
5	A The same contracts, the 583, the Mark 124,
6	the Mark 141, and I think that's the answer.
7	Q Was the M49 trip flair?
8	A Yes, the M49 trip flair.
9	Q Thank you. So, Your Honor, by Mr. Karlson's
10	testimony you can see to Mr. King was involved in all of
11	these contracts that we're speaking of. So we do feel
12	it's relevant that his actions that were taken at this
13	time point to an attitude of how the company was being
14	treated on all these prime contracts.
15	JUDGE PAGE: Objection overruled.
16	BY MR. HIRST:
17	Q Thank you. Excuse me while I'm able to get
18	my place, my question. We were talking about how this
19	was resolved. Can you please pick it up?
20	A Yes, the inspection of the units took place
21	the day after Christmas in 2008, three weeks before the
22	criminal trial was to start. It showed clearly that a
23	uniform lot of grenades without any mixing or
24	camouflaging or salting had occurred was in the presence
25	of the same QAR, Mike King, who had done the original

An attorney for the defense, the same FBI inspection. agent who was there during the original inspection and an engineer from the plant from Pyrotechnic Specialties. The umbrella contract that was alleged to have existed was a one-time purchase order from 2001 between FBI and the company. It stated on the second page, that it was a one-time purchase order. It was no way an umbrella contract or an indefinite delivery contract or any other kind of contract as was alleged. The charges were dismissed. The judge stated an investigation of the FBI, will commence in his court if they re-indict. The QAR stated we got off on a technicality.

Q My last question for you, Mr. Karlson, what occurred in June of 2009?

The M49 contract was terminated for default. Α That contract is with the same PCO and the same contract specialist and the same QARs. They cite quality system failures going back to 2004. They try to use the CAR that had been closed out years ago in perpetuity. We they had not understood what convinced that happened in court. Ιt had not been accurately communicated to them and that there was a black cloud over the company because of all these events and that the well with that buying command was poisoned.

Q Can you please clarify for me, you stated

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1	that there was no reason for us to believe that what
2	occurred in court was communicated to them. Who is
3	them?
4	A Them is Rock Island people that had
5	cognizance over two contracts, one which they then
6	terminated and one which was to be terminated, which is
7	the subject of these proceedings.
8	MR. HIRST: I have no further questions of
9	this witness Your Honor.
10	JUDGE PAGE: All right. Thank you, Mr.
11	Hirst. Mr. Neil, you may cross-examine Mr. Karlson.
12	CROSS-EXAMINATION
13	BY MR. NEILL:
14	Q Mr. Karlson, if you would, please turn to
15	Rule 4, Tab 245. It's Tab 243, I apologize, Tab 243.
16	A I've got it.
17	Q I'm sorry?
18	JUDGE PAGE: 243, sir?
19	MR. NEILL: I'm sorry, it was 245.
20	JUDGE PAGE: 245?
21	MR. NEILL: Yes.
22	JUDGE PAGE: Thank you.
23	Q You testified about this document. What is
24	it?
25	A It's an e-mail from Mike King to his boss
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1	referenci	ng a meeting with the NCIS agent, Mike Ernest.
2	Q	Did you write that e-mail?
3	A	No.
4	Q	Did you receive that e-mail?
5	A	Yes.
6	Q	Did you receive it directly from the author
7	of the e-m	mail through the e-mail system at the time?
8	A	No.
9	Q	Okay. All right. You weren't copied on this
10	e-mail at	all?
11	A	No.
12	Q	Okay. So this is a piece of internal
13	correspond	dence to which you were not privy at the time
14	it was ser	nt; is that right?
15	A	That's correct.
16	Q	Okay. Do you have any personal knowledge
17	about the	contents of this document?
18	A	Not at the time I didn't, not until I
19	received i	Lt.
20	Q	Is that a yes or no? Do you have personal
21	knowledge	about the contents of this document, Rule
22	4-245?	
23	A	Only the knowledge that I have from having
24	viewed it.	•
25	Q	Okay. In your testimony you referred to
1	t .	

1	allegations of fraud and you talked about an indictment.
2	The fraud allegations that were the subject of an
3	indictment did not relate to the contract that's at
4	issue in these appeals, did it?
5	A That's correct, it did not.
6	Q Okay. And the fraud allegations that were,
7	I'm sorry. Please strike that. If you'd please turn to
8	Tab 259. What is this?
9	A This is an e-mail from Mike King to his
10	supervision in Atlanta informing them.
11	Q And who is his supervision?
12	A Susan Clark is his immediate supervisor and
13	other two are fraud attorneys in Atlanta, DCMMR.
14	Q Were you a recipient of this e-mail at the
15	time?
16	A No.
17	Q And were you copied on the e-mail at the
18	time?
19	A No.
20	Q Did you author the e-mail?
21	A No.
22	Q All right. Do you have any personal
23	knowledge about the events that are described in the
24	e-mail?
25	A I learned about the visit that he took later
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1	on but was not there at the time it occurred.
2	Q Okay. And you have no personal knowledge of
3	the contact that is described, the contact by the FBI
4	office in Macon that's described in the body of the
5	e-mail? That's correct, isn't it?
6	A I have knowledge of the second inspection of
7	the same units and they had previously inspected them at
8	this time.
9	Q And the units that you're describing are Mark
10	141 units, not Mark 124 signals that are the subject of
11	this contract; is that right?
12	A That's correct.
13	Q Okay. So this e-mail does not pertain at all
14	to the performance of the contract that's at issue in
15	these appeals; is that right?
16	A It only has to do with the QAR.
17	Q Okay. But not the contract that's at issue
18	in these appeals; correct?
19	A He was the same QAR.
20	Q But the units that are described in this
21	message are not units that were manufactured for the
22	contract?
23	A That's correct.
24	Q Okay. And I believe you testified about Rule
25	4-270. If you'd please turn to Tab 270. What is this?

1	A This is the same issue an e-mail from Mike
2	King to his superiors about an inspection at units at
3	Quantico.
4	Q Okay. And you said by his superiors, who do
5	you mean?
6	A His direct superior was Susan Clark.
7	Q Susan Clark; correct?
8	A Correct. So I don't see her on here so I'm
9	wrong about that. It's just the attorneys at DCMA that
10	it's sent to.
11	Q So Gill Bass and Lee Owens were DCMA
12	attorneys; is that right?
13	A Correct.
14	Q Okay. And are you copied on this e-mail
15	message?
16	A No.
17	Q Did you author this e-mail message?
18	A No.
19	Q Did you receive it at the time backthe date
20	it's marked March 15th, 2006, did you receive it at the
21	time?
22	A No.
23	Q Okay. And would you have any personal
24	knowledge about the events that are described in the
25	body of that e-mail message at Tab 270, personal

1	knowledge, firsthand knowledge?
2	A Only in that I heard the testimony of Mr.
3	King when he spoke about it.
4	Q Okay. So no firsthand knowledge?
5	A If that's not firsthand then, no.
6	Q If you'd please turn to Tab 264. And I
7	believe you testified about this document. What is
8	this?
9	A This is an e-mail sent to Susan Clark from
10	Mike King accusing us of fraudulently entering an ammo
11	data card into the warp system and signing his name to
12	it.
13	Q Okay. Are you listed as a recipient to this
14	e-mail?
15	A No.
16	Q Did you receive this e-mail at the time,
17	December 5th, 2005?
18	A I was aware of this happening at the time.
19	I didn't have this document, but I knew of the
20	allegation.
21	Q So the answer is, no, you did not receive it
22	at the time?
23	A I don't recall how I became aware of it at
24	the time.
25	Q Okay. Did you author this e-mail?
E	I and the state of

1	A No.
2	Q And if you look there's, the second paragraph
3	of the body of the e-mail is in all caps and the first
4	line reading ammunition data card. If you look at,
5	below that there's NSN and that's National Stock Number;
6	correct?
7	THE WITNESS: Correct.
8	Q And below that is a line that reads
9	nomenclature charge MK141-0. So the information in this
10	e-mail refers to, I mean, are you familiar with the
11	ammunition data card?
12	A Yes.
13	Q Okay. And does this ammunition data card
14	pertain to signals that were manufactured for the
15	contract, the 0098 contract that's at issue in these
16	appeals?
17	A No.
18	Q Okay. Turn to Tab 224. And I believe you
19	testified about this document as well. If you turn to
20	the fourth page, there's a signature block at the end
21	that reads Robert Kowalski, DPM small and medium
22	caliber. So who is Mr. Kowalski?
23	A He's the deputy program manager for small and
24	medium caliber.
25	Q Okay. And you interacted with Mr. Kowalski;
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1	1 correct?	
2	2 A Correct.	
3	Q And you had meetings with him?	
4	A Many times.	
5	5 Q All right. And did Mr. Kowalski h	ave any
6	6 involvement in the Mark 124 contract that's at i	ssue in
7	7 these appeals?	
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9	9 Q And so your meetings with Mr. Kowal	ski had
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13	Q Okay. And which contract was that	?
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15	Q Okay. And I believe you tes	tified,
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24		ement in

1	A Not to my knowledge.
2	Q Okay. And you mentioned in your testimony
3	six civil lawsuits filed by FBI agents. Did any of
4	those lawsuits have to do with the Mark 124 contract
5	that's at issue in these appeals?
6	A No.
7	Q And the indictment of the company that you
8	mentioned that did not have to do with thesethe Mark
9	124 contract, did it?
10	A No, it did not.
11	Q Okay. If you'd take a look at Tab 204,
12	please?
13	A So did you want me to read it or
14	Q No, just take a look at it. Are you
15	familiar with this document?
16	A Not very, but I might have seen it.
17	Q Okay. Take a look at Page 7.
18	A All right.
19	Q Okay. At the top of the page there's a
20	heading, Pyrotechnic Specialties, Inc., Contract Number
21	W52P1J-04-C-0098 claim for equitable adjustment and
22	below that is a certification paragraph. Does your
23	signature appear below that?
24	A Yes.
25	Q So that's your signature on Page 7?

1	A Yes.
2	Q And you certified PSI's claim for equitable
3	adjustment?
4	A Yes.
5	Q Okay.
6	JUDGE PAGE: I'll note for the record that
7	the numbers that you're referring to, Mr. Neill, are the
8	Bates stamp numbers and not the numbers that were
9	originally affixed to the document; is that correct?
10	MR. NEILL: That is correct, ma'am.
11	JUDGE PAGE: Thank you.
12	MR. NEILL: In fact, the certification page
13	has no number other than the Bates stamp number, but
14	some of the other pages have multiple page numbers.
15	Thank you.
16	
17	BY MR. NEILL:
18	MR. NEILL: And are you familiar with PSI's
19	claim for equitable adjustment?
20	A I understand some of the issues. I wasn't
21	at all involved with the contract at this time and I
22	didn't draft this or I mean, I would need to study it to
23	be able to speak about it intelligently.
24	Q Okay. But you certified that it was
25	accurate to the best of your knowledge and belief,
- 1	

didn't you? 1 Correct. I'm sure I read it in 2012 when it Α 2 was written. 3 Okay. And the claim contains no allegations 4 5 of unfair treatment by quality assurance representatives, does it? б I don't know. I'll have to read it. 7 8 Q Okay. If you take at Page 6, Bates number 6. It's the fifth page of the claim. Look at the first 9 paragraph that's in the middle of 10 Begins, However, since the Government had utilized an 11 unstated inspection criteria, had previously established 12 its interpretation of the type of defect exhibited 13 was not critical, and 14 during the retesting 15 knowledge, three, had knowledge that there was evidence that the root to the defect was the ceiling disk 16 material, resulting from the defective Government TDP, 17 18 the rejection of the lot was improper. Would you agree that the contentions in that paragraph do not include 19 any allegations of --20 21 Α Yes it's----interference by QARs? Q 22 Yes, this is a technical issue. Although the 23

utilizing unstated inspection criteria may be--may

involve the QARs, I don't recall what that issue was and

24

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	MI. HIESE WILL be Larking about that. He was involved
2	with it.
3	Q But that utilizing unstated inspection
4	criteria allegation, in fact, nowhere, it does not refer
5	to any interference by DCMA employees in PSI's
6	operations, does it?
7	A Well, I'm not sure what that sentence refers
8	to. That may or may not refer to the Government
9	inspectors changing the rules of how it was to be
10	tested.
11	Q Okay. And if you would, please take a look
12	at Tabs 211 and 212. I believe these have to be
13	reviewed together. Are you familiar with these two
14	documents, Tab 211 and Tab 212?
15	A Not very familiar with the document. I could
16	probably talk to one of the issues in the document, if
17	that's what you're going to ask about.
18	Q Yeah. I mean, do you recognize the document
19	at 211?
20	A Not really.
21	Q Okay. Turn to Tab 212. Turn to Page 2.
22	A If I'm not mistaken, this is a restatement of
23	the earlier one but I'm not sure about that.
24	Q Does your signature appear on Page 2?
25	A Yes.
1	H

1	Q Okay. And what is that, what is Page 2?			
2	A I think they converted what was an adjustment			
3	for an equitable adjustment to then a clan that was the			
4	same matter. And I may be wrong about that, but I think			
5	that's what happened.			
6	Q What's the document at Page 2 in Tab 212, the			
7	one that has your signature on it?			
8	A It's a certification for amended or			
9	supplemental claim.			
10	Q Okay. And that is your signature in the			
11	signature block?			
12	A Correct.			
13	Q Okay. And it's dated September 23rd, '13?			
14	A Correct.			
15	Q Okay.			
16	A So I think it's the same issue as the earlier			
17	one.			
18	MR. NEILL: Okay. Let me just double check.			
19	All right. I have no further questions, Your Honor.			
20	JUDGE PAGE: Thank you. Mr. Hirst, have you			
21	any redirect?			
22	MR. HIRST: I do not, Your Honor.			
23	JUDGE PAGE: All right. Thank you very much.			
24	Mr. Karlson, you may step down. Thank you, sir. Mr.			
25	Hirst, you may call your next witness.			

1	MR. HIRST: Mr. Karlson will be taking			
2	MR. KARLSON: There is three pieces of			
3	evidence. Do I need to			
4	JUDGE PAGE: You'll need to have a seat, if			
5	you don't mind. Speak into the microphone so the court			
6	reporter can get it on the record.			
7	MR. KARLSON: I have the three pieces of			
8	these three exhibits and I wondered what you wanted me			
9	to do with them?			
10	JUDGE PAGE: All right, sir. The Exhibit A-1			
11	that you used to refresh your memory, as we discussed			
12	earlier, I'll ask that you bring it back tomorrow			
13	morning, have a copy for the Government, have a copy for			
14	me.			
15	MR. HIRST: We have two copies			
I				
16	JUDGE PAGE: Need one more.			
16 17	JUDGE PAGE: Need one more. MR. KARLSON: Oh, you do?			
17	MR. KARLSON: Oh, you do?			
17	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the			
17 18 19	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the microphone.			
17 18 19 20	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the microphone. MR. KARLSON: We'll do that.			
17 18 19 20 21	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the microphone. MR. KARLSON: We'll do that. JUDGE PAGE: Thank you. So you'll bring the			
17 18 19 20 21	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the microphone. MR. KARLSON: We'll do that. JUDGE PAGE: Thank you. So you'll bring the copies, necessary copies of the exhibits.			
17 18 19 20 21 22 23	MR. KARLSON: Oh, you do? JUDGE PAGE: Sir, you have to use the microphone. MR. KARLSON: We'll do that. JUDGE PAGE: Thank you. So you'll bring the copies, necessary copies of the exhibits. MR. KARLSON: Right.			

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MR. NEILL: Yes, ma'am.

All right. JUDGE PAGE: Subsequent to that had some items, some inert products that brought. Neill, Mr. have you had an adequate opportunity to examine those items, you and Captain Davidson? Do you need to examine them further?

MR. NEILL: No, Your Honor, we've had an adequate opportunity, yes.

JUDGE PAGE: All right then. As I described earlier, those inert items I will ask that you pack and ship to the board. Is there anything else other than those items and that document? Hold on, Mr. Karlson, hold on.

MR. NEILL: Your Honor, if the items are in evidence, we'd like to continue to have them available here in the courtroom to use during other witness' testimony, if that would be helpful.

JUDGE PAGE: Yes, of course, certainly. Thank you for clarifying that. You may either take them home or bring them back in the morning. I rather think, let me express some concern, sometimes when the staff comes into the court, courtroom later, and find objects that appear suspicious, they can be removed and destroyed. May I ask you to please bring them back tomorrow morning? Will that be acceptable? All right.

1	Thank you. Anything further, Mr. Neill?
2	MR. NEILL: No, Your Honor, thank you.
3	JUDGE PAGE: All right. Very well. Mr.
4	Karlson, you've been on the stand for some time. Do you
5	need a brief break before you begin to examine your next
6	witness?
7	MR. KARLSON: No.
8	JUDGE PAGE: All right. Very well then.
9	MR. KARLSON: We would like to call Mr. Rich
10	Profeta to the stand.
11	JUDGE PAGE: Sir, would you raise
12	MR. KARLSON: We'd like to call Mr. Rich
13	Profeta to the stand.
14	JUDGE PAGE: Sir, could you raise your right
15	hand? WHEREUPON,
16	RICHARD PROFETA
17	was called as a witness by the Appellant and,
18	having first been duly sworn, assumed the witness stand,
19	was examined and testified as follows:
20	JUDGE PAGE: Please be seated, sir. And, Mr.
21	Karlson, you have just done service as a witness. You
22	are now returning to the role of party representative.
23	MR. KARLSON: Thank you.
24	JUDGE PAGE: And as soon as the court
25	reporter tells us he is ready, I'll allow you to begin

1	examination of your witness. Please proceed.
2	DIRECT EXAMINATION
3	BY MR. KARLSON:
4	Q Mr. Profeta, what is your professional
5	background?
6	A Thirty-one years working for the Department
7	of Defense in the ammunition field, research testing,
8	and evaluation of munitions.
9	Q Were you assigned to go to PSI in 2006?
10	A I was.
11	Q Had you had any previous dealings with PSI or
12	its staff up to this time?
13	A I have not.
14	Q What was your assignment?
15	A My assignment was to go to PSI to work on
16	the, excuse me, the 583.
17	Q How long were you there?
18	JUDGE PAGE: Excuse me, sir, could you
19	clarify for the benefit of the record, what is the 583,
20	I think you said? What is that?
21	THE WITNESS: The aluminum flare around.
22	JUDGE PAGE: Pardon me?
23	THE WITNESS: The aluminum flare around 583.
24	MR. KARLSON: M583.
25	JUDGE PAGE: And I believe, Mr. Karlson,
1	F

1	you're holding up a device. Could you identify it for			
2	us? Because it appears to have been admitted as an			
3	exhibit.			
4	MR. KARLSON: Plaintiff's Exhibit 2, which is			
5	a markup of an M583.			
6	JUDGE PAGE: Thank you.			
7	BY MR. KARLSON:			
8	Q What was the first time you met the lead QAR,			
9	Mike King?			
10	A I met Mike King the night before, well, the			
11	day I flew in, the evening that I flew in I met with			
12	Mike King for dinner.			
13	Q Okay. And can you tell me about that			
14	meeting?			
15	MR. NEILL: Objection, lack of foundation.			
16	JUDGE PAGE: Overruled.			
17	BY MR. KARLSON:			
18	A When I received an e-mail, that he invited me			
19	to stop over for dinner so he could introduce himself			
20	because I was going to be coming down there and working			
21	with you folks and the DCMA group.			
22	Q Okay. Can you please inform the Court of the			
23	statements made to you by the lead QAR, Mike King?			
24	MR. NEILL: Objection, hearsay.			
25	JUDGE PAGE: Mr. Karlson, hearsay is an out			
}				

court utterance made by someone other than the 1 witness. 2 MR. KARLSON: But he was there, Your Honor. 3 He said it to him. 4 5 JUDGE PAGE: He didn't say it though, did he? Beg your pardon? MR. KARLSON: 6 JUDGE PAGE: He didn't say it though, did he? 7 8 MR. KARLSON: I'm not sure what you mean, Your Honor. 9 JUDGE PAGE: Your witness is not the one who 10 11 made the statement; correct? MR. KARLSON: Correct. I asked him if he 12 could tell us what statements were made to him by Mr. 13 Mike King. 14 JUDGE PAGE: Mr. Karlson, there is 15 difficulty in receiving testimony from someone who was 16 not the declarant, not the one who said those words. 17 expedite the smooth running of the hearing I will admit 18 it for its probative value, but you must understand that 19 there are certain exceptions to hearsay, which would 20 21 allow that information to come in by someone other than I don't know. I simply don't know the declarant. 22 because I am uninformed whether any of those are the 23 You may continue your examination of your 24 case here. witness and understand that it may be problematic.

25

1	going to reserve making a final evaluation of the			
2	evidence.			
3	BY MR. KARLSON:			
4	Q Please inform the Court what statements were			
5	made to you by the lead QAR, Mike King.			
6	A Mike King conveyed to me that PSI was			
7	manipulative and he made a direct statement to me that			
8	he would do anything to put PSI out of business.			
9	Q He was going to put us out of business?			
10	A He made the statement to me, saying that he			
11	would do anything to put PSI out of business.			
12	Q Were you aware that he was to testify in			
13	front of a Federal grand jury in June?			
14	A No, I was not.			
15	Q Was there another QAR trained by Mike King			
16	named Dean Cowart?			
17	A Yes, there was.			
18	Q And what was your experience with him?			
19	A Dean Cowart tested to fail.			
20	Q Can you explain what that means?			
21	A He tested speculatively. He didn't use good			
22	judgment when he inspected.			
23	MR. NEILL: Objection. I am sorry to			
24	interrupt. I wanted to object to lack of foundation.			
25	There's been noit hasn't been established that Mr.			
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1	Profeta observed Mr. Cowart in the performance of his			
2	duties and so forth to establish a basis for that			
3	opinion.			
4	MR. KARLSON: Could you			
5	JUDGE PAGE: Mr. Karlson, do you have a			
6	response?			
7	MR. KARLSON: Well, I can rephrase the			
8	question, Your Honor.			
9	JUDGE PAGE: Please do and please provide a			
10	foundation.			
11	BY MR. KARLSON:			
12	Q Sure. Do you have any personal direct			
13	knowledge of information inspecting done by Mr. Cowart			
14	that was not correct by your			
15	A Yes, I do.			
16	Q In your opinion? Can you share that			
17	information with the Court?			
18	A There's several			
19	MR. NEILL: Objection, lack of foundation.			
20	I'm sorry. Go ahead.			
21	MR. KARLSON: If he was directly involved,			
22	wouldn't that be foundation, Your Honor?			
23	JUDGE PAGE: We need some specifics, sir.			
24	I'm going to let you examine your witness a little more			
25	carefully with Mr. Neill's objections in mind. You have			
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to draw a foundation that includes the who, what, when, where. 2 BY MR. KARLSON: 3 Can you give some specific examples of what 4 5 inspections were done by Mr. Cowart that were not correct or fair? 6 7 Yes, I can. А All right. Mr. Karlson, I'm 8 JUDGE PAGE: going to anticipate Mr. Neill's objection. I can see 9 him beginning to rise. We need this witness's personal 10 So please ask him to respond from that 11 knowledge. personal knowledge. 12 BY MR. KARLSON: 13 Do you have personal knowledge of--14 Q Yes, I do. 15 А --examples? 16 Q Yes, I do. In one instance the QAR, Mr. Dean А 17 Cowart, stopped production on the 583 for a round that 18 would not chamber on the premise that the old woman that 19 was chamberings fingernail turned white when she was 20 chambering the round. Even though this round did, in 21 fact, chamber. That was a three-day shutdown and caused 22 us to have to fly to PSI to investigate. 23 And this was classified as a critical defect 24 25 at the time?

2	Q Was it a critical defect?
3	A No, it was not.
4	MR. NEILL: Your Honor, I would renew my
5	objection, lack of foundation. One, the testimony has
6	to do with the performance of another contract and the
7	question has to do with whether something that Mr.
8	Profeta observed was or was not a critical defect.
9	There's no evidence in the record as to contents of that
10	contract, what the specification was, what the testing
11	procedures were, you know, whether a characteristic was
12	identified as a critical characteristic of the M583 or
13	not.
14	JUDGE PAGE: Mr. Karlson, do you have a
15	response?
16	MR. KARLSON: Yes, Your Honor. This witness
17	is very familiar with the technical data package. He
18	·
19	knows what the critical defect is and he knows in this
	knows what the critical defect is and he knows in this case that this was a critical defect as we all knew it
20	
	case that this was a critical defect as we all knew it
20	case that this was a critical defect as we all knew it at the time.
20	case that this was a critical defect as we all knew it at the time. JUDGE PAGE: All right. Mr. Karlson, we've
20 21 22	case that this was a critical defect as we all knew it at the time. JUDGE PAGE: All right. Mr. Karlson, we've had these discussions several times today. It is my

That's correct.

1	that is the subject of the appeal are contracts that are	
2	the subject of the appeal to show a pattern of	
3	Government conduct; is that correct?	
4	THE WITNESS: Correct.	
5	JUDGE PAGE: All right. If, in fact, your	
6	witness is going to testify with respect to the	
7	technical data package and what was the critical defect,	
8	to lay a proper foundation, you need additional	
9	information just as Mr. Neill noted. I will give you	
10	the opportunity to lay that foundation now.	
11	MR. KARLSON: Through questioning, Your	
12	Honor?	
13	JUDGE PAGE: Yes, sir.	
14	MR. KARLSON: Or presenting the document?	
15	JUDGE PAGE: If you have a copy of that	
16	contract, if you have a copy of that technical data	
17	package, then certainly.	
18	MR. KARLSON: Not with me.	
19	JUDGE PAGE: All right. It's not part of the	
20	Rule 4 file?	
21	MR. KARLSON: Correct, correct.	
22	JUDGE PAGE: And, Mr. Neill, I will note your	
23	continuing objection.	
24	MR. NEILL: Thank you, Your Honor.	
25	BY MR. KARLSON:	

1	Q Mr. Profeta, can you describe critical
2	defects and what they mean when they're encountered and
3	how a contractor has to respond to a critical defect
4	when it's encountered?
5	JUDGE PAGE: I'm going to suggest just to
6	keep the record clear, Mr. Karlson, break that up into
7	bite size questions.
8	MR. KARLSON: Sure. Okay.
9	BY MR. KARLSON:
10	Q Mr. Profeta you're familiar with critical
11	detects?
12	A Yes.
13	Q Are you familiar with the critical defects
14	for the M583 round?
15	A Yes.
16	Q Do you know what a contractor is required to
17	do when a critical defect is discovered?
18	A The contractor is required to stop the
19	operation and conduct an investigation and a corrective
20	action needs to be presented to the Government on site
21	staff.
22	Q Okay. And doesn't it also have to go up the
23	chain and be approved by Rock Island?
24	A After it goes to the DCMA staff.
25	Q Okay. So it's a process that takes how long?
I	I .

ı	A :	Several days.
2	Q :	Several days. Are you familiar with the
3	chamber gau	ge critical defect callout on the M583?
4	A :	I am.
5	Q I	When you testified that's what Mr. Cowart
6	thought he	had encountered, the line was required to
7	shut down b	ased on the critical defect?
8	A :	That is correct.
9	Q	You then investigated it; is that true?
10	A '	That is correct.
11	Q i	And was it, in fact, a critical defect?
12	A 1	No, it was not.
13	Q 1	Did you ever communicate to your management
14	problems with the QARs at PSI?	
15	A	Yes, I have.
16	Q	Can you tell us what that communication
17	consisted o	f?
18	A :	I wrote a letter to Major Nash, who was the
19	deputy comma	ander of DCMA, requesting that Mr. Cowart be
20	removed as	the QAR because he could not be objective
21	because of	an incident that had occurred before I had
22	arrived the	re.
23	Q Z	And did he get removed?
24	A I	No, he did not.
25	Q i	And what about Mr. King, was he removed?

1	A Mr. King was removed. I'm not really sure
2	why.
3	Q Okay. Was it obvious to you that he was not
4	treating the company and its employees fairly and
5	impartially?
6	A Yes.
7	MR. NEILL: Objection. That's
8	MR. KARLSON: Is that too leading a question?
9	Okay.
10	JUDGE PAGE: Mr. Karlson, you need to provide
11	some specifics, lay a foundation. It was a very leading
12	question. I'll ask you to rephrase.
13	BY MR. KARLSON:
14	Q Did you see examples of Mr. Cowart not
15	treating the company and its employees fairly?
16	A I have.
17	Q Have you been in other plants and dealt with
1.8	other QARs?
19	A Yes, I have.
20	Q So was there a difference?
21	A The other QARs give letters of recommendation
22	to their contractors. I had asked Mr. Cowart
23	specifically in his office why I have never seen a
24	letter of recommendation from him to PSI and hehis
Į.	
25	response was, it's not my job to help them.

1	Q Did you know Dean Cowart was removed for
2	cause as the QAR at PSI after the termination of this
3	contract?
4	A No, I did not.
5	Q Okay. I have no more questions, Your Honor.
6	JUDGE PAGE: All right. Thank you. Mr.
7	Neill?
8	CROSS EXAMINATION
9	BY MR. NEILL:
10	Q Mr. Profeta, are you aware that Government
11	ethics rules may prohibit Government employees from
12	writing letters of recommendation for contractors?
13	A I did not write a letter of recommendation
14	for a contractor, I wrote a letter of recommendation to
15	DCMA from my R Deck office.
16	Q I'm sorry. That wasn't my question. Do you
17	have any knowledge of Government ethics rules that may
18	or may not prohibit Government employees from writing
19	letters of recommendation for contractors?
20	A No, I do not.
21	Q Okay. I have no questions, Your Honor.
22	JUDGE PAGE: All right. Thank you. Mr.
23	Karlson, anything on redirect?
24	MR. KARLSON: No, Your Honor.
25	JUDGE PAGE: All right. Thank you, sir.
!	1

1	Thank you. You may step down.
2	MR. KARLSON: All right. So you're going to
3	be next
4	JUDGE PAGE: Appellant, you may call your
5	next witness.
6	MR. KARLSON: Mr. Bob Hirst.
7	JUDGE PAGE: Mr. Hirst, let me ask this
8	question. Mr. Hirst, when the parties need a break, you
9	may tell me. It is almost 4:00. Am I to understand to
10	your testimony will be lengthy?
11	MR. HIRST: It will be lengthy, Your Honor.
12	JUDGE PAGE: Mr. Karlson, I will offer you
13	the opportunity of beginning Mr. Hirst's testimony
14	tomorrow morning so that you may continue without
15	interruption or you are welcome to use up the time
16	today.
17	MR. KARLSON: I think to scrub the questions
18	as you had suggested, would be good before he goes on.
19	So I think to wait until tomorrow would be a good idea.
20	JUDGE PAGE: Wait until tomorrow. All right.
21	Very well then. We will recess for the day and
22	reconvene at 9:00 a.m. tomorrow. Having said that,
23	party representatives and counsel, if you will, I want
24	to make sure that our court reporter doesn't have any

25 questions about the record. None?

1	JUDGE PAGE REPORTER: Just some spellings
2	that I'll get after we go off.
3	JUDGE PAGE: All right. Very well then. We
4	are in recess until 9:00 a.m. tomorrow morning. Thank
5	you.
6	JUDGE PAGE REPORTER: The time is 3:53, and
7	we are off the record.
8	(Whereupon, the above entitled matter went
9	off the record at 3:53 p.m.)
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CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Pyrotechnic Specialities

Before: ASBCA

Date: 10-21-14

Place: Macon, GA

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

near R. Gus 8

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

CERTIFICATE OF REPORTER

Appeal Docket No(s).: 57890,58335,59103

Appellant's Name: Pyrotechnic Specialties, Inc.

I, Ronald Legrand, associated with Neal R. Gross & Co., Inc. do hereby certify that I was present during the hearing of the above-entitled at its session in Macon, Georgia, on October 21, 2014 and recorded verbatim everything spoken during the hearing except as otherwise directed by the presiding official.

Transcript pages numbered 1-1 to 1-151, inclusive, are the true, accurate and complete transcript prepared by me from the verbatim record made by me in accordance with the applicable provisions of the reporting contract of the Armed Services Board of Contract Appeals under which I have performed my duties as a reporter.

12/5/2014 /h (A)

Reporter

CERTIFICATE OF TRANSCRIBER AND PROOFREADER

Appeal Docket No(s): 57890, 58335, 59103

Appellant's Name: Pyrotechnic Specialties, Inc.

We the undersigned do hereby certify that pages numbered 1-1 through 1-152 inclusive, are the true, accurate and complete transcript prepared from the notes and/or recordings taken by Ronald Legrand on October 21, 2014 at Macon, Georgia.

(2/5/2019 Date

12/5/2014

Date

Transcriber

Proofreader

UNITED STATES OF AMERICA

+ + + + +

ARMED SERVICES BOARD OF CONTRACT APPEALS

+ + + + +

HEARING

IN THE MATTER OF:

The Appeal of

Pyrotechnic Specialties, Inc.

Under Contract No. W52P1J-04-C-0098, : et al.

> Wednesday, October 22, 2014

VOLUME II

Courtroom B U.S. Federal Courthouse 475 Mulberry Street Macon, Georgia

: ASBCA NOS. : 57890

> 58335 59103

The above-entitled matter came on for hearing, pursuant to notice, at 10:00 a.m.

BEFORE:

THE HONORABLE REBA PAGE

Administrative Judge

APPEARANCES:

On Behalf of the Appellant:

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CEO

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WITNESSES:

ROBERT HIRST

TERRY S. GOODRICH

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WITNESSES

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Applicant Exhibit 3 9

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Applicant Exhibit 5 20

Appellant Exhibit 6 152

1	PROCEEDINGS
2	(9:00 a.m.)
3	JUDGE PAGE: Let the record reflect that Mr.
4	Karlson has handed the board and the Government a copy
5	of the document yesterday that he was using when
6	providing his testimony. These are your personal notes.
7	Is that correct, Mr. Karlson?
8	MR. KARLSON: Yes, it is correct.
9	JUDGE PAGE: All right, thank you. Yesterday
10	we agreed to mark it Rule 4, Tab 291. Is that correct?
11	THE WITNESS: Yes.
12	JUDGE PAGE: Thank you. Mr. Karlson?
13	MR. KARLSON: Yes.
14	JUDGE PAGE: You and Mr. Hirst, I believe had finished
15	with your testimony, Mr. Karlson, as a witness. You also
16	called a second witness. It is now your time, since you
17	are no longer serving as a witness, but as a party
18	representative, to call your first witness for the day.
19	MR. KARLSON: Okay. Your Honor, I'd like to
20	call Mr. Hirst in his capacity as a corporate
21	representative for PSI.
22	THE WITNESS: Your Honor, before I get on the
23	stand, I would like to use my personal notes as well.
24	JUDGE PAGE: Hold that thought. Let's back
25	up. Mr. Hirst yesterday served as a party

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representative when I allowed him to examine you when you were on the stand. Our rules allow you to not be represented by counsel, but to represent yourself. And so in that capacity since you and Mr. Hirst are both officers of the corporation, you can do that quite properly and you did so. However, today when Mr. Hirst takes the stand, just to be clear, he is not serving as party representative, but as a witness in the case.

MR. KARLSON: Correct.

JUDGE PAGE: And in that capacity, you will be the one, Mr. Karlson, to ask Mr. Hirst the questions and he will answer as would any other witness.

MR. KARLSON: Yes, Your Honor, he's going to be testifying to some things that are, involve corporate knowledge rather than him personally being directly involved is, my point.

JUDGE PAGE: Just remember please, Mr.

Karlson, that we need short, succinct questions, give it
a moment, a pause before you answer Mr. Hirst in case
there are any objections on which the board needs to
rule and then proceed. Now, Mr. Hirst, forgive me for
interrupting but I wanted to make it clear that you will
not be testifying as a party representative but as a
witness offering facts to the board. You had a
question.

THE WITNESS: Yes, I also, as Mr. Karlson did 1 2 yesterday, would like to have permission to use my 3 personal notes as a witness. 4 JUDGE PAGE: Do you have copies of that? 5 THE WITNESS: I do. 6 JUDGE PAGE: All right. Mr. Neill, have you 7 any objection? MR. NEILL: Yes, Your Honor, the Government 8 9 objects. We have, it would certainly be, facilitate the hearing if the appellant would use the documents that 10 are in the record and the other exhibits that we talked 11 12 about yesterday. We haven't had an opportunity to 13 examine Mr. Hirst's notes and we'd need an opportunity to do that before we could consider withdrawing any 15 objection to the notes. JUDGE PAGE: Certainly, Mr. Neill. Mr. 16 17 Hirst, at this time, I'll ask you to furnish a copy of 18 your notes to Mr. Neill and Capt. Davidson so that they 19 can take a moment and take a look. Gentlemen, take your 20 time. When you have finished reviewing the document, 21 please let me know. MR. NEILL: Your Honor, we've had a chance to 22 23 look at the letters. When Mr. Hirst handed me two 24 stapled sets of notes. I don't know to facilitate the 25 discussion on the record would be helpful to have these

1 marked for identification so that we all know which one 2 we're talking about, or if I can just describe them 3 generally. JUDGE PAGE: Let's start out by just 4 5 describing them generally. Let's not mark them until we 6 know what we're going to do. MR. NEILL: Okay. So the first handout has a 7 8 caption, Trial Presentation, at the top, the first page 9 appears to be a set of questions just to facilitate Mr. 10 Hirst's recollection. We don't really have any objection to that first page. The, the second page 11 12 appears to be a letter from Pyrotech, from Mr. Hirst to Joseph Camardo who is Pyrotechnic's attorney, outlining 13 14 Mr. Hirst's position on the case. We'd like to have 15 this marked as a separate exhibit or added to the Rule 16 4 file so that we can refer to it, if necessary, and 17 talk about it. Because it doesn't appear to be his 18 notes; it appears to be an actual piece of evidence, or 19 a letter recording his thoughts at the time. 20 JUDGE PAGE: All right then. Mr. Karlson, 21 what the Government has suggested then is that it has no objection to the first page of the exhibit he just 22 23 referred to, am I correct, Mr. Neill? MR. NEILL: Yes ma'am. 25 JUDGE PAGE: And that the second document,

Mr. Neill would have no objection if that letter were 1 2 entered as part of the Rule 4 file and referred to as evidence. Is that an acceptable approach for you, Mr. 3 Karlson? 4 5 MR. KARLSON: Yes, Your Honor. JUDGE PAGE: All right, thank you. Let's go 6 7 ahead then Mr. Hirst or Mr. Karlson, if you have an 8 extra copy of that, if you would hand it to the court 9 reporter 10 MR. KARLSON: Do you have it? JUDGE PAGE: I'll ask the court reporter to 11 mark the first page of the document as an exhibit as we 12 13 agreed. 14 (Whereupon, the above-referred to document 15 was marked as Applicant Exhibit 3 for 16 identification.) 17 JUDGE PAGE: We had a number of items 18 yesterday that we made exhibits. I believe this would be Exhibit A-3, 4, 3 or 4, 3. All right, we will mark 19 20 the first page of this document as Exhibit A-3. The 21 second page will become a Rule 4 file document and I'll ask the court reporter to please mark it as Rule 4, Tab, 22 23 and I believe it's 292, is that correct? MR. KARLSON: I think so, Your Honor. 25 MR. NEILL: Yes, Your Honor.

1	JUDGE PAGE: All right, thank you.
2	COURT REPORTER: It was A-4. Your Honor?
3	JUDGE PAGE: Rule 4, Tab 292 and then A-4.
4	Thank you.
5	COURT REPORTER: Marking down the second page.
6	(Whereupon, the above-referred to document
7	was marked as Applicant Exhibit 4 for
8	identification.)
9	JUDGE PAGE: Yes, the letter becomes a
10	separate document.
11	COURT REPORTER: This?
12	JUDGE PAGE: Thank you. Forgive me.
13	COURT REPORTER: Does that look correct?
14	JUDGE PAGE: Oh, I don't know. Let's see.
15	We had the items yesterday. We had the first document
16	from Mr. Karlson that was Exhibit A-1.
17	COURT REPORTER: Uh-hmm.
18	JUDGE PAGE: We had the
19	MR. KARLSON: Two devices.
20	JUDGE PAGE: Two devices. So that would be A-
21	2 and A-3.
22	COURT REPORTER: The two devices are the only
23	things I marked yesterday, A-1 and A-2.
24	MR. KARLSON: The other one was 291, I think,
25	Your Honor.

JUDGE PAGE: Oh, that was 291. All right, 1 2 thank you. Thank you very much. This is why we had this discussion to keep everything straight. Thank you. 3 COURT REPORTER: Yes. 4 5 JUDGE PAGE: So then this, Mr. Karlson and Mr. Neill, what I am going to do is that I'm going to 6 7 take the entire presentation which is the first page of 8 the stapled document that you gave me. I'm going to 9 remove it from the letter. I'm going to mark as Rule 10 4 file, Tab 292. Is that consistent with what we discussed? 11 MR. KARLSON: Yes, Your Honor. 12 MR. NEILL: Yes ma'am. 13 14 JUDGE PAGE: Now we have a second set of 15 documents, I believe Mr. Neill, that were handed to you. 16 MR. NEILL: Yes, Your Honor. The second set 17 has a heading at the top that reads Termination for 18 Default, and it, similar to the first document appears to consist of two separate documents stapled together, 19 the first two pages being a set of questions to refresh 20 21 Mr. Hirst's recollection. We have no objection to that being marked as an exhibit. The second--22 23 JUDGE PAGE: All right. Excuse me for a second. Then the document which is two pages, at the 25 top it's captioned, Termination for Default, and

underlined and you have no objection to Mr. Hirst's use 1 2 of this as a document to refresh his memory? 3 MR. NEILL: No, Your Honor. 4 JUDGE PAGE: All right. I will then label 5 that Exhibit A-4. And I'm going to disconnect it from the other document, another letter that is behind it. 6 7 So let's deal with the letter then which is from Pyrotechnics Specialties to Mr. 8 9 Camardo dated October 16, 2011. Is that correct? 10 MR. NEILL: Yes, Your Honor and it appears 11 also to have Mr. Hirst's signature at the end and 12 similar to the other letter that we just discussed, we would have no objection if this were added to the Rule 13 14 4 file as an exhibit so we could examine Mr. Hirst about 15 it, when it's our turn. JUDGE PAGE: Thank you, Mr. Neill. Is that 16 17 an acceptable procedure for you, Mr. Karlson? 18 MR. KARLSON: Yes, Your Honor. 19 JUDGE PAGE: All right. This document then 20 will become Rule 4, Tab 293, and I'll ask the court reporter to please staple that for me. No, this just 21 22 needs; it's already marked. This one just needs a staple. Thank you very much. All right, then of the 23 24 two documents that were provided by the appellant to the 25 Government, these have now become four documents.

1	top page or two pages in the case of the second
2	document, we will permit Mr. Hirst to use to refresh his
3	memory. In the first which is now labeled as Exhibit A-
4	3, it will be the trial presentation. The second
5	document which is captioned, Termination for Default, A-
6	4, a letter from Pyrotechnic to Mr. Camardo dated
7	October 9, 2011 is now Rule 4, Tab 292 and the letter
8	from Pyrotechnic to Mr. Camardo dated October 16, 2011
9	is now Rule 4, Tab 293. Are you in agreement, parties?
10	MR. KARLSON: Yes, Your Honor.
11	MR. NEILL: Yes, Your Honor.
12	JUDGE PAGE: Thank you. Now Mr. Karlson, are
13	you ready to call your witness?
14	MR. KARLSON: Yes, I am, Your Honor.
15	JUDGE PAGE: Mr. Hirst, if you would please
16	rise and raise your right hand.
17	WHEREUPON,
18	ROBERT HIRST
19	was called as a witness by the Appellant and, having
20	first been duly sworn, assumed the witness stand, was
21	examined and testified as follows:
22	JUDGE PAGE: Please be seated in the witness
23	box, sir.
24	DIRECT EXAMINATION
25	BY MR. KARLSON:

1	Q Mr. Hirst, what is your current position at PSI?
2	A My current position at PSI, I am a Vice
3	President and also the General Manager of the company.
4	Q Please describe your employment history at
5	PSI.
6	A I started with Pyrotechnic Specialties in
7	January of 2008. I was hired as the Vice President of
8	Sales and Marketing and in April/May timeframe of 2008,
9	I assumed my current title.
10	Q What was your involvement with the Mark 124
11	contract?
12	A From the time of approximately April/May
13	2008 until the contract was terminated which was
14	September 2011. I served as the point of contact with
15	the Government on contractual matters. I also provided
16	oversight for the manufacturer of the rounds, the
17	testing of the rounds under contract.
18	Q What is your recollection, history of the
19	events, related to the production of Lot 003003?
20	A To summarize, the recollection of the
21	history, the contract had been shut down
22	JUDGE PAGE: All right, forgive me for
23	interrupting.
24	Mr. Karlson, is that modification in the record?
25	MR. KARLSON: It's one of the lot numbers,

1	your Honor.
2	JUDGE PAGE: You referred to a contract
3	modification, is that correct?
4	MR. KARLSON: No, I'm referring to a lot that
5	was produced, Your Honor.
6	JUDGE PAGE: A lot that was produced. Thank
7	you. I'm so sorry. I misunderstood. Please continue,
8	Mr. Hirst.
9	BY MR. KARLSON:
LO	A Yes, Your Honor, the contract had been shut
L1	down, a stop work order, uh, on May 6, 2008. The
L2	contract resumed under Interfix Number Three. Interfix
L3	Number Three was assigned to indicate to the Government
L 4	that we had re-started production. Three lots were
L5	produced, or two lots were produced prior to Lot 3-0033-
L6	0013-002. The first lot, ah, was submitted for tests
L7	and passed with no issues. The second lot was submitted
L8	for tests and failed initially and it failed because
L9	there was a leaker and on one of the rounds. PSI
20	requested and was given permission from the Government
21	to do 100 percent screen of that lot, remove any other
22	leaking rounds. It was re-tested and passed test.
23	Q And was accepted?
24	A It was accepted on a deviation, correct.
25	Q So that was 003001 and 003002, what about

003003?

have the, the timeline in front of me. When it was tested a critical defect occurred to summarize what happened, one of the rounds had been functioned on the flare side and during the course of the function of the flare side, the igniter separated from the auto container. When the smoke handle was functioned subsequent to that, the smoke panel ignited and essentially dropped at the feet of the test technician. The outer container got launched down range about, I would say, about forty feet. So, that's what happened.

Q What was determined to be the cause of the critical defect?

PSI's engineering team and we determined that at that time we thought that the sole root cause of it was poor crimping of the rounds. We had the, re-started the contract with a fairly green work force. The work force that we had hired at the beginning of the contract, just about all those people were laid off, due to the distress caused by the suspension of the company. We had to cut back our resources.

The contract at that point as I described before had stopped. So we could not retain all the

steel workers. So we built this lot with some new folks and we found out later that the crimping machine that they used to crimp the rounds, the operators inadvertently were short, short cycling the press and, therefore, some of the rounds did not get a good print because of that. That failure analysis was presented, the results of the failure analysis were presented to the Government through a response to the corrective action that was issued and the Government representative is Mr. Kevin Bowen came down and worked with us to validate that our, our findings were, were accurate. And, the determination was that the crimps were the cause of the critical defect.

Q PSI had a contract with SAIC. Can you describe the purpose of the contract PSI had with SAIC?

A Yes, we were approached by the Government about working with them to develop a alternate sealing disc, that the sealing disk that we were using at the time that we produced the six lots, excuse me. The lots were produced under Interfix 2 and 3 which were six lots. The sealing disk had been changed after production of the first eleven lots that are identified by Interfix 1. And if I can interject, it might be helpful at this juncture for the court if I could use the poster board because we're going to go through some chronology.

MR. KARLSON: Is that all right, Your Honor, 1 2 to do that? JUDGE PAGE: Mr. Neill, do you have any 3 4 objection to using the large size chart that was 5 developed by the appellant. MR. NEILL: Yes, Your Honor, we looked at 6 7 this yesterday and noted a number of issues with the large chart. 8 Although in general using the large chart 9 might be helpful in facilitating testimony, we have some 10 concerns that the chart purports to in, perhaps Mr. Hirst could explain this, but purports to indicate 11 failure modes for the different lots. But it's 12 incomplete in that it doesn't indicate all of the 13 14 failure modes that are documented in the Lot Acceptance 15 Test Reports. So, it's incomplete and could be 16 potentially misleading. BY MR. KARLSON: 17 18 Excuse me, when you refer to a chart, you have two charts, which one are you referring to, Mr. Hirst? 19 I'm referring to the chart that is a chronology 20 Α 21 of the lot, all the lot acceptance testing from the conception of the contract to when it was terminated. 22 23 JUDGE PAGE: So this is essentially a timeline, is that correct? 25 MR. KARLSON: That would be a good way to

1	look at it, yes.
2	JUDGE PAGE: The one that appears to be a
3	timeline, Mr. Neill.
4	MR. NEILL: Yes, Your Honor.
5	JUDGE PAGE: Would you show me that
6	MR. NEILL: I'm not sure it's really a
7	timeline, but that's the one, yet, the large chart, we
8	were both referring to the same document.
9	JUDGE PAGE: You're referring to the same
10	document. All right. Why don't we pull that out and
11	take a look at it. Make sure we're all referring since
12	there are two different enlarged exhibits. Thank you,
13	court reporter. And can you tell me, Mr. Karlson, how
14	it's labeled at the top in the upper left hand corner?
15	MR. KARLSON: Mark 124 LAT results
16	JUDGE PAGE: Is that a label, sir?
17	MR. KARLSON: Mark 124 LAT results.
18	JUDGE PAGE: All right. Thank you. Mr.
19	Neill then as I understand it, it is your concern that
20	the documentation or the information that's conveyed on
21	the exhibit may not be complete. Is that correct, sir?
22	MR. NEILL: That's the gist of our objection
23	to that document. Yes, Your Honor.
24	JUDGE PAGE: Oh.
25	MR. NEILL: Incomplete and/or misleading in

1	some of the characterizations of, it includes, but
2	that's essentially it.
3	JUDGE PAGE: All right. Thank you, sir.
4	I'll admit it as Exhibit A-5.
5	(Whereupon, the above-referred to document
6	was admitted as Applicant's Exhibit 5.)
7	JUDGE PAGE: Mr. Neill and Capt. Davidson, I
8	will certainly give you leeway in examining the witness
9	on any of the shortcomings that you perceive in the
10	document. We have the easel, Mr. Karlson, perhaps you
11	could carry the easel over or if it can be propped up on
12	one of the chairs more readily. Please put it in a
13	position where it can best be seen by the witness and
14	opposing counsel. You have your own easel. Very good.
15	And if you will excuse me for a moment, I'm going to
16	step down from the bench and take a look at it myself.
17	MR. NEILL: You can use the large easel.
18	MR. KARLSON: Can I help you bring it over?
19	You got it.
20	JUDGE PAGE: Mr. Neill, Capt. Davidson, is
21	that an acceptable angle for you?
22	MR. NEILL: We can't see it, Your Honor.
23	JUDGE PAGE: All right. Let me ask Mr.
24	Karlson. This is an expanded chart. Do you happen to
25	have it reduced down to an eight and a half by eleven?

1	MR. KARLSON: I'm sorry, we don't, Your
2	Honor.
3	JUDGE PAGE: You don't. All right. It was
4	worth asking. All right. Mr. Neill and Capt. Davidson,
5	feel free to re-position yourself as Mr. Hirst testifies
6	so that you can have a good view of the Exhibit.
7	MR. NEILL: I can't read it.
8	MR. KARLSON: I can't either. I need my
9	glasses.
10	MR. NEILL: I can't the write, writing on the
11	chart from my seat, Your Honor.
12	JUDGE PAGE: Then Mr. Neill, Capt. Davidson,
13	you may move to a different seat or we can move the
14	chart down closer to you so long as Mr. Hirst can see
15	it, we can move it down closer to you.
16	MR. KARLSON: So
17	JUDGE PAGE: What is more comfortable?
18	MR. NEILL: Why don't we just move on, Your
19	Honor, and let Mr. Hirst testify using the thing from
20	here and if we need to see something on there, then
21	we'll move forward at that point if it's not disruptive.
22	MR. COURT: I'm certain that you'll do it in
23	a manner that is not disruptive. If you need to rise
24	from your chair and come closer, that will be fine.
25	MR. NEILL: Thank you.

JUDGE PAGE: Very well then. Thank you. 1 2 we have an expanded chart that has been labeled as Exhibit A-5. Mr. Karlson, you were about to begin your 3 examination of Mr. Hirst on that exhibit. 4 5 BY MR. KARLSON: Mr. Hirst, could you give us your 6 7 recollection of the contract performance prior to Lot 8 003003? 9 Α Yes. JUDGE PAGE: Now if I may, gentlemen, if you 10 are going to refer to the Exhibit, please be very, very 11 specific. Remember that while we're seated here in the 12 courtroom it's very clear as to who means what. But 13 14 when we go back and read the cold record, just the 15 printed words, it will not be as simple. So make sure 16 that you point out what line, what figure, what portion 17 of that document, that Exhibit, that you are referring 18 to. BY MR. KARLSON: 19 20 Q Mr. Hirst. 21 Okay. To, to summarize, the performance, prior to Lot 3, 3-003. A quick summary would be eleven 22 23 lots were produced initially. Those are identified on the exhibit as Interfix 1. They start with in the first 25 column Lot 101-001 and it conclude below it with Lot 01011. The time span is estimated to be Lot 001. I don't have an exact start date on that, but 002 was tested in November of 2006 and the last lot which was Lot 11 was tested in November of 2007.

Of those eleven lots, a quick summary would be that two of the lots passed with no issues. We had, after re-work, one lot pass. Four of the lots that were produced were initially rejected and accepted later on a deviation. And three lots were rejected in their entirety. After that, the sealing disk that was being used for the production of those first eleven lots which can be as identified in the exhibit on the left hand column, Interfix 1. The sealing disk that was being used was a 3M433L Sealing disk and it had a minimum adhesion requirement, twenty ounce per inch width. That sealing disk was changed, and we'll explain why later, to an alternate sealing disk that was developed jointly by PSI and the Government, that is, we were using the 3M363L Sealing Disc.

So, moving on, that is the reasoning for Interfix 2 being, posted on the, on the lot numbers.

Three lots were produced under Interfix 22-001 which was produced in February, tested, excuse me, in February 2008. 2-002 which was also tested in February of 2008 and 02003 which was also tested in 2008. Of those three

lots, all three failed initially. And they failed because they could not pass the temperature and humidity test that was conducted on them.

Excuse me, let me clarify. One and two did not pass for that reason. Lot 3 failed because there were thirteen fast flare burn times during the testing. All three of these lots subsequently, after it, our request for deviations were requested by PSI were accepted by the Government. I think our break point is I'm taking them up to three. Yes, I'll look out. I'm okay. Then we switched Interfixes again and the reason for that was to identify what I talked about before.

There was a stop work order issued after we tested 2-003. The lots could not pass, condition code A. They couldn't pass a T and H testing. They failed. The

A It is with the changed disc, correct?

A It is with the changed disc, correct. So the Government issued a stop work order. We stopped production and the contract was re-started in April, or started in 2009. The first lot that we tested which was 03A-001 was tested in April of '09. It's important to note that we did not, the configuration of the sealing disk didn't change. What I recall about why we got permission to re-start was that the Government stated

1	that any rounds that we produce that could pass all the
2	initial testing exclusive of the temperature and
3	humidity test would be accepted on, under Condition Code
4	B requirements.
5	Q Who told you that?
6	A It was part of the contract correspondence.
7	Q So it's in writing.
8	A It's in writing, correct.
9	Q Okay.
10	A My understanding of Condition Code B is
11	that the rounds are good for training purposes.
12	Q So that accommodation was made because the,
13	there was a design problem that had not yet been fixed.
14	Is that, is that accurate?
15	MR. NEILL: Objection, lack of foundation for
16	that opinion.
17	JUDGE PAGE: Sustained.
18	BY MR. KARLSON:
19	Q That accommodation was made because the
20	sealing disk that had been put into the product didn't
21	accomplish what it was intended for and still needed
22	further work. Is that correct?
23	A Correct. I mean, the sealing
24	JUDGE PAGE: Just a moment. Just a moment.
25	Yet, Mr. Neill.

1	MR. NEILL: I'm sorry. Would it be possible
2	to read back that question or no, or restate the
3	question?
4	JUDGE PAGE: It would not.
5	MR. KARLSON: I can restate it.
6	JUDGE PAGE: I will sustain the objection and
7	Mr. Karlson, remember bite size pieces. Short
8	MR. KARLSON: True.
9	JUDGE PAGE:to the point questions to establish the
10	basis, background and context for your questioning.
11	BY MR. KARLSON:
12	Q Mr. Hirst, there had been a change to the sealing
13	disk because of the problem with the material called out
14	in the TDP that was used in that first section of, 001
15	production. Is that right?
16	MR. NEILL: Objection, leading.
17	JUDGE PAGE: It is leading. You need to put
18	it in the form of a question.
19	BY MR. KARLSON:
20	Q Was there a problem with the sealing disk
21	in the units produced under 0001?
22	A Yes, yes, there were. They
23	Q Was there a change to the TDP to correct
24	that problem, to attempt to correct that problem?
25	A There, I'm not sure there was a change to

1	the TDP. I believe there was to allow the use of the
2	alternate sealing disc.
3	Q Was it an, an ECP?
4	A I don't know.
5	Q Okay. So that new changed disk is what's
6	being used in the second set of units, 002 Interfix, the
7	ones you were just talking about?
8	A It is and it's also used in Interfix 003,
9	excuse me, Interfix 3.
10	Q And it was then found that that didn't
11	solve the problem, that was to be solved. Is that
12	correct?
13	A The intent, the primary intent as I
14	understand it or what I recall, was that the alternate
15	sealing disk was put in place to stop leaking. The, all
16	the lots were made out of Interfix 2 failed the
17	temperature and humidity test.
18	Q Leaking?
19	A Yet.
20	Q I mean it's not obvious that that means
21	it's leaking, right?
22	JUDGE PAGE: Let Mr. Hirst answer the
23	question.
24	MR. KARLSON: Sure.
25	JUDGE PAGE: Mr. Karlson, you can't testify.

1	You can only ask Mr. Hirst questions.
2	MR. KARLSON: Right, right.
3	MR. NEILL: Your Honor, I'm sorry. If Mr.
4	Karlson would please speak up because I'm having,
5	sitting behind him in the courtroom, having difficulty
6	understanding his questions.
7	JUDGE PAGE: Mr. Karlson, if you would
8	please, a little louder and a little slower. Thank you,
9	sir.
10	BY MR. KARLSON:
11	Q Mr. Hirst, one of the major problems with passing
12	these tests was that they were leaking. Is that
13	correct?
14	A That is correct.
15	Q And, the, the place at which they were
16	leaking was where this sealing disk was, the part that
17	Is that correct?
18	JUDGE PAGE: Excuse me, Mr. Karlson. Mr.
19	Neill is, I'm going to save him the objection. I don't
20	understand the question.
21	MR. KARLSON: Sorry.
22	JUDGE PAGE: Would you rephrase?
23	BY MR. KARLSON:
24	Q There was a location of the leaks in the unit
25	where at the sealing discs, is that correct?

1	MR. NEILL: Objection, leading.
2	JUDGE PAGE: Yet, Mr. Karlson. You may ask
3	Mr. Hirst where, the difficulty was.
4	BY MR. KARLSON:
5	Q Where were they leaking, Mr. Hirst? What
6	was, where were they leaking in the unit?
7	A Would you like me to answer the question
8	universally, or both Interfix 1, 2 and 3 or do you want
9	me to answer just on Interfix 2?
LO	Q If the answers are different, then tell us
L1	both of them.
L2	A They are different.
L3	Q Okay.
L 4	A The leaks that were experienced from
L5	analyzing the LATRs, from talking with my staff on
L6	Interfix 1 were experienced when the units were
L7	produced. The units were put through a 100 percent leak
L8	check. It's a process control before they were
L9	submitted to the Government for LAT. Sometimes that was
20	done twice. And with the sealing discs that we were
21	using to produce the eleven lots on Interfix 1, you
22	couldn't stop the parts from leaking.
23	Q Okay. Was that the reason for the SAC
24	contract, SAIC contract?
25	A No. The SAIC contract was issued after we

had switched to the alternate sealing disc. The alternate sealing disc, as you can see from the chart, there were no leakers that actually occurred during the LAT testing that was done at PSI in Byron. However, they failed miserably when they went to the T and H test which was at an offsite at Crane, Indiana.

Q And what caused that failure, the leaking?

A In my opinion, in my opinion it was the-MR. NEILL: Objection, lack of foundation.

BY MR. KARLSON:

Q Was it, was there a determination for what caused the failure?

mention in my testimony, we were approached by the by
the Government after we had tested Lot 3-003 in March of
2010, it might have been slightly before that. I'll
give you the exact date from my notes. I guess I don't
have the exact date, but in the timeframe that we were
at the end of production on Interfix 3, we were
approached by the Government and asked if we would,
wanted to work with them to develop a alternate sealing
disk for which the primary purpose was to get a sealing
disk in place that would pass all the contract test
requirements consistently. The T and H testing, the
leak testing that's done in the normal course of the

LAT. And we engaged and we did sign a contract with 1 that third party, SAIC, as a third party that the 2 3 Government uses on small contracts. So we were 4 essentially doing R&D for the Government, or with the 5 Government to come up with this, to solve this problem. Okay. Why was the use of the 3M433L disk 6 Q 7 discontinued? 8 433L disk was discontinued after Interfix 9 1 because of a long, tragic history of the parts 10 leaking, basically from Lot 1 to Lot 11. 11 Did the sealing disk made from the 3M363L 12 stop the parts from leaking? 13 14 It did not. 15 Please describe the testing performed by PSI on the SAIC contract. 16 A quick summary of what was done, PSI 17 18 suggested some alternate sealing disk materials. 19 believe we tested in the range of four to six alternate 20 sealing discs that we selected. We tested some sealing discs that we had an equivalent thickness and strength 21 22 as the 3M363L that we were using and we saw some, and we 23 tested some, tested some that were thicker than that. 24 In the course of that testing we saw catastrophic 25 failures like the critical that was experienced in Lot

1 003-003. And I'll explain that to you again, when I say 2 the catastrophic failure where the outer container that launched down range and the smoke candle basically 3 4 dropped at the feet of the test technician. 5 Did PSI come up with an alternative sealing Q 6 disk satisfactory to the U.S. Government? 7 Α Yes, we did. We worked diligently on that project, until basically from my memory, is March of 8 2011 and after a lot of testing and trial and error, we 9 10 came up with essentially with the same sealing disk 11 configuration that we used before with one big 12 exception. If you look at the chart, on Interfix, on 13 Interfix No. 3 is, see the description of that sealing disc. Again it's once again the 3M433 foil which 15 matches what was used in Interfix 1. The big difference is we came up with a custom backing to improve the 16 17 adhesion of the bottom of the sealing disk to the round 18 to make it seal better. And by doing that you know, we 19 felt that we came up with a disc, a better disk that 20 would stop the leaking and also address what we had seen 21 on Interfix 2 testing that we created a lot of back pressure with that thicker disk we were using with the 22 23 363L. So it solved that problem as well. 24 So you received a ECP to incorporate this 25 into the product. Is that what happened?

1	A We, we received an approval, a written
2	approval to use it. To me that was a very important
3	thing before we continued the work on the contract. We
4	didn't want to have any more, what was called
5	separations to occur.
6	Q So this is one of the times when the
7	contract was stopped for an extended period of time?
8	A It was not stopped by the Government.
9	Q Correct. But it had been stopped?
10	A PSI was not willing to restart production
11	until an acceptable sealing disk was found. And I'll
12	define acceptable again. It had a good chance of
13	stopping the leaking and it would not induce back
14	pressure of the unit because it was so thick to induce
15	separation of the igniter from the outer container.
16	Q So the contract was stopped once due to a
17	stop work order, is that right?
18	A Correct.
19	Q And it was stopped once by PSI waiting for
20	this fix to be developed?
21	A That's correct.
22	Q Please describe the LAT for the re-work to
23	Lot 003003.
24	A Yes, a little background, I had several
25	concerns before we tested Lot 03-003 again. That lot

Volume 2

had the 3M363L disc, the thicker sealing disc. My concern was that after looking at the SAIC testing where we use alternate materials when we had the same catastrophic failure that the sealing disk was likely to cause a separation. Before we did this test, I talked with Mr. Kevin Vaughn he was down visiting. Kevin told me that we had to be very careful on this one, that separation where the igniter housing came off that it would be called a critical and to be very careful on the crimping.

So before we, let me back up for a minute. Lot 003, to bring you back to what happened, it, it was rejected. It had a critical defect. We cleared the critical defect through the failure analysis. We requested permission of the Government to re-crimp it as the cure. We were given that permission. The lot was re-crimped, before it was re-crimped, we worked with, we redesigned the crimper so you could not short cycle it. So re, short cycling the crimper was an impossibility. The operators could just push the buttons. It would squeeze the round for the prescribed amount of time to get a good crimp. That was part of our corrective action. We re-crimped the lot. That was done under heavy surveillance of the QARs, Dean Cowert and Jimmy Baron and observed that whole process and we're ready

to go. And again I had concerns. Even I know we had good crimps, the darn thing was going to come off because of the disc. So before we tested it, before we tested it, each and every one of those rounds was torque tested in the presence of the Government personnel watching the test. I did that to demonstrate that above and beyond the DCMA surveillance that they could see that these samples were crimped correctly.

So if we can continue on, we started the test we initially we had a problem. The problem was that we had a leaking round one leaking round in the testing and we continued on with the LAT as we have in the past. Leakers have not stopped completing the LAT and we were functioning the flare side, during tests and we had previous to that shot the cold side against a two-sided round. So the cold side had already been shot. unit was in the holding fixture before that, we had tested several units and they passed barely but they did pass. You could see separation on the rounds. We had one round that when the flare was being functioned, you could see that it ignited fine, started burning and my recollection is that it would burn approximately seventeen or eighteen seconds and then the igniter dropped off and it continued burning for another two seconds. At that point and time the Government declared

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that we had a critical defect and we stopped the
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      testing.
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                        Had separation of the flare side trigger
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      assembly been noticed on previous LATs for the Lots?
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                        Yes it had. And with the court's
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      permission, I'd like to use the books.
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                      JUDGE PAGE: Are you referring, sir, to the
 8
      Rule 4 file?
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                      THE WITNESS: Yes, I am, the Rule 4 file.
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                      JUDGE PAGE: All right. If you would direct
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      our attention to a particular Tab please, sir.
                      THE WITNESS: I shall. Please find Tab 283
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      in your book and I would like you to please look for,
      let me see, I might have the wrong Tab. It should be,
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      let's see, just give me a second. Okay, I apologize, my
      book is a little different than, I cross-references
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17
      here. Please turn to page 282-44.
18
                      MY COURT: All right, that's Rule 4 file, Tab
19
      282, page what, please sir?
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                      THE WITNESS: Page 44.
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                      JUDGE PAGE: Page 44.
                      THE WITNESS: I will point out that the, this
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      first page is the beginning of a summary, an executive
24
      summary of the LATR for Lot 002-001. I bring the
25
      court's attention, please, to the following page which
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is page 45. On the top of the report there is a reference to the separations, that I got some of the separations I would like to talk about. It says two minors were noted, igniter assembly separated from the can post function. I would now like to proceed to page 46 please. And I would point out that the, in them, title block on the top, it's very small to see. This is the test data for the transportation and vibration testing that was done on the lot. I bring the court's attention to serial number 130. You can identify the serial numbers in the last column to the right. And you will see that next to that sample, there's an annotation of figure assembly off. JUDGE PAGE: And is this in line number 23, sir? THE WITNESS: Yes it is. JUDGE PAGE: Thank you. THE WITNESS: I bring your attention also to the initials that are in the lower right hand corner. I believe to my knowledge, those initials are KAB and the date is 2-05-08. It's my understanding that those were Kevin Bowen's initials. I would like next to please move to the next page which is page 47. In the title block, you'll see that this is the outside testing of the rounds.

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I bring your attention to row 25, serial
number 126 and read, I'll read the annotation. Trigger
assembly came off. I will next point to row 28, sample
number 12. The annotation is the trigger assembly came
off. I'd also point again in the lower right hand
corner, the initials KAB are there with a date of it's
not clear to me, it looks like 1-8-18 or excuse me 08.
I would point out to the Court, there are a total of
three separations annotated in this LATR. The summary
in the front on page 45 discusses only two separations
from the can post function. I would next like to move
on to the testing of Lot 002-02. That should be in the
same Tab, 283, and if I did this right, it should be on-
-
JUDGE PAGE: Excuse me, sir, we're in 282.
THE WITNESS: I'm sorry. 282 and it should
be, page 282-32. So if you'll please go to that page.
Like the previous LATR, Lot Acceptance Test Report, this
is a summary of the testing. I would like to point out
to the Court on the last row with two stars, the note
that reads, one minors was noted. Igniter assembly
separated from the can post-function when the expended
unit was tossed and hit the ground.
I would like to please move to page 34. This
is the test sheet for the transportation vibration of

lot 2-002. Point the attention to row 12, serial number 66, there is an annotation, trigger assembly off. Lower right hand corner there are the initials KAB with a date of 2-5-08. I would like to next move on to the next page in the book which is a summary of the outside testing.

We would go to row 11, read to the right hand column.

The sample 47 reads, trigger assembly came off. Initials of KAB are in the lower right hand corner with a date 1-10-08.

I will bring the Court back to the original page that we discussed which was page 32. And the double asterisk note on the bottom. One minor was noted. For the record, there are two separations noted in the LATR. Only one is annotated as post-functional, when it hit the ground. I would now like to move to, make sure I have the right tab. Yes, we're still on tab 282. And we should be on page 282-6. This test report is formatted slightly different than the other one. It's a little bit more, but it's different in format but in content it's essentially the same. I'm bringing you to this page because I would like to read to you the summary of the high temperature function testing. It is in C --

MR. NEILL: Your Honor.

JUDGE PAGE: Mr. Hirst, just a moment.

MR. NEILL: I'm sorry to interrupt but just

1	to clarify the record, I don't think there's been any
2	discussion as to which lot this summary or this report
3	even refers to and that would be helpful if that was
4	identified.
5	JUDGE PAGE: Mr. Karlson, I'll sustain what
6	I understand to be an objection.
7	MR. NEILL: Okay.
8	JUDGE PAGE: I'll ask that you ask Mr. Hirst
9	a question that will clarify the purpose of this
10	testimony.
11	BY MR. KARLSON:
12	Q Mr. Hirst, what lot are you referring to on
13	this exhibit on page 282-6?
14	A Yes. It is lot 003-002.
15	Q So this is the same lot?
16	A No, it is a different lot.
17	Q This is a previous lot.
18	A This is the third lot I want to talk about.
19	Q Okay.
20	A This is lot 003-002.
21	Q 2. Okay. So what is on this page that you
22	want to
23	A Page 6 was the page I was talking about
24	before the objection was raised. And I was seeking to
25	explain or point out to the Court the documentation of

the high temperature function. That can be found under 1 2 paragraph 4, underlying high temperature function. 3 Twenty signals were tested at high temperature and were 4 in conformance with the requirements. 5 The next page I would like to go to is page 6 15, 282-15. This is a summary of the testing that was 7 done on the condition rounds. Condition means they were conditioned hot and cold. I would point the Court to row 8 one, serial number 99, hot. There's an annotation next 9 to the serial number that says housing fell off. I also 10 11 would also point the Court to row 4, which was also a 12 hot condition round, serial number 54. There's the same note, housing fell off. I would next like to go to page 13 6, excuse me, page 282-1. That is the header, the title 15 page, of the Lot Acceptance Test Report. I would point to the handwritten signature beneath the Pyrotechnic 16 17 Specialties, Incorporated font. And I would like to read 18 to the Court. It says, reviewed by, there are some 19 initials that are DC, and it's dated 9-29-09. And 20 beneath that there is an acceptance stamp from a QAR on 21 that, which I believe to be Dean Cowart. So what you're trying to say here in these is 22 23 that the test right there, you changed from these area 24 lots to lot 003. Is that your point? 25 MR. NEILL: Objection. Leading.

1	JUDGE PAGE: Sustained.
2	BY MR KARLSON:
3	Q So what are you trying to communicate with
4	the information you've just reviewed.
5	A I'm trying to communicate that there were
6	separations that were experienced during lot acceptance
7	testing. They're documented in the LATRs, in three of
8	the LATRs, 2-1, 2-2 and 3-2. That's what I ran you
9	through.
LO	Q And they were acceptable.
L1	A All three of those lots were accepted by the
L2	Government.
L3	Q Okay. So did that change?
L 4	A Yes. It changed in the testing of 03-003A,
L5	where separations were called a critical defect.
L6	Q Okay.
L7	A I might also point out there is in the notes,
L8	which we just went through, some documentation about
L9	post-function separation. But not all of the tested
20	rounds were accounted for in those notes. The one I just
21	discussed, 3-2, there's no mention of it.
22	Q So what does that mean?
23	A I don't know what it means. It means to me
24	that the reports don't document that, the post-function
25	separations. It does not say that.

1	Q Okay. Were these lots accepted by the
2	Government?
3	A Yes. Those three lots were, 2-1, 2-2 and 3-2
4	were accepted. 3-2 was rejected initially because there
5	was a leaker. That was secured through 100 percent leak
6	checking under the surveillance of the QARs, and
7	accepted on deviation.
8	Q In previous produced lots were there any
9	leakers in the LAT that were accepted by the Government?
10	A Well the best one to point out is the one I
11	just said. It happened on the previous lot that we
12	tested, 3-2. There was a leaker detected in the test.
13	The cure, the accepted cure with the Government is you
14	go back, you do a 100 percent leak check on the entire
15	lot. The government will watch the entire process, which
16	they did, and the units that pass become your lot.
17	Q So through leak testing you can ensure
18	leakers are excluded from the lots?
19	A Through leak testing you can, yes.
20	Q And you were allowed to do that?
21	A Yes.
22	Q Describe the events that took place after lot
23	003-003A.
24	A The contract was shut down because the
25	Government declared we had a critical defect. So what

happened after that immediately is that we scripted a Request for Deviation to try to get it submitted or accepted on deviation. That was denied by Mary Adams who the PCO at that time. Most of our energy on this contract went into fixing the problem with the sealing disk on a SAIC contract. So we worked diligently on that to try to get a sealing disk that would stop the leaking and not induce these separations. So that's where the effort was placed after we finished the testing on 3A.

Q How does the sealing disk cause the separations?

A Because it is thicker in nature and has, I believe, a fiberglass substrate, it does not release the energy from the candle quickly enough. So what it does, it looks for the path of least resistance. It wants to back pressure and push everything off until it can get relief. Or in layman's term, it induces back pressure during function, particularly on flare.

Q How long was the contract shutdown after 003-003A?

A It was shutdown. But, again, it was not a government shutdown. But we tested, again I'm using the exhibit 03-003A in March of 2010. We actually went into our first test using the new sealing disk under Interfix 4, 004A-001. That went into test in August of 2011.

Prior to that there were First Article activities that took place. And a series of discussions with the Government about clearing the critical, how the units would be tested in the future for separation. And there are two things that I recall that were particularly significant.

The first, I'd like to use my notes for a second so I recall it correctly. Yes, the first noteworthy event that happened, that in December of 2010, I was starting to get feedback from the PCO that we needed to get the contract restarted. And the reason for that, it was indicated that there was some expiring funding for the Air Force. In other words, on the contract the funds would expire, I believe it was in September, October timeframe of 2011. So in December they were starting to approach us, put a little pressure on us to get restarted. After those discussions, a gentleman by the name of Michael Barry , whose title as I recall it was Chief Systems Engineer, he was from ARDAC , visited the plant. He visited with me on December 8th, 2010. And in that meeting he outlined the requirements that we had to meet before we could resume work on the contract.

He told me that it was pretty clear that we were going to have to pass a full new First Article test

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before we could resume our production. And I communicated to him that we would like to continue further discussion about accepting lot 03-003A as a condition of future work on the contract. I also told him that it was very clear at the PSI that we had to get a new sealing disk in place before we could resume work on the contract.

The next important thing I want to share with the Court is that in March of 2011, there was a fairly big meeting that was held at Byron, at PSI. At that meeting Ryan Pierce was there. He had some of the PQMs, Program Quality Managers. The QARs were there. And we had, our engineering staff and myself attended the meeting. The purpose of the meeting as stated by the Government, that they were there to help PSI get back into production. The agenda that we followed was to discuss what we had to do to clear the critical defect and to set up a new schedule and also outline what the First Article test requirements are going to be.

Q Okay. Please detail the events that took place prior to the re-start of the contract.

A Some of those I've outline. Let me continue on. These are my observations from being at that meeting. During the meeting I became very, very concerned that there was a hidden agenda that the

1 Government had at this meeting. And that hidden agenda was to shift the blame for the critical defect from the 2 3 sealing disk to the crimping process. In other words the 4 emphasis was solely crimping. Sealing disk had nothing 5 to do with it. There was a gentleman there, and I'll try 6 to pronounce his last correctly, his name was Brian 7 Arnsdorf who was a senior quality engineer out of Rock 8 Island. He was a spokesperson for relating a new test 9 requirement that we had to pass in the FAT and the subsequent LATs. It was called a Relative Movement Test 10 11 Requirement. I objected to this because this was never 12 a test that was done before. I'll describe the test. I don't have a sample unit. It might be helpful. 13 JUDGE PAGE: Let the record reflect that Mr. 15 Karlson is handing Mr. Hirst an item. MR. KARLSON: Exhibit 1, Your Honor. 16 17 JUDGE PAGE: Exhibit 1. Mr. Neill, have you 18 any objection? 19 MR. NEILL: No objection, Your Honor. 20 JUDGE PAGE: Thank you, sir. And if you could 21 for the benefit of the record, tell us again what Exhibit 1 is, A-1. 22 23 THE WITNESS: Exhibit 1 is an inert Mark-124 24 round. And I will use the exhibit to explain this new 25 test that was outlined by the Government.

JUDGE PAGE: All right, Mr. Hirst, just to remind you since it's very easy to follow what you're doing while we're here in the courtroom, we need to be equally able to follow it when we are only reading the record. So when you point to something, when you make a gesture, please make sure that it's clear on the record what you are pointing to or what your gesture means. THE WITNESS: Yes, Your Honor. I'm holding in my hand the inert unit. And I'm pointing to the igniter. The igniter is here, the outer --JUDGE PAGE: Excuse me, sir. When you say it's here, use your words so that I can find it when I go back and read the record. THE WITNESS: Yes, ma'am. It's at the top of the unit. It is the piece part that is dark gray in color. It has a plastic device with it that is used to trigger the round. The Relative Movement Test that was imposed was essentially to take a black Sharpie marking pen and to draw a vertical line from that igniter down through the igniter onto the outer container. The outer container, for the Court's reference, is this long, silver device that holds the candles in. JUDGE PAGE: Now this appears to be a long tube. Is that correct, sir? THE WITNESS: Repeat the question, please?

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JUDGE PAGE: The item appears to be a long 1 2 tube. Is that correct? THE WITNESS: That is correct. It's a long 3 tube, approximately 4 or 5 inches in length. 4 5 JUDGE PAGE: Thank you. BY MR. KARLSON 6 7 Α So the Government imposed this new test. 8 Again, the test is not in the test spec. It's something 9 brand new in PSI's opinion. We're going to get there and 10 we're going to draw lines. We're going to draw a line from the igniter down to the outer container. And then 11 12 we're going to use a torque wrench. And if the line moved in any distance, any distance at all, it was a 13 14 failure. 15 Well some of the questions I asked was, how 16 are we going to draw that line consistently? What we're 17 going to use to mark the line. How we were going to 18 referee. What movement was acceptable? What was not 19 acceptable? Those were my concerns. Continuing on with 20 the meeting, as I recall it, PSI agreed to make up some 21 samples while the Government was here. They were here for more than one day so we had the time to do that. 22 23 We made samples up with a configuration that we were going to use in production. Meaning that we had 25 the 3M 433 sealing disk with the 40 ounce/inch width

disk. And put them together, crimped them, drew the line. And some of those parts did in fact move. They moved a very little amount. A miniscule amount would be the way I would describe it.

We took those rounds and functioned them. And when we functioned them, we were very careful. We were going to measure the amount of separation that we saw from the outer container and the trigger assembly. I'll point out using the sample what was measured. It would be the distance from the top of the outer container to the underneath section of the igniter. When those parts were functioned, they all functioned properly. There was no separation. The separation distance was incredibly small. It might have 5 or 10 thousandths, hardly any movement at all.

We also did something else, which I think is important to point. Because we failed 3-003A we retained the T&H samples. The T&H samples, again for the Court's recollection, were tested in Crane, Indiana. So we had those available. When the Government was here, I also had them do this same test. We drew the line. We used the torque wrench. And those passed. There was no movement at all.

- Q On the lot that had failed.
- A Lot that failed. That's another endorsement

1	that those units were crimped correctly.
2	Q So you're saying the disk is what caused the
3	separation.
4	A That's what I'm saying.
5	Q After this meeting you were going to start up
6	with the new material which resulted from the SAIC
7	contract.
8	A That's correct.
9	Q Is that correct? Okay. When did PSI conduct
LO	the required First Article acceptance tests?
L1	A Yes. We conducted our First Article test on
L2	April 8, 2011.
L3	Q What is your recollection of the events
L 4	pertaining to the FAT?
L5	A The FAT failed. It did pass all the test
L6	requirements except for the leak test. And I'd like to
L7	describe why it failed the leak test.
L8	Q Why did it fail the leak test?
L9	A It failed because we were so wrought up about
20	this new requirement of relative movement in this line,
21	that we decided we were going to increase the crimp
22	pressure. Normally those rounds were crimped under a
23	pressure of 700 to 750 psi. These rounds were purposely
24	crimped at a higher crimp pressure, 900 psi. In the
25	course of doing that, there was so much pressure on it

1	that we induced a leak path where we actually flexed the
2	primer holder. And that created a leak path. So we had
3	40 out of 145 samples that were tested fail leak test
4	because of that.
5	Q Okay. Was a re-test of the FAT conducted?
6	A Yes. We discussed the initial FAT failure
7	with the Government. I believe they concurred that the
8	problem was related to the over crimping at the higher
9	pressure. And we did conduct a second FAT. And that was
10	done in June 1 and June 2 of 2011.
11	Q What were the results?
12	A All the samples passed most of the portions
13	of the test, including the leak test. However, some new
14	problems surfaced. We had four samples that did not
15	function during testing. And we had multiple smoke ends
16	fail the delay and display time requirements in the test
17	specification.
18	Q What was the Government's response to the
19	second FAT?
20	A Shortly thereafter I received from the PCO,
21	Mr. Pierce, a Cure Notice.
22	Q Would you summarize PSI's response to the
23	Cure Notice?
24	A Yes. We responded to the Cure Notice and
25	pointed out

1	JUDGE PAGE: Okay. Excuse me, Mr. Hirst.
2	THE WITNESS: Yes.
3	JUDGE PAGE: Mr. Karlson, are those documents
4	in the Rule 4 file?
5	MR. KARLSON: I would think they have to be,
6	Your Honor.
7	JUDGE PAGE: It would be helpful to reference
8	that, please.
9	MR. KARLSON: Okay. Let me look at that
10	index.
11	THE WITNESS: I believe they're in Mr.
12	Neill's books.
13	MR. KARLSON: Tab 154 is the Cure Notice.
14	JUDGE PAGE: Just a moment. If you'll give me
15	time to turn to that, please. Rule 4 file, tab 154?
16	MR. NEILL: Your Honor, just to help things
17	along, I believe the exhibit Mr. Karlson is referring to
18	is tab 152.
19	JUDGE PAGE: 152?
20	MR. NEILL: Yes.
21	JUDGE PAGE: All right. Rule 4 file, tab 152.
22	Mr. Hirst, is this the Cure Notice that you were
23	referring to? This is at page 2
24	THE WITNESS: Yes.
25	JUDGE PAGE: of that document. All right.

1	And, again, if your response to the Cure Notice is in
2	the record, I'll ask that you please refer to it by tab
3	number.
4	THE WITNESS: This is the Cure Notice that I
5	received from Mr. Pierce. Correct.
6	JUDGE PAGE: And your response. You were
7	about to testify, I believe, regarding your response. Is
8	that correct, sir?
9	THE WITNESS: I was, yes.
10	JUDGE PAGE: All right. And were you
11	referring to a particular document?
12	MR. KARLSON: 156, Bob. Is that correct?
13	THE WITNESS: Yes. That is the correct
14	document.
15	JUDGE PAGE: All right. So Rule 4 file, tab
16	156 is Mr. Hirst's response to the Government's Cure
17	Notice. Is that correct?
18	MR. KARLSON: That's correct, Your Honor.
19	JUDGE PAGE: All right. Mr. Neill, do you
20	have that exhibit?
21	MR. NEILL: Yes, ma'am.
22	JUDGE PAGE: Thank you. Please proceed, Mr.
23	Karlson, with your question.
24	BY MR. KARLSON:
25	Q Would you please summarize PSI's response to

the Cure Notice?

A Yes. A summarization of it would be that the four units that were duds were dissected to try to understand why they failed. We determined that the cause of the failure was the age of the ignition disks that were used. These ignition disks were assembled in 2008 and had been stored since that time due to the interruptions in the contract. The cure was to get rid of the old disk and substitute freshly made ignition disks from the supplier. That is an item we buy. That was the cure for the dud problem.

The next thing we did is we told the Government that we would go through and look at the smoke candles that we had in inventory. We had a quality of smoke candles in inventory that we were using for First Article. We read in the drawing that we weren't doing it before, an advisory note in the drawing would be to use a brush to essentially brush the bore of the smoke candle. The smoke candle has got a hollow section in it where the flame path goes. And the thought was that by brushing the bore of the candle that it would enable it to pick up quicker and shorten the delay time and to also improve the display performance of the smoke candle.

Q Okay.

1	A That essentially is a summary of
2	Q Why did PSI state that we would resume
3	production immediately in order to meet the schedule?
4	A We did that, honestly, because there was
5	quite a bit of pressure from the contracting office
6	about the expiring funds on the Air Force. We had given
7	the Government several schedules that we were trying to
8	get caught up on. We didn't want to, we felt confident
9	enough that we had resolved the problems, that we could
10	go into production and essentially pass the First
11	Article test requirements in conjunction with passing
12	the LAT, which in our business is known as a FATLAT.
13	Q Okay. When was the first production lot
14	submitted for testing? This would be lot 004.
15	A It would be 004A-001. A is attached to the
16	lot number to identify it as a First Article test. And
17	that was completed, excuse me a moment while I get rid
18	of this book. Okay. The lot was presented for test on
19	August 9th and the testing concluded on August 12th of
20	2011.
21	JUDGE PAGE: Mr. Hirst, again, are you
22	referring to a particular document that's in the Rule 4
23	file?
24	THE WITNESS: I'm referring from my personal
25	notes, recollection of when it was tested. Which is, I

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apologize, I don't know what tab it is in the book. It
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      was added today.
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                      MR. KARLSON: There would be a test report in
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      the book. Is that correct? Or there may not be?
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                      THE WITNESS: I'm not referring to the test
      report, I'm just summarizing.
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                      MR. KARLSON: I understand that.
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                      JUDGE PAGE: All right. Mr. Karlson, if you
 9
      don't mind, take a quick look at the index and see if
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      you --
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                      MR. KARLSON: Yes.
                      JUDGE PAGE: -- can find a particular
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      document that Mr. Hirst is referring to.
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                      MR. NEILL: Your Honor, I'm --
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                      JUDGE PAGE: I think --
                      MR. NEILL: -- sorry to interrupt. But this
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      might be a time for a quick comfort break if at all
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      possible.
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                      JUDGE PAGE: Mr. Neill I think that's a very
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      good idea.
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                      MR. NEILL: Okay.
                      (Whereupon, the above-entitled matter went
22
      off the record at 10:36 a.m. and resumed at 10:51 a.m.)
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                      JUDGE PAGE: Mr. Karlson, you may resume your
25
      questioning of Mr. Hirst.
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1	BY MR. KARLSON:
2	Q Thank you. Mr. Hirst, can I ask you to turn
3	to section 284 and identify that document, please?
4	JUDGE PAGE: Rule 4 file, tab 284, sir?
5	MR. KARLSON: Yes, Your Honor.
6	THE WITNESS: It is the
7	JUDGE PAGE: Just a moment, Mr. Hirst. Let me
8	find that document. Please proceed.
9	BY MR. KARLSON:
10	A The document is the test report for lot 004A-
11	001.
12	Q And did this test also include First Article
13	test requirements?
14	A Yes.
15	MR. NEILL: I'm sorry to interrupt again,
16	Your Honor. But when we refer to tab 284, it appears to
17	contain three separate test reports. So it might be
18	helpful to identify, if Mr. Hirst is identifying one of
19	these test reports, to identify it by the page range
20	within the tab just for the sake of clarity. I'm sorry.
21	JUDGE PAGE: Thank you, Mr. Neill. A very
22	good suggestion. Mr. Karlson, if you would have Mr.
23	Hirst identify what portion of the document he was
24	referring to and which of the test reports he is
25	commenting on.

1	BY MR. KARLSON:
2	Q Mr. Hirst, in section 284, are you referring
3	to pages 1 through 20, the first test report for lot
4	004A-001?
5	A Yes.
6	Q Did this test also include First Article test
7	requirements?
8	A Yes.
9	Q What was the outcome of the test?
10	A The outcome of the test was that it was
11	tested and most of the test requirements were met. The
12	requirement for display time on cold, smoke function did
13	not pass. There were 7 of the 20 units that went above
14	the 25 second maximum time.
15	Q Okay. This is the first time we've talked
16	about display time. Could you explain that issue and
17	some of the history of that issue?
18	JUDGE PAGE: All right. Excuse me, Mr.
19	Karlson, forgive the interruption. Mr. Hirst, are you
20	referring to a particular page in this report? For
21	example page 20 contains some of the information, but I
22	need to know if there is a particular page that you are
23	referring to, which one it is.
24	THE WITNESS: Just give me a second, Your
25	Honor. I'll find it for you.

MR. KARLSON: Could it be page 8, Mr. Hirst? 1 2 THE WITNESS: Okay. I found the page. It is page 284-11, title cold. 3 4 JUDGE PAGE: That's Rule 4 file, tab 284, 5 page 11. Correct? THE WITNESS: Correct. 6 7 JUDGE PAGE: Thank you. 8 BY MR. KARLSON: 9 Point to the display time column. Any of those units that were above 25 seconds exceeded the 10 11 maximum test requirement for display and there were 7. 12 So this is the first time we've discussed 13 display time here. Can you explain that issue to the Court? 15 Again, it's a chronic problem for PSI since the inception of the contract. Again I would point to 16 17 the poster board. 18 JUDGE PAGE: That's Exhibit A-5 I think, sir. 19 Is that correct? 20 THE WITNESS: That's correct. Starting with 21 Interfix 1, lot 01-002 also failed initially on long display times. In that test there were 12 out of 20 22 23 units that were tested that exceeded the maximum display 24 time. And a deviation was requested by the company to 25 accept the lot for that condition and it was accepted.

The next lot we come is lot 4, 1-4. In that test there were 19 samples out of 50 during ambient testing that exceeded the maximum smoke display time. PSI again requested a deviation for that lot to be accepted, which was granted. It was accepted on deviation. I would next point to lot 1-6, same story. It failed initial test. 15 out of 20 samples failed due to long display times. A deviation was accepted for that lot. The lot was accepted by the Government. Moving down to the test of 1-8, 14 out of 20 again failed due to long display times during testing. That lot, which is number 4, the fourth lot, was also accepted on deviation.

BY MR. KARLSON:

Q So can you explain the significance of long display times and what was communicated from the Government about long display times?

A Long display time, in layman's terms, is how long the smoke is emitted in a robust manner from the round when it's triggered, shot. It is timed with a stopwatch. The timing is separated from delay time, which is a separate test criterion. And when the unit essentially picks up and starts to burn robustly and emit a solid plume of red smoke, that's when the start of the display time is measured. And when the smoke stops, the test technician, the Government reps that

_	were there auditing it with click off to record that
2	total elapsed time. That is display time.
3	Q Okay. So that's how it's measured.
4	A That's how it's measured. I have personal
5	knowledge based on information that I heard when I
6	solicited comments about long display times from Kevin
7	Bowen and also from a gentleman from the Air Force whose
8	name escapes me at the moment. I believe his name was
9	Matt Adams . He was there and he watched the testing,
10	all the test in Interfix 4. And my recollection is that
11	they told us that it's not a bad thing. That, in effect,
12	if you think about, the person being rescued has the
13	benefit of more smoke being emitted for a longer period
14	of time to be spotted by the rescue folks.
15	Q This device is used by pilots on the ground
16	signaling to be rescued. Is that right?
17	A It's my understanding it's primarily used by
18	downed airmen or seamen in a life raft.
19	Q Okay.
20	A They're trying to signal to rescue aircraft
21	that they're here and they need to be rescued.
22	Q All right. So you're told there's nothing
23	undesirable about having a longer time?
24	A You know, the two words I remember that were
25	repeated over and over was that the smoke's got to be

consistent and it's got to be robust. As long as it's 1 2 consistent and robust, if it's longer than 25 seconds it's okay. 3 And what did Matt Adams tell you about that? 4 5 He came for that reason, did he not? 6 Α That's essentially what he told me as did 7 Kevin, Mr. Bowen, excuse me. 8 Okay. So there were a number of lots with 9 this condition that were accepted. This condition was 10 exhibited in this lot 4. And then what happened after that? 11 The lot was rejected again because of the 12 long display times on the smokes, the cold condition 13 runs. The company immediately request that the lot be 14 15 accepted on deviation. That deviation was granted and 16 the lot was accepted by the Government. 17 Q Okay. When was the second lot submitted for 18 testing? It was in August. Let me give you the exact Α 19 date. It was submitted the latter part of August, August 20 21 29 and the test went into September 1. And what were the LAT results? 22 23 Similar to the previous lot. There were more of the rounds that had problems with long display times, 25 19 out of 20 had long display times.

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1
                      JUDGE PAGE: Excuse me, Mr. Hirst, are you
 2
      still referring to the same report, the same --
 3
                      MR. KARLSON: I'm sorry.
 4
                      JUDGE PAGE: -- pages 1 through 20? Or is
 5
      this a different report?
                      THE WITNESS: No, we need to go a different
 6
 7
 8
                      MR. KARLSON: In the section 284 there's a
 9
      second report, is there not, Mr. Hirst.
10
                      THE WITNESS: Yes. Give me a moment to find
11
      it, please. Yes. You will find it on the Rule 4, 284,
12
      page 38.
                      JUDGE PAGE: Rule 4 file, tab 284, page 38.
13
14
      Is that correct, sir?
15
                      THE WITNESS: Yes.
                      JUDGE PAGE: All right. Thank you.
16
      BY MR. KARLSON:
17
18
                Q
                      So what were the results of this test, Mr.
19
      Hirst?
20
                      There were more long display times. I will
      take you to the right page in just a moment. That's
21
      where those results are shown. It should be on 284-47.
22
      The results of the display time are in the second
23
24
      column. And it will say that 19 out of 20 had long
25
      display times, exceeding 25 seconds.
```

0 And what was the outcome of this lot? Was it 1 2 accepted by the Government? 3 It was not accepted by the Government. We 4 requested a deviation. We had, there was a meeting that 5 I attended after the test was completed. At the meeting 6 were the Government representatives, Mr. Bowen, I 7 believe, a gentleman by the name of Nathan Ash was there, and I believe Matt Adams was there from the Air 8 9 Force. And I was there. Andy Long was there, who's our, at that time our senior quality engineer. It was sort of 10 11 like a post test discussion of where we go next. My 12 recollection of that meeting that a favorable, it was 13 favorable, that the Government suggested strongly that we put in a Request for Deviation, there was a good 15 likelihood it would be accepted. Did we do that? 16 17 We did and it was not accepted. 18 Was there a reason? 19 I'm sorry? 20 Was there a reason? 21 There was one afforded after the contract was terminated. We never got any response on the Request for 22 23 Deviation until the contract was terminated. 24 JUDGE PAGE: Mr. Karlson, is the Request for 25 Deviation in the Rule 4 file?

1	MR. KARLSON: Request for Deviation, 285.
2	MR. NEILL: I see a Request for Deviation,
3	Your Honor, but I don't see the lot number on it to know
4	if it applies.
5	JUDGE PAGE: Is there a particular document
6	
7	MR. NEILL: In fact
8	JUDGE PAGE: that you'd like to direct our
9	attention to?
10	MR. KARLSON: No, that can't be it, Your
11	Honor. No.
12	JUDGE PAGE: No.
13	MR. KARLSON: I don't think it's in.
14	JUDGE PAGE: All right. Thank you. I wanted
15	to make sure that if it was in the record that we had
16	the right reference to it.
17	MR. KARLSON: Sure. You don't know of a
18	Request for Deviation in the package?
19	THE WITNESS: I know there was a Request for
20	Deviation that was authored and sent in. I know that for
21	a fact.
22	MR. KARLSON: Okay. Do you know if we have a
23	copy within these documents?
24	THE WITNESS: I don't know that.
25	MR. NEILL: Yes, I

1	JUDGE PAGE: Mr. Neill.
2	MR. NEILL: I'm sorry, if it would facilitate
3	things, I believe the Request for Deviation for lot 4-02
4	is in the record. It's at tab 180. And I apologize for
5	this, it has sub-tabs in it. There's a 180-C. I believe
6	that may be the document that
7	JUDGE PAGE: All right. Give us a moment,
8	please. Rule 4 file, tab 180, sub-tab 180-C. Is that
9	correct, Mr. Neill?
10	MR. NEILL: Yes, Your Honor.
11	JUDGE PAGE: Thank you, sir. Mr. Karlson, do
12	you have that document?
13	MR. KARLSON: I see A. I thought that was
14	what he was referring to.
15	JUDGE PAGE: I'll ask Mr. Hirst to look as
16	well.
17	MR. KARLSON: Here we go.
18	MR. NEILL: In my book it's tab C.
19	JUDGE PAGE: Tab C. Rule 4 file, tab 180,
20	sub-tab C.
21	MR. KARLSON: I see it, yes.
22	JUDGE PAGE: All right. Thank you. Forgive
23	the interruption but please continue with your
24	questioning, Mr. Karlson.
25	BY MR. KARLSON:

1	Q So this waiver was submitted but this is not
2	signed by the Government so it was not accepted. Is that
3	right?
4	A This document is the request that we put in
5	that is not signed by the Government. Correct.
6	Q Okay. Did you get an explanation for that?
7	A I recall that any explanation I had
8	concerning this lot as to why it wasn't accepted was
9	part of the Termination for Default.
10	Q Okay. What was the Government's response to
11	the LAT failure for lot 004-002.
12	A I just discussed my recollection of the
13	meeting that was held at Pyrotechnic Specialties with
14	the Government after the test. A favorable impression
15	was left with myself and the rest of my team that the
16	lot would and could be accepted on deviation.
17	Q And when that didn't happen, what was the
18	Government's response officially?
19	A The official response is in the Termination
20	for Default.
21	Q Did you receive a Show Cause letter?
22	A Yes. I did receive a Show Cause letter, yes.
23	Q Is the Show Cause letter in the book?
24	A The Show Cause letter is in the book.
25	Correct.

1	Q	Do you know the number?
2	A	I do not.
3	Q	Okay.
4	A	It's dated September 9th, 2011.
5		MR. NEILL: You might want to look at Rule 4,
6	tab 181.	
7		JUDGE PAGE: Thank you, Mr. Neill. Mr.
8	Karlson, Rule 4	file, tab 181.
9		MR. KARLSON: Yes.
10		JUDGE PAGE: Is this the document you were
11	referring to?	
12		MR. KARLSON: Yes, Your Honor. Thank you.
13		JUDGE PAGE: All right. We'll give Mr. Hirst
14	a chance to loc	ate it. Mr. Karlson, you can resume your
15	questioning.	
16	BY MR. KARLSON:	
17	Q	Mr. Hirst, did PSI respond to this Show Cause
18	letter?	
19	A	Yes, we did.
20	Q	And is the response section 182?
21		JUDGE PAGE: Rule 4 file, tab
22		MR. KARLSON: Rule 4
23		JUDGE PAGE: 182.
24		MR. KARLSON: section 182. No it's not.
25		MR. NEILL: It's tab 183?

MR. KARLSON: Is the response tab 183, Mr. 1 2 Hirst? 3 THE WITNESS: Yes, it is. 4 BY MR. KARLSON: 5 Okay. So what is your position in this letter Q 6 to the Government, Mr. --7 In the Show Cause letter, my recollection was 8 that they were, the Government was unhappy with PSI for 9 two reasons. The primary reason that I recall was adherence to the schedule. Secondarily it was the 10 11 quality of the product we were producing at that time. 12 My response in the letter, my initial response was that I was very surprised that the Government was being so 13 hardline on schedule. I had received a prior email from 15 Ryan Pierce that encouraged PSI, this email was sent on August 25th, 2011. 16 17 Shall we show that section to the Court, 18 please? 19 Yes. It's in book 6, tab 286. This is the 20 email I'm referring to. I'm primarily referring to the, it's an email that drills down. It's the information on the top that starts with, Bob, I think at this point the 22 23 goal should be for PSI to produce as many of its firing 24 signals as possible without compromising safety or 25 quality.

As stated in my latest letter, I'm open to
revising the schedule but I want to make sure that the
revision is realistic and achievable. You have quite a
bit of ground to cover in roughly three weeks' time. I
imagine pushing of the delivery of lot 3 out by one week
will help. But I'm concerned that completing the current
contractual quantity in such a condensed timeline
significantly increases the potential for error. In
other words, if lot 3 is pushed to arrive, I think we
need to T for C additional quantity. Something about
2,150 units so as not to overextend PSI personnel and to
put you at an increased risk for missing the revised
schedule again. Second paragraph. That being said, I
need you to take a good hard look at your resources,
capabilities and constraints and propose a realistic and
achievable schedule for getting expired quantities
accepted, invoiced not later than 21 September 2011.
I am agreeable for to T for C'ing the
quantity you don't think will be accepted/invoiced by 21
September and revising the remaining schedule

1	comfortable signing up to. And it closes saying that, I
2	need this proposal soonest. Questions/concerns please
3	call me.
4	Q So you received this after the Show Cause
5	letter and after you had responded to the Show Cause
6	letter?
7	A No. I received it prior to the Show Cause
8	letter. I received this, this email is dated August 25,
9	2011.
10	Q So was it clear to you that the PCO was
11	going to be agreeable to T for C'ing, Termination for
12	Convenience, some portion of this contract?
13	A That was my clear understanding from the
14	email. Correct.
15	Q Okay. The last lot was lot 0, was the last
16	lot, lot 004-003?
17	A Yes, it was.
18	Q Did PSI continue to work on the contract
19	after answering the Show Cause letter?
20	A Yes, we sure did.
21	Q And when was this third lot submitted for
22	testing?
23	A The test date I have on my record is
24	September 12 through September 15, 2011. I would like to
25	just take a moment to point out in the exhibit, I

1	apologize I don't know the exhibit number.
2	JUDGE PAGE: Exhibit A-5 I think. Is that
3	correct, sir?
4	THE WITNESS: That's correct. Where if you
5	look at the tally for 4-3 it shows it being tested in
6	August. It was tested in September of 2011. I'd like to
7	correct that
8	MR. KARLSON: Okay.
9	THE WITNESS: if I can right now.
10	JUDGE PAGE: And let me ask, are those test
11	results part of the Rule 4 file?
12	THE WITNESS: Yes, they are, Your Honor.
13	JUDGE PAGE: And could you direct us to a
14	tab, please?
15	THE WITNESS: I'll do my best. Okay. Yes, it
16	would be, I believe, section 284, Rule 4 file, 284-21.
17	JUDGE PAGE: Would that be Rule 4 file, tab
18	284, page 21?
19	THE WITNESS: Page 21, correct.
20	JUDGE PAGE: All right. And it goes from page
21	21 to page 37. Is that correct, sir?
22	THE WITNESS: Yes, Your Honor.
23	JUDGE PAGE: And could you tell us again what
24	lot this deals with?
25	THE WITNESS: This test report is for lot

1 004-003. 2 JUDGE PAGE: Thank you, sir. Please continue 3 your questioning, Mr. Karlson. 4 BY MR. KARLSON: 5 What were the test results, Mr. Hirst? 6 A summary of the test results is as 7 follows. There was one leaker that was detected during 8 the testing of the lot. There also was a problem with 9 long display times of the cold smoke rounds. Ten of the 20 samples exceeded 25 seconds. I will point you to the 10 11 page in just a second. That would be on page 284-30. 12 Again, it's in the second column. And you will see that 10 of 20 exceeded the display time, maximum display time 13 of 25 seconds. I would point out that the average of the 20 was 25.88 seconds. 15 Why is that significant, Mr. Hirst? 16 17 It's significant in that it gives, I think, 18 a truer indication of the lot itself. 19 Okay. This is a condition that had been 20 accepted in the past. 21 Yes, sir. Long display times. 22 23 Yes, sir. 24 And the leaker is a condition that you 25 could screen the lot for 100 percent and ensure that no

1	leakers were shipped to the Government. Is that true?
2	A Yes, sir. That was the accepted methodology
3	to remove leakers from the lot 100 percent.
4	Q You had done that in the past successfully
5	for other lots.
6	A Correct. 3-2 is the most recent lot I can
7	point to, I discussed that before.
8	Q Okay. What happened after the LAT on 004-
9	003?
10	A September 26 I received the registered
11	letter from Mr. Pierce with a Termination for Default
12	letter enclosed.
13	JUDGE PAGE: Is that in the record, sir?
14	MR. KARLSON: Do you know what? Yes, I'm sure
15	it is, Your Honor.
16	THE WITNESS: I'm sure it is.
17	MR. KARLSON: 187?
18	JUDGE PAGE: 187?
19	MR. KARLSON: I think so.
20	JUDGE PAGE: All right.
21	MR. KARLSON: Yes, Your Honor. It's tab 4,
22	section 187.
23	JUDGE PAGE: Rule 4, tab 187. Thank you, sir.
24	BY MR. KARLSON:
25	Q Did you receive a partial Termination for

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1
      Convenience on some number of the units, Mr. Hirst?
                        I did not.
 2
 3
                        Did PSI agree with the Government's
 4
      decision to Termination for Default?
 5
                        We did not agree.
                        Was there a rebuttal submitted?
 6
 7
                        There was a response to the Show Cause
      letter that was submitted. Correct.
 8
 9
                        But after the Termination for Default, did
                0
      PSI submit anything?
10
11
                        We sent them a letter, the nature of it
12
      protesting the Termination for Default.
13
                        Okay. Is that in the book?
                        I'm sure it is. I need help locating it but
15
      I --
16
                Q
                        Okay.
17
                        -- know we were going through it with Mr.
18
      Neill on deposition.
19
                      JUDGE PAGE: Have you found that document,
20
      sir?
21
                      MR. KARLSON: I don't see that document, Mr.
      Hirst. Why don't we go on.
22
23
                      JUDGE PAGE: Do you have a question for Mr.
24
      Hirst?
25
      BY MR. KARLSON:
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Q Please elaborate on the reasons why PSI disagrees with the Government's decision.

A Okay. The reasons why we disagree strongly are as follows. Government's argument is the company is delinquent to schedule and it's quality of the lots, the most recent lots, 4-002 and 003, is poor. Our position with respect to quality, that these two lots, 4-2 and 4-3, could and should have been accepted based on precedence.

Earlier in my testimony I went through, I believe, all the lots that had failed for long display times. I can do it again. 1-2, 12 out of 20 exceeded maximum display time, accepted on deviation. 1-4, 19 out of 50 to ambient, exceeded maximum display time, accepted on deviation. 1-6, 15 out of 20 cold exceeded maximum display time, accepted on deviation. And lastly, 1-8, 4 out of 20, long display times at cold, accepted on deviation. There is clear precedence for accepting these lots. I'll point out, too, what I testified to before. Our feedback when we were testing these units, our feedback from the Government representatives, that long display times was not undesirable. It's got to be consistent. It's got to be robust. If it's long, probably not a problem. We can take it on deviation.

The record shows that they did take those on

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deviation. Furthermore, the closing meeting of 4-2 that I attended, the Government representatives, again, related a positive point of view that the lot could be accepted on deviation. With respect to leaking, we don't deny that there was a leaker. There was a leaker in 4-3. The failure analysis that we did on that points to a pinhole leak in that disk. That might have been from the supplier. It might have been something that occurred during assembly. I don't know. But what I do know is that we could have cleared that lot up. We could have 100 percent screened it and given it to the Government and it would have been fine. Just like 3-2 was done.

Q Do you believe that the Government representatives acted impartially and in good faith during the time you were involved with this contract?

A No, I don't.

Q Please elaborate on the reasons why you believe that.

A I'll bring up two things. First is concerning the QARs that were involved with oversight on the contract. When we were testing 4-3, I clearly recall Mr. Dean Cower after we had done this relative movement test to ascertain that the units were crimped correctly, and the group was getting to leave. The Government group and the PSI group stayed a little bit longer and was

1 trying to test some more units and convince everybody that we had a problem with relative movement. 2 3 My recollection is that that was not treated 4 with any real credibility and we moved on. That that lot 5 passed the relative movement test. Nothing that was done 6 by Dean, and it was, it made it very difficult, 7 especially when we were trying to analyze test results 8 on Interfix 4-2 and 3. Let's take a moment here. When 9 this contract was started originally, if you look at the test spec, and I'm sure that that'll be brought up 10 later. For cold there were different maximum display 11 12 times that were represented in the test spec. It was not across the board 25 seconds. That got changed through a 13 deviation that I believe we'll be able to locate in 285. 15 JUDGE PAGE: Rule 4 file, tab 285, sir? 16 THE WITNESS: Yes, ma'am. 17 JUDGE PAGE: Is there a page number you could 18 direct us to? 19 THE WITNESS: Yes. Yes, it's page 1. 20 JUDGE PAGE: Page 1? 21 THE WITNESS: 258-1. JUDGE PAGE: 258 not 285. Is that right? 22 23 THE WITNESS: 285-1. 24 JUDGE PAGE: Okay. Please continue. Mr. 25 Karlson, it would be helpful --

MR. KARLSON: Oh, I'm sorry. 1 2 JUDGE PAGE: -- if you'd frame the question 3 to Mr. Hirst. BY MR. KARLSON: 4 5 I'm sorry. This document 285-1 is a deviation from the Government or approved, submitted to 6 7 the Government and approved by the Government even 8 though I don't see their approval on here. Is that 9 right? 10 I don't have the approval letter, but this was the deviation that was put forth. 11 And it was approved. Is that right? 12 To my knowledge, yes, it was approved. 13 And why is this significant? 14 15 It's significant because it points that back in January 24th of 2007, they submitted this 16 deviation. And the need for the deviation in block 23 17 18 reads as follows. We respectfully request at no cost to the Government deviation from maximum of 19 seconds to 19 a maximum of 25 seconds for the smoke burn on this 20 21 contract, W52P1J04-C-0098 and all mods. And that was 22 understood. 23 All the subsequent lots were analyzed opposite, all of the categories of smoke testing being 25 capped at 25 seconds. There was some discussion, I

recall, we debated this. And Kevin Bowen supporting our position, although feeling that the language was somewhat ambiguous, that clearly all the rounds would be tested regardless of what category and have a maximum display time of 25 seconds. Having to go through that and having that understood, and I believe we were told that the LATRs would not be accepted unless we went back to the old spec and I'm not sure if we did or not. But it tended to misrepresent the quality of the lot. That there were more defects that there really were. What tended to do that? This harping on, you know, the original spec. The original spec had changed on deviation. So, for example, if you have one of the categories where the maximum display time other than cold was 19 seconds. This is an example purely. Temperature and vibration. If we posted a result of 21, there was a feeling that we should report that as a failure, when it wasn't. This is by Mr. Cower? Q Mr. Cower. My recollection that this is something that Dean wanted to spend a lot of time on. Primarily when we were doing the testing on the last three lots of the contract, 4-001 through 4-003. Q Okay. I'd like to move to some other things that

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1	happened that I would categorize as bad faith actions by
2	the Government.
3	JUDGE PAGE: All right. Mr. Hirst, forgive
4	me. I need to make sure this is in response to a
5	question from Mr. Karlson.
6	MR. KARLSON: And my question was, please
7	elaborate on the reasons why PSI believes there were bad
8	faith actions by government personnel. I'm sorry.
9	JUDGE PAGE: Sometimes when the narrative
LO	gets long it gets very confusing. And I need to make
L1	sure there's a question there. Just a moment. Mr. Neill?
L2	MR. NEILL: Yes. Was the question just bad
L3	faith in general? Or did it relate to any particular act
L 4	or omission by the Government?
L5	MR. KARLSON: Actions.
L6	MR. NEILL: It's unclear.
L7	JUDGE PAGE: Mr. Karlson, if you would
L8	rephrase please, sir.
L9	BY MR. KARLSON
20	Q Were there specific bad faith actions that
21	you can point to that are, in your opinion, were bad
22	faith actions?
23	A Yes. There's another example I'd like to
24	give the Court. The PCO, Ryan Pierce, I believe was
25	deceptive with me. I clearly recall after I received the

1 Cure Notice and second, the Show Cause notice, I asked 2 him on the phone if the Government had already made their mind up. Is this just basically a game we're 3 4 playing? Are you going to T for D this regardless of 5 what we do? He convinced me, through his answers, that 6 that was not intent. He wanted us to finish the 7 contract. In my opinion, based on the evidence that we 8 9 have, I think that the agenda was to get a small 10 quantity of units for the Air Force, which they got on 11 lot 1, 5,400 units were accepted. They got possession of 12 these rounds. And after that, I don't like to use 13 acronyms but, you know, throw PSI under the bus. And I would note that after the Termination for Default, I 15 received a letter, I believe from Mr. Pierce, requesting 16 immediate payment for the unliquidated progress 17 payments. JUDGE PAGE: Excuse me, sir. Is that document 18 19 in the record? 20 MR. KARLSON: Yes, I saw it. 21 MR. NEILL: Your Honor, it is in the record. Its tab 189 that I think the only reason it's left in 22 the record; it's related to the appeal that was 23 24 withdrawn. So it is still in the record. 25 JUDGE PAGE: All right. Give me just a moment

1	to catch up with you, sir.
2	MR. NEILL: And I'm blanking on the appeal
3	number.
4	JUDGE PAGE: All right.
5	MR. NEILL: The withdrawn
6	JUDGE PAGE: So you're referring us then, Mr.
7	Neill, to Rule 4 file, tab 189. And as I understand your
8	concern, this is regarding an appeal that is no longer
9	before the Board. Is that correct?
10	MR. NEILL: That's right, Your Honor. There
11	was an appeal relating to the Government demand letter
12	for repayment of unliquidated progress payments. But PSI
13	had agreed to repay those and they subsequently withdrew
14	that appeal. And to my knowledge that's the only reason
15	that this document is in the record. It doesn't pertain
16	to the Termination for Default.
17	MR. KARLSON: It's not
18	JUDGE PAGE: Do you happen to recall that
19	appeal number? Either Mr. Karlson or Mr. Neill, either
20	of you.
21	MR. KARLSON: I don't recall what he just
22	said, Your Honor, as being accurate.
23	MR. NEILL: I can find the appeal number,
24	Your Honor.
25	JUDGE PAGE: All right.

1	MR. NEILL: I don't have
2	JUDGE PAGE: If it's more productive you may
3	do that over the break. Or would it be more useful to do
4	it now, Mr. Neill?
5	MR. NEILL: I can that during a break, Your
6	Honor.
7	JUDGE PAGE: All right. Very good then. I'd
8	like the record to reflect the status of any appeal that
9	was made under Rule 4 file, tab 189.
LO	MR. NEILL: I'm sorry, Your Honor. I do have
L1	that appeal number now.
L2	JUDGE PAGE: You do. All right.
L3	MR. NEILL: It's 58234.
L 4	JUDGE PAGE: 58234. And it is your belief
L5	that it's been withdrawn?
L6	MR. NEILL: Absolutely, Your Honor.
L7	JUDGE PAGE: All right.
L8	MR. NEILL: It was withdrawn and dismissed.
L9	JUDGE PAGE: And I apologize because I don't
20	have access to my database that would tell me the status
21	of all of those appeals. Mr. Karlson do you have any
22	recollection of the
23	MR. KARLSON: No. But Mr. Hirst is testifying
24	to this matter in the context of an example of bad
25	faith. If it was withdrawn later, I don't think that

1 would change that. But I don't actually recall that. 2 JUDGE PAGE: All right. That's fine. And we can check on the status. And, Mr. Neill, later on if you 3 can give us any additional information that'll be 4 5 helpful. I'll let you return, Mr. Karlson, then to your questioning of Mr. Hirst. And, again, you're referring 6 7 to Rule 4 file, tab 189. Sorry for digression. 8 MR. KARLSON: Sure. 9 JUDGE PAGE: But we need to very carefully 10 track the status of these documents. And if it refers to a different appeal, we need to know what that is. Thank 11 12 you. BY MR. KARLSON: 13 14 So, Mr. Hirst, section 189 that we were 15 just discussing, can you tell me what it is? 16 Α I apologize, but I don't seem to have that 17 book. 18 Q It's going to be up there I think. I've already looked. It's not there. 19 20 Really? Q 21 Unless it's mislabeled. JUDGE PAGE: Mr. Karlson, you may approach 22 23 and share your copy with Mr. Hirst. And once you've located it, Mr. Hirst, I'll ask that you please identify 25 the document for the record.

1	THE WITNESS: Yes, Your Honor. This is the
2	letter that I received concerning the repayment of the
3	unliquidated progress payments on the contract.
4	JUDGE PAGE: And it's dated 29 September
5	2011. Is that correct?
6	THE WITNESS: That is correct, Your Honor.
7	JUDGE PAGE: All right. Thank you, sir.
8	BY MR. KARLSON:
9	Q So when was the Termination for Default,
10	Mr. Hirst?
11	A The Termination for Default, September 26,
12	2011.
13	Q And then you got that letter when?
14	A I'm sorry. I just closed the book.
15	Q Section 189, when did you receive that
16	letter?
17	A The letter is dated September 29, 2011.
18	Q So that's four days later.
19	A Correct. Why that, if I can expand upon
20	that in tying it together with my opinion of bad faith.
21	In my opinion, the decision to Terminate for Default had
22	been made before we even started producing product on
23	interfix 4. For lack of a better term, I think it was
24	scripted. I was very surprised that we would be asked to
25	repay the unliquidated progress payments before going

1	through the appeal process, like we are right now. Very
2	surprised.
3	Q Okay. Do you believe that the Government
4	considered the Mark-124 technical data package a
5	producible package?
6	A No.
7	MR. NEILL: Objection. Foundation. I'm sorry.
8	JUDGE PAGE: Sustained. Please, Mr. Karlson
9	
10	MR. KARLSON: I'm trying to think of a way.
11	JUDGE PAGE: inquire of your witness some
12	preliminary questions for context and background.
13	BY MR. KARLSON:
14	Q Mr. Hirst, you had experience with this
15	tech data package and had made improvements to this tech
16	data package through the course of this contract. Is
17	that true?
18	A Yes.
19	Q Was the tech data package as first
20	delivered to the company producible?
21	A In my opinion, no.
22	Q Were changes made to it to make it
23	producible?
24	A To put it clearly, it was so flawed in my
25	view, you would try to correct one thing and you would

induce another problem. The best example I can give you, 1 you substitute a thicker sealing disk on Interfix 2 and 2 3 3, and it does help stop the leaking. But now we have a 4 separation problem. 5 But didn't another disk come in later that Q then solved that problem? 6 7 Sure. It fixed it or improved it. But 8 again, we're back to long display times on smoke. 9 Okay. Is that a condition you ever tried to 0 fix? Long display times? 10 11 We attempted to. We were working on the last three lots, I think I described before what we did. 12 13 We bore brushed the candles to try to get them to light up a little quicker, burn quicker. 15 Were there other government, this was a multiservice contract. Is that correct? 16 17 To my knowledge --18 Air Force, Navy, Army? 19 To my knowledge the customers were the 20 Navy, the Army and the Air Force --21 Q Were there ---- and the Marines, excuse me. I think the 22 23 Marines also were a customer. 24 Were some of those other stakeholders 25 agreeable to the, or not agreeable to the Termination

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1
      for Default?
                      JUDGE PAGE: Mr. Karlson, I'm going to ask
 2
 3
      you to restate that question. I'm afraid I got lost in
 4
      it.
      BY MR. KARLSON:
 5
 6
                        Sure. Were there agencies procuring these
 7
      devices on this contract through Rock Island that did
 8
      not want to terminate the contract for default?
 9
                        Correct. They were not.
                        Do you have, is there a document we can go
10
11
      to, to look at that?
                  Yes. I would like to please go to tab 288.
12
                      JUDGE PAGE: Rule 4 file, tab 288. Correct?
13
                      THE WITNESS: Yes, Your Honor.
15
                      JUDGE PAGE: Thank you.
      BY MR. KARLSON:
16
17
                        So can you tell us about this document, Mr.
18
      Hirst?
19
                        I think I'd prefer to read the document to
20
      you.
21
                      MR. NEILL: Objection. Lack of foundation.
                      JUDGE PAGE: Mr. Karlson, please ask some
22
23
      preliminary questions for context and background.
                      MR. KARLSON: I think I'll have to wait until
24
25
      of the other witnesses talk and bring it in that way,
```

1	Your Honor.
2	JUDGE PAGE: All right. So you're not going
3	to question Mr. Hirst regarding this document?
4	MR. KARLSON: I don't know that I can
5	JUDGE PAGE: That's fine, sir. It's your
6	choice.
7	MR. KARLSON: Right. Thank you, Your Honor.
8	JUDGE PAGE: Let me ask a question at this
9	point. It's almost 10 until 12. I don't know how much
10	longer your questioning of Mr. Hirst will go.
11	MR. KARLSON: Two questions.
12	JUDGE PAGE: Two questions. Very well then.
13	Please continue.
14	BY MR. KARLSON:
15	Q Do you believe that the Government had
16	already decided to terminate the contract prior to any
17	testing?
18	A I
19	MR. NEILL: Asked and answered I think.
20	JUDGE PAGE: Yes.
20 21	JUDGE PAGE: Yes. BY MR. KARLSON:
21	BY MR. KARLSON:
21 22	BY MR. KARLSON: Q Okay. Good. One question then. How has the
21 22 23	BY MR. KARLSON: Q Okay. Good. One question then. How has the Termination for Default affected PSI from the time it
21 22 23 24	BY MR. KARLSON: Q Okay. Good. One question then. How has the Termination for Default affected PSI from the time it was issued to present?

basically shut out the ability to win any big contract from the Government. All the big contracts government are evaluated under a best value criteria. A component of that best value evaluation is past performance. We had zero chance to get a good rating on past performance with a Termination for Default on our record. We carried a Termination for Default on our record from an incorrect Termination for Default on the M49 that you brought up yesterday. That was later Terminated for Convenience. You string those two events together, we had zero chance of winning a large client contract from the Government. Five years, five years because of that.

Q This contract from 2004 was the last government contract the company was awarded from Rock Island. Is that correct?

A Yes.

MR. KARLSON: No more questions, Your Honor.

JUDGE PAGE: All right. Now, again, it's

getting close to noon and Mr. Neill and Captain Davidson

I will certainly give you the opportunity to cross

examine Mr. Hirst. Before we do that let me, if you

don't mind, I mentioned on break that there were some

very common acronyms that have been used, very familiar

to all of us in dealing in government procurement. But

I just want to go through them and make sure that they

1	are accurately represented in the record. Mr. Hirst if
2	you would, T&H?
3	THE WITNESS: Temperature and humidity.
4	JUDGE PAGE: ECP?
5	THE WITNESS: Engineering Change Proposal, I
6	believe.
7	JUDGE PAGE: TDP?
8	THE WITNESS: Technical Data Package.
9	JUDGE PAGE: LAT?
10	THE WITNESS: Lot Acceptance Test.
11	JUDGE PAGE: T&V
12	THE WITNESS: Transportation and Vibration.
13	JUDGE PAGE: S/N.
14	THE WITNESS: Serial Number.
15	JUDGE PAGE: Now you mentioned an FAT and
16	explained that it was First Article Testing. But was
17	there at some point that you referred to an FAAT/LAT?
18	THE WITNESS: Yes. That's sloppy language on
19	my part. FAAT is the correct acronym for it.
20	JUDGE PAGE: Is that First Article Acceptance
21	Testing, sir?
22	THE WITNESS: That's correct, Your Honor.
23	JUDGE PAGE: All right. Thank you.
24	MR. KARLSON: But it could be combined with
25	an LAT.

1	THE WITNESS: Correct.
2	MR. KARLSON: And that's what I think she's
3	asking?
4	JUDGE PAGE: Mm-hmm. All right. ARDEC?
5	THE WITNESS: ARDEC. May need some help from
6	the Government for what that stands for. It's the
7	MR. KARLSON: Picatinny Arsenal.
8	JUDGE PAGE: It's an acronym for something.
9	Mr. Neill, Captain Davidson, perhaps you can help us
10	with that later.
11	MR. KARLSON: Army Research Engineering
12	JUDGE PAGE: We'll find it out. But I'll ask
13	that you get back to me later
14	MR. KARLSON: All right.
15	JUDGE PAGE: about that. You used the term
16	leaker?
17	THE WITNESS: Yes.
18	JUDGE PAGE: Mr. Hirst, what is a leaker?
19	THE WITNESS: A leaker is a unit that when
20	it's submerged in testing reveals that water has
21	infiltrated into the unit.
22	JUDGE PAGE: All right. Crimping?
23	THE WITNESS: Crimping is a term that
24	describes how this component, the igniter, is adhered to
25	the round. In this particular case, you can see that the

1	crimps are identified by these indentations.
2	JUDGE PAGE: All right. Now you're referring
3	to a particular exhibit here. Tell us what that is
4	please, sir.
5	THE WITNESS: I apologize. This is the inert
6	Mark-124 round that is identified as Exhibit A-1.
7	JUDGE PAGE: And you're pointing down on that
8	tube. About how many inches?
9	THE WITNESS: The crimps from the top of the
10	unit down to where the middle of the crimp is, it's
11	about, it's 750 thousandths, three-quarter of an inch.
12	JUDGE PAGE: Okay. All right. Thank you. I
13	have no further questions. Mr. Karlson have you
14	concluded
15	MR. KARLSON: Yes I have, Your Honor.
16	JUDGE PAGE: your examination of Mr.
17	Hirst?
18	MR. KARLSON: Yes, Your Honor.
19	JUDGE PAGE: We will go off the record.
20	(Whereupon, the above-entitled matter went
21	off the record at 11:52 a.m. and resumed at 1:26 p.m.)
22	JUDGE PAGE: Mr. Neill, before we adjourned
23	we were covering the explanation for several acronyms
24	that were used in Mr. Hirst's testimony. I believe one
25	of the ones I asked about was ARDEC. Sir, do you have an

1	explanation for that acronym?
2	MR. NEILL: Yes, Your Honor. That stands for
3	the US Army Armament Research Development and
4	Engineering Center.
5	JUDGE PAGE: Thank you, sir. All right. Now
6	to confirm again, just once more for the record, Mr.
7	Karlson, you're finished with your examination of Mr.
8	Hirst. Is that correct?
9	MR. KARLSON: Yes, Your Honor.
10	JUDGE PAGE: All right. Thank you. Mr. Neill
11	and/or Captain Davidson, well, excuse me, Mr. Neill or
12	Captain Davidson since we don't permit double teaming,
13	you may begin your questioning of Mr. Hirst. And Mr.
14	Hirst, I remind you that you remain under oath.
15	CROSS-EXAMINATION
16	BY MR. NEILL:
17	Q Okay. Mr. Hirst, you're not an engineer are
18	you?
19	A No, sir.
20	Q Okay. And you have a Masters of Business
21	Administration degree. Is that right?
22	A That's correct.
23	Q Okay. And you began work at PSI in January
24	of 2008. Is that right?
25	A That's correct.

1	Q Okay. So you have no personal knowledge of
2	lot acceptance testing that happened prior to that date,
3	do you?
4	A My personal knowledge in this regard, I
5	reviewed the contract file. That's my knowledge, what's
6	in the contract file.
7	Q But you didn't personally observe it,
8	testing or anything prior to January of 2008, did you?
9	A I did not.
LO	Q Okay. And before you joined, before you
L1	started at PSI you were working elsewhere. Is that
L2	right?
L3	A That's correct.
L 4	Q Okay. Now you began as the point of contact
L5	for the contract at issue in this appeal in April or May
L6	2008. Is that right?
L7	A Yes. When I became the General Manager,
L8	which was in that timeframe.
L9	Q Okay. And who performed that role prior to
20	your taking on that role?
21	A A gentleman by the name of Michael Trotter
22	•
23	Q Okay. And your testimony covered a lot of
24	lot acceptance test reports and other test data. Would
25	you please describe your role in conducting the lot

1	acceptance tests?
2	A My role?
3	Q Mm-hmm.
4	A Ultimately my role was to oversee the
5	manufacture of the lots and to oversee the lot
6	acceptance testing.
7	Q Okay. So you had, your role was an
8	oversight role. You would review reports. Is that right?
9	A That's true. I also witnessed the LAT
10	testing for 4-1 and 4-2 and 3-3A. I personally watched
11	those tests.
12	Q Okay. But you didn't actually conduct the
13	tests yourself, did you?
14	A I did not.
15	Q Okay. But you're familiar with the test
16	from observing it and
17	A Yes.
18	Q providing oversight, sir? Okay. Now on
19	direct examination you mentioned that lot 3-2, lot
20	acceptance testing for lot 3-2 discovered a leaker in
21	that lot. And that caused the lot to, not to meet the
22	acceptance criteria in the contract. Is that right?
23	A That's right.
24	Q Okay. And following that the Government
25	eventually agreed to permit PSI to conduct 100 percent

1 screening of that lot, or re-screening of that lot for 2 leakers. And that following the re-screening that lot was accepted. Is that right? 3 Correct. 4 5 Okay. Now isn't it true that with respect to the re-screening operation for leakers, the re-6 7 screening operation for leakers for lot 2 was the only 8 time in PSI's performance of this contract that such a 9 re-screening operation for leakers was agreed to by the 10 Government? I believe that is incorrect. There was 11 circumstances that happened when the original 11 lots 12 were being formed, where leakers were being detected and 13 14 removed from the lots before they were accepted for the 15 LAT, or submitted for the LATs. But my question, if after a lot failed the 16 Q 17 lot acceptance testing --18 Right. -- there was only one instance in PSI's 19 20 performance of the contract where the Government agreed 21 to permit PSI to go back and re-screen the entire lot for leakers. And that was lot 3-2. Isn't that right? 22 23 That's true. But in the formation of the other 11 lots, the first 11 lots, there was attempts to 25 manufacture the lots where there was leakers detected.

1	And the lots had to be 100 percent, 200 percent,
2	sometimes 300 percent screened before we could get the
3	parts into the LATs.
4	Q Okay. And that all happened before your
5	arrival at PSI.
6	A Correct.
7	Q Is that right?
8	A Correct.
9	Q Okay. So you have no firsthand knowledge of
10	those events.
11	A My firsthand knowledge comes from members
12	of my engineering team that relayed that information to
13	me.
14	Q Okay. So the members of your engineering
15	team would have firsthand knowledge.
16	A Correct.
17	Q But you do not. Is that right?
18	A Correct.
19	Q Okay. All right. Now you did talk about the
20	lot acceptance test results for lot Interfix 1. And
21	isn't it true there were no leakers reported from lot 1-
22	2 through lot 1-9?
23	A That's consistent with the lot acceptance
24	test reports. Correct.
25	Q Okay. Now I'd like to draw your attention

1 to Rule 4, I'll make sure that I have the right tab. Rule 4, tab 209. All right. The document at 209 is a 2 3 letter on PSI letterhead, or a memo on PSI letterhead, 4 dated December 3rd, 2009, to Dean Cower from Barry 5 Lindsey . And the subject is, response to DCMA CAR9295-6 0098 . Are you familiar with this? 7 It's likely that this is a document I would 8 have reviewed before it was submitted, even though I 9 didn't write it. 10 Q Okay. This pertains to the performance of 11 this contract during the period where you were managing 12 the contract on PSI's behalf. Is that right? 13 Yes. Okay. And I just want to draw your 15 attention to the, this letter has to do with lot acceptance tests for lot 3-3. I want to draw your 16 17 attention to the very first paragraph in italics. And it 18 discusses an igniter separating from the outer and inner 19 casing, causing the inner spacer to blow and send the 20 outer casing approximately 140 to 150 feet away. Now is 21 that the critical defect or the critical failure that you testified about earlier in lot 3-3? 22 23 Α It is. 24 Following that, the last sentence in that 25 paragraph mentions other issues. It says the igniter

1 came off during function on the following rounds also: 44, 38, 22 and 18. Do you have any recollection of other 2 igniter separations in lot 3-3 other than the 3 4 catastrophic one? 5 I don't. Okay. All right. Now did, and I think 6 7 you've admitted it, PSI initially investigated the lot acceptance test failure for lot 3-3 and determined that 8 9 the root cause was related to the crimp, PSI's crimping process. Is that right? 10 11 At that time we thought so, yes. 12 Okay. All right. Now you mentioned the SAIC contract. And isn't it true that the work that PSI did 13 on that was to qualify alternative sealing processes? 15 I would not say that. 16 Q Okay. 17 I'd rather say that it was to qualify 18 alternative sealing disks. 19 Alternative sealing disks? Okay. And why 20 did PSI stop using the 433L sealing disk material? 21 Α It was discontinued after lot 01-11 because of all the leakers that were occurring. That's evidenced 22 23 in the comments on the right hand side under those two 24 lots. That there was three leakers in lot 10 and 9 and 25 lot 11.

1	Q So did PSI have a problem with the source
2	of supply of this disk at that point in time?
3	A We had a problem with the disk.
4	Q With the disk itself?
5	A The disk itself.
6	Q But PSI had used that disk successfully in
7	lots 1-2 through 1-8, 1-9. Isn't that right?
8	A I disagree. We had to through sweat equity
9	get the lots to pass through repeated in-process leak
10	checking, 100 percent, 200 percent, 300 percent
11	sometimes. Just to get a lot that we could present an
12	LAT sample and have a fighter's chance of having it
13	pass.
14	Q Okay. And that was during the period prior
15	to your coming to PSI. Is that right?
16	A Correct.
17	Q Okay. So did PSI determine that there was
18	some problem with the manufacture of the 433L sealing
19	disk material?
20	A What I recall, there was some discussion
21	about the 3M material changing the source of
22	manufacture. I don't know if it was internal to the
23	United States. I seem to remember that somebody thought
24	that they'd move their plant to Mexico. And even though
25	they were producing disks that adhered to their

1	specification, that that adhesion was not good enough to
2	seal these rounds. That's what I recall.
3	Q Okay. Now did
4	A And incidentally, all that information was
5	rhetorical. It just was picked up from discussions. I
6	listened to other people talk about it.
7	Q Okay. Now are you aware that PSI requested
8	to use the 3M 363L sealing disk material?
9	A Yes.
10	Q Okay. And if you turn to tab 210, please.
11	And are you familiar with that?
12	A I believe I looked at this, at least the
13	deviation, prior to coming here today. I don't recall
14	the attachments, the test report, but I recall looking
15	at the deviation.
16	Q Okay. And it says, I recognize the date at
17	the top of this is 5 November 2007. The first page of
18	the tab is a DD form 1694, request for deviation or
19	waiver. And it's signed, appears to have Michael
20	Trotter's signature on the bottom. So this would have
21	been done prior to your arrival. Is that right?
22	A That's correct.
23	Q Okay. But you're aware that PSI did submit
24	a request to use the 363L sealing disk material, didn't
25	it?

1	A My knowledge is that we did and we did that
2	working closely with the Government's engineering group.
3	Q Okay. And from your review of the records
4	and from talking to other people, I mean, you're
5	satisfied that PSI conducted some tests of that 363L
6	A Yes.
7	Q sealing disk material before submitting
8	that request?
9	A Yes.
10	Q Okay. And the 363L material passed those
11	tests, didn't it?
12	A I don't know that it did, personally. But
13	from reading the report it appears that it did.
14	Q Okay. If you turn to page 2 of tab 210,
15	it's a letter on PSI letterhead dated November 9th,
16	2007, addressed to Julie Kophlin . And
17	A Excuse me, Mr. Neill. I'm lost. Where do I
18	
19	Q Oh, I'm sorry. 210, page 2.
20	A Okay. I got it.
21	Q And are you familiar with Julie Kophlin?
22	A Yes.
23	Q And who's Julie Kophlin?
24	A She was the, I'm not sure of her exact
25	title and I apologize, but she was the, I believe, the

1	contract specialist for this contract.
2	Q Okay. All right. And are you familiar at
3	all with Mike Trotter's signature?
4	A Yes.
5	Q Okay. Does that appear to be his signature
6	on the document?
7	A It appears to be.
8	Q Okay. And the letter reports that the
9	engineering testing was performed to assure capability
LO	of new material to be used on all future manufacture of
L1	reference 1 and 3, which is a reference to the contract
L2	and Mary Adam's letter dated 6 November 2007. And
L3	forwards test results to Rock Island. Is that correct?
L 4	A That's correct. But as I read this letter,
L5	I say that there's a troublesome note in here that
L6	doesn't appear to be accurate.
L7	Q Oh. And what's that?
L8	A Under the note, where they're talking about
L9	the one misfire, they're talking about utilizing the 427
20	aluminum foil tape material.
21	Q Mm-hmm.
22	A I have no knowledge of that material.
23	Q Okay. So the letter reports that candidates
24	tested were the 363L high temperature aluminum
25	foil/glass cloth tape.

1	A Okay.
2	Q And then below that 427 aluminum foil tape.
3	And it reports test results, I guess, for each of those
4	materials.
5	A I understand now.
6	Q Is that correct?
7	A Yes.
8	Q Yes. Okay. So I'm not going to All
9	right. So this testing was performed for the 363L
10	material that was used in lot Interfixes 2 and 3 for the
11	contract. Is that right?
12	A That's right.
13	Q Okay. And then for lot Interfix 4, PSI used
14	the 3M 433 foil tape material. Is that right?
15	A That's correct. And it also had a custom
16	backing to improve the adhesion.
17	Q Okay. And isn't the 433 tape essentially the
18	same as the 433L tape?
19	A To my knowledge it is.
20	Q Okay. And can you explain the slight
21	difference?
22	A Some slight difference. The difference is in
23	the adhesion. There was a custom backing put onto the
24	tape to make it stick better. To use the standard 3M
25	433L, L designates liner. That liner will not give you

1 the adhesion that you're looking for to stop the unit from leaking. That was the deliverable on the SAIC 2 contract. That is the disk that we determined from 3 4 testing we wanted to use. 5 Okay. Isn't the adhesion strength for the 433 Q 6 tape and the 433L tape very similar? 7 Α No. Isn't it 40 ounces per inch versus 38 ounces 8 9 per inch? 10 Α No. 11 Okay. All right. When PSI switched back to, 12 or switched to the 3M 433 aluminum foil tape, did PSI 13 request approval to use that? Could you please restate the question, Mr. Neill? 15 Yes. PSI didn't need government approval to 16 17 use the 433 aluminum foil tape, did it? 18 I believe we did need approval. 19 Okay. 20 I asked, I specifically asked the team that 21 came down in that March 2011 meeting that I said in my previous testimony. At that meeting that was discussed. 22 23 And I asked, do we have permission to move forward with 24 this new sealing disk. Only at that moment in time did 25 I feel like we had approval to use it.

1	Q Okay. But you don't recall a specific request
2	for deviation to use that material?
3	A No.
4	Q Okay. Because it wasn't a deviation, was it?
5	A I asked the Government what I needed to do to
6	be able to use it. They told me it was within the
7	boundaries of the TDPo 1 to go ahead and use it.
8	Q Okay. All right. You talked in your testimony
9	about torque testing rounds or signals in the presence
LO	of government witnesses. And I wanted to ask you about
L1	that. I think that was in the discussion of lot 3-3A. Is
L2	that right?
L3	A That's right.
L 4	Q Okay. And at that point in time, can you
L5	please describe the, I think you already did describe
L6	the torque test that PSI used. Was PSI employing a
L7	reference line at that point in time when it conducted
L8	the torque test on 3-3A?
L9	A No, we were not.
20	Q Okay. Now you talked about lot 2-1 and lot 2-
21	2, the lot acceptance test results for those two lots.
22	Those were both conducted prior to your taking over
23	management of the contract for PSI. Isn't that right?
24	A Correct.
25	Q Okay. Okay. All right. And you talked about

1	igniter separations and that's one of the issues in the
2	appeal. I'd like you to, are you familiar with the
3	drawings and specifications that are incorporated in the
4	contract?
5	A Yes.
6	Q Okay. If you'd please turn to tab 22. Are you
7	there?
8	A Yes.
9	Q Okay. Do you recognize this?
10	A I recognize it.
11	Q Okay. And what is it?
12	A I believe what it's called is the test
13	specification for the Mark-124.
14	Q Okay. All right. And if you turn to page 4 of
15	tab 22, I'd like to draw your attention to paragraph
16	3.5.1.1, function. Now are you familiar with that
17	particular paragraph of the specification?
18	A Yes.
19	Q Okay. And was PSI when it conducted its First
20	Article tests and lot acceptance tests was testing to
21	meet the criteria to find essentially in that paragraph,
22	wasn't it?
23	A No.
24	Q No? And why not?
25	A The test reference table, table 1, under

1	smoke does not reflect the approved deviation to have
2	the maximum times for display at 25 seconds.
3	Q Okay. So in looking in 3.5.1.1, subparagraph
4	D, display times, there is a table captioned, test
5	reference of table 1. It has some headings across the
6	top. Flare and then in parens, sec, which stands for
7	seconds if I'm correct. Is that right?
8	A Yes.
9	Q And then column it says smoke sec, and it has
10	columns of minimum and maximum times in seconds. And so
11	if I understood you to say, the maximum smoke time
12	column is incorrect in this specification, at least
13	during the times in question, because a Request for
14	Deviation had been approved extending that time to 25
15	seconds. Is that right?
16	A The test spec was extended when we requested
17	a deviation to extend it to 25 seconds.
18	Q Okay. So like
19	A Some of the lots prior to that, I believe
20	this was the criteria that was used after the deviation
21	was approved, the new requirement of 25 across the board
22	was used. That's my knowledge.
23	Q Okay. And so if you read across the first
24	line in that table it says, 5 foot drop and then it has
25	a paragraph number in parentheses, 4.5.2.1. To what does

1	that refer?
2	A I'm not really sure. It's probably cross
3	referencing to another section of the test report.
4	Q Okay. And if you follow that across the line,
5	when you get to the end of the line there's the number
6	19. Due to the approved Request for Deviation that
7	number should be 25. Is that right?
8	A That is right.
9	Q Okay. And the same thing for all the numbers
10	in that far right column. Those should all read 25. Is
11	that right?
12	A That's right.
13	Q And that's what PSI and the Government were
14	using at the time lot 3A was tested and at the time lots
15	4A-1, 4-2 and 4-3 were tested. Isn't that right?
16	A That's not right.
17	Q That's not right?
18	A No. As I explained before, the QAR muddied
19	the water and wanted to have us write our reports
20	opposite these requirements. So our test reports are
21	misleading because we were directed that we had to
22	indicate the actual times, the smoke display times and
23	not compare them to 25 seconds unilaterally. But to
24	compare to these previously stated thresholds in the
25	original spec, prior to the deviation being approved.

1	Q And is there a particular lot acceptance test
2	report that you can refer me to that demonstrates that?
3	A Certainly, if you're willing to help me find
4	it.
5	Q Sure, right. I'll look. I think it's tab
6	A Let's look at 4-2, the LATR for that, please.
7	Q Okay. Let's look at, turn to tab 284, please.
8	Page 38. Is that the report that you're referring to?
9	A Just give me a moment, please. Yes. This is
LO	the report that I asked you to help me find.
L1	Q Okay.
L2	A Yes. I'd point your attention, please, to
L3	page 43, paragraph 4.
L 4	Q Okay. So there's an error in paragraph 4. Is
L5	that correct?
L6	A No. No, there's not an error. It accurately
L7	represents that the display times for high temperature
8.	function were 21.36, 19.05 and 18.31. And the wording
L9	indicates that those did not meet the requirements. The
20	requirements we were told we had to use incorrectly,
21	were the original test table that I told you was not in
22	place at this moment in time. This is post the RFD being
23	approved. I went to Mr. Bowen for some help on this
24	issue. Asked him to help us explain to Mr. Cower that we
25	were using the 25 second display time across the board.

1	And he did help in that regard. He helped us, he helped
2	clarify it.
3	Q Okay.
4	A In my opinion that should read that they all
5	passed test. Because they did. They were all below 25
6	seconds. Go back to the old table, which I've
7	unfortunately closed my book on.
8	Q Okay.
9	A And if you read that, it'll call out a time,
LO	I think, of 19 seconds.
L1	Q Okay. And did you raise that with the
L2	contracting officer?
L3	A I don't recall if I did or not. I raised it
L 4	with Kevin Bowen.
L5	Q Okay. And that resolved the issue?
L6	A I don't know. I don't remember. I think it
L7	helped us move on.
L8	Q Okay. And I don't think there was any
L9	dispute, was there? That the time was 25 seconds?
20	A No. He helped, like I said, he helped me
21	clarify it for the benefit of Mr. Cower.
22	Q Okay. Now I wanted to ask you about, turning
23	back to tab 22.
24	A Okay.
25	Q Okay. Looking at page 4 in tab tab 22,

1 paragraph 3.5.1.1, subparagraph E, safety function. And then in parentheses it say C8. Do you know what the C 2 3 designates in that paragraph? 4 I don't know definitively. I believe it indicates it is a critical. 5 Okay. It's a critical characteristic. Is this 6 7 the paragraph, 3.5.1.1(e), safety function, which reads, during function igniter shall not separate from the 8 9 outer container. That was at issue in lot 3-3? 10 Yes. Yes. So when PSI had the so-called 11 catastrophic failure, that was an example of this, of 12 not meeting this criterion. Is that right? 13 It's one example. 15 Q One example. 16 It's the extreme example. 17 Okay. And the discussion about lot 3-3A in 18 which the igniter assembly fell off while the flare was 19 still burning, it's the interpretation of this paragraph 20 that's at issue in whether or not that was a critical 21 defect. Is that right? Restate the question, please. 22 23 Well whether or not the event that PSI 24 observed in testing of lot 3-3A, the reworked lot in 25 which the igniter assembly, I believe you testified that

1	it fell off the flare before the, while the flare was,
2	and was still burning, before it had completely burned
3	out.
4	A Mm-hmm.
5	Q Whether or not that was a critical defect.
6	That it's this paragraph that's at issue and the
7	interpretation of this paragraph that's at issue in
8	determining whether or not that was a critical defect.
9	Would you agree with that?
LO	A Yes.
L1	Q Okay. And would you please explain PSI's
L2	interpretation of this paragraph 3.5.1.1(e)?
L3	A PSI's interpretation is what it says. The key
L 4	word I think is function. We interpret function to mean,
L5	in the case of the smoke candle, and I believe it would
L6	be flare too, that the display has been completed.
L7	Q Okay. And function is mentioned in 3.5.1.1
L8	paragraph B, is it no?
L9	A Yes.
20	Q Okay. And that paragraph says ignite and
21	produce a display from both ends. Is that correct?
22	A Yes, it does.
23	Q Okay. Okay. Now I'm sorry to jump around. But
24	going back to the rescreening process for leakers that
25	was employed after lot 3-2 did not pass the lot

acceptance test initially. Do you have any knowledge of 1 2 the effort that was involved in the rescreening process for leakers? 3 4 Yes. 5 Okay. I do. 6 Α 7 Q Can you describe it? 8 Yes. The entire lot was screened. Meaning 9 there's a dunk tank. It's a poor description of it but 10 that's what it is, a dunk tank. You submerge the unit in, I believe, our fixture can hold four rounds at a 11 time. And they're submerged for a certain period of 12 time. And the indication as to whether or not the round 13 is leaking or not is a continuous stream of bubbles. 14 15 Q Okay. So --16 17 Does there have to be a vacuum --18 Yes. -- maintained in that chamber. 19 That's right. Yes. 20 Α 21 Okay. 22 So every one of those rounds would have gone 23 through that test. Every one of those rounds, I believe, I don't know if Mr. Cower or Mr. Barryman relaxed it. 25 If they did it wasn't very much. I think they watched

1	everything we did. Because it took so long. We had to be
2	careful with their schedule that they could do only a
3	certain portion of their day to watch us do this.
4	Q Okay. And a lot consisted of several thousand
5	signals. Is that right?
6	A It does. I don't recall exactly how many were
7	in this one. I could find it for you if it's important.
8	Q Okay. And so those would have had to go into
9	the test equipment
10	A Right.
11	Q Mr four at a time.
12	A I think it was four at a time. I may be wrong
13	on that. But it was
14	Q Okay.
15	A it was, there was multiple rounds you
16	could put in at a time.
17	Q All right. And so to rescreen an entire lot
18	of, say 10,000 units would take quite a bit of time,
19	wouldn't it?
20	A It would take a good deal of time, yes.
21	Q Okay.
22	A There was a
23	Q Yes.
24	A on that item, when we were discussing
25	rescreening this, there was an alternative test plan

1	that was offered where we could, I believe, do it on a
2	sample basis. But the criteria for accepting or failing
3	was much more severe. So we opted to do the 100 percent
4	leak check. I'm a little sketchy on what it was, but I
5	know there was an alternative proposal that was given to
6	us on how to do it.
7	Q Okay. Now PSI's manufacturing process for the
8	Mark-124 included in processing leak checks, did it not?
9	A Yes, it did.
10	Q Okay. So by the time a unit would get to the
11	point of lot acceptance testing, it had already been
12	tested for leaks hadn't it?
13	A Right.
14	Q Okay. And yet there were still leaks that
15	were discovered
16	A Yes.
17	Q or leakers discovered in lot acceptance
18	testing.
19	A That's not uncommon. We saw that in LAT
20	tests, where would have in the LAT parts. Rounds would
21	pass the initial leak test and later leak for no
22	apparent reason.
23	Q Okay. I wanted to ask you if you'd turn to
24	page 5 of tab 22.
25	A Yes.

1	Q Okay. And look at paragraph 3.5.2.7, sealing.
2	And in parentheses it says M105.
3	A Okay.
4	Q And it reads, the signal shall withstand a
5	vacuum of 6.0 plus or minus 1.0 inches of mercury below
6	atmospheric for a minimum period of 60 seconds without
7	signs of leakage when tested in accordance with 4.5.2.7.
8	And so does that, what's your understanding of that
9	paragraph?
LO	A Just what it says.
L1	Q So when we're talking about leakers, we're
L2	talking about signals that do not meet the standard in
L3	that paragraph. Is that right?
L 4	A Right. These would be units that exhibited
L5	escape of air bubbles in the water.
L6	Q Okay.
L7	A Which I might mention was refereed quite
L8	often. Sometimes we had a lot of bubbles and there was
L9	no question. Sometimes there were quantities of less
20	bubbles and that was, you know, a point of contention
21	between the Government and PSI.
22	Q Okay.
23	A What is a leaker?
24	Q All right. If you'll turn to page 8, pages 8
25	and 9. Are you familiar with those?

1	A I'm familiar with them. Yes.
2	Q Okay. And does that, what are they?
3	A This is a matrix that shows you the different
4	testing that's done during LAT. And it tells you under
5	the First Article requirements what the sample size is.
6	The accept/fail criteria. On the right hand column
7	you're given the requirements for the LATs under Plan 2.
8	And the same thing. How many signals to test. How many
9	failures are allowed. And how many failures would fail
10	the lot.
11	Q Okay. And this table is the same table that
12	was in effect from the, during the entire period of
13	performance of the contract, isn't it?
14	A I'm not sure.
15	Q Okay. Are you aware of any changes to it?
16	A Yes. I mean, the one I told you about, the
17	display times. That was different.
18	Q But that wouldn't change the table here. That
19	would just change
20	A It wouldn't change the table but it would
21	support that when you had an item that was below 25
22	seconds and you used this table and you called it a
23	reject, you could fail the lot.
24	Q Okay. Now if you look at the left hand
25	column, fifth row, it begins with the word sealing.

1	A Yes.
2	Q And then it has a paragraph reference in
3	parentheses 4.5.2.7. And it reads across, in the First
4	Article sampling plans column, sample size 100 percent
5	of sample. So, I mean, you're doing First Article
6	testing every, 100 percent, all the items in the sample
7	would be tested for the sealing function. Is that right?
8	A That's right.
9	Q Okay. And then in the next column it says,
10	acceptance criteria, ACORE1. What's your understanding
11	of that?
12	A It means that you can accept and pass it if
13	there's zero failures of sealing function. And you
14	reject the lot if there's one leaker detected.
15	Q Okay. Now after that there's two columns.
16	Plan A and Plan B in the inspection lot sampling plans
17	column. Do you have an understanding, do you understand
18	the Plan A and Plan B?
19	A Honestly, no.
20	Q Okay.
21	A I don't recall what those mean.
22	Q All right. So this table outlines the various
23	tests that were performed in inspection testing or First
24	Article testing. So the sealing test appears in
25	different places, does it not?

1	A	Yes.
2	Q	Okay. And could you explain that? There's an
3	initial sealing	test where 100 percent of the sample is
4	subjected to the	sealing test. Is that right?
5	A	You're asking me during LAT, sir?
6	Q	During
7	A	Or First Article?
8	Q	LAT and First Article.
9	A	Yes.
10	Q	Okay. So every First Article test, every LAT
11	test, 100 percen	t of the sample is subjected to that
12	initial sealing	
13	A	Correct.
14	Q	function test. Okay. Then if you follow
15	down to the next	line, just by way of example, the 5
16	foot drop row. F	ollowing that across it mentions sample
17	size 5 signals.	So 5 signals, that means 5 signals were
18	subjected to the	5 foot drop test. Is that right?
19	A	That's correct.
20	Q	Okay. And it also, there's a line that says
21	sealing, 4.5.2.7	. And you follow that across. So after
22	the 5 foot drop	tests, were the 5 foot drop samples also
23	subjected to ano	ther sealing test?
24	A	Yes, they were.
25	Q	Okay. And their acceptance and rejection

1	criteria defined for that sealing test after the 5 foot
2	drop test. Correct?
3	A Yes.
4	Q Okay. And that's the same thing after the
5	transportation and vibration test. Is that right?
6	A That's right.
7	Q Okay. And after the temperature and humidity
8	test there's not a sealing test listed there, is there?
9	A There is not.
10	Q Okay. Nor after the high temperature test?
11	A Correct.
12	Q Or low temperature test?
13	A Correct.
14	Q And just, I mean, for the sake of
15	clarification, then there's another, if you flip to the
16	next page, page 9, and there's the fourth line down. The
17	row begins, function and it says, I believe, 4.5.1.1. Is
18	that the ambient temperature test described in that row?
19	It doesn't say ambient temperature test but
20	JUDGE PAGE: Forgive me, Mr. Neill. But my
21	copy has 4.5. and then the numbers are obscured.
22	MR. NEILL: Something point something. Yes.
23	JUDGE PAGE: I'll accept your representation
24	if it's .1.1 if Mr. Hirst agrees.
25	MR. NEILL: Yes. It's unclear on my copy as

1 well, Your Honor. But it's the same function paragraph that's defined in each of the preceding test procedures 2 next to the word function. 3 4 JUDGE PAGE: All right. Mr. Hirst, will you 5 accept that it's 4.5.1.1? Or do you have a question about that? 6 7 THE WITNESS: I have no question. JUDGE PAGE: All right. Thank you. 8 9 BY MR. NEILL: Yes. No, and I, and the purpose of the my 10 Q 11 question, the lot acceptance test reports, sometimes 12 they refer to a test as outside and sometimes they'll 13 say ambient. And my question is that, on those sheets where it says outside or ambient, it's referring to this 15 test. Not the high temperature. Not the low temperature. But the one that just says function. Is that right? 16 17 I can tell you this much that the reports 18 that say outside are the ambients. 19 Q Okay. 20 But this function test, how that matches, I'm 21 not sure. Q Okay. And if you look at the table, is there 22 23 any description of a test there that says ambient? 24 I'm sorry, I don't see it. 25 Okay. Now the, just so, you know, if you can Q

1	I'd like you to just explain how the smoke display time
2	acceptance and rejection criteria is defined in this
3	table. And you can use an example if you'd like. In
4	fact, why don't you turn to page 9 to look at low
5	temperature?
6	A Mm-hmm.
7	Q The low temperature row, which is the third
8	row from the top.
9	A Right. Okay.
10	Q Okay. And I think you're going to have to
11	look at paragraph 3.5.1.1 at the same time.
12	A What page is that again? I'm getting lost.
13	Q Page 4.
14	A Page 4. Okay.
15	Q Okay. If you look over the third column in
16	that row.
17	A Okay.
18	Q There's all the way to sort of the bottom of
19	the cell in the table, it says C&D in parentheses.
20	A Yes.
21	Q Okay. And it says accept 3, reject 4.
22	A Mm-hmm.
23	Q Okay. Is that consistent with your
24	recollection of the smoke display time that you could
25	have 3 smoke display times that were not consistent with

1 the subparagraph D of 3.5.1.1 and that lot would be 2 accepted. If there were 4, that defines rejection? That's for paragraph C&D, so I guess for delay and 3 4 display times. 5 Initially, Mr. Neill, you asked me about low Α 6 temperature. You're asking me about ambients now? 7 No. I'm asking you about the low temperature. 8 And I'm trying to find where, if you agree with that 9 interpretation --I don't agree with it. 10 11 -- that the delay times, the delay time 12 acceptance criteria is defined or, the display time acceptance criteria is defined here in the table for the 13 low temperature testing in that third cell from the left 15 in the low temperature row. 16 Yes. 17 In the very bottom of the cell it says, 18 accept on 3, reject on 4. 19 Mr. Neill, my table says something different. 20 Under low temperature function it says accept on 1, 21 reject on 2 for C&D. What you're referring to, what I think you're referring to is the function section below 22 23 it. Which I believe is the ambients. 24 I'm sorry. I was looking in the First Article 25 sampling plan column. So that may have been the source

1	of confusion. I'm sorry. So if you follow all the way
2	across
3	A I want to tell you yes but
4	Q Yes, no, no. In the inspection lot sampling
5	plan. So for example, the lot acceptance test criteria
6	for lots 4-2 and 4-3 would involve the inspection lot
7	sampling plan. Is that right? That column? Acceptance
8	criteria defined in that column?
9	A Yes. It would be the inspection lot sampling
LO	plan. Not the First Article sampling plan.
L1	Q Not the First Article.
L2	A Because we had met that requirement with the
L3	first lot, 04A-001.
L 4	Q And then the, so the display time acceptance
L5	criteria is defined in that cell in the low temperature
L6	row, farthest cell to the right for subparagraph C&D,
L7	which would be delay time and display times. Accept on
L8	2, reject on 3.
L9	A Correct. It's a little confusing the way it's
20	worded. I think I told you before it's accept on 1. But
21	that's incorrect. You have to read the C&D, identify
22	that, and below it, it tells you the accept/fail
23	criteria. Accept on 2, reject on 3.
24	Q Okay. Okay. And the purpose of going through
25	that, the table is a little bit confusing. I just wanted

1	to make sure I understood your interpretation. Now if
2	you turn to page 10. Oh, I'm sorry. Page 9. And at the
3	bottom, near the bottom of the page there's paragraph
4	4.5.1.1, function test. Okay. This paragraph describes
5	the test procedures. Is that right? The function test
6	procedure?
7	A Excuse me a second. I just want to read it.
8	Q Okay.
9	A Yes. That appears to detail how we did, in
10	fact, do the function test.
11	Q Okay. And then if you turn to page 10, there
12	is a line that begins with the word defectives. It's
13	about two inches down from the top. Do you see that
14	line?
15	A Yes.
16	Q And it reads, defectives are signals failing
17	to meet the requirements of 3.5.1.1.
	to meet the requirements of 3.3.1.1.
18	A Mm-hmm.
18 19	
	A Mm-hmm.
19	A Mm-hmm. Q And is that consistent with PSI's
19 20	A Mm-hmm. Q And is that consistent with PSI's interpretation of the specification that the defectives
19 20 21	A Mm-hmm. Q And is that consistent with PSI's interpretation of the specification that the defectives are defined by signals that fail to meet the
19 20 21 22	A Mm-hmm. Q And is that consistent with PSI's interpretation of the specification that the defectives are defined by signals that fail to meet the requirements of 3.5.1.1?
19 20 21 22 23	A Mm-hmm. Q And is that consistent with PSI's interpretation of the specification that the defectives are defined by signals that fail to meet the requirements of 3.5.1.1? A The wording is unclear to me as to what

1 at 3.5.1.1(e), safety function, which reads, during 2 function igniter shall not separate from the outer container. And if a signal failed to meet that 3 requirement in 3.5.1.1, it would be defined by the 4 5 specification as defective. Would you agree with that? That's the way it's worded. 6 7 Q Okay. And if you turn to page 11, paragraph 8 4.5.2.7. 9 Α 4.5.2.7? 10 4.5.2.7, yes. Q 11 Yes. 12 Sealing test. 13 Yes. 14 And does that describe the sealing test 15 procedure that PSI employed in the lot acceptance testing and First Article testing? 16 17 Α It does. I would point to the last paragraph 18 of that section. The sentence beginning leakers. Leakers are indicated by air bubbles issuing from the signal. As 19 I mentioned before, it was very difficult to get 20 21 consensus on how many air bubbles were not a leak and 22 how many were a leak. Very confusing. 23 Okay. Yes, the sentence following that says, do not mistake the escape of occluded air for leakage. 25 Do you have an understanding of what that means?

1	A I believe what it means is, is that when the
2	parts are under vacuum they naturally will emit some
3	air.
4	Q Just from placing them in the water bath. Is
5	that
6	A Right. And then when the go under vacuum.
7	Correct
8	Q Okay. And then the last sentence in that
9	paragraph reads, defectives are signals failing to meet
10	the requirements of 3.5.2.7. So if we go back to page 5,
11	that reference refers back to 3.5.2.7, sealing, which
12	describes that sealing characteristic. Is that right?
13	A Yes.
14	Q Okay. So in your testimony, when you talked
15	about leakers, you were discussing signals that in the
16	course of testing, either First Article testing or lot
17	acceptance testing, failed to meet that standard in
18	3.5.2.7. Correct?
19	A In part. In part I was. In other parts I was
20	talking about the difficulty during the in process
21	testing to get the units to stop leaking. Which I
22	described before. With the 100 percent leak checks.
23	Sometimes we did it 200, sometimes we did it 300
24	percent. Because we could not get the parts to stop
25	leaking.

1	Q Okay. Okay. Now you testified about a meeting
2	in March 2011 with the contracting officer, the product
3	quality managers from Rock Island, quality assurance
4	representatives and PSI's engineering staff. You
5	mentioned testing T&H samples from lot 3-3A during that
6	week. Do you, are you aware of any document, and I
7	believe you were referring to the torque test? Is that
8	right?
9	A Yes. I was referring to, there was a torque
10	test done in conjunction with this relative movement
11	requirement with a vertical line being drawn.
12	Q Okay. And are you aware of any documentation
13	of that testing of the temperature and humidity samples
14	from lot 3-3A?
15	A I'm not sure if there's documentation or not.
16	Q Now you referred to checking for relative
17	movement using this torque test as a new test
18	requirement. I'd ask you to please turn to tab 97. Just
19	take a look at page 2 of 97.
20	A Is page 2 a drawing?
21	Q That's at page, oh, I'm sorry. It's page 3
22	for you because this is the one
23	A I have a double sided copy.
24	Q Because you have a double sided copy. And
25	this is the document that the existing page 2 in the

1 Rule 4 file was illegible and we had previously added or substituted a clearer copy of the drawing, which in my 2 3 copy is page 2 but in your copy is page 3. And it has a 4 number at the top, 3139733, in the upper right hand 5 corner. Is this one of the drawings for the Mark-124 6 signal? 7 Yes. Yes, it is. Okay. And isn't it true that the requirement 8 Q 9 for relative movement, I guess between item 12 and item 15 in the drawing, are defined in the drawing? 10 11 Α 12 and 15? 12 Right. 13 My notes only go to 13. No. It says, I'll draw your attention to note 15 10. 16 Α Note 10, yes. 17 Yes. And it has in parentheses on the left 18 M103. And am I correct in interpreting that as meaning 19 that that's a major characteristic because of the M? 20 I believe that to be correct. The M indicates major. 21 Q Okay. And note 10 reads, after crimping item 22 23 12 and item 15 shall not be damaged and shall be capable 24 of withstanding a torque of 20 inch pounds minimum with 25 item 1, without relative movement. Is that the

1	characteristic that was being checked with the torque
2	test?
3	A Yes.
4	Q Okay. And, yes, I believe you, in your
5	testimony you illustrated using the exhibit inert marked
6	24, the two items, or the two parts of the signal that
7	you were checking for relative movement for. So I'm not
8	going to ask you about that. Now while we are on this
9	drawing I wanted to ask you about note 13 which reads,
LO	alignment pin of item 12 shall be an alignment pin hole
11	of item 10 after crimping. Are you familiar with that
L2	characteristic?
13	A I'm familiar with it. I'm not an expert of
L4	exactly telling you what that means in assembly. I have
15	people who work for me that can explain that to you.
16	Q Okay. And you testified about lot 4-3.
L7	JUDGE PAGE: Mr. Neill, forgive me. But I
L8	want to inquire of Mr. Hirst since he's been on the
L9	stand all day. Would this be a good time for you to take
20	a brief break?
21	THE WITNESS: I'm neutral. I can keep going
22	or I can take a break.
23	JUDGE PAGE: All right. Up to you. If you're
24	comfortable then we'll continue.
25	THE WITNESS: I'm comfortable.

1	JUDGE PAGE: Let's plan on taking a break at
2	least, say 3 o'clock. It's a quarter until now, if
3	that's convenient.
4	MR. NEILL: Sure. That's no problem, Your
5	Honor. Okay.
6	BY MR. NEILL:
7	Q All right. So going back to note 10, that
8	note 10 was not a new requirement was it?
9	A Note 10 was not a new requirement. What was
10	a new requirement was drawing the line and refereeing
11	and defining what relative movement was.
12	Q Okay.
13	A Relative movement meant different things to
14	different people.
15	Q Yes. Without relative movement. Would you
16	please explain what your interpretation of without
17	relative movement is?
18	A Relative movement, the requirement we were
19	told we had to comply with, I can tell you that. That
20	the line
21	Q No. Please answer the question that I asked.
22	A Then please ask it again.
23	Q Yes. What's your interpretation of the phrase
24	in note 10, without relative movement?
25	A That when you do the, conduct the torque

1	test, the intent is that you do not move the igniter. It
2	does not move. And that it's snug and is crimped down
3	good. That you can't ascertain movement.
4	Q So the igniter portion of flare would not
5	move with respect to the aluminum housing. The housing
6	of the
7	A Yes. The outer container.
8	Q outer container. Okay. Now without using
9	a reference line, how was PSI able to discern whether or
10	not there was any relative movement in the igniter
11	assembly in the course of this torque test?
12	A All of the 11 lots on Interfix 1 and all of
13	the subsequent 6 lots built on Interfix 2 and 3, the way
14	it was detected was by the operators and the drop floor
15	inspectors looking for movement when the torque wrench
16	was applied and pressure was exerted.
17	Q Okay. And in lot, Interfix 4, PSI used the
18	reference line in the course of the torque test. Is that
19	right?
20	A That's right.
21	Q Okay.
22	A I would add also that we passed all the
23	requirements for those three lots.
24	Q Okay. Now before the lot 4A-01, which people
25	have referred to as the FAAT/LAT, there were two prior

1	First Article tests. Is that right?
2	A That's right.
3	Q Okay. And the first of those First Article
4	tests resulted in a number of leakers. Is that right?
5	A That is correct.
6	Q And PSI determined that the root cause of
7	that problem was crimping. Is that right?
8	A It was determined to be the root cause that
9	it was over crimping. We increased the pressure of the
LO	crimping machine from its normal 700 to 750 psi to 900
1	psi because we were so spooked about passing this new
L 2	relative movement test with this line. We wanted to do
L3	everything we could to make sure that we passed that
L 4	test. And unfortunately what we did is we over crimped
L5	the units to the point where we flexed the primer holder
L6	to create a very significant leak path. And that's why
L7	we failed.
. 8	Q And after that, the First Article test
. 9	failure, PSI received a Cure Notice from the contracting
20	officer. Is that right?
21	A That's right.
22	Q And if we turn to Rule 4, tab 152 and look at
23	page 2. Okay. This is the contracting officer's Cure
24	Notice to PSI, is it not?
25	A I'm sorry, Mr. Neill. My page 2 does not say

1	that. It's a letter that indicates that the FATR for 4A-
2	002, it's rejecting one of the First Article tests
3	Q Oh. Are you looking at Rule 4, tab 152?
4	A I am not.
5	Q The first page is, it looks like an email
6	from Anna Marquis to PSI.BobHirst@windstream.net.
7	That's your email address isn't it?
8	A Yes.
9	Q Okay. Copying a number of people. And the
10	subject line reads W52D1J-04-C-00984 MK-124 Signals Cure
11	Notice. And it had attached to it a document. And if you
12	look at the second page of this tab, is that the Cure
13	Notice that PSI received?
14	A It is.
15	Q Okay. And the first line reads, you are
16	notified that the Government considers your recent
17	failure to pass consecutive First Article test to be a
18	condition that is endangering performance of the
19	contract. So this came after the modified FAT failure?
20	Is that right? After the second FAT failure?
21	A Yes.
22	Q And the last line of the Cure Notice says,
23	the response must outline a detailed plan of action for
24	successful contract performance and completion, to
25	include PSI's proposed delivery schedule for remaining

1	undelivered contract CLINs. Did PSI submit a proposed
2	delivery schedule to the Government in response to this?
3	A I'm sure we did.
4	Q Okay. And just to define that acronym CLIN.
5	What's your understanding of CLIN?
6	A To be truthful, I don't know what the acronym
7	CLIN stands for. I can tell you what it means though.
8	Q Okay.
9	A In a contract you will have it broken by
LO	where the product needs to be shipped to and what
L1	customer. So a CLIN might say it goes Hill Air Force
L2	Base. And of your lot, for example, may 500 of those
L3	units go to that individual destination. That's
L 4	identified by a CLIN line item on your contract.
L5	Q All right. Is it a contract line item number?
L6	A It probably is. That's probably what it
L7	stands for, yes.
L8	Q Okay. All right. Now I wanted to ask you
L9	about the schedule that was submitted in response to
20	that. Yes. If you turn to tab 162, and do you recognize
21	this?
22	A I do.
23	Q Okay. And what is this?
24	A It's a modified schedule.
25	Q Okay. Was this the revised schedule that you

1	submitted to the contracting office at Rock Island in
2	response to the Cure Notice?
3	A I'm not sure if it's the one that was
4	submitted after the Cure Notice or not. I can tell you
5	that it's a modified schedule.
6	Q Okay. There was some back and forth
7	discussion about the revised schedule. Is that right?
8	A That's right.
9	Q Okay. Was this the schedule that was
10	ultimately agreed to?
11	A I don't remember.
12	Q All right. But you did propose a revised
13	schedule, PSI proposed a revised schedule
14	A I did.
15	Q to the Government.
16	A I did.
17	Q Okay. Can you take a look at tab 165. Is
18	that, do you recognize this?
19	A I do.
20	Q And what is it?
21	A It's an amendment to the contract.
22	Q Okay. Is that your signature in the lower
23	left hand corner of page 1?
24	A It is.
25	Q Okay. And it's dated 21 July 2011. Is that

1	right?
2	A That's right.
3	Q That's your signature? All right. And if you
4	turn to actually the third page of the tab. At the top
5	it reads page 2 of 11 but it's really the third page of
6	tab 165. I draw your attention to paragraph 1. It reads,
7	the purpose of this modification is to do the following.
8	And subparagraph A, revise the delivery schedule in
9	accordance with the attached section B. So was this the
LO	modification that incorporated your, PSI's proposed
L1	revised schedule to the contract?
L2	A Yes.
L3	Q All right. Your Honor, this might be a good
L 4	time for a break if that's appropriate.
L5	JUDGE PAGE: All right. I think that's a good
L6	idea. We'll go off the record.
L7	(Whereupon, the above-entitled matter went
L8	off the record at 2:55 p.m. and resumed 3:14 p.m.)
L 9	JUDGE PAGE: Mr. Neill, you may resume your
20	examination of Mr. Hirst.
21	BY MR. NEILL:
22	Q Thank you. Mr. Hirst, if you'd please turn to
23	Rule 4, tab 285, page 5.
24	JUDGE PAGE: 285, sir?
25	MR. NEILL: 285.

1	JUDGE PAGE: Thank you.
2	BY MR. NEILL:
3	Q And this is a copy of a request for deviation
4	that PSI submitted into the Rule 4 file. It's dated in
5	a 2006 date, and it refers to PSI lot 1-2. I draw your
6	attention to, it's box 23, need for deviation. And just
7	read that line. It mentions a deviation for that lot
8	from a maximum of 25 seconds to a maximum of 31 seconds
9	for smoke burn time. And you're familiar with the
LO	contract. The question that I have, are you aware of the
L1	Government approving a deviation to accept any lot with
12	a smoke display time longer than the 31 seconds listed
13	in this particular document?
14	A To be clear, this deviation appears to be
15	centered on lot 01-002.
16	Q Mm-hmm.
17	A I'm not aware of any deviation beyond 31
18	seconds.
19	Q All right. If you'll just
20	A I'm just aware the deviations were granted
21	for long display times. That I'm aware of and knowledge
22	of.
23	Q If you'll please turn to Rule 4, tab 284,
24	page 38. And this is the lot acceptance test report for
25	lot 4-2 that we've, you discussed earlier. If you'd turn

1	to page 44. And isn't it true that there were two
2	sealing test failures noted in lot 4-2, lot acceptance
3	testing?
4	A Or that one of the failures that failed the
5	initial sealing test was subsequently tested for
6	informational purposes and passed leak test, which is
7	not unusual. The parts, as I stated before, we make
8	them, we test them, they pass one time and then they
9	fail the next and then you can test them a third time,
10	they might pass again.
11	Q The informational test was something that PSI
12	did on its own after the lot acceptance test was done.
13	Is that right?
14	A It was done with the concurrence of the
15	Government. I believe they witnessed it.
16	Q But it's not part of the lot acceptance test
17	procedure, was it?
18	A It was an informational test, Mr. Neill.
19	Q Is that yes or no?
20	A It was an informational test. I'm not sure if
21	the test spec addresses whether or not informational
22	tests are allowed or not.
23	Q Okay. And then the transportation, vibration
24	sealing test failure that's mentioned on page 44. Are
25	you aware of that?

1	A I am.
2	Q Okay.
3	A I'd like to explain what happened on that
4	test, if I may.
5	Q Sure. Please go ahead.
6	A The sample in question was tested prior to
7	the transportation and vibration test and had passed
8	leak test. It was subsequently introduced to the
9	transportation, vibration test fixture. And it was
10	introduced without the end caps on the units. If I may,
11	I'd like to use Exhibit A-1 to demonstrate.
12	Q Sure. Just please describe what you're doing
13	for the record if you can.
14	JUDGE PAGE: If you will, Mr. Hirst, I think
15	Exhibit A-1 was a document, was it not?
16	THE WITNESS: It says Plaintiff's Exhibit A-1
17	on it.
18	MR. NEILL: I think
19	MR. KARLSON: 191 was the document, Your
20	Honor.
21	JUDGE PAGE: 191 was the document, or 291 was
22	the document.
23	MR. KARLSON: Or 291.
24	JUDGE PAGE: Thank you, gentlemen. I
25	appreciate it. Please go ahead, Mr. Hirst.

BY	MR.	NEILL:
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To describe what I'm doing, this is the inert version of the 124 round. These colored devices on each end, one red, one clear, are the end caps. The units, when they're subjected to the leak test, these end caps are removed, put into the tank and tested. The correct protocol before they go into transportation and vibration testing, is to re-secure the end caps. In transportation and vibration, the units are purposely shaken around. And they undergo a lot of trauma. And without the end caps on there, there's a possibility to tear the seals. And that's exactly what happened. We had one leaker. When we examined it there was a very, very large hole in one of the disks. That was a leaker that was induced by a faulty test technique that we did. We made an error in how we tested it. It's not a manufacturing caused leaker.

Q It was a testing procedures caused leaker. Is that right?

A Faulty testing procedures. Specifically not putting the end caps on caused the tear in the foil.

Q Okay. So it went through, the item went through the transportation and vibration testing without the end caps. Is that right?

A That's correct.

1	Q And that caused the leaker.
2	A It caused the opportunity for the leaker
3	because they were not protected, the foil, the sealing
4	disk and all the trigger assembly is not protected. As
5	I described before, it's a test where the parts are
6	purposely shaken to replicate what happens when they're
7	transported by a truck to destinations.
8	Q Okay. Now if you'd please turn to tab 183.
9	This is PSI's response to the contracting officer's Show
LO	Cause notice that you testified about on direct.
11	A I'm sorry. What tab is it again, please?
12	Q 183. Okay. And did you write this response?
13	A I did write it. I was assisted in its
14	preparation by a young lady that works for me by the
15	name of Jessica Beckham . She signed the document for
16	me. I was on vacation then.
17	Q Okay. So if we look at the second page of it,
18	there's some initials that says J, I can't really read
19	the initials.
20	A JB.
21	Q JB for R. Hirst. So Jessica Beckham signed it
22	for you at your direction.
23	A That's correct.
24	Q Right? Okay. Looking at the second paragraph,
25	the second paragraph addresses lot 4-2, which by this

point in time it had not passed lot acceptance testing. 1 2 The paragraph 2 addresses, you respond, it provides at 3 least some response to long display times on the smoke 4 end. But I see nowhere in this response any response to 5 the leakers that were noted during lot acceptance 6 testing of lot 4-2. Would you agree that this response 7 to the Show Cause notice does not include any response about the leakers that were identified in lot 4-2? 8 I would agree that it does not. 9 MR. NEILL: It does not. Okay. I have no 10 11 further questions, Your Honor. JUDGE PAGE: All right. Thank you, Mr. Neill. 12 13 Mr. Karlson, have you any questions on re-direct? MR. KARLSON: One or two, Your Honor. REDIRECT EXAMINATION 15 BY MR. KARLSON: 16 17 Mr. Hirst, we talked a lot about leaking. Can 18 you talk about a second leaking issue as it relates to 19 O rings with this unit? It came up in some of the 20 testing but it really didn't get discussed. 21 Α Yes. The cause of the leaking, you know, are, there a variety of reasons why the parts could leak. 22 23 Some of them that come to mind are a defective sealing 24 disk where the adhesion is weak. We saw that an awful on 25 Interfix 1. I don't want to go through that again. I

1	think I made it very clear in my previous testimony
2	about that. You can also have a leaker if the O ring,
3	this might be an appropriate time if it's okay with the
4	Court, to use my cross section.
5	JUDGE PAGE: Is this your other large
6	exhibit?
7	THE WITNESS: This is my other
8	MR. KARLSON: Yes.
9	JUDGE PAGE: Yes. That would be fine unless
10	the Government has any objection?
11	MR. NEILL: No objection, Your Honor.
12	JUDGE PAGE: All right.
13	MR. KARLSON: Go ahead, show them.
14	JUDGE PAGE: If you will, Mr. Karlson, why
15	don't you get that for the witness.
16	THE WITNESS: That's fine. Just right there.
17	Again
18	JUDGE PAGE: Mr. Neill and Captain Davidson,
19	if you need to come closer to see it, you're welcome to
20	approach and do so.
21	THE WITNESS: I'm going to unclip my
22	microphone for a moment so I can go over to the board.
23	COURT REPORTER: I'm going to need you to
24	wear it if you're going to speak.
25	MR KARLSON: Good. Looks like the wire will

1	go right over easily.
2	THE WITNESS: Thank you. The O ring is an O
3	ring. It's a thin, rubber ring that goes around the
4	circumference of the igniter. And it is shown
5	JUDGE PAGE: Mr. Hirst, forgive me. Could you
6	stand back so I can see
7	THE WITNESS: I'm sorry.
8	JUDGE PAGE: where you're pointing as
9	well. And remember to use your words. Tell us where on
10	the diagram you're pointing.
11	THE WITNESS: Okay. The O ring is a thin
12	rubber ring that goes around the circumference of the
13	igniter. And it is the, it is shown here. It's quite
14	small in this little notch right here. Okay?
15	JUDGE PAGE: Now when you say this little
16	notch, again could you tell us whether that's labeled on
17	the diagram or not and if so how it's labeled.
18	THE WITNESS: The notch itself is not labeled
19	but the O ring preform packing is labeled with an arrow
20	pointing to where it is on the device.
21	JUDGE PAGE: Thank you.
22	THE WITNESS: And I'll move to the other
23	side. And, again, the O ring preform packing, which is
24	the correct name for it, is right here on the other end
25	of the device. This is the flare end and this is the

smoke end. They both have an O ring. That O ring, I'll return to my seat if that's okay now.

JUDGE PAGE: You may.

THE WITNESS: The purpose of the O ring is to put in place a secure sealing system with a crimp. So when the part is crimped, the crimp in conjunction with the O ring is supposed to seal the unit. You can have leakers if there's any, if the O ring itself is compromised in any way. Meaning that it's got nicks in it or it's got a manufacturing defect in it. In fact that was the case for the leaker that we detected in, I believe it was in, let me refer to my notes so I won't to give you the wrong answer. Can you put the other, take that down for a second, please. The leaker that we detected in one of the lots, and I'm trying to remember which one it was, I believe it was 4-3, was in fact related to an O ring that had a missing piece of rubber. Or in other words, a chunk of it missing from the O ring. And we felt that that caused the leaker. You can also have a leaker if you don't put an O ring on the unit, if the operator forgets to put an O ring on the unit. We've had that happen, as well. That happened, to the best of my recollection, on lot 3-2. So O rings are very important. The quality of the O ring is important and that it's assembled correctly is very important.

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1	BY MR. KARLSON:
2	Q And this is an issue that you discussed
3	earlier with the intermittent leaking, where you tested,
4	it would pass. You'd test it, it would leak. You'd test
5	it, it would pass.
6	A Mm-hmm.
7	Q Was that the O ring leak or was that the
8	sealing disk leaking?
9	A It's hard to say. It could be both. My
10	opinion that, at least with the leaking that we saw and
11	that I read about and heard about from my engineering
12	staff, that the primary cause of the leaking initially
13	on the contract, the first 11 lots, was the sealing
14	disk.
15	MR. KARLSON: Okay. Thank you. I have no more
16	questions, Your Honor.
17	JUDGE PAGE: All right. Thank you.
18	Government?
19	MR. NEILL: I have no questions, Your Honor.
20	But I just would note that the cut away diagram that was
21	used on re-direct has not been marked as an exhibit.
22	JUDGE PAGE: Oh. Thank you so much.
23	MR. NEILL: Should probably do that.
24	JUDGE PAGE: I'll ask the court reporter to
25	tell me the number of the last Exhibit.

1	COURT REPORTER: That would have been A-5.
2	JUDGE PAGE: All right. So then, Mr. Karlson,
3	are you offering, if you would get that other diagram up
4	for me, the expanded one. Are you offering this as
5	Exhibit A-6?
6	MR. KARLSON: Yes, Your Honor.
7	JUDGE PAGE: Mr. Neill, have you any
8	objection?
9	MR. NEILL: No objection other than to the
LO	comments on the left hand side. The witness did not
L1	refer to those comments in any way. But we believe those
L2	are inaccurate so, that have to do with Interfix number
L3	1 equals 3M 433L sealing disk minimum adhesion, 20 ounce
L 4	inch width. I believe that's an inaccurate statement.
L5	JUDGE PAGE: All right. But no testimony was
L6	proffered regarding that side of it. So you would have
L7	the opportunity to examine a witness if in fact it were
L8	introduced.
L9	MR. NEILL: Sure.
20	JUDGE PAGE: All right. We'll mark it then as
21	Exhibit A-6.
22	(Whereupon, the above-referred to document
23	was marked as Appellant Exhibit 6.)
24	JUDGE PAGE: Thank you. And, again, just like
25	the other enlarged Exhibit, I will leave these with Mr.

1	Karlson to provide to the Board. It is also my
2	understanding that you will provide to the Government
3	and to me a smaller copy of each. Is that correct?
4	MR. KARLSON: Yes, Your Honor.
5	JUDGE PAGE: All right. Thank you so much.
6	All right. Mr. Hirst, you may step down. Thank you, sir.
7	THE WITNESS: Thank you.
8	JUDGE PAGE: I know it has been a long day
9	for you. I believe the microphone's caught in there.
10	I'll take a moment to ask the court reporter whether he
11	has any questions or clarifications required of Mr.
12	Hirst?
13	COURT REPORTER: None.
14	JUDGE PAGE: None? Very good. Thank you. All
15	right. Then Mr. Karlson, you may call your next witness.
16	MR. KARLSON: The next witness will be Mr.
17	Terry Goodrich, Your Honor. And he'll be questioned by
18	Mr. Hirst.
19	JUDGE PAGE: Very well then. Sir, if you
20	would please approach. And if you would please, sir,
21	raise your right hand. WHEREUPON,
22	TERRY GOODRICH
23	was called as a witness by the Appellant and, having
24	first been duly sworn, assumed the witness stand, was
25	examined and testified as follows:

1	JUDGE PAGE: Please be seated, sir.
2	DIRECT EXAMINATION
3	BY MR. HIRST:
4	Q Good afternoon. Please state your full name
5	for the court.
6	A Terry Goodrich.
7	Q Terry, what is your current position with
8	Pyrotechnic Specialties?
9	A I'm currently engineering team leader.
LO	Q Could you please provide a brief overview of
L1	your employment at Pyrotechnic Specialties?
L2	A I was hired in 2006 as a manufacturing
L3	engineer assigned to the Mark-124 project.
L 4	Q Thank you. And what was your specific
L5	involvement with the Mark-124 Mod-0 contract?
L6	A When I first came in, it was mainly we had
L7	leakers. Everything was at a stop. I came in between lot
L8	1 and lot 2. We worked on techniques for applying the
L9	disk and various problems. I designed a new leak tank,
20	vacuum tank system for checking, which we later
21	incorporated for 200 percent testing. And various
22	redesigning tools and techniques for the manufacture of
23	part.
24	Q Thank you. Would you please describe what
25	problems did the company, PSI, have with manufacturing

1 the Mark-124s when you were involved with the program. 2 The first problem, the main problem was leaking. They were probably, when I first came there 3 they were at a standstill. They probably had 60 percent 4 5 loss on leakers. We improved techniques of applying the stickers, I mean, excuse me, the foil disk. Implemented 6 7 the 200 percent. We got it down between 5 and 10 percent 8 overall loss from the in-house checking, before they 9 went to LAT. 10 Were there any other problems that you recall? 11 We had long burn times. It was accepted on 12 deviation and it was, it wasn't at the top of my list as 13 14 far as things were because we were, had deviations for 15 them. 16 There's two ends to the round. What specific 17 burn time problem did you have? 18 On the smoke for on the cold samples mainly we had long burn times, over the 19 seconds, which at 19 20 that time was the standard, on the ambients. And at the 21 same time on the hots we had to watch for short burn times. Do you have any direct recollection of what, if 22 23 any, comments were made about the long display times by government representatives that were watching the tests? 25 Yes, sir. Sometime during Interfix 1, and I

can't remember the exact lot, Mr. Bowman had made the comment to Mike Trotter and I guess me, also. I was there. If he was in a life raft that if he had something with a longer display time he'd be happier about it.

- Q To clarify, Mr. Bowman was who?
- A Kevin Bowman. He was the Government representative.
 - Q And Mike Trotter?
 - A He was my manager then, engineering manager.
- Q Thank you. You provided an overview about the in process testing. Could you spend a little bit more time about the nature of that in process testing? What was done?

A Well after the rounds were crimped and the crimps were visually checked, they would go out and be checked in a small vacuum chamber that held four units.

A vacuum of 6 inches of mercury would be drawn on it and they would be tested for one minute under vacuum. You would look for bubbles coming from that. Usually it was occluded air, bubbles that had stuck to the interior of the trigger assembly when it went into the vacuum. If you saw a continuous stream of bubbles, that indicated a leak. Usually if it was a small stream of bubbles, it was a pinhole leak in the foil. If it was a larger stream you would look for a leak in the seal, the O ring

1	seal. O ring seal leaks were relatively rare. We usually
2	caught them all during in process checking. The pinhole
3	leaks could come at any time.
4	Q Okay. When the leaking parts were detected,
5	if they were detected at LAT, to your knowledge what did
6	it do to the status of the lot?
7	A If one leak was caught, it failed the lot.
8	Q Okay. These lots that failed to pass the leak
9	test, what ultimately happened? What was the ultimate
10	disposition of those lots?
11	A We would test the entire lot 100 percent for
12	leaks again. Then either QAR or Mr. Bowman or somebody
13	would either witness the entire test or they would pull
14	a sample from the lot and test again. And they would
15	decide the numbers that they would pull and that sort of
16	thing.
17	Q Did these lots, after they passed that
18	testing, were they accepted by the Government?
19	A Yes, sir. As far as I know.
20	Q How were they accepted?
21	A On deviation I guess.
22	Q We talked a good bit of time today about the
23	different types of disks. And we talked about the
24	qualification of a new sealing disk after Interfix 1.
25	That disk was used on Interfix 2 and 3 and it was called

the 3M 363L. Did you have any involvement in qualifying that disk?

A Yes, sir. After lots 10 and 11 of Interfix 1, we had very many leakers in that lot. Also had some slow burn times or slow delay times. At that time we had been checking that particular lot, I think we checked 300 percent. And we're still getting the leakers then. My personal worry was that we were over testing these lots and creating more leakers. And I brought that to Mr. Trotter's attention.

Later on he came and brought me samples of foils and had me build samples to be tested. So you got the first going off test with just me and Mike Trotter.

We tested five of each of them. It was the 433, the one we were using, the 363L, and I forget the number of the third one. The 363L had a fiberglass substrate on the back of it. And the other one was a very, very thick foil. After testing five of them, 363L worked very well. The existing one, it worked but still with the same troubles. The very thick one was catastrophic in doing it. We tested it once and it blew the top off the part.

We said we weren't going to do it again. After that we decided to take the, and I'm, like I say, it's the 363, yes, the 363L part. And I cannot remember the total number of parts we did with it. But --

1	Q Excuse me. Mr. Goodrich, are you speaking now
2	to the actual qualification test that was done
3	A The actual qualification test.
4	Q with the Government's
5	A With the Government.
6	Q concurrence?
7	A Mr. Bowman was there.
8	Q Okay.
9	A And we tested it. We tested it like a regular
10	LAT. We made the rounds. We leak tested them. I think we
11	did the overnight water test, where they were just kept
12	underwater. We did the hots and colds and function.
13	Q As part of the test, was there any attention
14	paid or any quantitative data taken to gauge separation
15	or any movement of the igniter from the outer container?
16	A Not that I knew of or noticed. It was not
17	something we thought of at that time.
18	Q Do you have any reason, that you know of, why
19	that was not looked at?
20	A We had never had anything like that happen in
21	any of the previous lots.
22	Q And the previous lots, what
23	A Interfix 1.
24	Q And what sealing disk was used for Interfix
25	1?

1	A That was the M4 33L.
2	Q Thank you. In your own words, can you provide
3	an assessment of the performance of the 3M 363L sealing
4	disk when it was introduced into production?
5	A When it was first into production it
6	eliminated leaks. We had no more pinhole leaks
7	whatsoever. Whereas we were getting 10 percent out of a
8	lot that was failing. We had maybe 5 or 6 rounds out of
9	the lot fail. Also it improved the delay times. Because
10	it had, it was a little bit more robust disk. It built
11	more pressure up in the chamber which got it hotter so
12	the candles lit better. And I was happy, at that time,
13	this was before we started, before that first 002 lot,
14	I was excited about it. Because it was going to make our
15	lives a lot easier manufacturing these things.
16	Q And how did that ultimately play out?
17	A The first lot we did the LAT. We didn't have
18	any leakers. Everything lit fine. But we had one of the
19	trigger assemblies fall off at the end of the burning on
20	the flare side. It always happened on the flare side.
21	Q Did you, do you have any knowledge of whether
22	or not the lots you were involved with, were they
23	primarily with Interfix 2? Those three lots that were
24	built?
25	A I worked on Interfix 2 and the first lot of

1	Interfix 3.
2	Q Okay.
3	A That's when, during the start up.
4	Q Those lots on Interfix 2, those three lots
5	that were built, did they ultimately pass the LATs?
6	A No, sir. Because they failed temperature and
7	humidity testing.
8	Q Do you know why they failed temperature and
9	humidity testing?
10	A No, sir. I don't.
11	MR. HIRST: Okay. I have no further questions
12	for the witness.
13	JUDGE PAGE: All right. Thank you, Mr. Hirst.
14	Mr. Neill or Captain Davidson?
15	CAPTAIN DAVIDSON: Your Honor, may I just
16	have just a few moments to get organized and try to find
17	a couple tabs that he was discussing?
18	JUDGE PAGE: You may. Would you like a 5 or
19	10 minute break?
20	CAPTAIN DAVIDSON: That would be perfect,
21	Your Honor. Thank you.
22	JUDGE PAGE: We'll take a 10 minute recess.
23	We'll reconvene at 4 o'clock.
24	(Whereupon, the above-entitled matter went
25	off the record at 3:48 p.m. and resumed at 3:57 p.m.)

1	CROSS-EXAMINATION
2	CAPTAIN DAVIDSON:
3	Q Mr. Goodrich, thank you for being here. Just
4	a few follow up questions for you. First, what is your
5	educational background?
6	A I have a certificate in engineering
7	technology from Macon, Middle Georgia Tech. The rest of
8	the experience working under professional engineers. I
9	worked with Brian and Williamson for 8 years as a
LO	designer. I worked at YKK managing their machinery
L1	development group for 8 years. I worked at Technicon
L2	Engineering as a mechanical design engineer for 6
L3	months. I had my own business designing production
L 4	equipment and manufacturing production equipment for 2
L5	years. And I also worked for Techwood Precision
L6	Enterprises as their engineering manager.
L7	Q Thank you. And you mentioned that you became
L8	involved with the MK-124 contract following lot 01-02.
L9	Is that correct?
20	A Yes. If I understand correctly on that. And
21	at that time I was very new and did not know the product
22	very well.
23	Q Okay. And
24	A Um
25	Q Please, go ahead.

1	A No. Go ahead. I'm sorry.
2	Q And when did your participation with the
3	contract end?
4	A At lot 003-001, at the start of that first
5	lot from the startup.
6	Q So you did not participate in 003-001.
7	A No.
8	Q So your last lot was 002-003?
9	A Yes, sir.
LO	Q Okay. All right. And you testified that
L1	during Interfix 1 you were involved in lot screening for
L 2	leakers. Is that correct?
L3	A That's correct.
L 4	Q And Mr. Hirst testified to his, as well as I
L5	believe you mentioned that oftentimes this involved 100
L6	percent, 200 percent and 300 percent screens of the
L7	entire lot prior to going to LAT testing?
L8	A Yes, sir.
L9	Q And following the screening that was
20	performed internally by PSI, which the 100 percent, 200
21	percent, 300 percent, that was all internal?
22	A Yes, sir.
23	Q Following that internal screening, during
24	those particular lots, the LAT testing of those lots,
25	were there any failures for leakers?

1	A	During the, explain that.
2	Q	During the LAT testing of lots 01-02 through
3	01-08, were then	e any rejections of the lots for the
4	lots containing	leakers?
5	A	Yes, sir.
6	Q	There were. Okay. Do you know which lots were
7	rejected for cor	ntaining leakers?
8	A	To be honest with you, without studying
9	paperwork, no, s	sir. I wouldn't. Other than what's on
10	this chart here.	
11	Q	And actually that's great. Let's look at the
12	chart. And I bel	ieve that's Appellant Exhibit Number 5.
13	Is that correct?	
14	A	Let's see. Let me look at it again.
15		CAPTAIN DAVIDSON: Your Honor, may I go up?
16		JUDGE PAGE: You may, certainly.
17	BY CAPTAIN DAVII	DSON:
18	A	It's about
19	Q	Yes. This is
20	A	Okay.
21	Q	Appellant's Exhibit number 5. And so we're
22	talking about Ir	nterfix 1, lots 01-02 through 01-09
23	A	01
24	Q	I guess. Let's talk 01 to 09. And if we
25	look at this cha	art, if we go to the far right hand

1	column, it says comments. And do you see on any of those
2	lots that there's any comments that describe leakers in
3	any of those lots?
4	A No, sir, I don't.
5	Q And if we go, how about to lot 01-010 and we
6	go all the way to the comment section, do we see
7	description of leakers in that section?
8	A You do see description of leakers in that
9	section.
LO	Q How about 01-011?
L1	A Yes, sir.
L2	Q And so are you still sure that there were
L3	leakers and then LATs were rejected in 01-02 through 01-
L 4	09 for having leakers?
L5	A I cannot tell you which one, but it does seem
L6	in my memory that we had to retest some of them.
L7	Q Do you recall if any of those are in the
L8	record anywhere? The Rule 4 file?
L9	A No, sir. I don't. I didn't have much to do
20	with the records.
21	Q Okay. Thank you. And I guess my next question
22	is, if lots, at least based on Appellant's Exhibit
23	Number 5, if lots 01-02 through 01-09 did not contain
24	leakers according to that chart, although you believe
25	that they may have, what was the difference that

1	occurred between lot 01-09 and 01-010? So lot Interfix
2	1 lot number 9 and Interfix 1 lot number 10? Where we're
3	now all of sudden seeing several leakers found in LAT
4	testing?
5	A I remember those two lots in particular. It
6	seemed as though the disk itself had changed some. It
7	was nothing quantitative that I could put my fingers on
8	because you measured the thickness, but they felt
9	different. And I brought to Mr. Trotter's attention. And
10	at that time when we had the long ignition times, delay
11	times, I was, in my mind, I was coupling that with the
12	leakers as the foil was, tensile strength might have
13	changed on the foil or something like that.
14	Q And was PSI still performing their internal
15	screening prior to LAT testing for those two lots.
16	That's 01-010 and 01-011?
17	A Yes, sir.
18	Q Okay. You also mentioned during your
19	testimony that several of the lots in Interface 1 were
20	accepted on deviation?
21	A Yes.
22	Q Does the record contain any record of those
23	requests for deviations?
24	A I would not know. I did not have anything to
25	do deviations back then.

1	Q Can we look at Tab 73 of the Rule 4 File,
2	please?
3	Are you there, Sir?
4	A Yes, Sir.
5	Q If you go to Page 3 of that tab, again,
6	that's F73, are you familiar with this document?
7	A No, Sir.
8	Q Are you familiar with request for deviation,
9	in general?
10	A I am now. At that time, I was not.
11	Q Okay.
12	A Okay.
13	Q Well, then I'm not going to ask you another
14	question about that. All right. Next thing I wanted to
15	go to is that you mentioned that you were heavily
16	involved in the testing of, I guess, the new type of
17	foil tape that is switched to in between Interface 1 and
18	Interface 2. Is that correct?
19	A I'm the one who built the units, and I'm the
20	one who set them off.
21	Q During that testing?
22	A During that testing. Yes, Sir.
23	Q And so PSI, specifically, you, investigated
24	the effects of changing to a thicker ceiling disk.
25	A Per directions from Mike Trotter.

1	Q Okay, and Mr. Mike Trotter works with PSI?
2	A He worked at PSI. He was my Manager; he was
3	Engineering Manager at that time.
4	Q Okay, and can we go to Tab 82 of the Rule 4
5	File, please?
6	A Which book?
7	Q Tab 82. It should be in Book 1, no, Volume
8	II, excuse me. I'm sorry, Sir. I meant, can we go to
9	Tab 210? That was my mistake. Are you there, Sir?
10	A Yes, Sir.
11	Q Excellent. Okay, and if we can go to Page 2,
12	can you tell me what this document is?
13	A It says Critical Defect Calls Determination.
14	Q This is Tab 210?
15	A Okay, this is the spec sheet for the 3 and
16	360 4 disk.
17	Q On Page 2?
18	A Page 2? Okay. Yes, Sir. Okay.
19	Q This is a letter from PSI to the Government,
20	is that correct?
21	A Let me check and make sure. Yes, Sir.
22	Q At the top, the date is November 9, 2007?
23	A Yes, Sir.
24	Q It's signed by Mike Trotter, who was your
25	Supervisor at the time?

1	A Yes, Sir.
2	Q Okay, and can you tell me what this letter
3	is?
4	A I have never seen this letter before. It
5	looks, let me read it.
6	MR. HIRST:
7	Objection. The Government is asking the witness to
8	answer a question on the document that it had never seen
9	before and to interpret it.
10	JUDGE PAGE:
11	Captain Davidson.
12	CAPTAIN DAVIDSON:
13	Your Honor, this letter is about the testing that
14	was performed by Mr. Goodrich. I'm going to ask about
15	that testing. He is aware of what occurred during that
16	testing, which is the contents of the letter.
17	JUDGE PAGE: I will overrule the objection
18	subject to your observation that you're going to
19	question the witness, not about the document itself, but
20	about the testing he performed.
21	CAPTAIN DAVIDSON:
22	Yes, Your Honor. Thank you.
23	BY CAPTAIN DAVIDSON:
24	Q So, Mr. Goodrich, as I mentioned in response
25	to the objection, does this letter appear to talk about

1	the testing that you performed with regard to the 363
2	foil?
3	A Let me read the letter first.
4	Q I'll take that question back. Let me try
5	again, and ask just about the testing specifically. So
6	when you performed the testing, you looked at multiple
7	candidates for a different foil. Is that correct?
8	A We had three (3) different foils.
9	Q Okay, and what was the result of that test?
10	A the first testing was with existing foil.
11	They were satisfactory. The second testing was with the
12	3M363L. It was satisfactory. The fourth testing, I'm
13	reading here on this document was the 427 aluminum foil
14	tape. That tape was very thick. It was actually
15	catastrophic. It blew the igniter housing off the
16	round, which scared me, first time that happened.
17	Q Yes, Sir, and so following the testing you
18	performed, are you aware of whether or not PSI
19	recommended to use the 363 foil?
20	A Nothing was made, told to me formally. I
21	mean, personally, by Mike Trotter or anything. It was
22	just after it happened, we were told to use the 363L.
23	I have not seen any reports or anything like that from
24	them.
25	Q Based on the results of the testing that you

1	performed, the 363 was sufficient to produce the unit.
2	A I'm assuming Mr. Trotter thought so.
3	Q No further questions, Your Honor.
4	JUDGE PAGE: All right, thank you, Capt.
5	Davidson. Mr. Hirst
6	MR. HIRST: Yes, Ms. Terry, thank you. Can we
7	dismiss the witness?
8	JUDGE PAGE: No questions?
9	THE WITNESS: I thought you wanted me to call
10	the next witness. I apologize. I have no further
11	questions, Your Honor.
12	JUDGE PAGE: No further questions, all right,
13	thank you. Sir, you may step down. But I will note,
14	Mr. Hirst, it is 4:15, and we need to conclude no later
15	than 4:30. Would you prefer to call your next witness
16	now or
17	MR. HIRST: I prefer to call my next witness
18	tomorrow morning, if that's okay
19	JUDGE PAGE: Tomorrow morning?
20	MR. HIRST: Is that's satisfactory, Your
21	Honor.
22	JUDGE PAGE: It will. Government, have you
23	any objections, any concerns?
24	MR. NEILL: No objections, Your Honor.
25	JUDGE PAGE: All right, very well, then.

MR. KARLSON: May I add one thing for the 1 2 record, Your Honor? 3 JUDGE PAGE: You may, yes, Sir. 4 MR. KARLSON: We were discussing an issue 5 yesterday about a rule 6 JUDGE PAGE: Just a moment, we need to get the 7 microphone. It's the other one, Sir, I think. 8 MR. HIRST: Sorry. 9 JUDGE PAGE: Thanks, Mr. Hirst. MR. KARLSON: I'd like to clarify some 10 11 evidentiary issues we encountered yesterday in light of 12 the testimony received by the Court yesterday and any objections thereto. Some of the evidence was either 13 admitted for its probative value or excluded. I would 15 like to ask the Court to reconsider their value and admissibility of each piece of evidence relating to Mike 16 17 King. Yesterday, the Government objected to the use of 18 Tab 281 in the Rule 4 Notebook, which is the deposition 19 of Mike King on the basis of that deposition is hearsay. 20 The Government also made multiple objections to 21 statements and other correspondences made or sent by Mike King. As to the deposition, Fed. R. Evidence 22 23 801(d)(2) allows or the use of deposition testimony of 24 Mike King in this case as a partied admission by the 25 Government through its Agents. Here the deposition

1	testimony is being offered against the Government, and
2	Mike King was employed by the Government at the time of
3	the deposition. Furthermore, the matters testified to
4	by Mike King were matters related to and within the
5	scope of his employment with the Government. His
6	deposition testimony and any other statements made or
7	sent by Mike King that meet that criteria should be
8	admissible evidence in this case as partied admissions.
9	Once again, I would respectfully ask the Court to
10	consider this when evaluating the admissibility or
11	probative value of the evidence.
12	JUDGE PAGE: Thank you, Mr. Karlson, Sir.
13	Neal or Capt. Davidson, have you any response before I
14	rule?
15	MR. NEILL: We stand by the objections that
16	we raised yesterday, Your Honor.
17	JUDGE PAGE: All right, and I stand by my
18	rulings; however, Mr. Karlson, in your brief, you may
19	argue the point.
20	MR. KARLSON: Thank you, Your Honor.
21	JUDGE PAGE: Certainly. Is there anything
22	further, from either side, Mr. Karlson, Mr. Hirst,
23	anything further from you?
24	MR. KARLSON: Nothing, Your Honor.
25	JUDGE PAGE: Mr. Neill, Capt. Davidson?

1	MR. NEILL: No, Your Honor.
2	JUDGE PAGE: All right, and if there is
3	nothing from our Court Reporter requiring clarification,
4	all right, then we will adjourn for the day. We will
5	reconvene at 9:00 tomorrow morning.
6	(Whereupon, the above-entitled matter went
7	off the record at 4:14 p.m.)
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<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: Pyrotechnic Specialties, Inc.

Before: ASBCA

Date: 10-22-14

Place: Macon, GA

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

near Nous 8



ARMED SERVICES BOARD OF CONTRACT APPEALS

SKYLINE SIX 5109 LEESBURG PIKE FALLS CHURCH, VIRGINIA 22041-3201

OFFICIAL TRANSCRIPT OF PROCEEDINGS

FILE NO: 57890, 58335, 59103

In the Matter of:

Pyrotechnic Specialties, Inc.

Under Contract No: W52P1J-04-C-0098, et al

Place: Macon, Georgia

Date: Thursday, October 23, 2014

Pages: 3-1 to 3-269

NEAL R. GROSS & CO., INC. 1323 RHODE ISLAND AVENUE, NW WASHINGTON, D.C. 20005 TELEPHONE (202) 234-4433

UNITED STATES OF AMERICA

+ + + + +

ARMED SERVICES BOARD OF CONTRACT APPEALS

+ + + + +

HEARING

IN THE MATTER OF:

The Appeal of

: ASBCA NOS.

: 57890

Pyrotechnic Specialties, Inc.

58335 59103

Under Contract No. W52PlJ-04-C-0098, :
et al. :

Thursday, October 23, 2014

VOLUME III

Courtroom B U.S. Federal Courthouse 475 Mulberry Street Macon, Georgia

The above-entitled matter came on for hearing, pursuant to notice, at 9:00 a.m.

BEFORE:

THE HONORABLE REBA PAGE Administrative Judge

APPEARANCES:

On Behalf of the Appellant:

DAVID KARLSON CEO

of: Pyrotechnic Specialties, Inc.

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and

ROBERT HIRST

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On Behalf of the Respondent:

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WITNESSES:

DARRYL L. SUBER
JOHN ANDREW LONG
RYAN C. PIERCE
KEVIN BOWEN
DEAN COWART

TABLE OF CONTENTS

WITNESSES	Direct	Cross	Redirect	Recross
Darryl Suber	6	9		
Andy Long	18	40	49	
Kevin Bowen	55	171	200	
Dean Cowart	202	218		

Exhibits

Government Exhibit 1

Marked Rec'd

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PROCEEDINGS

2	(9:02 a.m.)
3	COURT REPORTER: The time is 9:02 and we are
4	on the record.
5	JUDGE PAGE: Thank you. Mr. Neill or Captain
6	Davidson. At this time are you ready to call your next
7	witness?
8	MR. KARLSON: I think it's
9	JUDGE PAGE: Oh, excuse me. You have not
10	rested your case have you, Mr. Karlson?
11	MR. KARLSON: No, Your Honor.
12	JUDGE PAGE: Do forgive. Do forgive. Mr.
13	Karlson or Mr. Hirst.
14	MR. KARLSON: Mr. Hirst.
15	MR. HIRST: Yes. We would like to call our
16	next witness, please. Mr. Darryl Suber.
17	JUDGE PAGE: Sir, if you would please, sir,
18	raise your right hand.
19	WHEREUPON,
20	DARRYL SUBER
21	was called as a witness by The Appellant and, having
22	first been duly sworn, assumed the witness stand, was
23	examined and testified as follows:
24	JUDGE PAGE: Please be seated, sir.
25	DIRECT EXAMINATION

1	BY MR. HIRST:
2	Q Would you please state your name, full name?
3	A Darryl Suber.
4	Q Mr. Suber, what is your current position at
5	Pyrotechnic Specialties?
6	A I'm the Lead Test Technician.
7	Q What do you your duties entail in this
8	position?
9	A I oversee the test lab, making sure that all
10	devices that are made by PSI is tested properly and all
11	test procedures are followed.
12	Q Okay. Could you give us a little of your
13	employment background?
14	A At PSI?
15	Q At PSI, please.
16	A Well I been with the test lab ever since I
17	been at PSI, which I was hired at November 1st, 2005.
18	Q 2005. What was your involvement with the Mark
19	124 Mod 0 contract?
20	A I oversaw all of the testing as far as timing
21	the devices. Making sure that the test technicians were
22	using the proper procedures.
23	Q Okay. Did you specifically participate in the
24	LAT testing of the following lots: 002-001, 2-1, 2-2,
25	2-3, 3-1, 3-2, 3-3, 3-3A, 004A-001, 4-2 and 4-3?
1	ı

Yes, I did. Α 1 span of approximately 2 Q This was а time February 2008 to September 2011. Correct? 3 Α Right, right. 4 What were your specific duties in these LATs? 5 Q Α Well, as I said, you know, I was in charge of б 7 timing the devices. Making sure that I watched every device from the beginning to the end, timing it, making 8 9 sure that the smoke side and the flare side was properly disposed of, and making sure that the test technicians 10 were doing their job properly. 11 During these LATs, were the 12 Q Government representatives there at all the LATs? 13 Yes. Kevin Bowen, Dean Cowert, Jimmy Berriman 14 Α 15 and a few other gentlemen whose name I don't remember. 16 Q Okay. Do you recall in the lots I 17 enumerated for you previously, did test separate? Meaning the igniter came loose and dropped off 18 19 during the testing on some of the lots. On a few of the lots, I guess it was on 3-2 20 and you have the 2-2, two of the units on those parts, 21 they separated while functioning. Okay. Before it was 22 complete and then burned maybe 15, 16 seconds and then 23 it fell off and it continued burning until it was 24

finished.

1	Q Did some of those igniters come off after the
2	device was fully functioned, maybe when it was dropped
3	on the ground?
4	A It might have come off, but no parts were
5	ever dropped on the ground. The test technicians didn't
6	drop parts on the ground. You know, we put them in a box
7	and then they're returned to the test lab for future
8	testing.
9	Q Okay. All these lots that were enumerated
10	previously, what sealing disk was used from your
11	recollection?
12	A Well the heavier disk. Okay. Once we started
13	using the heavier disk, that's when the parts started to
14	separate. Before that we didn't have any problems.
15	Q Okay. I want to take you to lot 3-3A please.
16	A Okay.
17	Q You indicated before, you were involved with
18	that particular testing?
19	A Yes, I was.
20	Q Can you from memory recall what happened on
21	that lot?
22	A Okay. We started testing. We were
23	approximately about 80 percent through with the lot when
24	one of the units had the separation problem. On the
25	flare side the trigger housing fell off before it was

1	finished functioning. And after it finished functioning
2	they called it a critical. Which I couldn't understand.
3	They'd never called anything else a critical.
4	Q Okay. Next question, Mr. Suber. I want to ask
5	you about some of the other testing that was done during
6	this time period. Did test samples that were testing
7	during LATs that you participated in; ever have problems
8	with long display times that you can tell me about?
9	A Only the cold units. The cold units had long
10	display times. But according to Mr. Bowen, Kevin Bowen,
11	it was okay. You know, because if it burned a little
12	longer it would help the person, whoever it was that was
13	down, like a downed flier to be seen by rescuers.
14	MR. KARLSON: I have no further questions.
15	JUDGE PAGE: All right. Thank you, sir. Mr.
16	Neill or Captain Davidson.
17	CAPTAIN DAVIDSON: Yes, Your Honor. Thank you.
18	Just one moment.
19	CROSS-EXAMINATION
20	BY CAPTAIN DAVIDSON:
21	Q Mr. Suber, can you tell me a little bit about
22	your educational background?
23	A I graduated from high school. I don't have
24	any college degree. I was trained in my, when I first
25	started working I worked for Neill Telephone Company for

1	20 years. Okay. Where I was trained as a computer
2	technician. From there I went to the Post Office, where
3	they also trained me to be a computer technician. And
4	then I was hired by PSI.
5	Q All right. Thank you. Can you turn to tab
6	282, please?
7	A What book is that?
8	Q It should be in one of the white binders. It
9	should be I think Volume 6.
10	JUDGE PAGE: Rule 4 file, tab 282, sir?
11	CAPTAIN DAVIDSON: Yes, Your Honor.
12	JUDGE PAGE: Thank you.
13	THE WITNESS: Okay.
14	BY CAPTAIN DAVIDSON:
15	Q And before we get into that tab, Mr. Suber, what
16	involvement did you actually have in the recording of
17	test data?
18	A Like I said, I was the person who timed the
19	units. And I wrote the time down on spreadsheets. And
20	whatever side notes had to be made that the Government
21	decided needed to be added to the spreadsheets, I made
22	those notations.
23	Q And so physically did that yourself. You
24	didn't have a test technician working under you who was
I	1

1	A No.
2	Q doing that?
3	A I did that myself.
4	Q Okay. And then going to tab 282 now, I'd like
5	to look at, Rule 4, tab 282, page 1. What is this
б	document?
7	A Page 1?
8	Q Yes.
9	A That's the front, it looks like the header
10	for the Pyrotechnic Specialties MK-124 Mod-0 contract.
11	Q And this is, is this lot 03-02 test report?
12	A 03-02 is correct.
13	Q And you mentioned during your testimony that
14	during this particular lot tests, two units separated
15	prior to function being complete. Is that true?
16	A I didn't say two units, I said one of the
17	units.
18	Q One of the units. Okay. Can you tell me which
19	unit that was?
20	A No, I can't. I don't specifically know which
21	one it was.
22	Q All right. Can you turn to Rule 4, tab 282,
23	page 15, please? Are you there?
24	A Yes.
25	Q And if you look, is this data for condition
l	1

1	hot/cold day th	aree for lot 03-02?
2	A Yes,	it is.
3	Q And	if you look in the far right hand column,
4	do you notice a	any notations?
5	A Its	ays, housing fell off.
6	Q And	can you tell me what unit that the
7	housing fell of	ff?
8	A Its	ays unit 99 and 54.
9	Q Sod	id two housings fall off during testing
10	of lot 03-02?	
11	A One	came off while testing and one came off
12	after testing.	
13	Q Whic	h one came off after testing?
14	A I co	ouldn't tell you because the Government
15	didn't tell me	to make that notation.
16	Q But	one did come off during function.
17	A Yes.	
18	Q Okay	. And why didn't you record that?
19	A I wa	sn't told to. These notations
20	Q Is	testing PSI's responsibility or the
21	Government's re	esponsibility?
22	A Thes	e notations that's on here, the
23	Government ove	ersight people that was doing the
24	oversight, thos	e are the ones who indicated to me what
25	to put there. M	Not PSI.

1	Q So PSI's not responsible for recording the
2	data, the Government is?
3	A I'm responsible for putting down what I'm
4	told to put down.
5	Q Okay. Can we go to Rule 4, 282, page 32. And
6	are you there, sir?
7	A Yes, I am.
8	Q What is this document?
9	A Looks like it's the results of the different
10	tests that's been done. How many were tested for each
11	function and whether they passed or were failures.
12	Q Is this the results of the lot 02-02 LAT?
13	A I don't know. I've never seen this before.
14	I'm not involved with the writing.
15	Q So you don't prepare the actual report. You
16	just do the testing?
17	A No I do not. I just do the testing.
18	Q You mentioned that during lot 02-02, when you
19	were performing the testing, I also believe you said
20	that two units separated prior to function being
21	complete. Is that true?
22	A No I said one of the units.
23	Q One unit separated?
24	A One unit separated. Okay. According to the
25	chart here, two units separated. One of those units

separated while testing, the other one separated when 1 2 the testing was complete. JUDGE PAGE: And if I may, just to make sure 3 that the record is clear, did the witness just point to 4 5 Exhibit A-5. THE WITNESS: Oh, yes, to --6 The expanded chart? 7 JUDGE PAGE: Yes, I did. 8 THE WITNESS: All right. Thank you, sir. 9 JUDGE PAGE: BY CAPTAIN DAVIDSON: 10 And can you turn to page 34 of that tab? And if you 11 12 look, is this the data for the T&V test during lot 02-02. 13 Α Yes, it is. 14 And if you go to the far right hand column 15 Q again. 16 Is this number --17 Α Q I believe it's number 66. 18 Mm-hmm. 19 А It says trigger assembly fell off. 20 Q 21 Α Yes. Did that fall off during or after function? 22 0 I can't tell you exactly which ones it was. 23 Α You said in this lot, one fell off during 24 0 25 function, one fell off after function. Is that correct?

1	A	Yes. If that's the lot I was talking about.
2	Yes.	
3	Q	And you're just referring to Appellant's
4.	Exhibit 5	again?
5	A	Excuse me?
6	Q	You're referencing Appellant's Exhibit 5.
7	A	Yes.
8	Q	Right?
9	A	Mm-hmm.
10	Q	Okay. And then if we go to the next page,
11	it's the o	utside function test. Is that correct?
12	A	Yes.
13	Q	This is page 35 of Rule 4, tab 282.
14	A	Mm-hmm.
15	Q	And go down to number 47 in the far right
16	hand colum	n. It says the same thing, trigger assembly
17	came off?	
18	A	Yes.
19	Q	And again you're not sure whether or not this
20	is the one	that was during function or post function?
21	A	No, I'm not.
22	Q	Okay. And one thing that you mentioned during
23	the testing	g, that none of the units were thrown to the
24	ground.	
25	A	Right.

_	I mad that hever occurred, can you go back to
2	the first page of this particular lot's report, page 32.
3	A What page would that be?
4	Q It's Rule 4, 282, page 32. At the very bottom
5	of the page there's a note with two stars. Can you
6	please read that?
7	A One minors was noted. Igniter assembly
8	separated from the can post function when the expended
9	unit was tossed and hit the ground.
10	Q Do you disagree with that note?
11	A Yes, I do.
12	JUDGE PAGE: Okay. If I may, please. Just to
13	make sure we keep the record clear, let's make sure one
14	person speaks at a time. That the questions is finished,
15	that the answer is finished before you begin the next
16	part of the conversation.
17	CAPTAIN DAVIDSON: Yes, Your Honor.
18	JUDGE PAGE: Thank you.
19	BY CAPTAIN DAVIDSON:
20	Q So just to confirm then, you disagree with the note
21	at the bottom of the page?
22	A Yes, I do.
23	Q You disagree with the note at the bottom of
24	page 282.
25	A This is the first time I saw. Yes, I do
ļ	i e e e e e e e e e e e e e e e e e e e

1	disagree.
2	Q Okay. Thank you. Mr. Suber, you mentioned
3	that when writing the notes on the actual test sheets,
4	this is both for lot 02-02 and 03-02, that when there
5	was a notation about a trigger assembly fell off or
6	housing fell off, you were told to write that by
7	government personnel. Is that correct?
8	A Yes.
9	Q Do you recall who told you specifically to do
10	that on 02-02?
11	A Anytime we tested the 124, our test, Kevin
12	Bowen was there.
13	Q So in both instances it was Kevin Bowen? Is
14	that yes?
15	A Yes.
16	Q Okay. All right. No further questions. Thank
17	you, sir.
18	A Okay.
19	MR. KARLSON: No other questions, Your Honor.
20	JUDGE PAGE: All right. Sir, you may step
21	down. Thank you.
22	THE WITNESS: Okay.
23	JUDGE PAGE: Mr. Hirst, you may call your
24	next witness.
25	MR. HIRST: Yes, I'd like to call as my next

witness Andy Long. 1 Sir, if you would please, raise JUDGE PAGE: 2 your right hand. 3 WHEREUPON, 4 ANDY LONG 5 was called as a witness by The Appellant and, having 6 first been duly sworn, assumed the witness stand, was 7 examined and testified as follows: 8 JUDGE PAGE: Please be seated, sir. 9 DIRECT EXAMINATION 10 BY MR. HIRST: 11 Please state your full name. 12 13 Α John Andrew Long. Mr. Long, could you please tell us what your 14 current position is at Pyrotechnic Specialties? 15 Technical Director. 16 Α Could you please provide the Court a short 17 0 summary of your professional background, including 18 education. 19 I went to high school at Milan High School in 20 Α Milan, Tennessee. Graduated as Salutatorian. I then went 21 to the University of Tennessee at Martin and graduated 22 with a BS degree in pre-med with high honors. I started 23 working for Martin Marietta at Milan Army Ammunition 24 Plant right out of college in 1975. Worked there for a 25

few months and was laid off due to a union trying to come into the plant.

I then went to Memphis, Tennessee and worked for Farrell-Calhoun Paint Company as a Paint Chemist for a short time. I also worked at Methodist Hospital in Memphis and St. Jude Children's Research Hospital in Memphis. I then went into the building industry and was a builder for about 5 years. Then I went back to Milan Army Ammunition Plant in 1980. I worked there as a Senior Chemist, a Senior Statistical Engineer and a Senior Supplier Quality Engineer until 1988.

At that point I went to Martin Electronics in Perry, Florida. Worked for them for about 2-1/2 years. I started as a Quality Engineer and when I left the company I was a Quality Manager. I then went to Class 1 in Ocala, Florida, which is a fire service industry. I worked for them for about 4 years as a Quality Manager. I then went to a company right down the street from Martin Electronics called Abisar. I worked as a Quality Manager there for approximately 6 months until I realized that they were probably going to go out of business. So I went back to Ocala as Quality Manager for ClosetMaid Corporation for about 4 years. And I worked a brief time as Operations Manager for Simar Metal Products in Ocala before coming to PSI in May 31st of

*	
2	Q Thank you. What was your specific involvement
3	in the Mark-124 Mod-0 contract that we've been talking
4	about for the last two days?
5	A I was the Senior Quality Engineer for the
6	company at that time and I was responsible for gather
7	data, preparing the lot acceptance test reports and
8	subsequently writing deviations.
9	Q Okay. Maybe using the Exhibit on the easel.
10	JUDGE PAGE: I believe that's A-5. Is that
11	correct, sir?
12	MR. HIRST: Yes, it is
13	JUDGE PAGE: Thank you.
14	MR. HIRST: Your Honor. A-5.
15	BY MR. HIRST:
16	Q Could you tell us what lots you recall that you
17	were involved in?
18	A The lots that I would have been involved with
19	would be the last three on the chart, Interfix 4, lots
20	004A-001, 004-002 and 004-003.
21	Q Okay. Thank you. Could you please give an
22	overview of how the testing went on the LAT 004A-001?
23	A Could I refer to the book?
24	Q Please do.
25	A I don't know which one of these it's in but.

1	Q Let me help you.
2	A I believe it was 284. Yes.
3	Q It should be, Andy, 284.
4	A Yes. The first lot in the 284 tab is PSI 10H
5	004A-001. That was a modified First Article test. And on
6	the, I'll turn to the summary data record. On the hot
7	phase of the smoke test
8	JUDGE PAGE: Excuse me, sir. Are you
9	referring to a particular page in Rule 4, tab 84? Are
10	you referring to a particular page in Rule 4, tab
11	THE WITNESS: Yes.
12	JUDGE PAGE: 284?
13	THE WITNESS: R-4, 284, page 10.
14	JUDGE PAGE: Thank you, sir.
15	BY MR. HIRST:
16	A This page is a summary of the hot phase of
17	the test. The average display time for smoke was 14.35.
18	And the average delay time was 1.17. The average flare
19	display time was 16.81. On page 11, this is a summary of
20	the cold testing, cold phase testing. The average delay
21	time for smoke was 2.19 seconds. The average display
22	time was 22.47. And on that particular one we had 7
23	display times that were above 25 seconds, 3 of those
24	being in the 25-26 second range. And the average display

25 time for the flare was 17.82. And the page 12, in the

2 seconds. The average display time was 16.64. And the 3 average flare display time was 17.30. On page 13, what 4 we call the tunnel test, this is testing for time and 5 also candle power and color and purity. On the smoke 6 7 phase the average delay time was 0.8 seconds. 8 average display time was 16.61 seconds. On the flare the 9 average display time was 17.95. The average candle power was 6,593. The average color value was 625 nanometers. 10 11 And the average purity was 99 percent. On page 14, this summary of the transportation/vibration test 12 samples. 13 JUDGE PAGE: Excuse me, sir. I see an acronym 14 15 TV in the upper left hand corner of this chart. THE WITNESS: That's 16 transportation/vibration. 17 18 JUDGE PAGE: Thank you, sir. BY MR. HIRST: 19 transportation/vibration 20 Α The phase, average smoke delay time was 1 second. The average 21 22 display time was 17.39. And the average flare display 23 time was 17.35. On page 15, these are the 5 foot drop 24 samples. The average delay time on smoke was 0.93. The

ambient phase, the average delay time for smoke was 0.93

average display time was 17.92. And the average of the

25

1	flare was 17.53. Page 16 just lists the samples that are
2	for temperature and humidity, because we don't do that
3	testing at PSI.
4	Q Thank you. The details of the testing that you just
5	related to the Court, opposite the testing criteria,
6	could this lot have been accepted as presented to the
7	Government with this testing?
8	A It could have been accepted on a deviation.
9	Q That's not my question. Could it have been
10	accepted as
11	A As-is?
12	Q Correct.
13	A No.
14	Q And why not?
15	A In the cold phase that's listed, summarized
16	on page 11, we had 7 display times that were above 25
17	seconds.
18	Q Okay. Based on your knowledge, could this lot
19	have been accepted on a deviation?
20	A Yes. Yes, I wrote a deviation for this
21	particular lot and it was accepted.
22	Q Thank you. I'd like to move to the next lot,
23	which is 4-2. And, again, please provide an overview of
24	that testing.
25	A Okay.

1	JUDGE PAGE: All right. And again if the
2	witness is going to look at particular pages in Rule 4,
3	tab 284, please let us know what they are for the
4	record.
5	BY MR. HIRST:
6	A Okay. This would be R-4, 284, page 29, the
7	summary of the high temperature smoke phase. We had an
8	average delay time of 1.23 seconds. An average display
9	time of 14.68 seconds. And we did have one value that
10	was below 10 seconds, sample number 61.
11	Q Mr. Long
12	CAPTAIN DAVIDSON: Excuse me, Your Honor.
13	JUDGE PAGE: Yes, sir.
14	CAPTAIN DAVIDSON: Can we get some
15	clarification? Is the witness talking about 04-02 or 04-
16	03? Because page number 29 applies to results from 04-
17	03.
18	THE WITNESS: Oh, I'm sorry. I went too far
19	over.
20	CAPTAIN DAVIDSON: Okay.
21	JUDGE PAGE: All right.
22	CAPTAIN DAVIDSON: Thank you.
23	JUDGE PAGE: Thank you, Captain Davidson. Mr.
24	Hirst, I'll ask you to ask your question of the witness
25	again.

1	MR. HIRST: I shall.
2	JUDGE PAGE: And this time we'll have the
3	witness look at different pages. Thank you.
4	BY MR. HIRST:
5	Q Okay. Let me repeat the question. Please provide
6	for the Court an overview of the LAT testing for lot 4-
7	2.
8	A Okay. They're out of order, that's why. 4-3
9	was in front of 4-2. Let me get the right page.
10	Q I think you'll find it on page 38.
11	A This is page R-4, 284, page 46.
12	JUDGE PAGE: And would the witness again
13	please state which lot this was for?
14	THE WITNESS: This is for lot, PSI, let me
15	turn back to the front. PSI 10H 004-002.
16	JUDGE PAGE: Thank you, sir.
17	BY MR. HIRST:
18	A The page 46 is a summary of the high
19	temperature phase. On the smoke end the average delay
20	time was 1.06 seconds. The average display time was
21	15.76 seconds.
22	Q Mr. Long, can I interrupt with a question, please?
23	A Yes.
24	Q I'm looking at the chart. I see under sample
25	40, I'm not sure what sample it is, but there's a

highlighted annotation against 1, 2, 3 of the rounds. 1 Why is that? 2 Yes. Samples 49, 114 and 125 are highlighted 3 because in the way the specification is listed it lists 4 19 seconds as the, or not 19 but I think it was 18 5 seconds, as the maximum display time. б Question. Was not 25 seconds the proper 7 display time? 8 Α That was our understanding, that 25 seconds 9 intended to be the maximum display time in all 10 phases of the smoke testing. 11 12 Then why did we highlight these as -did this at the request of QAR, Α 13 Cowert, because the way the specification listed it, it 14 showed a different time as being the maximum time. We 15 did have a deviation that we had submitted for the 16 contract to show that it was supposed to be 25 seconds. 17 But the specification still showed it different. So I 18 list it in the test report as what the 19 had to specification showed. 20 Were you directed to list it in the test 21 22 report this time by the QAR, Dean Cowert? 23 Α Yes. In your opinion, would he have accepted the test report if you had not listed those as failures? 24 25 CAPTAIN DAVIDSON: Objection. Lack of

1	foundation.
2	JUDGE PAGE: Sustained.
3	MR. HIRST: Let me rephrase the question. You
4	were directed by Mr. Cowert to indicate that these
5	samples that we just referred to as failures.
6	JUDGE PAGE: Is that question, sir?
7	THE WITNESS: Yes.
8	MR. HIRST: Correct?
9	JUDGE PAGE: Put it in the form of a
10	question.
11	BY MR. HIRST:
12	Q Correct? Is that correct?
13	A Yes, yes.
14	Q Did Mr. Cowert indicate that he would not or
15	would accept, that he would not accept the LATR if we
16	had listed those non-failures?
17	A Yes. I routed all LATRs as well as deviations
18	through him for approval. And he indicated that he would
19	not approve it unless it listed what the specification
20	said.
21	Q So Mr. Cowert did not recognize that there
22	was an approved deviation for all phases of testing with
23	a maximum display time of 25 seconds. Is that correct?
24	A Right.
25	Q Thank you. Please continue.

A All right. Under the flare display time for that phase the average was 17.16 seconds. In the low temperature phase, the smoke part, the average delay time was 2.69 seconds. The average display time was 29.93 seconds with 19 of 20 of the samples being over 25 seconds. And the average flare display time was 17.89 seconds. And the sealing function, page 48, sealing function summary, for the smoke the average delay time was 0.95 seconds with one dud on sample 100. The average display time was 16.07 seconds with one dud, again on sample 100. And the flare display time average was 17.47.

On page 49, the ambient tunnel phase for the smoke, the average delay time was 1.62 seconds. The average display time was 18.21 seconds with one sample, number 48, being over 25 seconds at 25.06. On the flare phase, the display time average was 18.43 seconds. The average candle power was 8,000. The average color value was 629 nanometers. And the average purity was 99. On page 50, in the transportation/vibration phase, the average delay time for smoke was 0.92 seconds. The average display time was 14.90 seconds. And the average flare display time was 17.58 seconds with a dud on sample number 109. On page 51, the 5 foot drop phase, smoke section, the average delay time was 1.46 seconds.

1	The average display time was 22.14 seconds with 4
2	samples being listed over what the specification showed.
3	The average display time for the flare was 17.28
4	seconds.
5	Q Thank you. Going to ask you the same question
6	I asked you before regarding the lot as presented with
7	the test results as you've outlined, should that lot
8	have been accepted initially by the Government?
9	A No.
10	Q Why not?
11	A During the smoke phase on page, low
12	temperature, page 47, we had 19 of 20 samples that were
13	in excess of 25 seconds on the display time.
14	Q How does the average of all the low
15	temperature smoke tests, that average compare to the
16	previous average of lot 4-1?
17	A The average on this was 29.93, so it's a
18	little bit higher than what it was on the previous lot.
19	Q I'm going to ask you, after the LAT testing
20	that was done on 4-2, was there any kind of a follow up
21	meeting held with government personnel that audited the
22	test?
23	A Yes. We had a close out meeting in the
24	conference room at PSI.
25	Q Do you remember what was discussed at that

1	meeting?
2	A Yes. That the attitude was positive about the
3	outcome of the testing. It as indicated by Mr. Kevin
4	Bowen that, even though we had 19 of 20 that were above
5	the 25 seconds on the display time, that that didn't
6	seem to be a major problem. And that we should go ahead
7	and write a deviation and submit that lot.
8	Q Even the fact that 19 of 20 failed it cold
9	with longer display times, that was still the case.
10	Correct?
11	A Yes.
12	Q In your opinion, why was that?
13	A Because the average display time was still
14	less than 30 seconds and there wasn't a big concern
15	about that being an issue with acceptance of the lot.
16	Q Had any remarks ever been made by government
17	personnel during this test about the nature of long
18	display times?
19	A The general consensus was that, as long as
20	the plume of the smoke was consistent and robust, the
21	display time being longer was not a major issue.
22	Q Do you remember specifically who would have
23	said that to you?
24	A I know specifically Kevin Bowen did.

Q

25

Okay.

1	A I don't remember if anyone else said that.
2	Q Thank you. Next question. I'd like to have a
3	brief overview of the testing of lot 4-3, please.
4	A 4-2?
5	Q 4-3.
6	A 4-3. Okay.
7	Q We just did 4-2.
8	A All right. This is on page R-4, 284, page 29.
9	This is a summary of the high temperature phase for the
10	smoke end. The average delay time was 1.23 seconds. The
11	average, am I on the right page? Wait a minute. Yes.
12	Okay. The average display time was 14.68 seconds with
13	one sample, number 61, with a display time of 9.1 that
14	was below the minimum display. And the average display
15	time for the flare was 17.23 seconds. On page 30, this
16	is a summary of the low temperature phase. On the smoke
17	end the average delay time was 2.67 seconds with one
18	sample, number 77, being over the maximum at 6.55
19	seconds. The average display time was 25.88 seconds with
20	7 samples, no, wait a minute, 10 samples being over the
21	25 maximum second. And the average flare display time
22	was 18.14 seconds.
23	On page 31 the sealing function, ambient
24	phase, the average delay time was 1.66 seconds. The
25	average display time was 18.45 seconds. And the average

3 - 32flare display time was 17.07 seconds with one dud on 1 sample number 48. On page 32, sealing function phase, 2 tunnel, and the smoke end the average delay time was 3 1.60 seconds. The average display time was 18.64 seconds 4 with one sample, number 17, at 27.42 seconds, above the 5 requirement. On the flare end, the average display time 6 was 18.42 seconds. The average candle power was 8,063. 7 The average color value was 622 nanometers. And the 8 average purity was 99 percent. 9 On page 33, the transportation/vibration 10 phase. The average delay time was 1.51 seconds. Average 11 display time was 17.25 seconds with 4 samples noted 12 above the maximum specification listing. And the average 13 flare display time was 16.98 seconds. On page 34, in the 14 5 foot drop test phase, on the smoke end, the average 15 delay time was 1.09 seconds. Average display time was 16 15.68 seconds. And the average flare display time was 17 17.62 seconds. 18

> I'd like to return, please, to page 33. Q

Α Okay.

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is listed Q This test sheet transportation/vibration smoke. I have, again, question of why certain samples under display time are highlighted. Why is that?

> Α For the same reason that they were on the

1	other lot tests. That's what the specification shows a
2	maximum and these are over the maximum time.
3	Q Again, my question, 25 seconds was the
4	approved maximum display time after the deviation was
5	accepted. Correct?
6	A Well 25 seconds was the time that was listed
7	on the deviation. Yes. But that's not what the
8	specification showed.
9	Q Thank you. The testing of 4-3, were any
10	leakers encountered?
11	A Yes. We did have one leaker that appeared to
12	be due to a slight abrasion on the sealing disk that
13	caused a pinhole perforation in it.
14	Q So the lot as you just outlined, should that
15	have been accepted by the Government on the initial
16	submission of the LAT?
17	A On the initial testing? No.
18	Q And why not?
19	A The delay time on page 30, the low
20	temperature smoke phase, we did have 10 that were above
21	the 25 second maximum. And then we also had the one
22	leaker.
23	Q Could this lot, 4-3, have been screened to
24	remove other potential leaking parts?
25	A Yes, it could have been screened 100 percent
- 1	1

1	for leakers.
2	Q Okay. Based on your knowledge, had that ever
3	happened before? Had the Government allowed 100 percent
4	screening of previous lots?
5	A Yes. I believe so.
б	Q After the LAT test, again was there a close
7	out meeting with the Government?
8	A Yes.
9	Q What do you recall about what was discussed
10	at that meeting?
11	A We discussed results of the testing. There
12	was an improvement from the previous lot. And the
13	general consensus was that we should document this in a
14	request for deviation to have the lot accepted.
15	Q In your opinion, why was there a favorable
16	view of acceptance of a deviation?
17	A I think primarily because we had shown quite
18	a bit of improvement in the low temperature smoke phase
19	between the lots 002 and 003. And it looked like we were
20	on the right track to meeting all the requirements.
21	Q And you stated in your answering a previous
22	question of mine, the long display times were not
23	necessarily viewed unfavorably. Correct?
24	A That's right.
25	Q Do you recall what happened shortly after the

testing of the last lot 4-3? 1 Very shortly after the testing was completed 2 we received a letter indicating that the contract had 3 been terminated for default. 4 Had a response been received on the two 5 deviation requests that you submitted for 4-2 and 4-3? 6 Not to my knowledge. I never received any 7 response on either one of them. 8 I'd ask you why you believe the 9 Government terminated the contract for default? 10 CAPTAIN DAVIDSON: Objection. Foundation. 11 JUDGE PAGE: Overruled. 12 13 BY MR. HIRST: I believe primarily it was two major reasons. 14 15 We had been told in the closeout meetings of both of the 16 last lots, lot 002 and 003 that the Air Force funding was about to run out and I think that was one of the 17 The other reason I think from reviewing some 18 of the documentation that I've seen was that there was 19 an intention to go to my former employer, Martin 20 Electronics, that I believe at that time had changed 21 over to Chemring Ordinance was the name of the company, 22

Q You mentioned earlier that you were employed by Martin Electronics. For the clarity of the Court,

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24

25

to produce the rounds there.

1	Martin Electronics
2	JUDGE PAGE: Okay, Mr. Hirst, I'm sorry I
3	can't allow you to testify.
4	MR. HIRST: Okay.
5	JUDGE PAGE: You may ask a question of the
6	witness.
7	BY MR. HIRST:
8	Q Could you please again clarify for the
9	benefit of the Court the name of Martin Electronics when
10	you worked there and what its current name is?
11	A When I started in 1998, the name of the
12	company was Martin Electronics, Incorporated, MEI for
13	short and I believe, I don't know the timing of when
14	they were bought out by Chemring but I believe now
15	they're called Chemring Ordinance.
16	JUDGE PAGE: Mr. Long, if you would please,
17	could you spell that for the record?
18	THE WITNESS: Chemring?
19	JUDGE PAGE: Yes, sir.
20	THE WITNESS: I believe it's C-H-E-M-R-I-N-G.
21	I don't know if there's a hyphen in between or not.
22	JUDGE PAGE: Thank you, sir.
23	BY MR. HIRST:
24	Q Okay. When you worked at Martin Electronics,
25	was Martin Electronics involved with manufacturing the

1	Mark 124 modular?
2	A Yes, it was.
3	Q They held a contract to produce the device?
4	A Yes.
5	Q Based on your direct recollection, was Martin
6	Electronics experiencing any problems manufacturing the
7	Mark 124 mod zero?
8	A Yes, we had issues with leakers. We had to
9	preheat the outer container to somewhat soften it and
10	kneel it before crimping to try to help with sealing the
11	device to meet the leakage requirement.
12	Q Do you recall if LATs were failed because of
13	leakers?
14	A No, I was not directly involved in the
15	testing at that time. I was working on another project
16	but I did work directly with the supervisor of the area,
17	Richard Kruce in trying to help him get around the
18	leakage problem, but I was more on a consulting
19	capacity. I was the quality engineer at that time and
20	was not directly involved in the testing of the Mark
21	124.
22	Q Do you know if Martin Electronics Mark 124
23	mod zero contract was terminated for default?
24	A No, I don't have any knowledge of, I just
25	know that we quit making it. I don't know the
ļ	

circumstances. 1 Thank you. I'm going to ask you based 2 0 on your knowledge, your direct knowledge, what is your 3 opinion of the manufacturability of the Mark 124 mod 4 zero with the TDP that was in place when PSI held the 5 contract? 6 I believe it's an extremely difficult item to 7 Α 8 manufacture. It's virtually un-producible in meeting all of the requirements of the specification and it has a 9 lot of pitfalls in the design that makes it easy to make 10 11 mistakes during assembly. 12 My next question, do you recall a visit that Q Pyrotechnic Specialties by Chemring 13 paid to Ordinance program and engineering personnel in May 2013? 14 15 Α Yes. What was the purpose of their visit? 16 0 They were coming to purchase a crimping 17 Α 18 device and table, a crimping setup from us. 19 0 Do you know how they were referred to Pyrotechnic Specialties to buy this crimper? 20 No, I'm not aware of that. 21 Α 22 Q Okay. How did you participate in this visit? I came down and introduced myself to one of 23 Α the employees. The other one I had worked with at 24 25 Martin Electronics and talked with them about how to get

¹	the table and device loaded and helped get them
2	positioned to load it onto their truck.
3	Q At any point in time when you were talking
4	with the Chemring visitors, did any of them relate to
5	you how they were doing with their new contract of the
6	Mark 124 mod 1 that they were awarded in 2011?
7	A Yes, we
8	CAPTAIN DAVIDSON: Objection. Hearsay.
9	JUDGE PAGE: Mr. Hirst. How do you respond
10	to the objection?
11	MR. HIRST: I'm asking his direct knowledge
12	of a conversation he had with a Chemring employee.
13	JUDGE PAGE: You're asking him as I
14	understand it though to relate the comments that were
15	made by the Chemring employees, is that correct?
16	MR. HIRST: That he heard directly from the
17	employee.
18	JUDGE PAGE: Sir, hearsay is a statement made
19	by a declarant who is out of court and is not available
20	as a witness. There are exceptions to hearsay but I
21	don't believe you've provided me with one of them, so
22	for that reason I'll sustain the objection.
23	MR. HIRST: No further questions, Your Honor.
24	JUDGE PAGE: All right. Thank you, sir.
25	Captain Davidson.
	•

1	CAPTAIN DAVIDSON: Yes, Your Honor, just one
2	moment to organize.
3	CROSS-EXAMINATION
4	BY CAPTAIN DAVIDSON:
5	Q All right, Mr. Long, you've testified about
6	three separate LATs that occurred that you supervised,
7	correct? 04A-001, 04-002 and 04-003, is that correct?
8	A Right.
9	Q And you arrived at the company, I believe you
10	said in May 2011?
11	A May 31, 2011, yes.
12	Q Prior to the performance of those LATs, do
13	you know, and if so, were you involved in, First Article
14	Tests that occurred during inter-fix 4 or prior to the
15	beginning of inter-fix 4?
16	A No.
17	Q You had no involvement in First Article
18	Tests?
19	A Are you talking about before?
20	Q I'm talking about tests that would be
21	strangely named but 04A-001, not the LAT FAT that's on
22	that chart, but the actual first article that occurred
23	in
24	A In like the March timeframe?
25	Q I believe it was after that. One moment.

1	A If it was prior to May 31, 2011, I don't have
2	any involvement in it. I wasn't at the company.
3	JUDGE PAGE: And Captain Davidson, if you
4	have a reference we could provide.
5	BY CAPTAIN DAVIDSON:
6	Q Okay, this one did occur before your arrival.
7	How about, actually let's to the point, did you
8	participate in any first articles before 04A-001 that
9	you testified about?
10	A No, that
11	Q No. Okay.
12	A My first involvement was with the 004A-001.
13	Q Which was a FAT LAT combination, correct?
14	A Right.
15	Q Okay. Thank you. And then, sir, let's talk
16	about 04A-001 that you testified about at tab 284, this
17	was, page one is the start of that LAT, correct?
18	A Right.
19	Q Okay. And during your testimony on page 11,
20	this is the cold smoke display times as well as flare
21	but focusing on smoke display, is that correct?
22	A Yes.
23	Q And you discussed how, it looks like there's
24	one, two, three, four, five, six, seven out of 20 that
25	were over the, I guess what was the specification that,
1	

1	you're und	derstanding of the specification, is that	
2	correct?		
3	A	Right.	
4	Q	And you had mentioned that there was	
5	previously	a deviation that changed that time to raise	
б	it up to 2	5 seconds, is that correct?	
7	A	Well, now the cold display time is 25 seconds	
8	anyway.		
9	Q	It is? Okay.	
10	A	It always has been.	
11	Q	Okay. And, so the ones that are highlighted	
12	are all ab	ove 25 seconds?	
13	А	Yes.	
14	Q	And so based on the specification those were	
15	not compli	ant?	
16	A	That's right.	
17	Q	Okay. And when you, excuse me, scratch that	
18	question.	And are you aware, was lot 4, 004A-001, was	
19	that accep	oted by the Government despite these long	
20	display ti	mes?	
21	A	By deviation, yes.	
22	Q	By deviation, but the Government did accept	
23	it?		
24	A	Yes.	
25	Q	Okay. And can we go to lot, oh, one second.	
‡	!		

1	Can we go to page 16 of Rule 4 Tab 284, please? And
2	this is I believe still dealing with the same 004A-001,
3	is that correct?
4	A Yes.
5	JUDGE PAGE: Captain Davidson, could you give
6	me that reference again, please, sir?
7	CAPTAIN DAVIDSON: Yes, Your Honor, it's Rule
8	4, Tab 284, page 16.
9	JUDGE PAGE: Page 16. Thank you.
10	BY CAPTAIN DAVIDSON:
11	Q Can you just explain the paragraph note
12	that's on the upper right hand side of the page and what
13	that means?
14	A Yes. There were samples that were pulled and
15	I believe they were cut into to remove the flare end of
16	the candle to use for a tunnel test but they weren't
17	supposed to be at that point, so when we tried to test
18	the smoke end because there was no crimp to support it,
19	it blew one of the samples out, so we went back and
20	pulled additional samples to get around those ones that
21	were prepared improperly out of sequence.
22	Q Okay. Thank you. All right, now I'd like to
23	turn your attention to lot 004-002, which should be Rule
24	4, Tab 284, page 38.
	1

A

33?

1	Q 38, sir.
2	A 38?
3	Q And specifically, excuse me, I'd like to
4	actually go to page 47 of this report, or of this Tab of
5	the lot 004-002 report.
6	A Okay.
7	Q Are you on that page, sir?
8	A Yes.
9	Q And on this page, you testified that 19 of
10	the 20 samples, this is again the cold smoke test,
11	tested above the 25 second max, is that correct?
12	A Right.
13	Q And of those 25 samples that were above the
14	25 second max, looking at that chart can you tell me
15	what the longest display time was?
16	A The maximum was 41.48.
17	Q Okay. Thank you. And again the
18	specification says the max display time is 25 seconds,
19	is that correct?
20	A That's right.
21	Q And in much of your testimony you focused on
22	what the average display time was for a particular test.
23	A Right.
24	Q Do you know, does the specification, is that
25	25 second max based on average or on an individual unit
ı	I .

1	testing?
2	A No, it's based on individual units.
3	Q Okay. Thank you. And also while you
4	testified fairly extensively on the display times of
5	this particular lot, are you aware did this lot have any
6	other issues that were cause for its non-acceptance?
7	A Which lot?
8	Q This is lot 004-002.
9	A 002?
10	Q And to help you go to Rule 4, Tab 284, page
11	42, and if you look at paragraph B1, so that's paragraph
12	B is physical testing, 1 is seal integrity, can you just
13	read that first paragraph?
1	
14	A And what page were you on?
14	A And what page were you on? Q 42.
15	Q 42.
15	Q 42. A 42? And which paragraph?
15 16 17	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph,
15 16 17 18	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity.
15 16 17 18	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity. A B1? Yes. Sample number 40 five foot drop
15 16 17 18 19	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity. A B1? Yes. Sample number 40 five foot drop test sample failed the seal integrity test. All other
15 16 17 18 19 20	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity. A B1? Yes. Sample number 40 five foot drop test sample failed the seal integrity test. All other signals passed the sealing test and were in conformance
15 16 17 18 19 20 21	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity. A B1? Yes. Sample number 40 five foot drop test sample failed the seal integrity test. All other signals passed the sealing test and were in conformance with the requirements.
15 16 17 18 19 20 21 22	Q 42. A 42? And which paragraph? Q B1, so physical testing and then paragraph, subparagraph 1 is seal integrity. A B1? Yes. Sample number 40 five foot drop test sample failed the seal integrity test. All other signals passed the sealing test and were in conformance with the requirements. Q Great, and based on the specification, do you

1	A None.
2	Q None, so zero?
3	A Zero.
4	Q So, having one fail was a reason the
5	Government could reject a lot?
6	A Yes.
7	Q Okay. And then can we read paragraph C,
8	subparagraph 2 on that same page, transportation
9	vibration?
10	A Twenty signals were subjected to the
11	transportation vibration test with acceptable results.
12	Sample number 109 failed the sealing test following
13	transportation vibration test due to a hole in the
14	sealing disk on the flare end.
15	Q So this was another leaker contained in the
16	lot?
17	A Yes.
18	Q So this lot, 04-002 contained two leakers as
19	well as the display time issues?
20	A Well this leaker was the result of testing.
21	Q But was it a leaker?
22	A Yes.
23	Q Okay. Thank you. All right, now I'd like to
24	turn our attention to lot 004-003, which is at Tab 284,
25	page 21. And actually, excuse me, specifically I would

1	like to look at this lot but go to the lot report, which
2	is, the portion of the lot report that's at page 30 of
3	the Tab, so 284, page 30.
4	A Okay.
5	Q And just to confirm, this is test results of
6	cold or low temperature, has both smoking, flare display
7	times for lot 004-003, is that correct?
8	A Yes.
9	Q And looking at the display times or the
10	smoke, which is the second column, there are several
11	that are highlighted. Again the highlighted ones are
12	the ones that were over 25 seconds display time?
13	A Yes.
14	Q And just looking at that list, can you see
15	what the longest display time was?
16	A 36.18 seconds.
17	Q Okay, and, and again you testified that the
18	specification, it can go up to 25 seconds display time,
19	correct?
20	A Right.
21	Q And, and much of your testimony focused again
22	on average display time, is that also correct?
23	A Yes.
24	Q And then here while the average was 2.85,
25	there were seven, no several, looks like 9 flares

1	A Ten, I think total.
2	Q Ten. Ten of the 20 flares that were over that
3	25 seconds?
4	A Yes.
5	Q Okay. And then also you mentioned in this
6	lot that there was also a leaker, is that correct?
7	A Yes.
8	Q And, again, how many leakers can there be in
9	a lot under this specification before a lot's rejected?
10	A None.
11	Q None. Okay. You had mentioned that you had
12	heard that a lot had been previously accepted before
13	your arrival at PSI after 100 percent, a lot that
14	contained leakers, excuse me, after 100 percent
15	rescreen, is that correct?
16	A Yes.
17	Q But you were not there to personally witness
18	the rescreen or the failure of that lot?
19	A No.
20	Q Okay. Thank you. No further questions.
21	Thank you.
22	A All right.
23	JUDGE PAGE: Mr. Hirst?
24	MR. HIRST: Yes, I have a follow-up question.
25	 REDIRECT EXAMINATION

1	BY MR. HIRST:
2	Q I'd like to return please to page 42 of Tab
3	284.
4	A 42?
5	Q Page 42.
6	A Okay.
7	Q We'll go back to paragraph B1, seal
8	integrity. You indicated that sample 40 failed the seal
9	test integrity test and all the other singles passed
10	this test, correct?
11	A Yes.
12	Q How many emergent tests are done on the drop
13	test?
14	A Two. There's one done prior to the test and
15	one done after.
16	Q Do you recall the result of the initial test
17	prior to the drop test, the seal integrity test, how did
18	that turn out?
19	A On the sample number 40, the initial test
20	failed and then after the five foot drop test, that same
21	sample passed sealing.
22	Q So it failed initially?
23	A Yes.
24	Q And then the unit was tested, the drop test.
25	Could you please describe what the drop test is?

1	A The drop test is taking a sample and holding
2	it five feet above a solid surface and dropping it.
3	Q And after that test, the subsequent seal test
4	passed, is that correct?
5	A Yes.
6	Q Was there any other testing done on this
7	unit?
8	A There was function testing done after the,
9	after the seal integrity test.
10	Q And how did that, what was the result of that
11	test?
12	A They all functioned properly.
13	Q Okay. Do you have any explanation as to how
14	a unit could fail the initial seal test, seal integrity
15	test, be dropped and then pass?
16	A I don't have any direct explanation for how
17	that can occur, no.
18	Q Thank you.
19	MR. HIRST: No further questions.
20	JUDGE PAGE: Captain Davidson?
21	CAPTAIN DAVIDSON: No, Your Honor. Thank
22	you.
23	JUDGE PAGE: All right. Thank you. I have
24	one question for the witness just to make sure that the
25	record is clear. Early in your answers with Mr. Hirst's

1	initial examination of you, you mentioned screening for
2	leakers. Would you please tell us for the record what
3	does it mean to screen for leakers?
4	THE WITNESS: That means to take the entire
5	lot and put it through the sealing test, which takes the
6	samples and puts them under water under a specific depth
7	of water with a vacuum being pulled on it and look for
8	a stream of bubbles coming off of it.
9	JUDGE PAGE: And if you find a stream of
10	bubbles, what do you do then?
11	THE WITNESS: A stream of bubbles indicates
12	that one of the, that sample is leaking.
13	JUDGE PAGE: Thank you, sir.
14	THE WITNESS: So it, that would fail the
15	sealing test.
16	JUDGE PAGE: All right. Thank you, Mr. Long.
17	You may step down, sir. Thank you.
18	THE WITNESS: Okay.
19	JUDGE PAGE: I will ask if the court reporter
20	has any questions or clarifications needed from Mr.
21	Long.
22	COURT REPORTER: Just need his contact
23	information.
24	JUDGE PAGE: Thank you, Mr. Long. Mr.
25	Karlson and Mr. Hirst, have you any further witnesses to

call? MR. HIRST: I'd like to call Mr. Ryan Pierce, 2 3 Your Honor. JUDGE PAGE: All right, sir. Mr. Pierce. 4 Your Honor. MR. NEILL: 5 Yes, Mr. Karlson. I'm sorry, 6 JUDGE PAGE: Mr. Neill. 7 I'm sorry, Mr. Pierce was not MR. NEILL: 8 listed on PSI's witness list and he'd certainly be 9 subject to cross-examination after we call him. 10 MR. KARLSON: As long as the Government is 11 planning to call him. 12 JUDGE PAGE: All right then. Yes, Mr. Neill 13 is quite correct. You need to have listed Mr. Pierce on 14 your witness list, but you can cross-examine him as part 15 of the Government's case. All right, Mr. Pierce, you 16 17 may be seated, sir. Mr. Karlson, Mr. Hirst. MR. HIRST: We'd like to rest our case, Your 18 Honor. 19 All right. Thank you. JUDGE PAGE: Now I 20 will note as I did at the outset of this hearing that 21 because this is a termination for default that the 22 Government bears the burden of proving the propriety of 23 that termination and you do as the appellant have the 24

right to examine and cross-examine their witnesses on

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1	that. Any questions?
2	MR. HIRST: No, Your Honor.
3	JUDGE PAGE: All right. Thank you.
4	Government, it is about 10:25. Would you prefer to
5	present your case in chief on the termination or to take
6	a brief break?
7	MR. NEILL: I'd prefer to take a brief
8	comfort break, Your Honor, but then to come back fairly
9	quickly.
10	JUDGE PAGE: How long would you like?
11	MR. NEILL: Five minutes, ten minutes,
12	whatever you want.
13	JUDGE PAGE: Ten minutes. Off the record.
14	(WHEREUPON, the above-entitled matter went
15	off the record at 10:22 a.m. and resumed at 10:35 a.m.)
16	JUDGE PAGE: Mr. Neill.
17	MR. NEILL: Before we get started, Your
18	Honor, we did have one document to be marked as an
19	exhibit. It responds to the Appellant's Exhibit A-5
20	that we contend is inaccurate in a couple of respects
21	and I wanted to use it in the testimony of Kevin Bowen.
22	So if I can show this to
23	JUDGE PAGE: If you will share a copy with
24	Mr. Karlson, provide me with one as well, please. Thank
25	you. Let's give Mr. Karlson and Mr. Hirst a moment to

1	look at the Exhibit please. Appellant, do you have any
2	objections to this document?
3	MR. KARLSON: No, Your Honor.
4	JUDGE PAGE: All right. Thank you. Mr.
5	Neill, would you like to move for its admission at this
6	time?
7	MR. NEILL: Yes, Your Honor.
8	JUDGE PAGE: All right. I'll ask the court
9	reporter to mark it as Exhibit G-1. Is that correct?
10	MR. NEILL: Yes, Your Honor.
11	JUDGE PAGE: Thank you.
12	(Whereupon, the above-referred to document
13	was marked and admitted as Government Exhibit
14	1.)
15	JUDGE PAGE: Is there anything further, Mr.
16	Neill?
17	MR. NEILL: No, Your Honor. Do you mind if
18	I set it up?
19	JUDGE PAGE: You may. Mr. Neill, you may
20	call your first witness.
21	MR. NEILL: The government calls Kevin Bowen.
22	JUDGE PAGE: Thank you. Sir, if you would,
23	please raise your right hand.
24	WHEREUPON,
25	KEVIN BOWEN

1	was called as a witness by The Respondent and, having
2	first been duly sworn, assumed the witness stand, was
3	examined and testified as follows:
4	JUDGE PAGE: Please be seated, sir.
5	DIRECT EXAMINATION
6	BY MR. NEILL:
7	Q Would you please state your full name?
8	A Kevin Bowen.
9	Q And are you currently employed by the
10	Government?
11	A No, sir.
12	Q Okay. Have you recently retired from the
13	Government?
14	A Yes, sir. I retired on August 1.
15	Q And prior to your retirement, what position
16	did you hold?
17	A I was a mechanical engineer working for Naval
18	Service Warfare Center at Crane, Indiana, working in the
19	ordinance department which in the Government standard
20	has been reorganized and renamed numerous times over the
21	32+ years that I worked.
22	Q Okay. And when did you begin working in that
23	position?
24	A I was hired into the same position from which
25	I retired, actually served in the same place for over 32

1	years, on June 1, 1982.
2	Q All right. Do you have any education after
3	high school?
4	A Yes, sir. I have Bachelor of Science degrees
5	in mechanical engineering from Rose-Hulman Institute of
6	Technology and I had continuing education also with
7	Rose-Hulman through work towards a master's degree but
8	I never did my thesis to obtain the master's degree.
9	Q And when did you obtain your bachelor's
10	degree?
11	A I graduated three days prior to my start of
12	work at Crane Naval Service Warfare Center in 1982.
13	Q Okay, and you, and what field was your degree
14	in?
15	A Mechanical Engineering.
16	Q And what, would you please describe the
17	nature of your duties in the position that you held for
18	32 years?
19	A I have served as, in the field I work at,
20	refer to as a design agent and as an acquisition
21	engineering agent, usually double hatted for many items
22	for a number of different demolition and pyrotechnic
23	items and also I did serve, work with submarine and
24	acoustic countermeasure systems as well for a few years
25	within that same group.

Q Okay. And if you would please try to answer a bit more slowly just to to help everyone I think it might be helpful. And in those areas, did you provide technical support?

sir. As a design agent, I am the engineer who is responsible for the configuration, the configuration management aspects of technical whatever items I was assigned during my tenure. acquisition engineering agent, I provided the additional quality assurance and other quality related documents and organizational documents with that technical data package that is performed by the design agency side of job to provide a complete technical procurement package to the contracting office in order to procure whatever widgets that were being desired by the program office in any given year.

Q Okay. Now you used the term configuration management. What does that mean?

A Configuration management is the concept by which there are standards and established procedures and practices to define exactly what components are within a particular widget. In this case, a pyrotechnic or a demolition item so that if anything happens downstream in the future, that they can go back to the records to see exactly what components were utilized in the

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manufacture of the said widget and also what extraneous 1 circumstances or testing might have been done in 2 3 addition to that on those same items. And, if you don't mind, sir, 4 JUDGE PAGE: please let me repeat Mr. Neill's request that you slow 5 down just a little. 6 THE WITNESS: I'm sorry. I do happen to speak 7 a little quickly. I, just my nature. 8 9 JUDGE PAGE: Thank you. BY MR. NEILL: 10 So in the course of your duties were you 11 responsible for maintaining the technical data package 12 for the Mark 124 mod zero smoke and illumination signal? 13 Yes, sir. 14 Α And what does the technical data 15 Q package consist of? 16 The technical data package consists of all 17 drawings, specifications, and other pertinent documents 18 such as hazards, components, safety data statements that 19 are provided by the Government or directed by the 20 Government for use in production of the item. This is 21 also generally an R group consolidated and covered by a 22 document referred to as automated data list which is an 23 index of all such specifications and drawings. 24 Now when did you first become 25 All right. 0

1	involved with the Mark 124 mod 2ero signar:
2	A The item itself was developed by R&D group in
3	our department in the 1980s. The engineer who assumed
4	the acquisition engineering responsibilities upon its
5	transition from R&D retired in the mid-1990s and I
6	inherited the program from him I believe around 1996.
7	I don't remember the exact date, however.
8	Q Okay, and was PSI producing the Mark 124 mod
9	zero signals at that time?
10	A No. It was currently, at that time it was
11	produced by a company in Perry, Florida referred to as
12	Martin Electronics as Andy referred to previously, in
13	previous testimony.
14	Q Okay. And how long did your involvement with
15	the Mark 124 mod zero continue?
16	A From the point in approximately 1996 through
17	I believe three contracts with Martin Electronics and
18	throughout the entirety of the PSI contract.
19	Q In the course of your duties did you deal
20	with requests for deviation from the specifications and
21	drawings that were submitted by contractors?
22	A Yes.
23	Q And specifically with reference to the
24	contract at issue here, did you deal with requests for
25	deviation that were submitted by PSI in the course of
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performing it's contract to produce the Mark 124?

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Α Yes. In this contract there were multiple customers. Basically this is a distress item that is used by all services of the Armed Forces and as such all services have been customers for this item through the contracting office at Rock Island. Despite that, this is a Navy configuration item and as the Navy engineer for the item I am the lead technical agent for that and I do serve in the design agent function solely. As such, I had to be involved with the technical disposition of virtually every deviation that was submitted by PSI. a few instances I believe towards the latter lots there may have been one or two deviations for a specific lot that was going to another service, such as the United States Air Force, in which case the engineer from the Air Force would have had authority to do the approval but generally all approvals of deviations were routed through our office as being the configuration management office for the item.

Q Okay, and --

A And even on the, excuse me. Let me clarify one other point. And even though the Air Force may provide the technical approval it was still channeled through our office to be signed off before presented back to the contract office for incorporation into the

contract.

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Q Okay. Can you briefly describe the process for considering a request for deviation and either approving it or disapproving it?

In, once the deviation is submitted to the Α office there is quality assurance contracting а representative of the quality manager on the team at Rock Island who coordinates input from all technical points of contact from the customers with myself being the lead as the design agent. Those inputs are then all considered back to me in a kind of what's done is a configuration control board meeting with input from all technical activities back myself the to as configuration manager of the item and then we discuss the technical merits or disadvantages of the proposed deviation and make a technical assessment as to whether or not is it acceptable and whether or not we would recommend that the contract office pursue consideration in exchange for granting such deviation.

Q Okay, and it's the contracting office that ultimately either approves or disapproves these?

A The deviation is technically approved by my office as the design agent and configuration manager for the item. We then provide that technically approved deviation back to the contracting team through the

1	quality manager to the contract specialist for them to
2	incorporate contractually and negotiate a consideration
3	if appropriate.
4	Q Okay. All right. Now are you familiar with
5	the drawings and specifications of the Mark 124 mod
6	zero?
7	A Yes, sir. They were my responsibility.
8	Q Okay, and were those, are you aware, were
9	they incorporated in the contract at issue here?
10	A I'm sorry?
11	Q Were they incorporated into PSI's contract?
12	A Yes. As I mentioned before the entire
13	technical data package which is all the specifications
14	and drawings is included in a procurement data package
15	which adds a quality requirement and that entire package
16	is sent and incorporated into the contract. I believe
17	it's listed in, I'm not the contracts expert, but I
18	believe that it is referenced in J as an attachment.
19	Q Okay. Would you please turn to Tab 22?
20	A That would be in Volume I?
21	Q Yes.
22	A Yes, sir.
23	Q Are you familiar with this document?
24	A Yes, sir.
25	Q And what is this?
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Ţ	A This is the weapons specification for the
2	Mark 124 mod zero. It defines the performance parameters
3	for the item upon completion of production.
4	Q Okay. And does this include a table with lot
5	acceptance criteria?
6	A Yes, it does. In Table I. It's a summary of
7	the tests that are performed that are also described
8	herein.
9	Q All right.
10	JUDGE PAGE: Could you give me a page
11	reference for that, sir?
12	THE WITNESS: It's page 8 and 9.
13	JUDGE PAGE: Page 8?
14	THE WITNESS: Page 8 and 9 is the Table.
15	JUDGE PAGE: Pages 8 and 9?
16	THE WITNESS: Yes.
17	JUDGE PAGE: Thank you.
18	BY MR. NEILL:
19	Q Okay. Before we discuss that table, well,
20	why don't we just discuss the table on page 8 and 9 and
21	I would ask you if you could to please look at the,
22	explain I guess, the test sequence for the first article
23	sampling plans.
24	A For the first article only?
25	Q Yes, just for the first article.
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3-64 For the first article of production quantity of 185 signals is produced. Of that initially the entire quantity is then subjected to x-ray prior to any other conditioning or testing in order to get a definition of the baseline configuration. Okay. Now is the x-ray procedure that you Q mentioned listed in the table anywhere? Yes, the, in all cases the layout of the spec А is such that when you look at x-ray, which is the third block down on the very far left side on page 8, there is a reference paragraph in there, 4.5.2.8 and 4.5.2.8 will be a description of the test procedure. Within that test procedure of 4.5.2.8 it will in turn refer back to

a requirement that needs to be achieved or demonstrated which will be numbered as 3.5.2.8. Paragraph 3 contains requirements, paragraph 4 the contains the test procedures and they are linked by using common numbers or sub-paragraph numbers.

All right, now does the Table I on 0 Okay. page 8 define the sample size for a first article --

Yes. The entire, in the second column where it says, under the heading ironically, sample size, it indicates that the 100 percent of the first article sample is subjected to the x-ray and the x-ray procedure calls for two x-rays to be taken at 90 degrees so that

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1	it will be taken one in the config, I'm using Exhibit Al
2	as a visual, to illustrate that there is an x-ray taken
3	in one orientation and then the cylinder is rotated 90
4	degrees for a second x-ray typically.
5	Q Okay. And then are the acceptance criteria
6	listed in the table?
7	A The acceptance criteria will be contained in
8	the paragraph 4.5.2.8, I'm sorry the acceptance
9	requirements. The criteria are accept zero reject one
10	and if you go to 4.5.2.8 it will define the process
11	which will lead you back to 3.5.2.8 and the requirements
12	on this if you want me to read that, will
13	Q Let's just take, let's slow down here and
14	take a look at page 11 of Tab 22. I'll draw your
15	attention to paragraph 4.5.2.8, is that the paragraph
16	you're referring to?
17	A Which is the procedure. Yes.
18	Q I'm sorry.
19	A Yes. I'm sorry.
20	Q Mr. Bowen.
21	JUDGE PAGE: One at a time please, gentleman.
22	BY MR. NEILL:
23	Q Yes. Please, please wait until I finish
24	asking the question and I'll wait until you finish your
25	answer. Thank you. So looking at page 11, paragraph

1	4.5.2.8 x-ray test, that's the paragraph that you
2	referred to when you were describing the Table on page
3	8, is that right?
4	A Yes. That is the test procedure that I
5	cited.
6	Q Okay. And you mentioned that the test
7	procedure then refers back to paragraph 3 reference?
8	A Yes, it refers to a corresponding requirement
9	which in this case for 4.5.2.8 is 3.5.2.8.
10	Q Okay, and the 3.5.2.8 defines the standard?
11	A Yes, and that is on page 5 of the same Tab
12	where it states that the signal shall show no evidence
13	of missing components, extra components, displacement of
14	components or foreign objects when tested in accordance
15	with the procedure 4.5.2.8.
16	Q Okay. And so if the, for example, if the, if
17	an x-ray test here were to reveal a missing component,
18	then the acceptance criteria in column 3 in the Table on
19	page 8 indicates accept on zero defects and reject on
20	one, is that right? So, so
21	A That is correct.
22	Q If the x-ray test of 100 percent of the
23	sample revealed a missing component in one signal, then
24	the lot would be rejected, is that right?
25	A That is correct.

Q Okay. Now looking at the, back to page 8, the Table, can you walk through the sealing test that's referenced in the Table and explain the acceptance criteria that applies to the sealing test?

In much the same manner as described Α Yes. for the x-ray test, this is an indentured sequence. sealing test would then follow with 100 percent of the first article sample, which would be 185 signals. The test procedure is outlined in 4.5.2.7 which is also on page 11 and it describes the procedure by which the sealing test shall occur where the item is put in a under, is submersed under water, subjected to a pressure of six inches of mercury and sustaining that for a minimum of 60 seconds and any defective unit is one that fails to meet the requirements of the corresponding requirement paragraph 3.5.2.7 which brings us back to page 5 again where it states that this is again a major requirement, same as x-ray, that the signal shall withstand a vacuum of 6.0 + or - one inches of mercury below atmospheric pressure for a minimum period of 60 seconds without signs of leakage when tested accordance with the corresponding procedure of 4.5.2.7.

Q Okay. Now the signs of leakage that are mentioned in 3.5.2.7 are those called out anywhere in the specification?

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1	A Specifically, no.
2	Q Are they
3	A Just the signs of leakage are pretty much,
4	you know
5	Q Let me ask a question.
6	JUDGE PAGE: One at a time, please,
7	gentlemen.
8	BY MR. NEILL:
9	Q Draw your attention back to page 11,
10	paragraph 4.5.2.7.
11	A Okay. I stand corrected.
12	Q Does that paragraph describe the signs of
13	leakage?
14	A Yes. The leakers are indicated by air
15	bubbles issued from the signal, do not mistake the
16	escape of occluded air for leakage, so it is indicated
17	by air bubbles or gas bubbles escaping from the interior
18	of the unit.
19	Q Okay, and have you observed the, this test in
20	the course of your duties?
21	A Numerous times.
22	Q Numerous times. And can you describe the
23	process of identifying an item that fails the sealing
24	test?
25	A Yes. If I can refer to Al, the inner signal
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1 model. Q Okay. 2 Generally when you are submersing the unit it 3 held in a horizontal position, so the tube 4 horizontal. 5 JUDGE PAGE: And let the record reflect that 6 you are now using another exhibit to demonstrate this. 7 Would you give us the Exhibit number, please, sir? 8 I'm using Exhibit A-1. THE WITNESS: Yes. 9 10 JUDGE PAGE: Thank you. THE WITNESS: I believe it's A-1. 11 JUDGE PAGE: When you gesture with an object 12 it's very helpful here in the courtroom. 13 THE WITNESS: I'm sorry. I thought I had 14 identified it when I started to speak. 15 You did. But, sir, while it's JUDGE PAGE: 16 very easy to observe your doing it here, later we will 17 have only the written record and so I need you to use 18 your words as it were whenever you pick up or refer to 19 an object or a different exhibit. That way the record 20 will be complete so when we read it without you here 21 we'll know what was happening. Thank you. 22 I believe I did when I picked THE WITNESS: 23 up the item and started speaking but I could have been 24 I apologize. 25 mistaken.

JUDGE PAGE: Well I need you to call out the Exhibit number when you do so, pleas, sir.

BY MR. NEILL:

Q Mr. Bowen, can you just describe it without using the exhibit, please?

A Sure. There are, when an item is, when the unit is placed under the water in a horizontal position, then subjected to the vacuum, there will generally be except in the case of a gross failure, there will be a stream of bubbles coming from one of two places. In terms of a gross leaker such as the foil missing or a very large tear in the foil you'll see a very large burst of bubbles come out from that end.

In the case of anything other than that such as a fine discrepancy in the foil material or in a crimp that has not been proper around the O-ring, you will see a stream of bubbles come either from the foil covered end of the signal or from the line of demarcation or the joint line between the ignition housing and the outer container, the outer container being the long cylinder that is the, what, the majority of what you see when you look at the unit. If the crimp around the O-ring is not adequate you will see a steady stream of small bubbles, steady not being continuous but on a regular basis depending upon how, whether or not the crimp has a very

small flaw in it or if the O-ring has a small flaw in it and the bubbles would be larger and more regular than how much more profound the failure is and if the failure is through the foil, then when you look end on at the unit you will see bubbles coming out from that foil either from separation of the foil or from a defect in the foil that would cause a pin hole or some other type of defect within the foil itself.

Q Okay, and why is the sealing test performed?

This is a distress signal designed by the Navy for use primarily by Navy personnel in case of a man overboard or of a downed pilot and they guite often may be bobbing around with their life vest or treading water or in a life boat in a, you know, in the water itself exclusive of the life boat to where this is going to be submerged in their vest and as such, has to be able to withstand water integrity so it doesn't get saturated. Being an energetic item wet pyrotechnic composition does not light. Wet black powder does not blast and the old adage of keep your powder dry applies in this case so that when you are dependent upon that unit functioning to signal a reconnaissance craft that it will actually function and they will have the ability to see. Otherwise, it's going to be a very bad day.

Q Okay. And you discussed the foil disc, and

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what's the function of the foil disk in this item?

A The primary function of the foil disk is to provide a hermetic waterproof seal at the end cap portion of the device so that, again, so that the candles inside the unit will stay dry. Secondary purpose of that is that once it is ignited it will retain in small measure the heat and pressure of the ignition train of the item when it is first started.

Q Okay.

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A And yet still be fragile enough to burst through so that the flames and smoke will be expelled.

Q All right. Now if you could please go back to the Table on page 8 and 9 and go to the next row in the table, a five foot drop and please just walk us very briefly through that test.

Out of the 185 signals in the Α All right. first article sample, DCMAs will typically select five of those 185 to be performed in the 5 foot drop. Those five units will then be taken and dropped in five specific orientations from a height of at least five foot onto a steel plate. The five orientations would be flare flare side up, flare side 45 degrees up, horizontal, flare side 45 degrees down and flare side directly down, 90 degrees down. Subsequent to the five foot drop being impacted, you have to make sure the unit is not broken apart, it still appears to be in good shape, and then at that point the unit is subjected to a second round of the sealing test to ensure that it has not had anything pop loose that would cause it to no longer be water tight.

After that, the unit is placed under the next test for function test. It is prepared by going under a six inches of water for a 24-hour soak, at which time it is removed and then each end is functioned to ensure that it did do what it's supposed to do with the smoke side emitting smoke and the flare side emitting flare for the prescribed times.

Q Okay. Now looking at the five foot drop row in the table and below there's a reference to sealing and it mentions paragraph 4.5.2.7. Is the sealing test, is performed after the five foot drop the same test procedure that's performed with the initial sealing test procedure?

A Yes, it is.

Q Okay. And below that appears the word function and in parentheses it says 4.5.1.1 and would you please using the Table on the specification walk us through the function testing that appears in that row? Just explain it.

A 4.5.1.1 starts at the bottom of page 9

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1	describing the function test and which case as I said
2	the units after be put through the conditions of five
3	foot drop and then the sealing test is then put in the
4	function cycle in which case it is soaked for 24 hours
5	under a level of at least six inches of water to
6	simulate somebody being bobbing around out in the ocean
7	with it in the vest under the water level for at least
8	24 hours and then once that has been done the item is
9	removed from the water bath, taken out to the test range
10	and then it will have the end caps removed and then
11	functioned as prescribed to by sliding the trigger lever
12	out horizontally and then pulling it down against the
13	side of the unit so that it will in turn start the
14	ignition process of the flare. Flare on one side, smoke
15	on the other and both the flare and smoke sides will be
16	tested to ensure viability.
17	Q Okay. Now at the end of this paragraph
18	4.5.1.1 there's a reference to paragraph 3.5.1.1.
19	A Yes.
20	Q Is that similar to the organization that we
21	walked through for the sealing function?
22	A Yes. That will be the case for all tests.
23	Q Okay. Now if you turn to paragraph 3.5.1.1
24	A Page 4.

Page 4 and it has various lettered sub-

paragraphs so would you please explain paragraph 3.5.1.1?

A When the item is functioned it shall, in order to prove viability, all requirements cited in 3.5.1.1 need to be met. That includes, that means when you function the item under sub-paragraph A it displays the correct color, which on the smoke side is a reddish orange and for the flare side is a red flare as colors in the tactical scenario have distinct meanings, red being universally prescribed as distress.

Q Okay. It's not a white flare?

A It is not a white flare as previously noted in testimony, no.

Q Okay. Now next to the words display color in sub-paragraph A, there's a note C1 in parentheses. What does that indicate, C1?

A Various levels of requirements are proscribed to each of the characteristics that is governed by in technical documentation you will, it also refers to this. It is defined by DOD Standard 2101, 2-1-0-1 which is titled Classification of Characteristics and there are three tiers, three primary tiers of classification of characteristics, the first being critical which is a risk of life and/or limb. Second is major which is a risk of the successful completion of the mission at hand

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and anything other than those is a third tier, which is minor.

characteristics These items are are identified by for critical as C and then the number 1 through 99 so that each of the characteristics in that particular document can be identified explicitly. For major requirements it's identified with a capital M and then the numbers starting from 101 and running through Anything unlabeled is considered a minor and in reference there too can be considered as a small m 201 but without designation on any of the documents they explicitly called out ìn be reference.

Q Okay. Now if you look at sub-paragraph B, it describes function. Can you continue to explain the performance requirements in the specification starting with that paragraph?

A Yes. On the function, when you pull the trigger horizontally and then snap it down to the side on the smoke and the flare side respectively that the item shall actually complete its ignition train and produce a smoke or a flare from the respective ends.

Q Okay. And if you look at sub-paragraph C, delay.

A Yes. From the time the trigger is pulled

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down against the item to start the ignition process from 1 that point to the point where either smoke or flare 2 indeterminate starts to be displayed from the unit shall 3 occur within a maximum of three seconds. 4 That way you 5 don't pull the trigger and have to wait for two minutes 6 before it actually completes its ignition cycle. 7 0 Okay. And then the sub-paragraph below that, 8 display times. Would you please explain this paragraph, sub-paragraph d? 9 Once the display has started, which 10 Α 18 indicated by the completion of the delay portion of the 11 characteristics, then at that point you start to measure 12 the display time, in which case there is adequate flame 13 14 smoke being produced to be visible reconnaissance craft and the display times shall be a 15 minimum and maximum as prescribed in the test reference 16 1.7 of Table 1 contained herein under sub-paragraph d. Okay. Now there has been testimony that the 18 display 19 time maximums that listed in the are specification were changed for the performance of the 20 21 contract through a request for deviation. familiar with that? 22 A Yes, sir. 23 24 Q Okay. And is that, in fact the case?

That is correct.

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It was done early in the

1 contract. although the numbers in the And SO 2 0 specification here, for example, if I follow the line 3 across five foot drop all the way to the right in the 4 smoke max column it says 19. Did the RFD modify that 5 number? 6 Α The RFD we are discussing proposed and 7 was accepted to change the maximum smoke display time to 8 25 seconds irrespective of, the 9 excuse me. 10 preconditioning environment. Okay. So for each of the types of testing 11 that are listed there, five foot drop, transportation 12 vibration, temperature and humidity, high temperature, 13 low temperature, and sealing function, the maximum smoke 14 display time was changed to 25 seconds, is that right? 15 Α That is correct. 16 for 17 0 Okay. And that was that request deviation applied to the entire performance of 18 contract after it was approved, is that right? 19 The particular deviation request was 20 Α submitted for the completion of LAT for lot 1-2 and was 21 pertinent to the balance of the contract starting with 22

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Okay. Now if you would turn to sub-paragraph

and please

1-3 through the completion of the contract.

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functioning igniters shall Α During not separate from the outer container. The spirit of the intent of this requirement and the specification is that separation of the igniter assembly from the flare, from the signal is indicator of an improper crimp and creates safety risk for the user. The letter of the specification is that during function which came to pass in this particular contract to be applied to the function being function test portion the the specification as being called out.

Q Okay. Okay, so if you go back to the Table on page 8 and we look back at the five foot drop row we were looking at, look down at the function heading in that row, are the acceptance criteria for the function testing described in the table?

A Yes. In column three under acceptance criteria the acceptance criteria for sub-paragraphs a and e of the function requirements, i.e. 3.5.1.1, which would be display color, also designated back if you go to page 4 where it is listed as a Cl and one safety function C8, both critical requirements, the acceptance criteria is accept on 0 reject on 1. For the other characteristics listed under sub paragraphs b, c and d, the ability to function, the delay and the display

times, the accept and reject criteria are to accept on 1 and reject on 2 failures out of that particular subgroup of five samples or five signals.

Q Okay. And those criteria are, would you agree that those criteria are similarly described below for the other conditioning tests that are described in the Table?

- A Yes, they are.
- Q Okay.

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- A With the exception of the last block.
- Q Okay, and would you please, the last block, if you turn to page 9, the last row reads group data acceptance and could you please explain that?

If a contractor were to somehow skate Yes. along with the absolute maximum number of failures in each and every group of conditioning, transportation vibration, temperature humidity, high temperature, low temperature, five foot drop and ambient functioning, there would be a very large number of failures that would be considered acceptable. As a moderator of that there is group acceptance data which places a cap on the sum total of failures of those particular characteristics for, and for first article for b, which is the function requirement that it actually lights off, they accept on 5, reject on 6 and for the delay and

display times as noted in sub c and sub d on page 4 that it would be accept on 10 reject on 11. And this would be out of the entire 180 units that are functioned in the First Article Testing sequence.

Q Okay. And, you know, looking at the I guess it's the third column in the table on page 8, the heading at the top reads inspection lot sampling plans and then within that column there's a sub-column that is captioned plan and below that is an a and b. Can you please explain the plan a and b, well first of all, do the acceptance criteria listed in this inspection lot sampling plans column, are those the acceptance criteria for the lot acceptance testing for the contract?

A I'm not positive what the question was. The acceptance criteria for the LAT is slightly different from the lot acceptance criteria for the FAT simply because the sample size is different. Instead of having 30 units in each of the environmental condition groups, there would only be 20 units in a plan lot acceptance test.

Q Okay.

A And then to your part, first part of the question, the differentiation between an a plan and a b plan is an effort that was established to try to mitigate some of the test costs and test time such that

it had at a very extensive testing parameters on an a plan LAT test, lot acceptance test, that would include all of the conditioning parameters prior to function testing as a First Article Test would have but with smaller samples whereas a b plan test would be comprised solely of the 50 ambient units that are tested in the open air and also having 20 of those samples being tested for color, the flare side of those signals being tested for color purity and intensity.

Q Okay, if you turn to page 7 of the specification.

A Yes.

Q Does this describe the, when the sampling plan A is used and sampling plan B is used in lot acceptance testing?

A Yes. Upon start of production two a plan tests need to be passed before the next sequence would kick in and try to mitigate costs. Once two consecutive a plans have been passed then in the sequence of the subsequent five LATs presuming nothing fails, there would be at least one a plan test, randomly selected, and then four, up to four b plan tests. If, however, any time during that cycle, if there is a failure, then we have to start back with a plan lot acceptance testing until, again, two subsequent a plan lot acceptance tests

have been passed.

Q Okay. And you witnessed lot acceptance testing during PSI's performance of this contract, did you not?

A I witnessed out of all of the qualification tests, First Article Tests, re-inspection tests and lot acceptance tests which enumerated approximately 30, I witnessed all except the FAT LAT of Interfix 4 and the subsequent lot 2 under Interfix four in the summer of 2011.

Q Okay. Now was the lot, was lot acceptance testing performed at PSI's plant or was it performed elsewhere?

A Initially the contract called for all testing to be done at a government facility, in this instance at the facility where I worked, Crane Naval Service Warfare Center and subsequent, so during First Article Testing all three efforts before first article is passed were done at Crane. The lot 1-1 LAT was also performed at Crane. When it failed as part of the negotiation of how to dispose of the units from lot 1 PSI offered its consideration for being able to dispose of lot 1 in a manner that was not financially destructive to them, they offered as consideration to perform all subsequent b plan tests. Lots 2 and 3, I know lot 1-2 was done at

Crane.

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I don't recall about 1-3 but somewhere early on PSI also offered to conduct all a plan testing other than T&H that would have normally been in the Government purview to do those in order to expedite the processing of the testing, so after, let me see I believe lots 1-2 and 1-3 were both a plans tested at Crane and I believe there was a subsequent a plan lot 9 that was tested at Crane. After that I believe every single subsequent LAT was performed at PSI with the exception of the T&H tests.

- Q Okay. And T&H stands for?
- A Temperature and humidity conditioning.
- Q Okay. And is that described in the Table at page 8 of this specification?
- A It is the next to the bottom row referencing paragraph 4.5.2.4.
- Q Okay. Now in your experience in working on the contract with PSI was it your observation that PSI understood the acceptance criteria in the contract?
 - A Yes.
- Q Yes. I would ask you to please turn to Rule 4, Tab 210.
 - A That would be Volume IV?
 - Q Volume IV.

JUDGE PAGE: Page 210, is that correct? 1 2 MR. NEILL: 210. JUDGE PAGE: Thank you, sir. 3 BY MR. NEILL: 4 look at 5 you'd take a this, recognize this? 6 7 Α Yes, sir. And, what is it? 8 9 Α This is the deviation submitted by subsequent to qualification testing that was 10 between Interfix 1 production and Interfix 2 production 11 in order to allow use of a potential different foil 12 material in the sealing disc. 13 Now, all right, if you look in block Okay. 14 10 of the form it mentions a drawing number and are you 15 familiar with the drawing that's at issue in this 16 deviation? 17 I don't recall off the top of my head exactly Α 18 which drawing this is but I'm pretty sure by in context 19 that this would be the foil disk used for seal which 20 shows an actual size punched piece of foil that would be 21 circular in nature and the prescribed diameter in order 22 to fit in the assembly of the item. 23 Okay, and do you have any recollection of the 24 circumstances leading to the submission of this form? 25

A Yes, I do.

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Q And what's your recollection of that?

Α During production of Interfix 1 after an initial couple problems getting first article passed and then one other separate issue in the production of lot 1-1, PSI went into production and for the most part produced quite capably and quite regularly with only one minor hiccup I believe in lot 7 through the production of lot 9. In lot 10, there was a problem that occurred that illustrated numerous leakers and the subsequent result of those leakers being some long ignitions and I don't recall exactly but if there were some duds in that lot or if there had been duds in lot 11 but in lot 10 there were numerous problems with leakers and then at that point they stopped production of lot 11 subsequently down, about a month or so after that submitted a lot 11 to the Government for testing and failed that as well, again with numerous leakers.

experiencing with the leakers and scrap rates that they had found in the production of nine which had been notably different than all prior production, PSI from my understanding believed there was a problem with the foil production, rumors confirming what Mr. Hirst stated in previous testimony, rumors abounded that the production

facility had been shipped to Mexico and PSI was concerned that the source that they had been using for all prior production was no longer going to be viable.

As such, since the requirement for the foil is a specification controlled document, not the 2113661 shown in block 10 but the drawing cited in block 16, 2114083, which would be the drawing depicting the characteristics for the foil used in the foil disk shown by 2113661. The characteristics in 2114083 is a list of salient characteristics for the foil that are required and then at the bottom of that drawing there is a suggested sour of supply illustrating the 3M433L material has been used successfully in the past, not as a quarantee of future or permanent availability and compliance, but it has been used previously to start the contractor on the way of finding a good material, or a previously proven good material.

Since they were concerned with that no longer being a viable source, they then discussed the issue. Mike Trotter was the head of engineering at that time. He and I had some discussions about what the options available were and I suggested to Mr. Trotter that they may wish to try to qualify an alternate source. If they changed the material as significant as the foil disk in this configuration it would require a First Article Test

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in order to restart or least a qualification test that would do the same, meet the same parameters as a First Article Test.

As a result of those discussions Mr. Trotter and his staff did some research and came up with three options of what could be used as an alternate foil and of those three, they did a small sample of each of three. One was found to be unacceptable and I believe this is the case that Terry referred to in his previous testimony where he had a catastrophic failure and that one sample was eliminated leaving two other samples, the 363L material and the 427 material. The 363L was a thicker material but had the same adhesive as was used in the 433L that was used during the entirety of lot Interfix 1 production. 427 had a different adhesive.

I don't recall exactly but I believe it was an acrylate based adhesive and since there, adhesives tend to react with energetic material, the use of 427 would have required compatibility testing with the energetic components of the flare and smoke candles. At the completion of the qualification tests for these, oh, I'm sorry. I'm getting ahead of myself. That was the short-term test.

The long-term test was taking the two, the 427 and the 363L and producing a substantive sample of

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100 signals each using each of the two foils, so there were 200 samples that were prepared. These samples were then tested in a qualification test at PSI with me witnessing, going through the same parameters of conditioning as would have been done in a First Article Test with the exception of T&H because PSI did not have a T&H chamber. Upon completion of the tests with both units passing PSI chose to pursue the 363 because they did not want to, at that point, pursue the additional cost, effort and time of doing compatibility testing of the 427 material because of the different adhesive.

Q Okay. Now if you turn to page 3 of Tab 210, pages 3 and 4, are you familiar with that?

A It is a product, it appears to be a product specification sheet for the 363L material from 3M, so yes, I am familiar with that.

Q Okay and what is this document?

A In the commercial world companies typically will provide a product data sheet that provides the necessary or the pertinent salient characteristics for 99 percent of the users of that product with the general properties of that material, in this case being an adhesive backed foil. It provides such things as a tinsel strength, adhesion strength, the temperature at which it will operate, the pull test requirements of how

much it would stretch when pulled, the weight, various 1 other such mechanical properties. 2 All right and if you'd take a look also at 3 Exhibit G1 as the piece of paper. 4 5 Α Yes, sir. And what is this? Q 6 This is the similar product data sheet for 7 Α 8 the 433 series of foil tape which includes the 433 and the 433L, difference between them being the backing 9 material used on the foil tape. The 433L is what was 10 used by PSI during production of the entirety of 11 Interfix 1 production whereas 433, same item with a 12 utilized 13 different backing material, was production of Interfix 4. 14 15 0 And I believe you said that the adhesive material was the same for the 363L foil and the 16 433L? 17 Both were a silicone based adhesive. 18 Α Okay, and is that described on these data 19 Q sheets? 20 In the product construction the second 21 Α Yes. block of the G1 exhibit, shows the adhesive to be a 22 clear silicone adhesive whereas in the document in 210 23 page 3 in the same area shows the adhesive to be a 24

silicone transparent.

1	Q Okay. And is the adhesion strength listed in
2	the product data sheet for the 363L foil?
3	A Yes. In the third block typical physical
4	properties it shows an adhesion strength of 67 ounces
5	per inch.
6	Q And can you explain, what's your
7	understanding of what that means, 67 ounces per inch?
8	A If you take a one inch wide piece of tape,
9	adhere it to a piece of steel and then try to pull it
10	off it will withstand a strength of, or the force
11	necessary to start to peel the tape of steel would be 67
12	ounces for a one inch wide piece of tape. For a two
13	inch wide piece of tape, it would be twice that or 134
14	ounces.
15	Q Okay. And if you look at Exhibit G1 is the
16	adhesion strength for the 433L tape described in the
17	product data sheet?
18	A Yes, it is.
19	Q And what is it?
20	A It is identified as 38 ounces per inch.
21	Q Okay. And is the adhesion strength for the
22	433 aluminum foil tape also described in Exhibit G1?
23	A Yes, it is.
24	Q And what's the strength that's listed in the
25	product data sheet?
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1	A it is very slightly higher. It is forty
2	ounces per inch.
3	Q Okay. If you look at the Appellant's Exhibit
4	A5, which is the large chart.
5	A Yes.
6	Q I believe that's A5. There's a note over on
7	the left hand side, upper left hand corner.
8	A I can barely see it and I'm a lot closer than
9	you are.
10	JUDGE PAGE: Do you have an extra copy, Mr.
11	Neill, of your reduced version?
12	MR. NEILL: I have it, but.
13	JUDGE PAGE: Mr. Karlson?
14	MR. KARLSON: I have an extra one, Your
15	Honor.
16	JUDGE PAGE: Mr. Neill, would it be useful to
17	provide that to the witness?
18	MR. NEILL: Yes, it would be.
19	JUDGE PAGE: Thank you, gentlemen.
20	THE WITNESS: Thanks Rob.
21	BY MR. NEILL:
22	Q So if you look at the note in the upper left
23	hand corner of A5 which reads Interfix number 1 equals
24	3M433L sealing disk min adhesion 20 ounce per inch
25	width, does that accurately describe the adhesion

1 strength of the 433L foil? 2 Α No, it does not. Okay, and what is the adhesion strength of 3 O 4 the 433L? 5 Α The 433L has an adhesion strength of 38 6 ounces per inch width. 7 Okay. Q A And there has not been a change to the 8 specification sheet during the tenure of 9 production by PSI because Exhibit G-1 has the date 10 printed in the bottom right portion of page 2 showing 11 that this particular iteration of the product data sheet 12 was printed on, as of July 5, 2001, more than three 13 years prior to the contract award to PSI and this is 14 15 also Exhibit G1 is also the same part of the data sheet 16 as is currently exhibited on the 3M website. 17 Okay. And would you please explain the 18 difference between the 433 tape that was used on lot Interfix 4 and the 433L tape that was used in lot 19 Interfix 1? 20 The difference in functionally is the two 21 ounces per inch in adhesion strength. The mechanical 22 difference is the difference of the backing material, 23 which is different, and it was my understanding during 24

the use, or the decision to use the 433 versus the 433L

1	going into production of lot Interfix 4 is that
2	different backing material allowed PSI to mechanically
3	test that material whereas with the 433L, the backing
4	material did not allow them to validate the adhesion
5	strength test.
6	Q Okay. And otherwise the two types of tape are
7	very similar, would you agree with that?
8	A Yes. They're both in the same family and
9	have virtually identical characteristics.
10	Q Now looking at Tab 210, the first page, the
11	document in the record does not indicate whether it was
12	approved or disapproved. Do you have any recollection
13	of whether this request for deviation regarding the 363L
14	tape was approved or disapproved?
15	A Either this or a version very similar to it
16	with only some minor clerical issues addressed would
17	have been approved, it was approved subsequent to lot
18	Interfix 1-2.
19	Q Okay.
20	A So I do recall the technical nature of the
21	RFD was approved. I'm not sure if it was this particular
22	version or not.
23	Q Okay. If you could please turn to Tab 97.
24	A Volume II.
25	Q I'd just draw your attention to the drawing

in that tab. In my book it's page 2. In the witness 1 copy, I believe it's page 3. 2 Yes, the legible one. Α 3 I wanted to ask you about, first of all $\frac{4}{2}$ 5 are you familiar with this? 6 Α Yes. And what is it? 7 0 This is the drawing for the loaded assembly 8 А the Mark 124 mod zero smoke signal illumination 9 Marine, mod zero. 10 Okay. And I'd like to draw your attention to 11 a note ten in the upper left quadrant of the drawing. 12 Α Okay. 13 Okay, are you familiar with that note? 14 Yes, sir. 15 Α And what's your interpretation of that note? 16 Q 17 Note ten is a requirement that after crimping Α the unit together that it shall be able to withstand a 18 torque test with a minimum of twenty inch pounds without 19 having any relative movement. This is to ensure that the 20 21 crimp on the device is sufficient to hold it together during function since the alternatives would have 22 involved destructive testing, this was a method that was 23 determined during R&D to validate the crimping operation 24 without damaging any units and costing any units to the 25

contractor in performing the test during in process 1 2 checks. Okay. And looking at that note, what's your 3 0 interpretation of the phrase without relative movement? 4 5 When you torque the ignition assembly with twenty inch pounds it shall not and the importance here 6 is the use of the word shall which is an absolute 7 directly, shall not have relative movement. 8 here being relative of the trigger assembly relative to 9 the outer container. 10 And ahead of, or to the left side of mode ten 11 there's an M103 in parentheses and what does that 12 define? 13 This refers to this being a major classified 14 Α characteristic which will in turn result in a different 1.5 level of an inspection and process in accordance with 16 quality plans of whatever contractor is dealing with the 17 18 item. Okay. 19 Q And it indicates that failure to meet that А 20 would result in a risk to successful completion of the 21 mission at task for the item. 22 Okay. Now was this note in the drawing from 23 the outset of the contract? 24 If you take note of the upper right 25 A

1	corner of this drawing, the most recent revision of the
2	drawing, the one that is being utilized here, was last
3	updated in 1995, so that was the last time this drawing
4	would have been modified and so has been in use since
5	1995, so would have been used in the 2004 contract.
6	Q All right. I'd like to draw your attention
7	to note 13 on the same drawing.
8	A Yes.
9	Q And next to note 13 is a notation C1 and what
10	does that stand for?
11	A Critical requirements as I previously
12	mentioned are classified by DOD Standard 2101 as being
13	a failure of that characteristic would result in threat
14	of life and limb.
15	Q Okay. And are you familiar with the
16	requirement in note 10, no 13?
17	A Yes.
18	Q And I meant note 13.
19	A I am familiar with both.
20	Q Okay. And what's your interpretation of the
21	requirement in note 13?
22	A In note 13, it, this is talking about the
23	alignment of the pin hole, when you assemble the item on
24	the smoke side there are three holes that allow the
25	smoke to escape. In order to prevent an orientation of

the trigger assembly being aligned so as the crossbar covers the majority of those three holes which would result in an unsafe condition unit, building pressure internally without adequate venting space, thus creating propensity for an explosion.

In order to prevent that from happening there is a defined orientation so that the three holes would align diagonally within a crosshair grid of the mating part. In order to ensure that, the mating part has a male member tab on the bottom which will then fit with the female identified slot or hole that is in the appropriate position of the mating part so that the alignment of the two parts results in a 45 degree out of orientation alignment with the holes with respect to the crossbars of the mating piece. That way it ensures there is no overlap or coverage of the three hole orientation cover.

Q Okay.

A And if there is, that, that's the purpose of that.

- Q All right and that was, it's identified in the drawing as a critical characteristic?
 - A Yes.
- Q Okay. And what's the significance of a characteristic being identified as critical?

1	A Again, according to DOD Standard 2101 the use
2	of a critical classification of a characteristic is
3	relating to a characteristics which if not conformed
4	with would result in a situation that would result in
5	risk to life and/or limb.
6	Q Okay. Now let me ask you, if you could refer
7	to the inert model that I believe is identified as Al.
8	A A1?
9	Q Okay, and if you could please point to and
10	describe what you're doing with your hands and fingers
11	for the record the holes that you were just discussing?
12	A It's a little hard to because in this inert
13	model it doesn't look like it was assembled in the
14	proper orientation.
15	JUDGE PAGE: Now, let the record reflect, sir,
16	it appears that you have removed the red end cap, is
17	that correct?
18	THE WITNESS: That is correct. The red end
19	cap
20	JUDGE PAGE: And now you're looking inside
21	from where the red end cap was a covering, is that
22	right?
23	THE WITNESS: That is correct.
24	JUDGE PAGE: Thank you.
25	BY MR. NEILL:

1	A Looking into the trigger assembly housing and
2	the three holes that are covered by the foil are usually
3	discernible because of any temperature changes after the
4	unit is assembled will result in either a bubbling in or
5	a bubbling out of that foil as the pressure inside
6	relative to the ambient pressure wherever it might be
7	are typically different.
8	Q Okay. So you can see where the holes are
9	A Yes.
10	Q from looking at the foil?
11	A And in this case they should be, and it's
12	hard to see
13	Q Where should they be?
14	A if one looks at the trigger assembly head on
15	you can see what I was referring to as a crosshair where
16	there are a vertical and a horizontal intersecting bars
17	with the ignition located in the center of that
18	crosshair. The three hole configuration, the middle of
19	which holds the first part of the ignition train, the
20	other two holes allow the venting, should be at a 45
21	degree angle to that crosshair part, but in this
22	particular instance they are not.
23	MR. HIRST: Objection. What is the
24	JUDGE PAGE: No, no, no. You make the
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objection to me, sir. What is your objection?

1	MR. HIRST: The objection is that we are
2	talking about the assembly of an inert unit that is here
3	for display only to help facilitate the conversation.
4	It's not representative of how the units are made in
5	production.
6	JUDGE PAGE: All right. Mr. Hirst, I will
7	overrule your objection. You will have the opportunity
8	to cross-examine the witness on that very issue. Mr.
9	Neill.
10	BY MR. NEILL:
11	Q Right. If you could please take a look at
12	Rule 4 Tab 184. Rule 4 Tab 184.
13	A Yes.
14	Q And before I ask you any questions I want to
15	make sure that all of us have the same page number.
16	Okay. In the copy that I have there is, if you turn to
17	the first photograph in Tab 184, I have a Bates number
18	3 on that page. Is that, Mr. Bowen, is that what you
19	have?
20	A Yes.
21	Q Okay. And you were describing the holes that
22	would be visible in the foil if you looked at the end of
23	the Mark 124. This is the smoke end, is that right?
24	A Correct.
25	O Okay And does this photograph illustrate

1	the two holes that you were describing?
2	A Yes. In the orientation of where they are at
3	a 45 degree variance, basically centered in the open
4	areas of the crosshair provided by the trigger assembly.
5	Q Okay. And when the flair is ignited does the
6	smoke then escape from through those two holes?
7	A It typically one of them, sometimes both.
8	Q One or both?
9	A Yes.
10	Q Okay. Now the alignment pin that was
11	referred to in note 13 of the drawing that we were just
12	discussing, can you describe with your words where in
13	this picture that pin would be?
14	A In this particular orientation I believe it
15	would be in the 4:00 position.
16	Q Okay. 4:00, would it be located on the dark
17	bar that extends from the center down toward the 4:00?
18	A Yes, on the side facing down into the signal
19	would be where the detent would be, the little button.
20	Q Okay, so underneath that part of the igniter?
21	A Yes.
22	Q All right. Okay. All right, and if you turn
23	to the next page, this would be page 4.
24	A Okay.
25	Q And look at the, what is this, in general,
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1	what does this a photograph of?
2	A This is a depiction of the end view of the
3	smoke end igniter assembly.
4	Q Okay. And looking at the foil portion in the
5	lower left quadrant of this photograph, there appears to
6	be a dimple. Is that have any, do you know what that
7	is? Can you tell from the drawing, or the photograph?
8	A It appears to be where there had been a
9	misalignment of the trigger assembly when attempted to
10	be assembled resulting in a blemish being placed on the
11	foil seal.
12	JUDGE PAGE: And just for the point of
13	clarity, is this in the light portion of that lower left
14	hand quadrant? That portion of the item?
15	MR. NEILL: Yes, ma'am. That's the portion
16	that I was referring to, the light portion.
17	JUDGE PAGE: The white. Thank you.
18	BY MR. NEILL:
.9	Q All right. Now if you turn to Tab, I mean
20	page 6 of that same Tab. Take a look at that and what
21	does this, do you recognize this, the object in the
22	photograph?
23	A It's the same assembly, or a similar
24	assembly.
25	Q Okay, now
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1	A Only this appears to be a situation where the
2	foil was actually perforated.
3	Q Perforated by the alignment pin?
4	A It appears that it could very well have been
5	done by the alignment pin.
6	Q Okay.
7	A It's the same orientation, distance from the
8	center, same size, same diameter as what could have been
9	done by a misaligned orientation during assembly.
10	Q All right.
11	A With it then being adjusted afterwards.
12	Q You mentioned
13	JUDGE PAGE: Excuse me. Please forgive me
14	but again I'm trying to make sure we get this on the
15	record. If I could ask the witness to identify which
16	quadrant.
17	THE WITNESS: In the lower right quadrant.
18	JUDGE PAGE: Lower right quadrant.
19	THE WITNESS: Yes.
20	JUDGE PAGE: Thank you, sir.
21	MR. NEILL: Okay.
22	JUDGE PAGE: And this is in the white
23	portion, is that correct?
24	MR. NEILL: It's in the silver portion on my
25	copy.
•	•

The silver portion on yours? JUDGE PAGE: 1 2 Thank you. BY MR. NEILL: 3 Now looking at the 9:00 position, or between 4 8:00 and 9:00, on the left hand side of the photograph 5 there appears to be an indentation where there may be a б hole beneath the foil covering, but it's obscured by a 7 dark crossbar that extends from the 9:00 position across 8 to the 3:00 position. Does this photograph illustrate 9 what you were describing earlier when you said if 10 there's a misalignment the crossbar can cover up the 11 holes where the smoke was supposed to escape? 12 Yes. Covering part of a majority of the vent 13 Α holes. 14 Okay. So does this illustrate a misalignment 15 of the alignment pin that was described in the drawing 16 at Tab 97? 17 Yes. 18 Α All right. And that's a critical defect, 19 Q right? 20 Yes. 21 Α All right. 22 Okay. Q The orientation shown on page 3 despite a 23 A blemish in the right side quadrant, what appears to be 24 25 blemish, this appears to be the proper alignment

despite what appears to be a blemish on the foil. 1 Okay. Now if you, all right. Now I do want 2 to ask you regarding the note 10 on the drawing at Tab 3 97. 4 Note 10? 5 А Note 10. Q 6 Torque test? 7 A yes, the torque requirements, the 8 without relative movement requirement. 9 Α Yes. 10 Are you familiar with torque In note 10. 11 test procedures that PSI was employing to check for this 12 no relative movement characteristic in production of the 13 Mark 124? 14 I became aware of them late in production. 15 Α This is an in process check that I would not normally 16 witness during my performance of my duties. 17 18 Okay. Did you have an opportunity to observe PSI performing this torque test? 19 Yes, starting with a torque test that was 20 Α 21 performed as an informational test during the acceptance test of reworked lot 33 Alpha. PSI chose to 22 perform as at their own risk a torque test on all LAT 23 units prior to function. And I got to witness the 24 process by which they used, they performed the torque 25

test at that time.

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Q Okay. And can you describe it?

A The torque wrench which is calibrated to start slipping at a prescribed level was set to 20 pounds, 20 inch pounds and the torque wrench then had a fixture attached to the end of it so it would mate with the trigger assembly at one end of the signal. The operator who performed the test, I don't remember if it was Darrell or one of the other test technicians, would hold the signal by the middle, the silver shiny outer container, place the torque wrench with the adapter onto the trigger assembly and rotate until the prescribed 20 inch pounds was achieved at which point the torque wrench would then click free.

Q Okay. And was that test effective for determining whether or not there was relative movement between the igniter assembly and the outer container?

A It would show a gross failure of that requirement but it would not guarantee failure to show no relative movement. There could still be movement cause as you're doing this twisting operation holding the unit with one hand and twisting the torque wrench with the other there is no datum upon which to verify any movement that it may or may not be made in that process.

1	Q Okay.
2	A If it slips free and rotates around all the
3	way, that's a gross failure, that will be discerned.
4	Q And now, there's been testimony about drawing
5	a reference line. What, if any, advantage or
6	disadvantage would come from drawing a reference line in
7	conjunction with the torque test that PSI was
8	performing?
9	A It would actually show compliance with the
10	requirement for something other than a gross failure.
11	Q Compliance with the requirement in note 10 of
12	the drawing 3139733?
13	A Yes, compliance with the requirements of note
14	10.
15	Q Okay. All right.
16	MR. NEILL: Your Honor, it's now 12:00. I
17	don't know if this might be an appropriate time for a
18	break but I still have some more questions for Mr.
19	Bowen.
20	JUDGE PAGE: I think it would be a very
21	appropriate time to take a break. How long would you
22	like for lunch? What time would you like to resume?
23	MR. NEILL: No more than an hour, Your Honor.
24	I'm concerned that the hearing may go fairly late until
25	tomorrow and I'd like to ensure that we get all the

1	testimony in.
2	JUDGE PAGE: All right. Using the clock
3	that's in this room, and again no two clocks here have
4	been consistent, it appears to be 12:05. Let's resume
5	at 1:05. Off the record.
6	(Whereupon, the above-entitled matter went
7	off the record at 12:03 p.m. and resumed at 1:03 p.m.)
8	JUDGE PAGE: Thank you. Mr. Neill, you may
9	resume questioning your witness, and sir, I remind you,
10	you remain under oath. Thank you.
11	BY MR. NEILL:
12	Q Mr. Bowen, would you please turn to Rule 4
13	Tab 282 page 44.
14	A 282 page?
15	Q 44.
16	A Page 44.
17	Q And I'd like you to take a look at page 44
18	through the last page in Tab 282, which is page 53. Are
19	you familiar with this document?
20	A Yes, I am.
21	Q Okay, and what is this?
22	A This is the PSI report for lot acceptance
23	test for lot PSI 07G002T001.
24	Q Okay, and is this one of the lot acceptance
25	tests that you witnessed?

1	A Yes, it is.
2	Q And if you turn to page 46, a set of
3	handwritten initials and a date in the lower right hand
4	corner of that page, are those your initials?
5	A Yes, they are.
6	Q Did you write those on the original sheet?
7	A The original data sheet was transcribed by
8	Darrell during the testing. After the testing was
9	completed he transcribed that information into an Excel
10	spreadsheet on site at the test area of the facility and
11	he printed this out and then I indicated that I
12	witnessed the testing as indicated by my initials.
13	Typically DCMA will utilize their stamp in recognition
14	of having a government witness for the testing.
15	JUDGE PAGE: All right, Mr. Bowen, if you
16	would please, please remember to speak slowly.
17	THE WITNESS: Sorry.
18	JUDGE PAGE: Thank you.
19	THE WITNESS: Had a Mountain Dew for lunch so
20	that might be counterproductive.
21	BY MR. NEILL:
22	Q Okay now if you turn to page 45.
23	A 40?
24	Q 45.
25	A 45.

Q In the same test report, first line at the top of the page indicates two minors were noted, igniter assembly separated from the can post function. Do you have any recollection of trigger assembly separations occurring during lot acceptance testing for log 21?

A Yes. Lots 21 and 22 were tested in conjunction the same week. On lot 21 there were two or three assemblies that fell off. There was also issues with 22 of similar nature. During the testing I had discussions with the head of engineering for PSI, Mike Trotter, regarding that issue and at that time we discussed the application of the weapon specification, which was identified under the Tab 22 document.

Q Okay, and what did you communicate to Mr. Trotter at that time?

A That a separation did constitute a failure but in looking at the wording of the specification since the specification does say shall be no separation during function and that became a key phrase because that did somewhat limit by their interpretation of the specification was which was a reasonable interpretation of the specification as to what could be enforced within the scope of the contract.

Q So did you discuss whether or not the igniter separations that were observed in testing for lot 21

7	should be recorded as critical defects?
2	A Since the separated after the completion of
3	the function testing it was determined that they could
4	make a notation of that in the test record and identify
5	it as a minor since it occurred after function testing
6	had been completed, while not necessarily in compliance
7	with the spirit of the specification it was in
8	compliance with the letter of the specification.
9	Q All right. If you turn to page 32 of the
.0	same Tab, and I believe the page, the page range I'd
1	like you to look at is R4 Tab 282 pages 32 through 43
.2	A Okay.
.3	Q And are you familiar with this document?
4	A Yes. It was submitted concurrently with the
.5	this is the lot acceptance test report from PSI for
6	lot PSI 07J002T002.
.7	Q Okay and its dated April 17, 2008, the same
.8	date as the document we just finished discussing, is
.9	that right?
0 !	A I believe so. I didn't look at the
21	submission date of the prior one.
22	Q Okay, I'll draw your attention to page 44.
3	A Yes, both were dated April 17.
4	Q Now looking back to page 32, at the very
25	bottom of the page there's a note that reads one minor
1	1

was noted, igniter assemblies separated from the can post function when the expended unit was tossed and hit the ground. Did you witness the lot acceptance testing for lot 22?

A Yes, I did.

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Q Okay. And do you have any recollection of that igniter, that particular igniter separation?

recall incidents this I of of occurrence. During the testing a unit will be, one end of the unit will be fired, particularly in the instances where they are cold conditioned or hot conditioned. One end of the signal will be fired. Then the unit will then be returned to the conditioning chamber to be reconditioned overnight for a 16 hour minimum time so that when the other end is functioned it will be at the required temperature. This is more essential for cold conditioned units than for hot cause you take a cold unit and to ensure that it will operate even in a cold environment, you want to ensure that either end will function at a cold environment so you function one side.

The heat from the burning of the candle brings the overall temperature of the signal so it is no longer at the cold condition so then return to the chamber to be returned to the cold condition, pulled out the following day, the other end is fired at the

1	appropriate temperature. After both ends are expended
2	the unit is no longer needed to be treated carefully so
3	in many cases the test technician would merely toss the
4	completely expended unit on the ground. And in the
5	cases where it was noted such as this the trigger
6	assembly fell off when it impacted with the ground.
7	Q Okay and, and you observed that type of
8	separation yourself?
9	A Yes, I did.
10	Q Okay. Now if you look at page 34, what is
11	this?
12	A This is the specific data as printed out of
13	the spreadsheet for the transportation vibration units
14	flare side ignition or function testing.
15	Q Okay, for lot 22?
16	A For lot 22.
17	Q Okay. And if you look in the far right hand
18	column there's a note next to the number 66 that says
19	trig assum off, T-R-I-G A-S-S-U-M O-F-F. Do you have
20	any recollection of that?
21	A That it would be noted as such it would
22	appear that this is the assembly or one assembly or one
23	signal where the trigger assembly came off in the manner
24	prescribed by the note.
25	Q Okay. And

Without any further detail in the note on the 1 data sheet itself it is difficult to ascertain. 2 All right. Now did you tell Darrell Suber 3 Q what to write in the, as he was recording the test data? 4 It was typical for me whenever there was an 5 6 aberration in a test to make a comment of that in the message column on any testing of any item and in this 7 case in particular I would just indicate to Darrell that 8 he needed to make notation that such an event occurred. 9 Q Okay. 10 If there was a no test for some reason or, in 11 this case, if the trigger assembly came off. 12 0 Now if a critical defect had been observed in 1.3 lot acceptance testing for lot 22, would you have 14 communicated to Mr. Suber to make a note of that in the 15 test data? 16 Yes as well, for two reasons. One, because it 17 would be significant in the acceptance and rejection of 18 the lot and secondly upon failure of a critical 19 characteristic, there is a clause in the contract that 20 requires the contractor to suspend operations until that 21 issue has been resolved, which requires a failure 22 23 analysis, a corrective action proposal from the vendor to the Government for review and approval and approval 24

thereof.

1	Q Okay. So that was a pretty significant event
2	if a critical defect would occur during lot acceptance
3	testing, would you agree with that?
4	A Yes.
5	Q Okay. And if one had occurred you would have
6	made note if it?
7	A Yes.
8	Q Okay. And to your recollection, did a
9	critical defect occur in lot acceptance testing for lot
10	22?
11	A No, not for that lot.
12	Q Okay. And did, turning back to page 44, Tab
13	282, did a critical trigger assembly separation type
14	defect occur in lot acceptance testing for lot 21?
15	A Not in accordance with the specific wording
16	of the specification, no.
17	Q Okay. All right, if you would turn to Tab
18	282, page 1.
19	A Okay.
20	Q And now I believe the pages in this document
21	go from page 1 through page 31, so I'd ask you to just
22	take a quick look at that.
23	A Okay.
24	Q Okay, and do you recognize this?
25	A Yes.

1	Q And what is it?
2	A This is the PSI report submitted for lot PSI
3	09D003 tag 002.
4	Q Okay, and did you witness the lot acceptance
5	testing for this lot?
6	A Yes, I did.
7	Q Okay. And I'd draw your attention to page
8	15, look in the far right hand column and next to the
9	number 99 and next to the number 54 there's a note
10	housing fell off. Do you recall any igniter separations
11	during lot acceptance testing for lot 32?
12	A Yes.
13	Q Okay. And did those occur after function of
14	the flare or during function of the flare?
15	A They would have occurred after functioning of
16	the flare was completed; otherwise, it would have been
17	noted as being failure during the function test.
18	Q Okay and no critical defect was reported in
19	the lot acceptance test for 32, was it, for the trigger
20	assembly separation?
21	A There was no report of such.
22	Q Okay. And to your recollection did a
23	critical trigger assembly separation defect occur in lot
24	acceptance testing for lot 32?
25	A Not per the specific wording of the weapons

3 - 118specification. 1 Now did you witness lot acceptance 2 Okay. 0 3 testing for lot 33? Yes, I did. 4 And --5 Q It was exciting. 6 Α 7 All right. What's your recollection of the 0 exciting event that occurred in lot acceptance testing 8 for lot 33? 9 During the function testing of lot 33, one of 10 the units had a catastrophic failure of the requirement 11 The unit during function testing of the separation. 12 literally blew apart upon functioning. The interior, the 13 guts of the unit, the interior components were ejected 14 backwards at a 45 degree angle bouncing off the ground 15 and landing about 20 feet behind the test operator. The 16 outer housing with the trigger assembly attached on the 17 functioned end, the back end had separated during a 18 prior test, and the trigger assembly on the function end 19 that was being functioned at that time flew off about 20 150 feet down range in the opposite direction. 21 22

Q Okay. And did you recognize that event as involving a critical igniter separation defect at the time?

A Yes.

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And did PSI also interpret that as a critical 0 1 defect at the time? 2 I, not to speak for them but they 3 Α 4 appeared to because they invoked all the clauses necessary under the critical characteristics clause of 5 the contract. б 7 Okay. And they treated it as such? Q Α Yes. 8 Do you recall if PSI conduct an investigation 9 Q into the root cause of that event that the catastrophic 10 11 trigger assembly separation? As a result of the invoking of the 12 Yes. critical characteristic clause of the contract, at that 13 14 point the contractor before they can re, has to suspend operations and before they can resume they have to do a 15 root cause analysis, failure analysis and then provide 16 a corrective action proposal for moving forward and then 17 18 with or without doing anything with the lot affected by 19 the critical failure and that has to be approved by the 20 Government prior to PSI, prior to the contractor being 21 able to move forward with production on the production line for that particular item. 22 23 Q Okay and were you involved at all in reviewing the responses to that? 24 That was handled through the DCMA office. Ι 25 Α

got a few courtesy copies of things and I was aware in 1 general of what was going on but I was not specifically 2 involved. 3 Are you aware of what the root cause Okay. 4 was ultimately determined to be of the critical failure 5 in lot 33? 6 I don't recall the Tab number or the 7 Α Yes. specific document but I did go to PSI upon a couple 8 occasions during their failure analysis to witness the attempts to try to isolate a failure mode because there 10 were several possible considerations initially from a 11 cracked candle that had burned and exploded until we 12 ultimately came to the conclusion that the crimp being 13 inadequate is what caused the unit to come apart. 14 Okay and if you'd please turn to Tab 80. 15 Q 16 Α Tab? Eighty. 17 Eight zero. 18 Α Okay, and I'd ask you to just to turn to page 19 0 4 of that Tab. 20 21 Α Okay. Okay. This document with a November 11, 2010 22 23 date and the words contractor's reply at the top. The date of what? Α 24 November 11, 2010. 25 Q

1	A Okay.
2	Q Are we on the same page?
3	A Yes.
4	Q Okay, so this is PSI response to a DCMA
5	corrective action request and I'd like you to turn to
6	the following page, which is page 5.
7	JUDGE PAGE: And for the record Mr. Neill,
8	that's a handwritten 5 and not the typed 4 that appears
9	on that page, is that correct?
10	MR. NEILL: That is correct, Your Honor.
11	JUDGE PAGE: Thank you, sir.
12	BY MR. NEILL:
13	Q And I draw your attention to the second
14	paragraph on that page. There's a statement. It reads
1,5	past test history indicates that the flare igniter
16	housing working itself free is a recurring problem. It
L7	has been witnessed during testing in previous LATS and
L8	was not cause for lot rejection. LAT reports for lots
19	21, 22 and 32 include information regarding igniter
20	housings working free post igniter function. Do you
21	agree with that statement that the igniter separations,
22	that the LAT reports for lot 21, 22 and 32 include
23	information regarding igniter housings working free post
24	igniter function?
25	A Yes, I do.

1	Q Okay. Now during lot acceptance, following
2	the critical defect that occurred in lot acceptance
3	testing or it was identified in lot acceptance testing
4	of lot 33, PSI ultimately submitted a reworked lot for
5	lot acceptance testing, lot that was designated as lot
6	33A and did you witness the lot acceptance testing of
7	lot 33A?
8	A Yes, I did.
9	Q Okay. And did any critical defects, did you
10	observe any critical defects in lot acceptance testing
11	of lot 33A?
12	A Yes, there was one.
13	Q Okay, and could you describe that?
14	A During the function of the flare side of one
15	of the signals, do not have an idea which sample number
16	it was, the trigger assembly popped loose and canted off
17	of the outer container and while the flare was burning
18	the trigger assembly then proceeded to completely detach
19	and fall off before, while it was still functioning,
20	still burning.
21	Q Okay. And do you recall any discussion of
22	that igniter separation between government personnel and
23	PSI personnel at the time?
24	A Not specific wording, but I'm sure there was
25	discussion of the nature of that it had fallen off

during the function, during function as opposed to post function. 2 And did you interpret that igniter 3 0 Okay. separation to be a critical defect within as it was 4 5 defined in the specification? Yes, sir, I did. 6 A 7 Okav. And why is that? 0 Because even with the limitation of the Α 8 wording in the specification, the failure occurred 9 explicitly during function or during function testing. 10 Okay. If you'd turn to Tab 194. 11 0 Volume IV. Α 12 1-9-4. 13 0 Α Yes. 14 Are you there? 15 0 Α 194, I am there. 16 194 is an email from PSI Barry 17 Q All right. Lindsay to Mary Adams dated October 22, 2009. 18 copied to Bob Hirst and Julie Coughlin , subject MK124 19 signal contract number DAAA09-03-C-0066 critical defect 20 occurrence but if you look down in the body of the email 21 22 the second paragraph that begins during LAT activity for lot PSI 09H003-003 a critical defect 23 the MK 124 occurred, please read that paragraph silently to 24 25 yourself.

1	A Okay.
2	Q Does that paragraph describe the event that
3	you referred to as the catastrophic failure earlier?
4	A Yes, it does.
5	Q Okay. And in the following paragraph, reads
б	as a result of this critical occurrence PSI shut down
7	production activities as required by contract.
8	Additional information will be reported as it becomes
9	available. Is that consistent with your recollection
10	that that occurred?
11	A Yes.
12	Q And if you turn to the next page, page 2, it
13	reads this is a letter from Rock Island Contracting
14	Center Contracting Officer to Mr. Bob Hirst and I just
15	draw your attention to the paragraph after the paragraph
16	that begins with the letter C, to the paragraph that
17	begins this command in conjunction with NWSC Crane and
18	DCMA have reviewed your function test procedure, are you
19	familiar with that?
20	A Yes, I am.
21	Q And could you explain that?
22	A When PSI opted to do some of the performance
23	testing there were additional contract data requirements
24	that were invoked. One of those was to submit a test
25	procedure to be reviewed and approved by the Government

prior to moving forward to ensure the procedures were adequate and in this case that procedure for performing tests was modified as a result of the catastrophic failure during testing of lot 33 because of the inherent risk to test personnel and PSI modified their test procedure to utilize a guarded fixture that would clamp the test sample in place prior to functioning so that if something were to recur similar in nature to what happened with the one that exploded in 33, that it would not create a risk to either the test operator or to any other people in the immediate area witnessing the testing, which was a very prudent and good move on their part to editorialize a bit.

Q Okay. Now if you turn to Tab 209. I had asked you previously about whether PSI investigated the root cause of the defect that occurred in lot 33.

A Yes.

Q And I draw your attention to paragraph A root cause of the deficiency in Tab 209 and it reads improper crimping on the flare end allowed the flare igniter to fall off prior to testing of the smoke end blah, blah, blah, and it goes on to describe action taken to correct and prevent recurrence of the root cause of the deficiency. PSI determined that improper crimping was the root cause of the defect that occurred in lot 33,

1	correct?
2	A Correct.
3	Q Okay. And they ultimately submitted
4	procedures to rework that lot, did they not?
5	A Yes, they did.
6	Q Okay. Were you involved at all in reviewing
7	the rework procedure?
8	A Yes, I was.
9	Q Okay. All right, if you turn to Tab 195. Do
10	you recognize that?
11	A Yes, I do.
12	Q Okay. This is an email from on the first
13	page, an email from Julie Coughlin dated February 10,
14	2010 to Bob Hirst and your name is listed as being
15	copied on the email and the email appears to forward a
16	letter regarding rework procedure, if you turn to the
17	second page, did the Government approve the rework
18	procedure?
19	A Yes.
20	Q Okay, and is this the approved, does this Tab
21	contain the rework procedure that was approved?
22	A Starting on page 3, yes.
23	Q Starting on page 3, okay. All right. And
24	following the rework was the lot 33 tested again?
25	A Yes, it was, but subsequent to the

	requirements of a rework procedure under the rework
	clause of the contract and the labeling information
	requirements of Mill Standard 1168, the lot number had
	to be modified to reflect that it had been reworked by
	adding a suffix of the letter A.
	Q Okay. So lot 33A was the same as lot 33
	except lot 33A had been through a rework procedure to
	address the crimpling problem that PSI had determined
	was the cause of the problem in lot 33?
	A Correct.
	Q Okay. And now following the testing of lot
	33A I believe we've already discussed was 33A accepted
	or rejected?
	A It was rejected.
	Q Okay. Why was that?
	A Because the critical failure of the
	separation of the igniter assembly during the function
	testing.
	Q Okay. Was there also a sealing test failure
	observed in that testing?
	A Yes, there was.
	Q Okay. And the sealing test failure alone
	would be sufficient to reject the lot, would it not?
	A Yes, it would.
-	O Okay. If you turn to Tab 199 there's a

1	letter from PSI addressed to the contracting officer.
2	A That starting on page 2?
3	Q Yes, starting on page 2 and page 3. First
4	taking a look at the first paragraph at the top, where
5	it refers to WS13697N, paragraph 3.5.1.1 C8, to what
6	does that refer?
7	A I'm sorry, oh, okay, okay. I was looking at
8	the first paragraph on the page 2 instead of page 3.
9	I'm sorry.
10	Q Yes, page 3.
11	JUDGE PAGE: Yes, it's bate stamp number 3,
12	is that correct, sir?
13	MR. NEILL: That's it's bate stamp number
14	page 3 at the bottom and at the top it says page 2 of 2.
15	JUDGE PAGE: Page 2 of 2, right.
16	MR. NEILL: I'm sorry.
17	BY MR. NEILL:
18	Q So my question was WS13697N, to what does
19	that refer?
20	A That's the weapons specification we discussed
21	initially when I took the stand. It is the product
22	specification for the item showing performance
23	characteristics after completion of production.
24	Q Okay. And paragraph 3.5.1.1 CA, that's the
25	same paragraph that we were discussing earlier, is that

1	right?
2	A Yes, the C, the I'm sorry, the C8
3	characteristic applies to the sub-paragraph e
4	requirement of the 3.5.1.1.
5	Q Thank you. And it reads during function
6	igniter shall not separate from the outer container, is
7	that right?
8	A Something to that effect, yes. I'd have to
9	go back to Tab 22 to, although I've read it many times
10	I don't have it memorized by wrote.
11	Q Okay. Take a look back at Tab 22.
12	A During function, igniter shall not separate
13	from the outer container.
14	Q Okay.
15	JUDGE PAGE: Excuse me, sir, are you on Tab
16	22?
17	THE WITNESS: Tab 22 page 4.
18	JUDGE PAGE: Give me a moment to catch up
19	with you, please. Thank you.
20	BY MR. NEILL:
21	Q All right. Now looking, keeping Tab 22 open
22	and looking at Tab 199 page 3, looking back at that same
23	paragraph that begins WS13697N, paragraph 3.5.1.1 C8
24	states during function igniter shall not separate from
25	the outer container. The paragraph continues it is

important to note that the igniter's function is
complete once candle is initiated. Therefore the
igniter's detachment after function is not a critical
defect and has never been previously flagged as such.
Do you agree with that statement?
 A No, I do not.

Q Okay, and why not?

A When the initial separation occurred during the testing of lots 2-1 and 2-2, Mr. Trotter and I had discussions regarding the implications of that subparagraph e section of the requirements under 3.5.1.1 and the function aspect is implicitly and explicitly defined by the function test requirement within the same specification which includes the initiation, delay time and display time, all of which are requirements as part of the function test and the function of the item.

Q Okay. Now if you go, continue down Tab 199 page 3, the fourth paragraph and just take a moment and read that paragraph to yourself. It begins gradual detachment of the igniter.

- A Okay.
- Q Okay. Now did the Government's approval of PSI's request to use the 363L foil change the specification in any way or the drawing?
 - A We did not specifically approve the 363L

If you go back to the deviation we discussed foil. previously, the only thing listed within the scope of deviation to increase the salient that was characteristic of the thickness of the foil that was allowed to be used from I believe 3.4 mil to 6.7 mil. All other characteristics of the foil remains required in the same parameters as within that drawing already in existence, SO to correct that that we specifically approve the 363L foil. We approved a variance allowing the contractor to use a thicker foil if they so choose.

Q Okay. Now looking at that same paragraph that begins gradual detachment of the igniter can be attributed to the sealing disc, which is considered too thick, do you agree with that statement?

A Not completely, although a thicker foil could increase in part the propensity or the potential for a separation to occur, so long as the crimps are adequate there should not be a problem.

Q Okay. Now if you continue down that in the same paragraph, it says that the contract's inception in 2005 sealing disk material 433L was used. Do you agree with that statement?

A No, I do not. First of all, the contract was incepted in fiscal year 2004 I believe and I believe the

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contract was actually awarded in September of 2003. I'd have to defer to the contractual personnel on that because I don't have my contract file to refer to since I'm now retired but secondly there were not several lots that failed leak testing. There as a result of the foil because of quality control issues and a lot of marginal foil combined there was a problem with lots 10 and 11 that could be somewhat attributable to foil but even that traces back to quality control issues within the plant. Lot 1-1 failed because of leakers but that was specifically noted in the lot test report that every one of those leakers occurred through the O-ring and the crimp around the O-ring. None of them involved the foil seal.

- Q Foil seal? Okay.
- A And --

Q There's a sentence in that same paragraph that read, this thicker disk causes an internal increase in pressure which gradually pushes the igniter free. Would you agree with that statement?

A No. Upon initiation of the device there is a start of the process of ignition of the candle, which will then start to burn and as that happens the heat and pressure contained from this, or the heat and pressure generated by this started the burning process is

contained within that chamber of the signal until such time as the foil will melt and/or rupture allowing the display of the smoke or flare, depending on which end we're talking about, to then come free. At such time, the pressure is alleviated and there is no gradual Typically the pushing. venting occurs within The display may take a few tenths of a milliseconds. second to a second or so to come to full pressure and output but there's already been a rupturing of the foil to alleviate pressure. Therefore, there is nothing gradual that can be allowed as far as a gradual pushing of the igniter assembly free from the housing or the main portion of the signal.

Q Okay. And the last sentence in that paragraph reads although PSI manufactures these rounds per specification, issues with the sealing disk continue to cause lot failures. Do you agree with that statement?

A I would tend to disagree with the statement saying it was produced per specification because of the torque requirement on the drawing that we discussed previously was never actually complied with that we are aware of. There was a test performed that would show gross failures but nothing that would actually show full compliance with that requirement, so on that basis we do

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not know if they did have adequate crimps because they never did the testing in a manner that would demonstrate that.

Q Okay. Now the paragraph after that mentions PSI has a subcontract agreement with SAIC and there's a number in parentheses to develop a solution for the problems associated with Mark 124 sealing discs. Are you familiar with PSI's subcontract with SAIC?

A Yes, I am.

Q Okay, and did you have any involvement with that?

A Initially the effort to try to quality an alternate sealing process and/or material was going to go directly through the contracting office at Rock Island. I prepared a statement of work to have that issued or to be negotiated with PSI for the effort. Before that could be invoked PSI was suspended from further contract abilities and we were not able to move forward in that path.

Accordingly we dealt with a subcont, with an omnibus contract that Crane holds with the company called SAIC for to team with them. SAIC performs technical support for the base at Crane and they are able to partner with outside companies to do other actions along in conjunction with that technical

support. The funding was then diverted through that omnibus contract for SAIC to perform that same function of trying to find an alternate sealing operation with PSI. PSI was chosen because they had an existing established ongoing production line for the Mark 124. There was only one other viable alternative and that would have been Martin Electronics who had produced the Mark 124 in the recent past, but did not have an existing line in operation.

- Q Okay, and what was the purpose?
- A At the time that we started this --
- Q Purpose of the subcontract with SAIC.
- A I'm sorry.

Q The purpose of the subcontract or the purpose of the contract with SAIC.

Mas to try to find an additional sealing method or an additional sealing materials. The 433L material had been utilized successfully for years and at this time we were under the impression that there was a structural or systemic problem with 3M in providing that in the same level of quality that had been provided previously and concurrent with that we were seeing that the 363L foil that was being used in the production of 2 and 3 had issues in being able to pass the temperature and humidity conditioning testing on a continual

perpetual basis. So we were looking to try to find something else.

Even if the 363 were working fully well with no problems if we still believed that the 433L was not going to be available to quality standards provided previously it's always good to have at least two options Again competition is good so the Government tries to foster competition when possible to avoid a sole source limitation which can be expensive and create of additional problems, we looked at numbers SO materials as well as procedures where they looked at providing coatings above a thin foil or doing double layers of foil. There were numerous methods that were discussed and that PSI chose to pursue in attempts to fulfill this contract.

Q Okay. Are you familiar with the results of that SAIC contract?

A Yes.

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Q And what was the product of that contract?

A The product of this contract was supposed to be a definitive alternative that would successfully meet the requirements of what was being used previously. In essence, something as an alternative to the 433L and/or the 363L foil.

The testing that was ultimately done at PSI

1	was inconclusive at best. There were a number of
2	different workmanship flaws that prevented adequate
3	assessment of the options simply because parts were
4	missing, parts were put together incorrectly, testing
5	was incorrect, there were a lot of different problems
6	that resulted from that test and although several of the
7	alternatives were able to be proven inefficient there
8	was no way to find something that was going to be proved
9	as an adequate replacement.
10	Q Okay. Did the results of that test establish
11	that the 363L foil tape was somehow defective?
12	A I don't recall that being a conclusion. I
13	have not looked at the report in some time though.
14	Q And do you recall that it find that the 433L
15	tape was unsuitable?
16	A If the 433 tape, either 433 or 433L, they're
17	both the same foil, was used as a control and I remember
18	there were controls but I'm not sure whether the 433 or
19	363 were used as a control mechanism so I'd have to
20	refer to the test report from SAIC to confirm that.
21	Q All right. Now I believe you said that you
22	witnessed all the testing of the Mark 124 by PSI except
23	for two lots, lot 4A1 and lot 42 is that correct?
24	A If 4A1 refers to the FAAT LAT lot as opposed
25	to the initial first article of Interfix 4, that would
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be a correct statement.

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Q Okay. So you did witness the first article for lot 4, the First Article Test, the first First Article Test for lot 4, is that right?

number, the second number is the lot number. For Interfix 4, I witnessed the initial First Article Test. I also witnessed the modified second round at the First Article Test. Subsequently, I did not witness the FAAT LAT lot 1 test nor was I available to witness the lot test for lot 4-2. In both of those cases, the material was earmarked to go to the U.S. Air Force so Matt Adams, who is the engineer for the Air Force attended those and even though as a design agent I historically attended, I was unable to in those two instances. They occurred within a few weeks of each other and I was otherwise obligated.

Q Okay. Now looking back and if you need to take a look at the Appellant's Exhibit A5, the big chart, I'd just like to walk you through your recollection of the lot acceptance testing for the lots, lot acceptance testing that you witnessed and what is your recollection of the lot acceptance tests for lot 1-1.

A The lot acceptance tests for; we want to walk

through everything there were also three efforts before the First Article Testing was initially passed at the start of production. These are not listed on A5.

Q Okay. Why don't you start with those then?

I don't recall the specifics. I just know that there were some problems in trying to get the burn times correct and trying to get the, there was some other problem but I don't recall exactly what it was. It took three efforts. Nothing profoundly significant for a new contractor with a new item. It's not unexpected to have a couple tweaks to get into full production so that was not an issue but the fact that it did take three rounds of testing before first article is ultimately passed. Subsequent to that, PSI went into full production and then the first production lot was presented to the Government, sample was drawn. The sample was shipped to Crane for lot acceptance testing. During that acceptance testing, there were multiple leakers, specifically from the O-ring, around the O-ring crimp that resulted in the failure of the lot.

Q Okay and what corrective action was taken to address that?

A The problem was found that within the technical data package there is a requirement for the outer housing, the silver cylinder that is on the

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outside of the unit, that is crimped around the O-rings and crimped until the assembly is in place is required to be a T-6 temper. The material when formed into its proper shape with the ridges at one end sometimes will exhibit brittleness or hardening as a result of being worked.

Work hardening is a standard result of any kind of working of a metal or a similar material. Since PSI had told me that they were using the same vendors that Martin Electronics had used on a previous contract that had just closed out about the time that PSI was awarded this particular contract, it did not appear that that would have been a problem.

The vendor typically would do a stress relief operation by heating up the cylinder and then allowing it to cool slowly so that it would regain its T-6 temper, which is an indicator of its hardness and malleability. There was not an issue during the First Article Testing regarding any imbrittlement of the outer containers so there was not perceived to be a problem with that.

When lot 1-1 was presented and all the leakers occurred I opened discussions with Mike Trotter regarding that to see if they were still getting material that had been stress relieved from their

vendor. He was not sure. He checked into it and as a result of that, they subsequently made provisions within their purchase orders to ensure that the stress relief was done on the parts prior to being accepted at PSI and that from that point forward was never an issue again.

Q Okay. And would you please, if you don't mind, just walk us briefly through the Lots 1-2 through 1-9, and your recollection of the Lot Acceptance Testing and results for those lots?

A In Lot 2, it was again an A Plan performed at Crane; the sample was drawn, shipped to Crane. During the testing, there were twelve of the twenty cold units had a long display time from the smoke end. And as a result of that during discussions with Mr. Trotter, who was at Crane to witness the testing, it was agreed that the display from the smoke was continuous, was robust, and was sufficient; even though some of the burn times were up around thirty seconds or so, which had always been considered a working maximum. And as such, there were two deviations that were submitted as a result of the testing from Lot 2. The first was specifically for the Lot to accept the Lot even with the long cold smokes up to a point of a thirty-one second maximum.

In the session with Mr. Trotter, I told him that that was sort of an exception, usually thirty would be

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the maximum that would be allowed, because there was only so much material in the candle that can be used and testing on land is not quite the same as what happens out in an ocean environment with the wind being somewhat more prominent than in a static function on land. Secondly, there was a deviation submitted to standardize the display time for all smoke displays to twenty-five seconds, which was then approved for the balance of the contract.

Lot 3 would have been another A Plan test, in order to get two in a row; and that test was again performed at Crane. I don't recall there being any particular issues with that Lot and it was ultimately accepted. The fourth lot would have been a B Plan test and it would have been conducted at PSI. And apparently from the chart, there were some units that were long on the smoke display. I do not recall if this would have been, I think this, based on the timing, this may or may not have been after the deviation for the balance of contract had been improved and incorporated contractually.

- Q May I draw your attention to Tab 283, Page 9 through 18, I believe.
 - A Okay, 283, Page 9? Starting?
 - Q 9 through 18. That's a document on Page 9

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anyway, dated January 19, 2007; and the subject line 1 2 reads Lot 4 LAT. A Yes. 3 Does that refresh your recollection at all? 4 Also looking at the dates. I believe 5 6 the deviation in question for that twenty-five second standardization, I'm thinking that was submitted in 7 January of '07 and approved at the end of January '07, 8 and then was contractually incorporated as subject 9 afterwards. And looking at the data on Page 12, it 10 appears the data reflect that the twenty-five second had 11 not yet been incorporated by deviation and red-lined on 12 the control copy utilized by the contractor. Because 13 there are no display times that are above, I'm sorry, I 14 was looking at the wrong column. I do not see any 15 display times that are above twenty-five seconds. 16 Okay. And this lot was ultimately accepted 17 by the Government, is that right? 18 Yes. 19 Α Did it contain any leakers? 20 As shown on Page 9, under the third 21 Α paragraph, Item 3-Sealing Test, Quantity 50, all passed. 22 23 Okay. All right, what about Lot 1-5? What's your recollection of lot acceptance testing for 1-5? 24 And unfortunately, there does not appear to be a report 25

1	in the record for that.
2	A 1-5 would have been a B-Plan test performed
3	at PSI with fifty units. There are, the unit, the lot
4	was accepted. I don't recall there being any issues on
5	that lot.
6	Q Okay. And Lot 6?
7	A Lot 6 was an A-Plan; I am not sure if that
8	would have been done at Crane or at PSI. The chart
9	provided by PSI indicates that there were several long
10	smokes.
11	Q I can draw your attention to Tab 283, Page 19
12	through, I believe
13	A If the testing was performed by the
14	Government, there's going to be a lot more pages.
15	Q Yes, there were a lot of pages. Through Page
16	60.
17	A Okay.
18	Q Okay, and were there any sealing test
19	failures identified in this lot acceptance test?
20	A No, there were no leakers on either initial
21	testing nor after five foot drop nor after
22	transportation vibration testing.
23	Q Okay and this test; what's your recollection
24	of the test results for this lot?
25	A There were some long cold smokes, which was

not unusual.

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Q Okay, and was this lot accepted after PSI submitted a request for deviation?

A Yes, it was.

Q Okay. Now, Lot 7. What's your recollection of the lot acceptance test for Lot 7?

Lot 7 was the first instance where we saw an issue with the assembly of the item at PSI. in the trigger assembly is a plastic trigger that is held inside a metal sleeve. The trigger slides out and then is depressed down to function the item. to prevent the trigger from just sliding loosely around, there is a slot in the bottom of the plastic part and a little knob on the part of the trigger assembly, from the metal part that it slides out of that catches the trigger assembly in place so that it does not slide out just on its own. You have to physically move this out across the d-tent. This is supposed to be hard enough so it won't just bounce out on its own and present a potentially unsafe item; but at the same time, it should be loose enough that it can be one hand operable so that an injured Airman or Seaman or Army person, or Army or Marine or Coast Guard person can still effectively operate the unit with one hand.

In this situation, we found several instances

where the trigger assembly was tight, resulting in at least two units that were unfunctionable because it could not be operated one hand operable resulting in a classification as a dud, because they could not be operated under those terms. As a result of that, there was a screening operation performed on this lot, to where the lot was one hundred percent screened and then a new sample submitted. The new sample was after that, so I went back to PSI. This was to be done at PSI.

So after the initial failure, I had to go back a second time for presentation of the screened lot with no function testing, because the functional aspect were fine once the unit did function, but it was merely to prove with a statistically valid sample that the rework, that the screening operation had been successful in culling all of the tight trigger assemblies. That reduced the quantity of Lot 7, I believe, by a couple thousand. Subsequent to that, PSI also submitted a rework proposal to rework that trigger assembly to loosen it up so that it would be possible to have that be one hand operable.

That was approved. PSI did the rework operation. A sample was drawn from the reworked lot, which was then according to, as stated previously, was designated as Lot 7 Alpha, and then there was a sample

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of that that was checked. There were a couple of units
that were still tight, so a secondary screening
operation was done on site with me being present to
again check for one hand operability. The way this was
done, there was pretty much basically a four by four
piece of wood with holes drilled in it so that the
signal could be dropped down in. You could then take a
thumb or finger and slide the trigger assembly out, but
it could not be depressed because it was just above the
surface level of the wood. And if it could be operated
with a finger or a thumb, it would be pushed back into
the locked position, turned upside down, the other end
would be checked in the same manner. If it was able to
be operated in that manner with one finger or one thumb,
it was then accepted. So after a second screening and
culling operation, Lot 7 Alpha was then accepted. The
paperwork had to chase a little bit to catch up on that,
but it was ultimately accepted.

Q Okay. And that, the tight trigger assembly issue, was it a workmanship issue?

- A Yes.
- Q Or a specification issue? Workmanship issue?
- 23 A Yes.

Q A lit--

JUDGE PAGE: Please make sure you speak only

one at a time. THE WITNESS: I'm sorry; I thought he had finished the 2 3 question. BY MR. NEILL: 4 Turning to Lot 1-8, what's your recollection 5 of the lot acceptance test for 1-8? 6 7 I don't have specific recollection of the Α It appears there were four out of twenty that 8 were culled. It's not a significant quantity and odds 9 are that they were not much over the twenty-five second 10 limit. 11 Okay, and that lot was accepted 12 deviation, is that right? 13 14 Α Yes, it was. And Lot 9; what's your recollection of Lot 9? 15 Q Both 8 and 9 were A-Plan tests, as the result Α 16 of the failure of Lot 7. And these two tests were both 17 performed at Crane. Lot 9 was at Crane, and it 18 indicates that there were two out of twenty that were 19 culled. I'd have to look at the test report. 20 21 I recall vaguely Mr. Trotter being very proud and very glad of the results of that test, because it was an 22 issue where it was, I believe it was an absolute clear 23 24 LAT pass, where there was no follow up paperwork going

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to be required whatsoever.

Now, for Lots 2 through 9, were any leakers Q 1 identified in lot acceptance test? 2 Α No. 3 Testing? Okay. What about trigger assembly 4 0 separations? Do you recall any trigger assembly 5 separations in those lots, 1-2 through 1-9? б 7 A No. Now with Lot 1-10, do you have a recollection 8 9 of Lot 1-10? Yes. Lot 1-9 had been shipped to Crane for 10 Α A-Plan testing, and with the environmental conditions 11 required as prerequisites for functional testing of the 12 lot, there is a time lag from the receipt of the lot 13 14 until we could actually complete the testing. As a result of that shipping delay and the testing delays, 15 the production folks at PSI had completed Lot 10 by the 16 time we were completed with the testing of Lot 9. 17 Consequently, we were at Crane, Mike Trotter came to 18 Crane to witness the testing of Lot 9 on one week. 19 20 The subsequent week, I traveled to PSI to 21 witness the testing of Lot 1-10. During that testing, 22 there were issues with multiple leakers and as a result 23 of leakers, we had some long ignition times. 24 Q Okay. Or concurrent with the leakers. 25 Α

Q All right, do you recall whether that lot was accepted or rejected?

A It was not accepted. In talking with Mr. Trotter, he was wanting to pursue the path of trying to do a screening operation to cull any leaker units; and we discussed this. I'm not sure if it ever was officially submitted as a rework or a screening plan for the lot. What I recall in conversations with Mr. Trotter was that they did a screening operation and then prior to submitting to the Government, they drew their own internal sample and found that despite their effort to do a culling one hundred percent screen, they still had some leakers.

Consequently, the second iteration of screening and along with the pre-production screening, this resulted in a three hundred percent screening operation. And even after that, when they drew their own sample, there were still leakers. And as such, I'm not sure if there was ever an official submittal to do the, to check; but at that point, they terminated; well what they were doing was, they terminated the production of Lot 11 at that point and submitted that lot to the Government on the chance that it might be good. But they didn't want to go any further with additional production at that point in time; because they did not have much faith in

the quality of Lot 11. And as such, Lot 10 was never accepted. 2 Okay, do you have any recollection of an Q 3 investigation into the cause of lot failure for Lot 10, 4 1-10 and 1-11? 5 Α There was some internal work at PSI; I am not 6 privy to what all was involved. One thing that bothers 7 me now is that part of that discussion was centering 8 around rumors of 3M having relocated their production 9 facility for the foil from a domestic location to 10 Mexico; and as such, it was perceived that the material 11 that has been brought in under Lot 9 or part of 10 was 12 the last residual material that was left from domestic 13 production and that they were starting to see the 14 Mexican product come in and exhibiting a much lower 15 16 level of quality and reliability. 17 Okay. And found out since then, that is no longer 18 the case, but it was one of the prompting factors at 19 that time. 20 That was not the case? Okay. 3 M 21 production facility for the foil tape did not move to 22 23 Mexico? it did not. The 3M facility that No. 24 Α

produced the 433-L foil as well as the majority of their

foil, adhesive-backed foil products had been relocated from the east, initially developed when 3M was producing this on an East Coast location. I don't remember exactly where.

In 1994, they relocated that production facility to a facility in Indiana, and at that time with the change of the source of the material, there was requirement to requalify with the first article under production that was ongoing at Martin Electronics at the time. This was prior to my involvement, but I found out later in researching the issue that they had, at that time, done a new first article with the foil produced in the Indiana facility in 1994 and passed with no issues.

When I contacted a 3M technical rep to discuss some of the issues that had been ongoing as a result of the allegations, I did find out some data about some of the production lots of foil that had been used during production at PSI and I also discovered that they had never moved the facility. It was still in production at the Indiana facility, and it had not been relocated at any time to my knowledge, after that.

Q Okay. Moving on to Lot Interfix 2; and this Lot Interfix 2 was manufactured using the 3M 360-L foil?

A 363.

Q 363-L foil sealing disc, is that right?

A Correct.

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Q Okay. And what's your recollection of the lot acceptance test for Lot 2-1?

A We already discussed that.

Q We already discussed that. I'm going to skip that; we already discussed it.

A If we're going through, we already discussed 2-1 and 2-2, we hadn't gotten to 2-3 yet.

Q No, we didn't get to 2-3. What's your recollection of 2-3?

2-3 was rejected because at some point during the production operations at PSI in the production of this lot, they lost their calibration control on the press operation that is used to manufacture the flare that is used in the unit; and as such, the flares that were produced did not have sufficient quantity or density of material to burn for the required minimum amount of time. That loss of calibration on the equipment was not discovered until after the lot had been completed and presented to the Government for evaluation. As such, there were multiple flares that burned below the prescribed minimum time and the lot was initially rejected accordingly. Ultimately, as part of a negotiated for equitable adjustment from a stop work order, the Government did accept Lot 2-3 and I believe

it was, may have been for a reduced price, but I was not 1 2 privy to the negotiation to that extent. Okay. Now looking at Exhibit A-5, there's a 3 note to the right of, at the far right end of the row 4 that begins with Lot 2-3 that says: Accept Code B. 5 do you have an understanding of what Code B is? 6 7 Α Yes, I do. And what is that? 8 0 9 Condition codes are assigned to ammunition items depending on their availability and viability. 10 Condition Code Alpha is full and unrestricted use. 11 12 Condition Code Bravo is a restriction of some type of Typically a Condition Code Bravo unit is another. 13 restricted for training purposes only. 14 In some cases, the restriction may be for 15 environmental use, i.e., could only be used in areas that are above a certain temperature or below a certain 17 temperature; or may be restricted on where they can be 18 19 stored. So there are some limitations, but they can still be used for some purposes. 20 Some purposes, but not all purposes? 21 22 And the alphabet soup for condition codes stretches down into at least H, which is Hotel, 23 which is scrap. 24

Now, going to--all right, I have not

1	asked you about Interfix 3(a)-1. And do you have a
2	recollection of that?
3	A Yes, that would have been the First Article
4	Test coming out of a restart by PSI after prolonged
5	stoppage of work and the First Article Test would have
6	been in compliance with the left-most column of the
7	specifications we discussed earlier.
8	Q Okay, and that passed?
9	A And that passed.
10	Q And there were no leakers in that lot?
11	A None noted.
12	Q Okay. And Lot 3-2, right? We've, do you
13	have a recollection of Lot 3-2, acceptance testing in
14	Lot 3-2?
15	A Yes.
16	Q And what's your recollection of that?
17	A That the lot was tested at PSI and that there
18	was one unit that leaked.
19	Q Okay. And did that lot pass lot acceptance
20	testing?
21	A No, the one leaker caused it to be rejected
22	initially.
23	Q Okay. Now, was that lot ultimately accepted?
24	A Yes. PSI proposed that it be screened one
25	hundred percent and witnessed by government personnel

with the caveat responded to by the Government allowing them to do so. And with that factoring, it took them I think a month and a half or two months to be able to schedule in the eighty-plus hours of time necessary to do a screening of that production lot, concurrent with their production of the subsequent material and availability of DCMA personnel to witness the screening operation.

- Q Okay, so the rescreening operation for leakers was a time consuming process?
 - A Very much so.

Q And why was that?

A The chamber utilized at PSI accommodates four signals. You have to load the chamber, drop it down into the water to seal, turn on the vacuum, draw a six inch vacuum and at that point you start a sixty second dwell time. Upon completion of that, you pull the material, the four signals out of the water, turn the vacuum pump off, release the vacuum, pull the units out of the chamber, take them out of the fixture and start the process over again. That's a minute and a half to a two minute cycle time for four units. When you have a lot of ten thousand units and you can do four units every minute and a half to two minutes, it encumbers well over eighty hours of test time.

1	Q Okay. Now, to your knowledge, did the
2	Government ever agree to rescreen any other lot than
3	that lot, Lot 3-2 for leakers?
4	A No, not subsequent to that.
5	Q Okay. Or prior to that?
6	A We discussed that option in 1-10; but I don't
7	know as it was ever officially submitted for that.
8	Q Okay. Lot 3-3, we've discussed. Lot 3-3(a),
9	we've discussed. Now the next lot that you witnessed
10	was Lot Interfix 4-3, is that right?
11	A No, I witnessed both attempts at first
12	article prior to the FAT LAT with Lot Interfix 4
13	production.
14	Q Okay, and would you describe, I mean, what's
15	your recollection of the first First Article Test for
16	Lot Interfix 4?
17	A Can you direct me to the tab of that test
18	report? You know the book a whole lot better than I do,
19	Rob.
20	Q Let's see if I can. That would be 128.
21	A Okay.
22	Q Is that it or is this the modified?
23	A No, this would be the initial. That's April
24	of 2011 with the initial first article attempt. The
25	modified second attempt at first article was in June.

1	Okay.
2	JUDGE PAGE: I note, Mr. Neill that it is
3	2:30. I'm happy to continue, but if you wish to take a
4	short break, that's up to you. You know best how your
5	questioning of the witness needs to proceed.
6	MR. NEILL: Yes. I think we could probably
7	take a short break if that would be helpful to
8	everybody.
9	JUDGE PAGE: How long would you wish?
10	MR. NEILL: Ten minutes?
11	JUDGE PAGE: We'll resume at quarter till.
12	(Whereupon, the above-entitled matter went
13	off the record at 2:32 p.m. and resumed at 2:43 p.m.)
14	JUDGE PAGE: Mr. Neill, you may resume your
15	questioning of Mr. Bowen. Thank you.
16	MR. NEILL: Okay.
17	BY MR. NEILL:
18	Q Mr. Bowen, please turn to Tab 129 in the Rule
19	Four file.
20	JUDGE PAGE: 243, sir?
21	MR. NEILL: 129.
22	JUDGE PAGE: 129, I'm so sorry; I
23	misunderstood.
24	MR. NEILL: 129.
25	BY MR. NEILL:

We've already heard prior testimony about the 1 0 2 First Article Test for Lot 4, and that it involved numerous signals failing a leak test? 3 Α Correct. 4 And do you have a recollection of the cause 5 of the sealing test failures in the first, First Article 6 Test for Lot Interfix 4? 7 made allegation the and 8 Yes, was substantiated by PSI that in their effort to make sure 9 the crimp was really, really good, that they ramped up 10 the pressure, the air pressure that's used to perform 11 the crimp and they were essentially over-crimping the 12 signals and ovaling a component that resulted in a 13 leaker situation on many, many units; especially after 14 they were bounced around the least little bit. 15 though they may have passed initially, after putting 16 them through transportation vibration or a five foot 17 drop, the vast majority of those units then would 18 19 generate a leak. Okay and that was communicated to you in this 20 document at Tab 129, is that right? 21 The test results, this did not include a 22 failure analysis. As I recall, it was merely stating 23 what the results of the testing were. Okay, wait a 24

minute; take that back. On the very last page, next to

1	the last page, Page 35; this may have something
2	regarding that. Okay. It was included in the test
3	report, I apologize. But yes, the validation to support
4	that allegation was documented at the very end of the
5	test report on Page 35.
6	Q Okay, and did you review that root cause
7	analysis?
8	A Yes.
9	Q And did you take any issue with that?
10	A As I recall, this was done at the tail end of
11	the lot test. I don't specifically remember whether it
12	was there or not, but it looks, it is familiar. I
13	witnessed it as well as reviewing the document and had
14	no issue with it; and out technical recommendation was
15	to accept that as a corrective action, to move forward.
16	Q Okay, now the problem that PSI identified
17	with the First Article Test, was that a workmanship
18	problem?
19	A Yes.
20	Q And following that the Government agreed to
21	permit PSI to repeat the First Article Test, is that
22	right?
23	A Correct.
24	Q Could I draw your attention to Tab 147?
25	A 147.
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1	Q Page 2.
2	A I'm there.
3	Q And did you witness the second First Article
4	Test for Lot Interfix 4 or the modified FAT, as people
5	have been referring to it?
6	A Yes I did; I believe that was in June, 2011.
7	Q Okay. And it was reported that there were
8	several failures in this modified FAT. Do you recall
9	those?
10	A Yes, I do.
11	Q And what was the problem with this lot?
12	A On the smoke side of the signal, the smoke
13	candle is a hollow tube that burns from the inside out.
14	The ignition process is to, once the trigger is pulled,
15	it hits a primer, which then initiates a pellet. It
16	creates a flash down through the middle of that candle
17	and is then caught at the bottom with the piece of
18	material that's called ignition composition; it's a
19	cloth that is soaked with ignition composition. And
20	that allows a secondary instance of catching to get the
21	candle to burn on the inside and start burning from the
22	inside out.
23	What was discovered during post mortem on
24	this First Article Test was that the ignition discs that
25	were used in the candle in this production had been

1	stored in a container in the production area in a
2	plastic bag in a metal can, but the bag had not been
3	hermetically sealed, the can was not hermetically
4	sealed. There was no desiccant in the can, nor was
5	there any humidity indicators in the can; all of which
6	are standard practice in dealing with any kind of
7	pyrotechnic or energetic device; to make sure it has not
8	been degraded by contact with humidity. And as such,
9	those ignition discs had been degraded, which was a bad
10	thing from a quality control perspective for PSI's
11	perspective; but a good thing, it was a very easily
12	definable cause and easily correctible cause.
13	Q Okay. Now the, that cause was not a, as a
14	result of the specification, was it?
15	A No. It was failure to maintain the ignition,
16	the energetic material under the humidity and
17	temperature controls that are required in normal
18	operation for this type of material. Somebody had stuck
19	them away after they stopped production
20	MR. HIRST: Objection.
21	Aanticipating they were going to be used the
22	next day, I presume
23	JUDGE PAGE: Just a moment.
24	Aand it was a year and a half.

Excuse me, sir.

JUDGE PAGE:

When an

1	objection is made, I need to
2	THE WITNESS: I'm sorry.
3	JUDGE PAGE:listen to it and give an
4	opportunity to rule. Your objection?
5	MR. HIRST: Yes, the witness is using hearsay
6	in his comment. They stored that material there.
7	JUDGE PAGE: Okay.
8	MR. HIRST: Who were they?
9	JUDGE PAGE: I will overrule your, excuse me,
10	I will overrule your objection, because hearsay is an
11	out of court statement made by a declarant that is not
12	before us, is not a witness. When you cross-examine
13	him, you may ask him to clarify who was they; because
14	he's not testifying with respect to something that was
15	said.
16	MR. HIRST: May I revise my objection, to
17	speculation? The witness is speculating.
18	JUDGE PAGE: Overruled. Mr. Bowen, if you
19	remember the question, you may continue. If not, we'll
20	have Mr. Neill repeat it.
21	THE WITNESS: That's fine.
22	BY MR. NEILL:
23	A To continue, the material had been stored in
24	a manner that would be acceptable for returning for use
25	on a subsequent day, but not for storage for a year

1	duration.
2	Q You were also involved in witnessing lot
3	acceptance testing for Lot 4-3?
4	A Yes.
5	Q Okay. And if you turn to Tab 284 at Page 21?
6	JUDGE PAGE: Tab 284 at Page 21, is that
7	correct, sir?
8	MR. NEILL: 21.
9	JUDGE PAGE: Thank you.
10	MR. NEILL: Okay.
11	BY MR. NEILL:
12	Q What's your recollection of the, first of all
13	did Lot 4-3 pass lot acceptance testing?
14	A No, it did not.
15	Q And why not?
16	A It had one unit that leaked during the
17	sealing functions, during the sealing test and there
18	were also multiple excessively long cold smokes.
19	Q Okay, and if you turn to Page 30?
20	A Mm-hmm.
21	Q What's this?
22	A This is the data as printed from the
23	spreadsheet for the low temperature or the cold smoke
24	function and the flare function.
25	Q Okay. And are the, had the Government
ı	

accepted lots with display times in excess of thirty-1 five seconds in the past? 2 3 Α No. Or in excess of thirty-one seconds? 4 Thirty-one seconds is the highest Α I can 5 recall; and that was on Lot 2, 1-2, excuse me. 6 Okay. Do you recall a request for deviation 7 0 being submitted for this lot? 8 Α I'm not sure if one was submitted that I saw 9 or not. 10 Okay and this is around about the time of the 11 termination of the contract? 12 This --Α 13 Just asking. 14 This lot test was performed the second or 15 Α third, I think it was the second week of September and 16 then by the time a deviation could have been drafted, 17 submitted through the Contracting Officer, routed 18 through, actually routed through DCMA and then submitted 19 to the Contracting Officer, from that point routed to 20 the Quality Manager at Rock Island and then distributed 21 22 to the technical personnel, by that time it could have been moot in that the contract had been terminated. 23 Okay. Now, several witnesses have indicated 24 in their testimony that you told them that long smoke 25

display times were not undesirable or were acceptable?

Do you have any recollection of that?

A Yes.

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Q And what's your recollection?

That so long as the smoke, typically the Α issue is long displays come on the smoke side. A smoke burn is hard to maintain. So long as it produces significant volume, substantial volume, if it's a little bit over the twenty-five seconds; that's not an issue. Historically, around thirty seconds has been an absolute cap on accepting an extended delay time, or display time; because even though it may appear to be robust on land, you are looking at two things that are affected. One, there is only so much material in the smoke candle that can be distributed; and what we were trying to do with the time limitation is trying to insure that the display can be seen from a reconnaissance craft, and so we're trying to simulate that, or define that in a manner that can be handled cheaply and effectively. Secondly, if you are bobbing around out on the ocean in the water, the wind factor may cause what appears to be in a static condition a robust display, may get spread out relatively quickly and extensively where it is not visible by the aircraft.

Q Okay. I wanted to ask you about Rule Four,

Tab 288. Who's Doug Starke .

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A Doug Starke was a junior engineer in our group who started, who filled in for a program manager several years ago for a one year hitch. Subsequent to that experience, he found that he liked program management, dealing with the dollars better than dealing with the engineering side of things and pursued a path into the program office. And as such, he is an upper level executive in the program office through IWS-3(c).

Now, this, the email message at Tab 288, I 0 don't see your name copied on there, but the subject Re: Hot Request for Review MFRREMK-124 line reads: Contract. And in the first paragraph reads: Ryan, this is addressed to Ryan Pierce a contracting officer. first paragraph reads: Ryan, the USN does not concur with the decision for determination for default. USN believes that continuing to work with PSI to achieve delivery of useable products will be a less costly option and achieve a better value for DOD compared to the cost of litigation and settlement and little chance of recouping any prior payments to PSI. Were you aware of a Navy nonconcurrence to the termination for the default decision?

- A Yes, I was.
- Q Okay. And what's your understanding of the

reason for that nonconcurrence?

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For most of the previous year or two, the critical shortfall of stock levels by the Air Force had necessitated trying to quide any and all deliverable assets to them, and as such, even though there were still funds that were on the contract from the Air Force and the Army and the Special Forces side of the Navy, the preponderance, there was a preponderance of money or a significant amount of money that was left on the contract for deliveries to the Blue Water side of the Navy. This is the office over which Doug presided. And it was his belief that if there was as such, continuation of the contract, the Navy would be able to work with them, since the money for the Navy was good for another year before it lapsed, that we would be able to work with the company and get some deliverable product from them in that time.

- Q Okay. And the Navy did not take issue at all with the basis for the termination for default, did it?
 - A No. It was merely a financial perspective.
- Q Okay. Now, you mentioned that prior to PSI's production of the Mark 124, Martin Electronics was producing that item?
 - A Correct.
 - Q And what was your involvement with Martin

Electronics production of the item?

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A The same as it was with PSI; I served as the design agent and acquisition engineering agent for the Navy. Actually for the all armed services as the design agent, and as the Navy acquisition engineer for the procurements. I worked with, at that time, the quality manager at Rock Island, who was a very involved gentleman. His name is Jerry Lowery and he and I took turns witnessing testing at Martin Electronics, which actually turned into more of me doing it than him. But I still witnessed the majority of the testing.

I was also still involved as the design agent and configuration management, technical person responsible for that within our group and I fulfilled those roles for the Government and for the Navy from my time that I inherited the program around 1996 through the completion of the last Martin Electronics contract which was completed in, it was either 2003 or 2004. Around the same time that PSI was awarded their contract.

Q Okay and did Martin Electronics successfully produce the Mark 24 Mod Zero signal?

A In multiple contracts from 1991 through either 2000 or 2002 was the date of the last contract. They produced in excess of I believe, one million

1	Mission Code Alpha assets.
2	Q In your experience, have you had an
3	opportunity to develop, form an opinion as to whether
4	the technical data package for the Mark 124 Mod Zero was
5	producible?
6	A Yes, I have an opinion on that.
7	Q And what's your opinion?
8	A That is it producible and that opinion is
9	supported by the numerous assets that were produced
10	under the Martin Electronic contract and the multiple
11	lots that were delivered in a consecutive manner from
12	PSI when they were in production without quality control
13	and other glitches hitting them.
14	Q Okay, and do you have an opinion as to
15	whether the foil sealing disk was the most likely cause
16	of igniter separations that PSI experienced?
17	A I have an opinion. My opinion is that
18	although it might increase the potential for it, so long
19	as the requirements of the crimping operations
20	prescribed in the technical data package are maintained,
21	then it should not be an issue.
22	MR. NEILL: I have no further
23	questions, Your Honor.
24	JUDGE PAGE: All right; thank you, Mr. Neill.
25	Mr. Hirst or Mr. Karlson?

MR. KARLSON: Mr. Hirst will. 1 JUDGE PAGE: All right; Mr. Hirst, you may 2 cross-examine the witness. 3 Just give me a moment, please. MR. HIRST: 4 CROSS-EXAMINATION 5 BY MR. HIRST: 6 Mr. Bowen, could you describe a little bit 7 more clearly the difference in the 3M 433 sealing disk 8 that was used to produce the three lots on Interfix 4, compared to the 3M 433-L sealing disk that was used to 10 produce the eleven lots under Interfix 1? 11 12 JUDGE PAGE: And Mr. Hirst, are you going to refer us to some exhibits, so that he may do that 13 comparison? Or are you testing his memory? 14 JUDGE PAGE: I'm testing his memory. 15 BY MR. HIRST: 16 Without ο£ Exhibit 17 the use G-1, the difference is in terms of properties, would be that the 18 19 adhesion strength of the 433-L is 38 ounces per inch; whereas the adhesive strength of the 433 proper, without 20 the suffix, is 40 ounces per inch. And the mechanical, 21 22 the only physical difference between the two is the type of backing paper that is used with the foil material. 23 Are you aware of any improvement in adhesion 24

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by using that custom backing?

1	A That results in an increase, as I stated
2	previously, from 38 to 40 ounces per inch.
3	Q Are you aware of any testing that was done by
4	PSI on the actual adhesion strength of the custom
5	backing?
6	A I did not witness any.
7	Q The question is are you aware of any of those
8	results, not that you witnessed.
9	A I under, my understanding was that the 433
10	was used vice the 433-L so that PSI would have the
11	ability because of the difference of the backing
12	material, to perform adhesion tests independently of
13	what 3M had on their particular lot information.
14	Q My question, are you aware of the results
15	that PSI achieved?
16	A No.
17	Q From that testing?
18	A No.
19	Q I'm going to ask you a question about your
20	knowledge of the in-process testing that PSI did for
21	leak checking the parts during manufacture.
22	JUDGE PAGE: What's the question, Mr. Hirst?
23	MR. HIRST: My question is to ask Mr. Bowen
24	what does he know about how the in-process test for the
25	leak testing was conducted during the manufacture of the

lots starting at the inception.
BY MR. HIRST:

Q Yes, so let me be more specific. From Lot 0-1-002 to Lot 1-008?

A It is my understanding that there was a one hundred percent screening operation performed for all production, commencing about Lot 1-002; I'm not sure, I don't think it was done on 1-001. But I'm aware of it starting with Lot 1-002. And has continued throughout the balance of the contract.

Q Yesterday, you heard witness Terry Goodrich testify to the fact that when he started with PSI, he came in on board on 01-002. I believe if you were listening carefully, he indicated that leaking was a major problem. In light of that information, how can you suggest that the sealing disk 3M 433-L was doing a good job?

A Because the leakage issue prior to Terry's employment, as exhibited in Lot 1-001, was not a function of the sealing disk problem; it was a function of a crimping issue. And as you would have, as I explained in my testimony previously, the problem was occurring because of the failure of the vendor of PSI to properly re-anneal the outer container to the T-6 temper condition as required by the technical data package

prior to shipping the material to PSI. Once that was brought to PSI's attention, so their vendor was able to correct that issue, there was no further issues with the crimping.

Q In light of that, how can you explain that three hundred percent in-process checking had to be done to get the parts to stop leaking? If they were crimped properly, wouldn't they have passed the initial leak test?

A I was only aware of a one hundred percent screening operation until Lot 1-10 had its problems; and given a scrap rate that was documented by PSI of only about one percent, I don't see where that a three hundred percent screening operation would have been necessitated.

Q Again, Mr. Goodrich clearly testified that in the production of all the lots on Interfix 1 when he came on board had leaking problems. He also testified to the fact that many of the lots had to be rechecked two hundred percent. I think he testified to the fact that became standard. Can you explain to me and the court how a lot could pass an initial leak test and then not pass later?

A Which part of the question do you want me to answer first?

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Whatever you choose. 0 1 JUDGE PAGE: No. No. Sorry, Mr. Hirst. 2 going to ask you to break this down into short, to the 3 point questions. That's a multipart question. Ask him 4 5 in individual parts, please. My question is why would a two MR. HIRST: 6 hundred percent leak check in-process test be required? 7 JUDGE PAGE: For? 8 MR. HIRST: For lots produced on Interfix 1, 9 specifically Lots 1-2 through 1-8. 10 11 BY MR. HIRST: If there were recurring problems as exhibited A 12 post, back up. If you are a one hundred percent 13 screening operation and you find there are still issues 14 with leakers after that because you did not catch them 15 on the first time around, then that would be a cause for 16 a second, or a two hundred percent screening operation. 17 That could be one justification. There could be 18 But we're speaking in the hypothetical on 19 several. this. 20 Please enumerate what, you said several; what 21 would be some of the other causes? 22 I'm sorry; I didn't follow that. А 23 You just said there could be several causes. 24

Would you please enumerate what those several causes

are?

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A As to what could be causes of failures?

Q Mm-hmm.

Α I said if there were several failures, then would second screening be а cause to đo а operation. But I was not aware of such a thing happening. And Mr. Goodrich, Terry testified that there repeated issues during the first production where there were LAT failures that had to be screened and resubmitted. That was blatantly incorrect. None of the test reports indicate that ever happening. So quite simply, the answer to the first part of your question you asked previously is, the reason is that Terry was wrong.

Q That's your opinion, that Mr. Goodrich was not telling the truth?

I did not say he was not telling the Α No. Mr. Goodrich was mistaken. He made statements that are not factually correct. Because there are absolutely no lot test reports through Lot Interfix 1 1-2 through 1-9 that exhibited, Lot demonstrate there were leakers involved during the LAT. And the test report from Lot 1-1 specifically denotes that all the leakers occurred through the O-ring hole.

Q Let's go to another lot, please. I believe

the lot we want to look at is 04-002, we should have the tab for that in your book, Tab 284. Page 42, please. I would like you to please read, Mr. Bowen, Section B-2, Title Five Foot Drop Test.

A Okay, B-2, Five Foot Drop Test. Five units were subjected to the five foot drop test in accordance with Weapons Specification 13697, Red N, Paragraph 4.5.2.1 and PSI Procedure P-8888. All five passed this test.

Q Please read the paragraph, Subparagraph A.

A Subparagraph A: Skill Integrity. The five foot drop test units above were resubmitted to the skill integrity test following the drops. All five units passed this test. As mentioned in 1, above, sample number forty which failed the initial sealing test, passed the sealing test after the five foot drop test.

Q Do you have an explanation for that?

A As to what exactly happened? I do not know exactly. I have theories it could have happened. I was not there to witness any kind of a postmortem on the unit to see what was wrong with the unit, so I have no direct knowledge, because I was not there for this test.

Q Thank you. Was there a stop work order issued by the Government to PSI on this contract?

A Yes.

1	Q Do you remember when it was issued?
2	A I don't recall the exact date. In the
3	sequence of events, it was subsequent to the failure of
4	Lot 2-3.
5	Q Do you know why the stop work order was
6	issued?
7	A It was purported that there was no viable
8	source for material for the foil seal that would pass
9	all tests including temperature and humidity, and with
LO	the information available at the time, the Government
L1	responded with a stop work order. As to what they
L2	perceived at that time, you'll have to talk to Julie
L3	about the perceptions and the contractual perspective;
L4	but I'm the technical person on this.
L5	Q In the course of the stop work order, were
16	you engaged by others that had to rule on it for your
17	view of the reasonableness of the REA?
18	A Yes, as the design agent, I was contacted by
ا 9	part, I was part of the Government team.
20	Q Do you recall what you might have offered up
21	to the team about the reasonableness of it?
22	A There were several things discussed; I'm not
23	sure which aspect you're specifically asking about.
24	It's a rather broad scope of, I was the technical
25	representative for the Navy, talking about the viability

of what was going on.

Q Okay. What was the ultimate outcome of the REA?

A The ultimate outcome of the REA is that PSI was awarded funds for the duration of the stop work order in accordance with law and that, above and beyond that, the negotiated settlement was along the lines of government buying Lot 2-3, either, I don't recall if it was at price or at a discounted rate.

I believe there may have been an additional hundred thousand dollars of consideration offered at the time. But again, as the technical person I was not involved in the financing sides or the legality side of the negotiations.

Q In your testimony, I want to ask you a question. I believe what you said in your testimony, prior testimony that PSI's in-process torque test did not comply with the requirements of relative movement. Is that correct?

A Close. I believe I stated that it did not confirm, that it was confirming that the requirement was being met.

Q In the course of the beginning of the contract, is it not true that PSI would have submitted an AIE list for all the inspection equipment they were

	going to abe in the contract. In that cract
2	A That is correct.
3	Q Would this torque test requirement have been
4	included in that AIE list?
5	A Not necessarily. AIE, as required by the
6	Navy includes only those items which are nonstandard.
7	A standard torque wrench is the same as a standard metal
8	ruler, the same as in the other standard equipment is
9	not material that would need to be routed through the
10	Navy technical personnel for review and approval.
11	Q Isn't this true this was an Army contract?
12	A It was an Army contract. It was an Army
13	contract on the basis of having multiple services as a
14	customer and therefore is by charter of the Senior
15	Manager of Conventional Ammunition, which was stood up
16	in 1977, it is their charter to consolidate procurement
17	efforts
18	Q Let me just ask the question more directly.
19	JUDGE PAGE: Excuse me. Just a moment. One
20	at a time. Just a moment. Mr. Hirst, I'm sorry; did
21	you have a comment?
22	MR. HIRST: I wanted to clarify the question.
23	JUDGE PAGE: Then please do so, but let's
24	make sure since the record needs to be clear, that we
25	only speak one at a time. Go ahead, Mr. Hirst; you may

clarify your question. 1 BY MR. HIRST: 2 Mr. Bowen, do you know if this torque test 3 Q equipment was submitted as part of the pre-startup 4 requirements for acceptance by the Government? 5 6 Α No. In the course of your many 7 0 Thank you. visits, albeit you admitted many visits to PSI, did you 8 ever seen this in-process torque being done? 9 Α No. 10 When--11 0 Let me clarify that. I did not see it prior 12 Ά 13 to the testing of Lot 33-A, where it was done as an informational test as part of the test procedure. 14 But, 03-002, I withdraw that question. 15 want to ask you a different question. What is your 16 specific definition of relative movement? 17 Movement of one object with respect 18 another. 19 And how is it measured? 20 Q In terms of distance, either in inches or 21 centimeters. It could be measured in radian, since it's 22 a circumferential movement; but that would be very 23 difficult. It's much easier to just measure it with a 24 25 pair of calipers.

Q This was specific to the relative motion test that was done with a line. You recall, you recall that test, don't you?

A Yes, I do.

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Q Can you relate to the court exactly how that test was done, please?

After the item crimped, fully Α was orassembled with the ignition housings being crimped on each end, there was a line of demarcation drawn using a metal ruler as a straight edge and a superfine tipped Sharpie to draw a straight line along the somewhat contoured interface between the ignition and the outer container. Then subsequent to that, the unit was placed in a holder, where it was secured; so that the middle was held in a clamp. The torque wrench was applied with its attachment to the top and twisted until release of the torque wrench was felt; at which time the unit was released from the clamp and in an effort to look longitudinally down the line to determine whether there had been any movement to the side caused by the torque test. If there was measurement, if there was any break where it could be seen when looking down the line of it at the mark, it was then measured.

Q So what was the ultimate measurement of the separation that was allowed? For example, if the outer

container and the igniter separated two thousandths test, for example, ís that relative this movement? That could not be visually discerned. Α Is it relative movement? 0 Within the parameters of the test, it Α beyond the standards of what could be determined. there was a visible break, then that was considered to be relative movement. The question --Q The standard of classification at that point Α it was visually determined at the line of demarcation. So could a very small separation, let's not use such an extreme example. Let's use ten thousandths. Could that be determined during this test? Ten thousandths may be discernible looking at the naked eye along the line. Most of the failures that we saw were along the lines of a sixteenth to an eighteenth of an inch, which would be about six to ten times, six to twelve times that. Q If there was a separation of ten thousandths, would that be a failure of this relative motion test, in your opinion?

It's not possible to discern that. The test

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as defined, there's a certain limitation of any kind of test you perform. If you weigh something to weigh two hundred pounds, you can't weight it to 0.00001 ounces. The limitations of the test procedure create a limit by which a pass and accept/reject criteria can be established.

In this test, as jointly determined with meetings, at the kickoff meeting with the quality control personnel from Rock Island, myself, Matt Adams from the Air Force and PSI personnel, we jointly looked at a method, the best method to obtain something that could be utilized and functional without costing three thousand dollars a test. And the way to do that was determined was to basically use a straight edge and an extra fine Sharpie, if the movement was such that the overlap of the line, the thickness of the line, if the movement was more than the thickness of the line, it was If there was a gap between the line, a failure. subsequently that is even a worse fail. And most of the instances we saw that were failures, there was a distinct break beyond the thickness of the line equal to approximately one eighth or one sixteenth to one eighth of an inch.

Q Those breaks that you just discussed that you observed, when did you observe these?

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1	A	During the process of trying to define the
2	procedure	and doing the checks on the crimping
3	operations	the week of the kickoff meeting when we went
4	down the h	ill and tried to figure out how to do it.
5	Q	Went down the hill?
6	A	The meetings were held up at the
7	administrative office at PSI and then we went down the	
8	hill	
9	Q	Down the hill. Excuse me, I'm sorry. I
10	thought you might have been referring to Hill Air Force	
11	Base.	
12	A	No. Down the hill at your facility.
13	Q	I understand.
14	A	Topographical reference, I guess.
15	Q	So there was some movement that was detected
16	in this test?	
17	A	Yes.
18	Q	Okay. Did those parts later function?
19	A	I believe most of them did. I'm not sure.
20	Q	Was separation measured as part of this test
21	between th	e outer container and the igniter?
22	A	There was an attempt to measure if there had
23	been any p	oush out or separation.
24	Q	What was the result?
25	A	I don't remember the data from it.

1	Q W	hat was the result?	
2	A I	don't remember the data from it.	
3	Q Yo	ou don't recall?	
4	J	UDGE PAGE: One at a time, sir. One at a	
5	time.		
6	BY MR. HIRST:		
7	Q A	t any rate, whatever test, whatever	
8	conclusions	that were drawn from this testing, did any	
9	of those cond	clusions support that there was separation?	
10	A I	don't recall. If you could cite me	
11	Q Po	ost function separation.	
12	ודָ	UDGE PAGE: Excuse me. Now. Mr. Hirst, ask	
13	your question completely and then we'll allow Mr. Bowen		
14	to answer.		
15	M	R. HIRST: Okay.	
16	J	UDGE PAGE: Ask your question fully. Then	
17	pause and we'll let Mr. Bowen answer.		
18	T	HE WITNESS: You're asking with respect to	
19	JI	UDGE PAGE: Mr. Bowen, let Mr. Hirst ask his	
20	question fully.		
21	T	HE WITNESS: I thought he had.	
22	J	UDGE PAGE: Let's let him do it again, just	
23	to make sure it's clear.		
24	T	HE WITNESS: All right.	
25	BY MR. HIRST	:	

1	Q We'll go a little more slowly. The parts
2	were functioned, correct?
3	A As I recall.
4	Q All right. Was there any attention paid to
5	separation of the igniter from the outer container as
6	part of this testing?
7	A I recall there being measurements taken of
8	the igniter housing to the outer container pre and post
9	function to try to determine if there was any affected
10	push out of the igniter from that crimping operation.
11	I do not recall the results of those measurements.
12	Q Okay. Do you recall if there was any post
13	function separations during this testing?
14	A Complete separations?
15	Q Post function separations.
16	A That's what I'm asking. Separation being a
17	slight movement or a complete separation?
18	Q A post function separation where the igniter
19	would have come off.
20	A Come off completely?
21	Q Mm-hmm.
22	A I do not recall any.
23	Q Do you recall what sealing disk was used to
24	make up these test runs?
25	A No, I do not.

	Q Oxay. Tou mentioned before in your prior
2	testimony that there was a critical defect that occurred
3	in the testing of Lot 04-003. What happened after that
4	critical was found?
5	A I don't recall a critical defect during the
6	functioning of Lot 4-3; I remember there being an in-
7	process critical issue that occurred that was resolved
8	prior to the submitting of the lot for lot acceptance
9	test; but I don't recall there being a critical failure
10	during the execution of lot acceptance test for 4-3.
11	Q Okay. After it was detected, the critical
12	defect in 4-3, that you just described. What happened?
13	A I was not directly involved
14	MR. NEILL: Objection; that misrepresents the
15	witness's prior testimony.
16	JUDGE PAGE: Mr. Hirst, I confess I was a bit
17	confused by your question and I ask you to restate it.
18	BY MR. HIRST:
19	Q After the critical was detected, was the lot
20	screened?
21	JUDGE PAGE: Which lot was this, sir?
22	MR. HIRST: 04-003. This lot we're talking
23	about.
24	BY MR. HIRST:
25	A My knowledge of the critical failure in Lot
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1	4-3 was an in-process critical failure as the result of
2	misalignment of the trigger assembly with respect to the
3	D-10 hole. How that was handled internally with DCMA
4	prior to the lot being completed and submitted to the
5	Government for, as a lot for acceptance testing was not
6	within my purview and I am not aware of what the process
7	was. I am only aware that there was an issue with an
8	in-process critical failure.
9	Q The lot that we're speaking of, Lot 04-003
10	ultimately did get tested, did it not?
11	A Yes.
12	Q In order for it to have been tested, is it
13	not true that the critical would have had to been
14	addressed and cleared?
15	A Yes.
16	Q I have some questions that we're going to
17	need to use Tab 282 for, please.
18	A 282 or 284?
19	Q 282.
20	A 282, okay.
21	Q Just give me a moment to give you the page
22	reference, Mr. Bowen. Would you please turn to Page 44?
23	A Okay.
24	Q What is this first page of this document?
25	A It is your presentation of a lot test report

1	for Lot PSI U/GOIIUUZ-UUI.
2	Q Thank you. Would you please turn to Page 45?
3	And I would ask you to please read the first line?
4	A Triple asterisk, Two minors were noted, an
5	igniter assembly separated from the can post function.
6	Q Thank you. The next, I would ask you to turn
7	to Page 46 for me. What is on this page, Mr. Bowen?
8	What does this represent?
9	A This is the flare functioning data for the
10	transportation vibration subgroup of the LAT in question
11	of Lot 2-1.
12	Q Serial Number 130, there's an annotation of
13	trigger assembly off. What does that mean to you?
14	A That the trigger assembly came off.
15	Q Are those your initials in the lower right
16	hand corner, Mr. Bowen?
17	A yes, they are.
18	Q Thank you. Please turn to the next page.
19	Page 47, for the record. I would point your attention
20	to Serial Number 126. Could you please read the
21	comment?
22	A Trig assembly came off.
23	Q I would point your attention to Serial Number
24	12, please read the note.
25	A The same, trig assembly came off.
I	ſ

7	Q Are those your initials in the lower right
2	hand corner?
3	A Yes, they are.
4	Q Mr. Bowen, what does the total amount of
5	separations noted in this test report?
6	A On the raw data sheets, three.
7	Q Thank you. I would next ask you to turn to
8	Page 32, Tab 282. Excuse me, Page 32 of 282, that's
9	correct. Again, what is this page representing?
10	A This is the cover page for your submittal of
11	test report for that PSI 07Juliet002-002.
12	Q I would draw your attention please to the
13	bottom line on the report that is denoted with two
14	asterisks. Would you please read that note for me?
15	A One minors were noted. The igniter assembly
16	has separated from the can post function when the
17	expended unit was tossed and hit the ground.
18	Q Thank you. I would ask you please to turn to
19	Page 34 of Tab 282 next, and point your attention to
20	Serial Number 66. Would you please read the note next
21	to, next to the Serial Number 66, please?
22	A Trig assem off.
23	Q Are those your initials in the lower right
24	hand corner?
25	A Yes.
	l .

1	Q Thank you. I would next ask you to turn to
2	Page 35 of 282. I would point your attention Serial
3	Number 47. Please read the note next to it.
4	A Trig assem came off.
5	Q Are those your initials in the lower right
6	hand corner?
7	A Yes.
8	Q Thank you. How many separations occurred on
9	this lot, Mr. Bowen.
10	A Per the raw data sheets, two.
11	Q Thank you. Could you please turn to Page 1
12	of Tab 282 next? Let me just back up and ask a
13	clarifying question first. Mr. Bowen, you have
1.4	testified before you were present at this LAT, correct?
15	A Yes.
16	Q What is represented on this cover sheet?
17	A The lot acceptance test report for Lot
18	PSI09Delta003-002.
19	Q I would point your attention to beneath the
20	Pyrotechnic Specialties, Incorporated line, which is
21	typed. There's a handwritten note. Do you know what
22	that is?
23	A Reviewed by something, 9/21/09.
24	Q Thank you. Below that there is a symbol. Do
25	you know what that symbol is?
	ı

1	A The double eagle stamp is consistent with
2	what is utilized by DCMA Representatives.
3	Q And typically how is that stamp used?
4	A To indicate review and chop off on some
5	process being done, being witnessed or being confirmed.
6	Q Thank you. The next page I would like to
7	bring your attention to is Page 6 of Tab 282. Could you
8	please read for me Paragraph 4 that begins in underline,
9	High Temperature Function?
10	A High temperature function. Twenty signals
11	were tested at high temperature and were in conformance
12	with the requirements.
13	Q Thank you. Please turn to Tab 282, Page 15
14	for me. And on Row one, Serial Number 99, is there a
15	note next to it?
16	A Yes.
۱7	Q Could you please read the note?
18	A Housing fell off.
19	Q What does that mean to you?
30	A From being there, that the ignition housing
21	or the trigger assembly, which is defined by the part
22	being named a housing, separated.
23	Q I draw your attention next to three lines
24	below it, Serial Number 54. Again, please read the
, [annotation next to it

1	A The same comment, housing fell off.
2	Q Thank you. So how many separations occurred
3	on this lot?
4	A By the raw data sheet, two.
5	Q Thank you. You mentioned in your previous
6	testimony the name of a gentleman that I believe works
7	for the Navy by the name of Douglas Starke?
8	A Yes, it was a question regarding Doug Starke.
9	Q And again for my benefit, who was Doug
10	Starke?
11	A Doug Starke
12	Q Or who was Doug Starke?
13	A Doug Starke in the scope of the email
14	reference previously was writing as a manager in the
15	IWS3C Program Office.
16	Q And in that function, what kind of
17	responsibilities would he have for the contract? What
18	decisions could he make?
19	A For the contract, he has no authority. For
20	the funds that were provided, he has the ability to say
21	what preferences he might have, but he has no authority
22	in the contract.
23	Q What was your relationship with Mr. Starke,
24	your working relationship with him?
25	A Good. I've known Doug for a long time. He

was a junior engineer in our group for several years 1 before he moved into program management. 2 I should clarify the question. What was your 0 3 professional relationship? How would you interact with 4 his position, in your position? 5 In his position as manager in IWS3C, I had Α 6 officially minimal contact with him since he was over a 7 family, or a number of individual program managers and 8 had the responsibilities for the different areas that he 9 oversaw; and I dealt primarily with the person in that 10 particular program office. In this case, Jeff Rozanski 11 was the specific program manager I dealt with. And Doug 12 was one level above him. However, since I've known Doug 13 for a long time, he and I would communicate upon 14 15 occasion as desired. Thank you. Okay, Mr. Bowen, bear with me for 16 Q I need to find the right tab. 17 a second. The D-ring binders are a lot easier to work 18 Α with than the round binders. 19 Yes, please, let's turn to Tab 288. 20 Q 288. 21 Α I believe this email is read in its entirety 22 0 before and I don't intend to do that again; so I'm just 23 going to ask you some specific questions about the 24

The last line of this email says:

email.

25

If the PCO

1	decides to pursue termination for default, the Navy
2	requests to make the option available to accept the two
3	most recent production lots at renegotiated cost as part
4	of the determination settlement. Do you know what two
5	lots Mr. Starke was referring to?
6	A The two most recent production lots would
7	have been 4-2 and 4-3.
8	Q Okay. Did Mr. Starke have the authority to
9	make that recommendation to Mr. Pierce?
10	A To make the recommendation?
11	Q Or the request.
12	A The request, yes.
13	Q Thank you. Do you have any recall of
14	referring Chemring Ordinance personnel to PSI to
15	purchase a crimper?
15 16	purchase a crimper? A I commented that you had two crimpers in hand
16	A I commented that you had two crimpers in hand
16	A I commented that you had two crimpers in hand and might be willing to sell one, or both.
16 17 18	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during
16 17 18	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during that time period?
16 17 18	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during that time period? A I had served as the design agent and
16 17 18 19 20 21	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during that time period? A I had served as the design agent and acquisition engineering agent for the Mod One
16 17 18 19 20 21	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during that time period? A I had served as the design agent and acquisition engineering agent for the Mod One configuration of 124 for that contract.
16 17 18 19 20 21 22 23	A I commented that you had two crimpers in hand and might be willing to sell one, or both. Q Were you involved with their contract during that time period? A I had served as the design agent and acquisition engineering agent for the Mod One configuration of 124 for that contract. Q So you would have had the same

BY MR. HIRST:

A Fine. Until I retired.

So your duties would have been exactly the same as they were at PSI, just a different contractor, different contract, correct?

A Correct.

Q Do you have any knowledge of how they were doing with the contract in May of 2013?

A As far as specific timeline denoting, that it was at a given time, I would hate to say something where I would be incorrect. I am, without checking records of what the timeline was specifically. I'm trying to think when it was they passed the first article. I know when they were awarded the contract, they were awarded two large contracts at the same time.

In order to accommodate that, they underwent an extensive remodeling project on one of their production buildings that put them about, it took them about a year and a half to perform, which put them well behind schedule by the time they got the building refurbished and refitted with equipment and at that point they started the process of putting samples together to actually work on building and passing the first article.

Q Thank you. The current Mark 124 is a Mod

Correct. 2 Α What is the significance of Mod One versus 3 0 Mod Zero? 4 The fact that it became a Mod One but still 5 Α remained a Mark 124 in the inventory system says that 6 the two would be interchangeable functionally; but that 7 there is a specific difference between the two in terms 8 of configuration for configuration management purposes. 9 this case, the difference between the Mod One 10 configuration and the Mod Zero configuration is solely 11 within the composition of the candles. There was an 12 effort made to try to reduce the hazardous components 13 within the candles, such as the red lead in the ignition 14 15 cup on the flare side, the xylene on the smoke side. going Q Okay. Again, back to 16 your participation when the lots were made on Interfix 4; I 17 believe you testified that you weren't present, nor did 18 you witness the testing of 04-001(a), is that correct? 19 Α The FAT LAT? 20 21 Q Correct. 22 I was not; that is a correct statement, I was 23 not there. Were you present at the, did you witness the 24 25 testing of 04-002?

correct?

One,

1	A No, I was not there.
2	Q Were you present at 04-003 testing?
3	A Yes, I was.
4	Q OOT testing. Do you recall if there was a
5	meeting held after the testing?
6	A I don't recall. We usually have a closeout
7	meeting to talk about things before we leave and that's
8	pretty much standard in all cases; so yes, I'm sure
9	there was a closeout meeting.
10	Q Okay. Do you recall recommending submitting
11	the lot for acceptance on deviation? Submitting a
12	deviation for the lot to be accepted?
13	A I may have, given the nature of what there
14	was. It would have been marginal on the duration of the
15	extensive long cold smokes and the fact that there was
16	a leaker which required springing, if amenable by the
17	receiving activity. In this case, since Lot 4-3 was
18	earmarked for the U.S. Air Force, it ultimately would
19	have been their call.
20	MR. HIRST: Thank you, Mr. Bowen; I'm done
21	with my questions.
22	JUDGE PAGE: All right; thank you, Mr. Hirst.
23	Mr. Neill? Have you any redirect?
24	MR. NEILL: I do, Your Honor; just a couple
25	of brief questions.
F	1

REDIRECT EXAMINATION BY MR. NEILL: 2 Mr. Bowen, on cross-examination, Mr. Hirst 3 asked you about a discrepancy in the number of trigger 4 5 assembly separations noted in the data sheets that you had witnessed, a discrepancy between the number on the 6 data sheets and the number in PSI's letter summarizing 7 the test results. Do you have any explanation for that 8 discrepancy? 9 Given my discussions with Mike Trotter, when 10 the separations occurred during 2-1 and 2-2 tests, which 11 were done concurrently and the right--12 MR. HIRST: Objection. 13 You have an objection? JUDGE PAGE: Sir? 14 15 MR. HIRST: I do. State it, please. JUDGE PAGE: 16 MR. Trotter is not here to HIRST: Mr. 17 testify; he's not an employee of PSI any longer. 18 19 hearsay. JUDGE PAGE: All right. At this point, Mr. 20 Bowen has not offered any statements made out of court 21 22 by Mr. Trotter. I will overrule the objection and allow If he quotes Mr. Trotter, you Mr. Bowen to continue. 23 may renew your objection. 24

BY MR. NEILL:

1	A Subsequent to those two lot test I was
2	discussing the wording of the weapons specification
3	wherein it says, there shall not be separation during
4	function, and limitations that were implied inherently
5	from that. Consequently, the only thing that I can
6	suggest as to discrepancy would have been the fact that
7	a week later when the PSI personnel generated the report
8	from the raw data, they did not count properly because
9	otherwise, they would have made some kind of annotation
10	as to contain all separations.
11	MR. NEILL: I have no further questions.
12	JUDGE PAGE: All right. Mr. Hirst, is there
13	anything further?
14	MR. HIRST: No, Your Honor.
15	JUDGE PAGE: All right; thank you. Mr.
16	Bowen, you may step down.
17	MR. BOWEN: I'll clean up my mess. I do not
18	want to rip up my tie, nor do I want to take your
19	equipment down the aisle.
20	JUDGE PAGE: Government, you may call your
21	next witness.
22	MR. NEILL: Your Honor, we would request if
23	possible, just a very brief recess, because we believe
24	we might be able to cut down the questioning of the next
25	witness.

1	JUDGE PAGE: How long would you like?
2	MR. NEILL: Five minutes?
3	JUDGE PAGE: We'll recess for five minutes.
4	Thank you.
5	(Whereupon, the above-entitled matter went
6	off the record at 3:53 p.m. and resumed at 3:59 p.m.).
7	MR. NEILL: Your Honor, the Government would
8	like to call Mr. Dean Cowart.
9	JUDGE PAGE: Sir, if you would please, raise
10	your right hand?
11	WHEREUPON,
12	DEAN COWART
13	was called as a witness by the Respondent and, having
14	first been duly sworm, assumed the witness stand, was
15	examined and testified as follows:
16	JUDGE PAGE: Please be seated, sir.
17	DIRECT EXAMINATION
18	BY MR. NEILL:
19	Q Are you ready Mr. Cowart?
20	A Yes, sir.
21	Q Excellent, thank you for joining us this
22	afternoon. First, can you just please tell us a little
23	bit about your educational background?
24	A I was Air Force for thirteen years. I broke
25	my back during Desert Storm and was medically retired.
E	1

1	I went back to college, got my degree; I'm Microsoft
2	Certified Network Engineer. I am program quality level
3	two certified in quality. I have been a, I was, had
4	been a QAR in munitions and weapons for approximately
5	ten years, which eight was with PSI, eight and a half.
6	JUDGE PAGE: And sir, excuse me; I'll also
7	ask you to please slow down.
8	MR. COWART: I'm sorry, I thought I was slow
9	that time.
10	JUDGE PAGE: Slower, then please, sir.
11	BY MR. NEILL:
12	Q Mr. Cowart, you mentioned that you were
13	something level two certified; can you go into a little
14	more detail?
15	A It's program quality management, PQM. It's
16	a required course for DCMA to be level two qualified to
17	be a certified with a needle stamp, which is our stamp
18	for approving or disproving our inspection processes.
19	And it's a two year requirement classes to be certified.
20	Q Okay. And when were you assigned as an
21	inspector at PSI?
22	A Approximately March of 2004.
23	Q And do you recall when did you leave PSI?
24	Leave your post as an inspector?
25	A The summer of 2012.

	3-204
1	Q Okay, so you were there approximately a
2	little over eight years?
3	A Yes, sir.
4	Q Okay. And when you left PSI in the summer of
5	2012, do you recall why did you leave PSI?
6	A There were some accusations, personal
7	accusations made between, from an employee; there was no
8	findings through the DCMA Council and I decided after a
9	long eight and a half years at one agency, I mean, one
10	contractor was a little bit long. Personalities get too
11	close and I asked to be removed. So I took over the
12	contracts.
13	Q Excuse me, could you repeat that last?
14	A I went and took over contracts, other
15	contracts.
16	Q Okay. Is it normal for a DMCA inspector to
17	be in one location for eight and a half years?
18	A Not necessarily. It's abnormal in some
19	aspects, but in this case, no. We only had two ammo
20	qualified people in the south.
21	Q Got you. And when you left PSI were you
22	removed for cause?
23	A No.
24	Q Another thing I wanted to ask you about is,
25	being a DCA inspector, did you perform several tests at
ļ	ı

1	PSI?
2	A DCMA employee Q hours do not perform tests;
3	we witness tests and inspections with contractor
4	personnel.
5	Q You witness tests, you do not perform them?
6	A No, sir.
7	Q When you witness them, do you evaluate the
8	tests? Or evaluate the results?
9	A We evaluate for pass or fail.
10	Q Pass or fail?
11	A Yes, sir.
12	Q And do you test to fail?
13	A No, sir. There's no such a thing as test to
14	fail.
15	JUDGE PAGE: One at a time gentleman, please.
16	Just want to make sure. Please pause after you give an
17	answer, please pause before you ask a question.
18	BY MR. NEILL:
19	Q Let me just repeat that to make sure the
20	record is clear, sir. Do you test to fail?
21	A No, sir.
22	Q How do you test?
23	A We have, this contract is an AQL of
24	requirement for mil standard 1960. It gives us specific
25	requirements based on lot size. We pull approximately

1	
1	ten thousand rounds. We will do, we'll have a hundred
2	and ninety-two inspection samples per individual part
3	and then contract mandates how many LAT samples to be
4	pulled for testing at final acceptance.
5	Q And is that in the specification for this
б	particular contract on the samples you would pull to
7	test?
8	A Yes, sir.
9	Q And do the specifications also provide the
10	guidelines for what would be considered a passing or
11	failing?
12	A Yes, sir.
13	Q And did you follow the specifications for
14	this particular contract when testing under this
15	contract?
16	A Yes, sir.
17	Q A few weeks ago, we had a witness named
18	Richard Profeta, who testified, actually, let me
19	withdraw that question and let me start this over. Did
20	Richard Profeta ever witness you observing the testing
21	of the Mark 124 Mod One?
22	A No, sir.
23	Q Numerous witnesses have testified regarding
24	the torque test that was initiated following a failure,

a critical failure, excuse me, of Lot 003-003; which

involved using a hand torque and testing to twenty 1 pounds per inch. Is that correct? 2 3 Α Yes, sir. personnel have testified 4 PSI you observed that testing, is that correct? 5 After it became apparent that it was not 6 Α 7 being utilized in a way that we could get an actual, a relative motion test, physical measurement, it was 8 brought out in early, I believe it was like, in the '03 9 10 time frame. Prior to that with the numerous other aspects of PSI's working with the 124, that test was not 11 as important as getting the crimping and the seals 12 worked, so we was more closely in those areas, or I was. 13 I'm specifically asking about the test that 14 PSI decided to implement as part of their corrective 15 action following a critical failure of 03-03; and in 16 17 that test they, we have prior testimony saying that they would use the torque wrench and do it, the twist to 18 about twenty pounds per inch, or something along those 19 20 lines. Is that correct? Yes, sir. 21 Α And did you witness before Lot 003-03(a) when 22 0 implemented this test, were you witnessing those 23 tests? 24

Yes, sir; by sampling mode.

Α

1	Q Say again?
2	A By sampling.
3	Q And what do you mean by sampling?
4	A With approximately ten thousand rounds per
5	lot, we would pull a hundred and ninety two throughout
6	the life cycle of the program, I mean, the life cycle of
7	that LAT from beginning to end. We would randomly
8	witness every so many days, every so many hours, you
9	know, how long it took the lot.
10	Q Would you go to Tab 80, please? Are you
11	there, sir?
12	A Yes, sir.
13	Q Could you go to
14	JUDGE PAGE: Excuse me, just a moment.
15	Unless there's an objection, I'm going to hand the
16	witness a cough drop.
17	THE WITNESS: I just took one.
18	JUDGE PAGE: You just, very good.
19	THE WITNESS: I've got my water, too. I'm
20	sorry.
21	BY MR. NEILL:
22	Q Can you please identify the document
23	contained on Page 2 of Rule Four Tab 80?
24	A It is a corrective action for 003-003. And
25	

1	contractual information backing up what the requirements
2	are for the inspection. And the description of
3	nonconformities was listed on Page 3.
4	Q Okay, thank you. So this is what's known as
5	a CAR report? Is that correct? Or a CAR?
6	A That's correct.
7	Q And what does CAR stand for?
8	A Corrective Action Report.
9	Q Okay. And so, it appears, we look at the top
10	of Page 2, this is something issued by the Government to
11	the contractor, is that correct?
12	A Correct.
13	Q And in this particular report, who issued it?
14	A This one was myself.
15	Q And who did you issue it to?
16	A To Mr. Hirst.
17	Q Okay. After the Government, or in this case,
18	you, issue a CAR, what is the general course of action
19	following that?
20	A Typically, the allowances are seven to ten
21	days for response. A contractor will either call us and
22	we'll discuss it along the way or he'll give us a
23	response back and we'll discuss the response for prior
24	to acceptance or rejection, so there's no surprises.
25	Q Okay and if you turn to the next page, so

1	still Tab 80, but Page 4? Is this PSI's reply to your
2	CAR?
3	A Correct.
4	Q And can I direct your attention to, one
5	moment, Paragraph 4? It starts out: Lot 003-003.
6	A Okay.
7	Q The second sentence of that reads: Before
8	function testing of the LAT sample, the extra prove-out
9	of torqueing the rounds one hundred percent to verify
10	proper crimp was performed in the presence of Kevin
11	Bowen and then, SWC is his office, D. Cowart, DCMA and
12	Jimmy Berryman, DCMA. Is that correct?
13	A That's what it says.
14	Q And now if we go one more page to Rule 4, Tab
15	80, Page 6, is this your response to PSI's November 11th
16	letter on the prior page?
17	A It appears to be, yes sir.
18	Q And can we go down to, it's Number 3, labeled
19	as Paragraph 4?
20	A Yes, sir.
21	Q So Number 3 and then Paragraph 4 is in bold?
22	Do you see that?
23	A Yes, sir.
24	Q Can you please read that paragraph, that
25	sentence?

A Paragraph 4: While DCMA was in the vicinity,
DCMA did not agree, nor will assist in additional non-
authorized extra prove-out tests.
Q Can you please explain that sentence?
A After, this was for the hot and cold air to
test rounds, the, I do not know who made the decision to
do so, decided to do a torque test to make sure there's
no virtual movement and I know Darryl had asked me about
it prior to, told me they were going to do it. And
Jimmy was with me and I went and told Darryl, I said, we
cannot legally authorize another test.
This test would be an unauthorized test, at risk for the
contractor and the reason being that is, when you have,
especially cold rounds and you have a rubber seal
against a metal container and they're frozen, I don't
know what the rate is, sixty-five to eighty-five below
zero, you try to torque it, you break the seal between
that rubber and the metal casing. And, but they did the
test anyway and it was just annotating such.
Q Okay, thank you. Can I now have you turn to
Page 182 of the Rule Four file, please?
JUDGE PAGE: Tab 182, sir?
MR. NEILL: Yes, Your Honor. Excuse me,
that's Tab 182.

25 BY MR. NEILL:

1	Q All right. And if you go to the second page,
2	or yes, if you go to the second page. So Rule 4, Tab
3	182, Page 2; is this another DCMA corrective action
4	request, or another CAR?
5	A Yes, sir. Approximately that time frame,
6	mid-2011 or so, DCMA come out with a new computer
7	generated corrective action request and this is one of
8	the first ones that they, that we had utilized and it
9	had been modified since then.
10	Q So even though it looks a little bit
11	different, this is the same basic document the same
12	basic type of document that we just looked at?
13	A Yes, sir.
14	Q And do you recall, did you write this CAR?
15	A I believe so, yes.
16	Q And can you read the first paragraph, please?
17	A On September 12, 2011, during surveillance
18	audit, DCMA QR did find the following nonconformants.
19	Drawing Number 3139733, outer container loaded, note
20	thirteen. Alignment pin of item 12, igniter, shall be
21	in alignment pinhole of item ten, smoke primer holder,
22	after crimping.
23	Q And can you explain in layman's terms what
24	that means?
25	A That means prior to crimping the alignment

1	of the matter holders are in alignment so that the pin
2	is pressed, the little button is pressed properly into
3	the lock mechanism. The bottom fits in a hole. It
4	keeps the igniter assembly from twisting, which would
5	cause a blockage of the holes, where the smoke would
6	plume out.
7	Q And do you know, is this misalignment, is
8	that a critical defect in accordance with the
9	specifications?
10	A Yes, sir.
11	Q In the drawings?
12	A Yes, sir.
13	Q And so, if we look at Tab 184, and going to
14	Page 003, we have a few photographs, is that correct?
15	A Correct.
16	Q That page and the next few pages?
17	A Correct.
18	Q Can you, looking at these photographs, do
19	these photographs demonstrate the issues that were
20	described, that was described in the CAR?
21	A This particular one looks correct.
22	Q This one's correct, okay. And can you
23	explain how this is correct? Again, this is Page 3
24	we're discussing.
25	A Correct. The two smoke pulmo holes are open
	ı

and clear. So when the smoke ignites, it will have an 1 escape route; otherwise it will build up excessive 2 pressure inside and potentially--3 Where on the, using this circle kind of as a 4 5 where are those holes located that you're describing? 6 On this picture, the twelve o'clock and six 7 o'clock dimples on the silver metallic, in the white 8 9 area. Okay, and if we go to the next page, is the 10 one of the, is this an example of the issue that was 11 described in the CAR? 12 It actually looks like it This is Page 004. 13 may have been aligned at one time, or misaligned at one 14 time and they twisted it properly, twisted it back to 15 proper motion but didn't realize that it had, it had 16 created a small dimple hole in the sealing disc. 17 And what are you referring to in the photo 18 Q. that shows that it may have been realigned? 19 this dimple hole? 20 The little dimple into the sealing disk to 21 A in the seven o'clock position and the; and with 22 this picture, it's hard to see the alignment holes. 23 mean, the smoke holes, though. 24

Okay, but the kind of little circular looking

O.

1.	thing, kind of right below the trigger assembly?
2	A Correct.
3	Q And if we go to Page 5, and this appears to
4	be very similar. Is this, is that the same type of
5	thing you were just describing?
6	A Correct.
7	Q And if we go to Page 6, is this a similar
8	issue?
9	A Yes, sir; this one had actually poked through
10	the sealer, sealant disk and it wasn't caught when they
11	realigned it.
12	Q And where on this photograph on Page 6 do you
13	see the actual issue?
14	A Approximately nine o'clock position on the
15	left hand side, you see part of the pulmo hole, the
16	escape hole there for the smoke, underlying, underneath
17	the wagon wheel center spoke to the left.
18	Q And what is the circle that's on say,
19	approximately the four o'clock position to the right of
20	the trigger assembly?
21	A That looks like the alignment hole, the
22	alignment pin had been protruding through that hole,
23	poked a hole in it and then it was realigned of some
24	sort and it didn't properly set up the second time.
25	O And so the CAR that we saw at Tab 182,

actually can we go back to that? Tab 182, page 2. 1 2 A Okay. Is this CAR describing the issues that were 3 seen in photographs, sounded line one and four of Tab 4 5 184? Α Yes, sir. 6 7 And can you discuss a little bit of on the 0 morning or on the day of September 12, 2011 when you 8 9 conducted a surveillance on it, what all that entails? Basically, we would have been in the, prior 10 to pulling the samples, I don't know if this was during 11 this actual sample pull, but prior to samples, after the 12 lots were, the rounds were built up, we'll pull sample 13 rounds and inspect them. And once this nonconformance 14 like this was found, the supervisor is notified at the 15 time and they in turn call their QA and their QA calls 16 their quality management and up to Mr. Hirst. 17 Can you look at Page 3 of Rule 4, Tab 182? 18 O Α Yes, sir. 19 Do you recognize this letter? Q 20 Yes, sir. 21 Α And what is this letter? 22 Q Α letter from Debra Brown, 23 It's a Supervisor at the time; stating that they're going to do 24 a hundred percent screening of four thousand two hundred 25

1	and forty nine rounds; because that's what was, at that
2	point what was built up. And when they were completed,
3	they had found three more defects and they removed them
4	from the lot for our review.
5	Q Just to clarify, did they find three defects
6	total including the one that you discovered, or did they
7	find four defects total?
8	A Well, this, based on this, they found three
9	additional, so it would be four total.
10	Q Can we read
11	A No, I stand corrected. It says two more
12	defects were discovered, so it would be a total of
13	three.
14	Q And do did PSI agree that these defects
15	constituted a critical defect under the specifications
16	in the drawings?
17	A Does it say that here?
18	Q Can I direct you to just read the first
19	sentence of that letter?
20	A This is on September 12, 2011, the above-
21	listed critical defect was discovered on Mark 124 Model
22	Signal Flare.
23	Q And so this is PSI prepared this letter, is
24	that gammagt?
<u></u> x	that correct?

1	Q And so PSI, the above-listed critical defect?
2	So did PSI agree with your assessment that that was a
3	critical defect?
4	A Yes, sir.
5	MR. NEILL: No further questions, Your Honor.
6	JUDGE PAGE: All right; thank you, sir. Mr.
7	Hirst or Mr. Karlson?
8	MR. KARLSON: Mr. Karlson.
9	MR. HIRST: Mr. Karlson, Your Honor.
10	JUDGE PAGE: Mr. Karlson.
11	CROSS-EXAMINATION
12	BY MR. KARLSON:
13	Q Can I ask you to look at Rule 4, Tab 228?
14	A Okay, sir.
15	Q This is to the Army at Rock Island and it's
16	copied to PCO Mary Adams, and the Contract Specialist,
17	Julie Kaufman? Is that correct?
18	MR. NEILL: Objection, Your Honor, relevance?
19	The email that is being referred to has nothing to do
20	with the Mark 124 contract.
21	MR. KARLSON: I'll show relevance, Your
22	Honor.
23	JUDGE PAGE: All right; I'll overrule the
24	objection and give the appellant the opportunity to
25	lestablish a foundation for this document.

1	BY MR. KARLSON:
2	A Is that Dash 1, Sir?
3	Q Page 1.
4	A Page 1? Okay, and would you repeat your
5	question, please?
6	Q Can you read the first two sentences?
7	A It says, Mike, we confirmed with DCMA Dean
8	Cowert this morning that direction was given by DCMA
9	Management to make an exception in normal N41 IPT
10	communication distribution because of sensitive,
11	potential fraudulent situations following corrective
12	action request.
13	Q So, this is being sent to the PCO of the MACH
14	124 Contract, is it not?
15	A It's being sent to Steve Zaury .
16	Q It's copied to the PCO of the MACH 124
17	Contract and the Contract Specialist?
18	A Correct:
19	Q Can I ask you to go to Tab 261, please? This
20	is, can you identify this document?
21	CAPTAIN DAVIDSON: Objection, Your Honor.
22	Foundation?
23	JUDGE PAGE: Gentlemen, if you'll give me
24	just a moment to catch up with your findings, and that's
25	Rule 4 file tab 261, correct, Sir?

1		CAPTAIN DAVIDSON: Page 261, yes, Your Honor.
2		JUDGE PAGE: As you can see, I have a number
3	of binders	to choose from. Forgive my interruption.
4	BY MR. KARL	SON:
5	A S	Your question, again, sir.
6	1 Q	Mr. Cowert, is this a letter to Mary Adams,
7	the PCO of	the MACH 144 Contract?
8	A :	Yes, Sir, apparently, it is.
9		CAPTAIN DAVIDSON: Objection.
10		JUDGE PAGE: All right, yes.
11		CAPTAIN DAVIDSON: Foundation?
12		JUDGE PAGE: Overruled. I'll give the
13	Appellant	the opportunity to provide us with a
14	foundation.	You may renew your objection, if they fail
15	to do so.	
16	BY MR. KARL	SON:
17	Q :	This letter is from your Superior, Michael
18	King, is th	at correct?
19	A I	No, Sir. It's from Michael King, but he was
20	not my Supe	rior.
21	Q	Was he the Lead QAR at PSI?
22	A 1	No, we did not have a Lead QAR, officially.
23	Q 5	So you reported to somebody other than him,
24	is that wha	t you're saying?
25		JUDGE PAGE: One at a time, Gentlemen,
ŧ	f	

	3-221
1	please. Make sure you pause between question and
2	answer, Sir.
3	BY MR. KARLSON:
4	Q So this is a letter from your colleague, Mr.
5	King, and it talks about you and he observing something?
6	Is that right?
7	A Correct.
8	Q Can you tell us what you were observing here?
9	A It's, apparently, machine was, it was a press
10	that was changed out for some reason or other, and it's
11	different. It was different from the one that was
12	originally approved, and PSI, apparently, didn't receive
13	permission to change from that AIE equipment from the
14	old to the new press.
15	Q And who was Mr. Lindsey who is referred to in
16	the letter?
17	A Mr. Lindsey is the QA Manager at the time, I
18	believe.
19	Q Right, so he's being accused of making a
20	gross misrepresentation of the facts, is that what this
21	letter says?
22	A Is it, his email here? I don't see Mr.
23	Lindsey's comments.
24	Q The first sentence of the letter.
25	JUDGE PAGE: Excuse me, Mr. Karlson, I just

1	want to make sure I have a complete record. We're
2	looking here at Tab 261, and it only is a one-page
3	document.
4	MR. KARLSON: Correct, Your Honor.
5	JUDGE PAGE: So the email at the bottom, it
6	indicates, all right, I'm trying to make sure I
7	understand the email string.
8	MR. KARLSON: We don't have the whole string.
9	JUDGE PAGE: You don't have the whole string.
10	All right, so it is only intended to be a one-page
11	document?
12	MR. KARLSON: Yes, Your Honor.
13	JUDGE PAGE: All right, thank you.
13	
14	BY MR. KARLSON:
14	BY MR. KARLSON:
14 15	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert?
14 15 16	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's
14 15 16 17	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as
14 15 16 17	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as witnessed by myself and Dean Cowert on Tuesday, 26 of
14 15 16 17 18	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as witnessed by myself and Dean Cowert on Tuesday, 26 of September, 2005. The machine was in useful production
14 15 16 17 18 19	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as witnessed by myself and Dean Cowert on Tuesday, 26 of September, 2005. The machine was in useful production items, but was not in the process of the initial
14 15 16 17 18 19 20 21	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as witnessed by myself and Dean Cowert on Tuesday, 26 of September, 2005. The machine was in useful production items, but was not in the process of the initial checkout. As a matter of fact, it had been used for
14 15 16 17 18 19 20 21	BY MR. KARLSON: Q Can you read the first sentence, Mr. Cowert? A It says, Ladies and Gentlemen, Mr. Lindsey's email below is a gross misrepresentation of the facts as witnessed by myself and Dean Cowert on Tuesday, 26 of September, 2005. The machine was in useful production items, but was not in the process of the initial checkout. As a matter of fact, it had been used for about a week, as I understand it.

1	Q Can I ask you to go to document R4267-1?
2	A Okay.
3	Q I'm only going to ask you about the last
4	three lines. This is a letter sent by you, is that
5	correct?
6	A No, Sir. It's a letter of record from my
7	attorney to my Supervisor.
8	Q It says at the bottom, it's from Dean Cowert,
9	is that not from you?
10	A No, it's from me, Sir.
11	Q Okay. Could you read the last three
12	sentences of the document?
13	CAPTAIN DAVIDSON: Objection, your Honor,
14	relevance as well as it is outside the scope of direct
15	exam, and he is not on PSI's witness list.
16	JUDGE PAGE: All right, let's deal with,
17	first, for me, what is the first question you must
18	answer. When you cross-examine the witness, your cross-
19	examination is bounded by the questions that are asked
20	by the Government. You can't go beyond the questions
21	that are asked by the Government. Now if you can show
22	me that this is relevant.
23	MR. KARLSON: What I think I can show, Your
24	Honor, is that there's a pattern of dysfunction between
າ [the relationship between the DCMA CARs and the meanle at

PSI, and these documents all have that common theme to them, and in that sense, it's relevant in that the 2 Company was subjected to them as part of the testing 3 process that we've been talking about here today. 4 JUDGE PAGE: Give me a moment to think this 5 over, well, let me allow, Captain Davidson to reply. 6 CAPTAIN DAVIDSON: Your Honor, we did not ask 7 8 him about that on direct. MR. KARLSON: But objectivity is a relevant 9 matter in terms of a person's credibility as a witness, 10 Your Honor. 11 JUDGE PAGE: Is it my understanding, Mr. 12 Karlson, that you are questioning Mr. Cowert regarding 13 this document in the furtherance in the execution of his 14 15 duties? Yes, Your Honor. MR. KARLSON: 16 I will admit. I will, for the JUDGE PAGE: 17 objection and allow the 18 moment, overrule the questioning, however, Mr. Karlson, please be very clear, 19 there is a boundary set, and that is, the examination 20 that the Government did of this witness. If you wanted 21 22 explore the more full range of the to relationship of Mr. Cowert, other Government persons, 23

and PSI, then they would need to be on your witness

list, and you could raise those issues on direct

24

25

1	examination. So, do you understand? I'm sorry, I know
2	the distinctions between direct and cross are sometimes
3	difficult, and I'm going to give you some leeway.
4	Having said that, I will expect Captain Davidson to
5	object again should you go too far.
6	MR. KARLSON: Thank you, Your Honor.
7	BY MR. KARLSON:
8	Q Mr. Cowert, would you read the last three
9	sentences of this letter.
10	A Yes, Sir. Until his official departure, his
11	attitude towards DCMA was of a friendly nature. Since
12	he was rehired by PSI, he has portrayed a more hostile
13	and argumentative nature, constantly wanting to draw us
14	into an argument.
15	Q So, who is being discussed there?
16	A David Singletary.
17	Q And who is he?
18	A He was rehired back in, I'm not sure what
19	position he held, SME or
20	Q Was he a Quality Engineer at PSI?
21	A I would assume that, yes.
22	Q Was he involved with the MACH 124 Contract?
23	A Honestly, I do not remember, Sir.
24	Q Would you say that there was a very difficult
25	relationship between you and this gentleman at PSI?

1	A No, Sir.
2	Q You don't think this says that?
3	A No, Sir.
4	Q When you say he's constantly wanting to draw
5	you into an argument, what does that mean?
6	A We would pull a spec out for a finding of a
7	non-performance, and it would be brought through his
8	office, and he would want to sit there and want to know
9	we have to, why the spec was written that way, and he
10	don't see it that way, and we didn't have an answer that
11	would satisfy his answer that he needed, and
12	specifically, if the drawing says one aspect, and that's
13	all we have to go by, DCMA does not have authority to
14	make any changes, contract or otherwise, to our
15	findings. I mean, if it's not contractual, anything we
16	say is not contractual except for our findings for
17	inspections.
18	Q Would it be fair to say there were a lot of
19	disagreements with Mr. Singletary?
20	A The short times I would deal with him after
21	that, Sir, I wouldn't use a lot, I would say several.
22	Q Would that also apply to a lot of other
23	people like Mr. Lindsey, whom we talked about in the
24	previous emails?
25	CAPTAIN DAVIDSON: Objection, outside of
,	

1	scope, calls for speculation.
2	JUDGE PAGE: Yes, Mr. Karlson, you're going
3	pretty far afield. I will sustain the objection.
4	MR. KARLSON: Okay.
5	JUDGE PAGE: Move on.
6	BY MR. KARLSON:
7	Q You were asked under cross, under direct
8	examination, about your removal from PSI in 2012, was
9	it?
10	CAPTAIN DAVIDSON: Objection,
11	mischaracterizes the witness testimony.
12	BY MR. KARLSON:
13	Q Your departure from PSI in 2012.
14	A Yes, Sir.
15	Q Can you review what your testimony was, the
16	circumstances surrounding that?
17	A Well, not verbatim, but conditions arose at
18	PSI, accusations toward myself and the investigation
19	resumed
20	JUDGE PAGE: Excuse me, wait, wait,
21	wait, wait, wait. Mr. Karlson, let the witness finish.
22	Again, pause between question, pause after answer. Mr.
23	Cowert, go ahead.
24	BY MR. KARLSON:
25	A There's an accusation that was made. Mr.

1	Hirst asked that I not come to the facility until it's
2	rectified. It was submitted to my Supervisor through an
3	attorney stand of command, as I asked Mr. Hirst to do
4	so. The findings were found non-valid, and I went back
5	to work temporarily, and then I thought about it, and I
6	decided maybe it was time for me to move on, and
7	requested a transfer to the Contracts, and pulled out of
8	PSI.
9	Q Okay, so it was Mr. Hirst that asked you not
10	to return? Is that what you're saying?
11	A Via, I don't remember it personally or
12	whether he asked me it might be better not to come out
13	until we rectified the problem. He didn't ask me not to
14	return. It was just better that I don't for awhile,
15	until it was rectified.
16	Q Were there complaints sent to DCMA
17	Management?
18	A There were at that time, yes, Mr. Hirst
19	complied with my request.
20	Q Wasn't it they that asked you not to return?
21	A No, Sir.
22	Q Can you tell us what those complaints were?
23	A They were, I can, Your Honor, they're of a
24	personal nature. They've been rectified as non-, I
25	could, they don't really need to be in the Court

I'll tell you, if you like, and you can tell records. 1 me to answer --2 All right, let's go off the JUDGE PAGE: 3 record for a moment. 4 5 (Whereupon, the above-entitled matter went off the record at 4:45 p.m. and resumed at 4:45 p.m.) 6 JUDGE PAGE: All right, thank you. 7 our taking a brief recess, the Government had objected 8 9 to a line of questioning by Mr. Karlson and Mr. Cowert. We dealt with that off the record. Captain Davidson, 10 your objection is sustained. With the late hour of 11 today, we are going to recess for today. We will begin 12 tomorrow morning at 8:30. Now I have asked each side, 13 and I'll ask you to confirm, because tomorrow is our 14 last day of hearing, that there is an adequate amount of 15 time. I'll ask the Appellant, do you feel that tomorrow 16 will be adequate to conclude the Hearing? 17 MR. KARLSON: Yes, Your Honor. 18 JUDGE PAGE: For the Government? 19 We believe so, yes. 20 MR. NEILL: All right, very well. With JUDGE PAGE: 21 thank you, we are in recess until tomorrow 22 morning, and we are off the record. 23 (Whereupon, the above-entitled matter went 24 off the record at 4:52 p.m) 25

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CERTIFICATE OF REPORTER

Appeal Docket No(s).: 57890, 58335, 59103

Appellant's Name: Pyrotechnic Specialties, Inc.

I, Ronald Legrand, associated with Neal R. Gross & Co., Inc. do hereby certify that I was present during the hearing of the above-entitled at its session in Macon, Georgia, on October 23, 2014 and recorded verbatim everything spoken during the hearing except as otherwise directed by the presiding official.

Transcript pages numbered 3-1 to 3-267, inclusive, are the true, accurate and complete transcript prepared by me from the verbatim record made by me in accordance with the applicable provisions of the reporting contract of the Armed Services Board of Contract Appeals under which I have performed my duties as a reporter.

Date

Date

Date

Date

Date

CERTIFICATE OF TRANSCRIBER AND PROOFREADER

Appeal Docket No(s).: 57890, 58335, 59103

Appellant's Name: Pyrotechnic Specialties, Inc.

We the undersigned do hereby certify that pages numbered 3-1 through 3-267 inclusive, are the true, accurate and complete transcript prepared from the notes and/or recordings taken by Ronald Legrand on October 23, 2014 at Macon, Georgia.

12/5/2019

12/5/2019

Date

Transcriber

Proofreader

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19A. Na	me And Tit	le Of Signer (Type Or Print)			20A. Name Of Contra MARY S. ADAMS	eting C	lfficer		
			<u>. </u>		ADAMSM@AFSC.AR	HA'KIT	(309)782-4841		
19 B. Na	me of Conto	ractor	19c. Date S	igned	20B. United States Of	Ameri	DR.	28C, Da	te Signed
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CONTINUATION SHEET Reference No. of Document Being Continued Page 2 of 43 PHN/SHN #52P1J-04-C-009# MOD/AMD Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

SECTION A - SUPPLEMENTAL INFORMATION

ITEM: MK124 SIGNAL, SMOKE AND ILLUM
NSN: 1370-01-144-3561 AND 1370-01-030-0330

- 1. THE PURPOSE OF THIS PROCURSMENT ACTION IS TO DO THE FOLLOWING:
- A. AWARD 42,228 EACH OF 1370-01-144-3561 AND 18,330 EACH OF 1370-01-030-6330 AT A UNIT PRICE OF \$46.21 EACH; WITH FIRST ARTICLE, F.O.B. ORIGIN FOR A TOTAL CONTRACT AMOUNT OF \$2,79865.18.
 - B. NOTE THAT CLAUSE I-72 "EVALUATED OPTION FOR INCREASED QUANTITY" IS FOR A 150 PERCENT OPTION AT A UNIT PRICE OF \$42,00 EACH.
- 2. THEREFORE THE TOTAL CONTRACT VALUE IS \$2,798.385.18.
- 3. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED IN FULL FORCE AND EFFECT.

*** END OF NARRATIVE A 005 ***

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

		Regulatory Cite	Title	Date	
	A-1	52.215-4501 LOCAL	ARSENALS AS SUBCONTRACTORS	JUN/2000	
4**	A-2	AMC	AMC-LEVEL PROTEST PROGRAM	DEC/2000	

(End of clause)

M7010)

A-3 52.252-4500 FULL TEXT CLAUSES LOCAL

SEP/1997

- 1. This contract incorporates one or more clauses and provisions by reference, with the same force and effect as if they were set forth in full text. Upon request the Contracting Officer will make their full text available.
- 2. The entire body of full text regulatory and command unique clauses and provisions will no longer be included in solicitations or contracts. These clauses and provisions have the same force and effect as if the entire full text was included in the solicitation/contract. Where text has been incorporated by reference three astericks are put in its place (***).
- 3. You can view or obtain a copy of the clauses and provisions on the internet at:
 www.osc.army.mil/ac/aais/ioc/clauses/index.htm. Click on command unique first to locate the clause. If it is not located under
 command unique click on regulatory to find.
- 4. All full text clauses have a 6 or 7 as the third digit of the clause number (i.e. AS7000).

(End of clause)

(A\$7001)

EXECUTIVE SUMMARY

ITEM: SIGNAL, ILLUMINATION AND SMOKE MK124 MOD 0

NSN: 1370-01-144-3561 (L263)

QTY: 47436 CLIN: 0001

. ITEM: SIGNAL, ILLUMINATION AND SMOKE MK124 MOD 0

NSN: 1370-01-030-6330 (L293)

CONTINUATION SHEET	Reference No. of Document Be	Page 3 of 43	
CONTINUATION SHEET.	PIIN/SHN W52P1J-04-C-0099	MOD/AMD	
Name of Offerer or Contractor: PYROTECHNIC	SPECIALTIES INC.		

QTY: 20,354 CLIN: 0003

- 1. THE PURPOSE OF THIS SOLICITATION IS TO PROCURE THE ABOVE ITEM BY SOLICITING PRICING ON A WITH FIRST ARTICLE, F.O.B. ORIGIN BASIS.
- 2. PROGRESS PAYMENTS ARE AUTHORIZED.
- 3. THE SOLICITATION CONTAINS AN EVALUATED OPTION CLAUSE FOR ONE HUNDRED FIFTY PERCENT(150%). THE OPTION EXTENDED AMOUNT (OPTION UNIT PRICE TIMES THE OPTION QUANTITY WHICH IS THE SOLICITATION QUANTITY TIMES 150%) WILL BE INCLUDED WITH THE SOLICITATION EXTENDED AMOUNT (SOLICITATION UNIT PRICE TIMES THE SOLICITATION QUANTITY) TO COME UP WITH THE TOTAL EVALUATED PRICE PROPOSED BY THE CONTRACTOR.
- 4. AWARD WILL BE MADE TO THE OFFEROR WHO PROVIDES THE BEST VALUE TO THE GOVERNMENT. RECENT, RELEVANT PAST PERFORMANCE, MANUFACTURING PLAN, SMALL BUSINESS UTILIZATION AND PRICE ARE THE FACTORS THAT WILL BE EVALUATED TO DETERMINE THE BEST VALUE. A CONTRACT CAN BE AWARDED TO OTHER THAN THE LOW OFFEROR. PLEASE READ SECTIONS L AND M CAREFULLY TO MAKE SURE YOU SEND THE GOVERNMENT THE REQUESTED INFORMATION AND TO SEE HOW THE GOVERNMENT INTENDS TO EVALUATE THE OFFERS.
- 5. AWARD MAY BE MADE FROM THE INITIAL OFFER WITHOUT DISCUSSIONS.
- 6. THE ITEMS HAVE BEEN DETERMINED TO BE HAZARDOUS AND A PRE-AWARD SAFETY AND PHYSICAL SECURITY SURVEY WILL BE REQUIRED. A POST-AWARD MEETING WILL ALSO BE REQUIRED.
- 7. PLEASE NOTE THE REQUIREMENTS OF CLAUSE ESCOOL ENTITLED "HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT" (PAR 52.246-11).
- 8. NOTE: CONTRACTORS WILL HAVE TO MEET THE REQUIREMENTS OF THE FOLLOWING:
 - A. DOD CONTRACTOR'S SAFETY MANUAL, DOD 4145.26M
 - B. DOD PHYSICAL SECURITY STANDARDS FOR SENSITIVE CONVENTIONAL ARMS, AMMUNITION AND EXPLOSIVE MANUAL, DOD 5100.76M.
 - C. ALL FEDERAL, STATE, CITY AND COUNTY SAFETY AND SECURITY REQUIREMENTS THAT MAY BE REQUIRED FOR THEIR OWN AREA.

PLEASE NOTE THE REQUIREMENTS OF CLAUSE (IA6200) ENTITLED "SAFEGUARDING SENSITIVE ARMS, AMMUNITION, AND EXPLOSIVES" (252.223-7007 DEARS).

- 9. PLEASE PROVIDE YOUR PRICES ACROSS FROM CLINS 0001 AND 0003 "WITH FIRST ARTICLE", THERE ARE NO CONTRACTORS ELIGIBLE FOR WAIVER OF FIRST ARTICLES, PLEASE DISREGARD THE PRICING LINE FOR CLIN 0001AA.
- 10. Offerors are responsible for including sufficient details to permit a complete and accurate evaluation of the proposal. The Government will not make assumptions concerning an offerox's intent, capabilities, facilities or experience. Clear identification is the sole responsibility of the offeror.
- 11. Offerors are cautioned to ensure that their proposals are complete, including all fill-ins and blanks in the solicitation. This also includes written approval from the cognizant Contracting Officer for use of Government Owned Facilities and Equipment if applicable.
- 12. Offerors are directed to the provision in Section L regarding Central Contractor Registration (CCR). Failure to register in the CCR will preclude an offeror from receiving an award under this solicitation.
- 13. This executive summary is provided as an administrative convenience and is not intended to after the terms and conditions of the solicitation in any way. Any inconsistencies between this executive summary and other solicitation provisions shall be resolved in favor of the other solicitation provisions.
- 15. If necessary, the Government reserves the right to request cost and pricing data.
- 16. GOVERNMENT FURNISHED MATERIAL (GFM) M2A1 METAL BOXES, WILL BE PROVIDED FOR CLIN 0001 FOR A QUANTITY OF 2.788 EACH AND AT A RATE THAT WILL SUPPORT THE DELIVERY SCHEDULE.
- 17. Your proposal must be submitted and received at MQ, ARMY FIELD SUPPORT COMMAND (AFSC), AMSFS-CCA-M, BLDG 350, STH floor, North Bay, between Post number C3 and C4, Rock Island, IL 61299-6500 by 23 JULY 2004 at 2:00FM CENTRAL TIME. Your attention is directed to instructions set forth in cluase LS7100 of this solicitation. Packages cannot be delivered on weekends (Saturday and Sunday) and hiddays. Offers will be valid for sixty (60) days unless the offeror clearly indicates otherwise in their proposal.

CONTINUATION SHEET	Reference No. of Document B	Page 4 of 43	
	PHN/SIIN W52P1J-04-C-009#	MOD/AMD	
James of Officers on Contractors			

same of Offerer or Contractor: Pyrotechnic specialties inc.

*** END OF MARRATIVE A GO1 ***

- 1. THE PURPOSE OF THIS AMENDMENT IS TO EXTEND THE DELIVERY SCHEDULE 60 DAYS DUE TO LONG LEADTIME ITEMS AS DELINEATED ON THE FOLLOWING SECTION B.
- 2. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.
- 3. THE DATE FOR RECEIPT OF PROPOSALS REMAINS THE SAME AT 1400 23 JULY 2004.

*** END OF MARRATIVE A 002 ***

ITEM: MK124 SIGNAL SMOKE AND ILLUM

NSN: 1370-01-030-8330

CLIN: 0003

- 1. THE PURPOSE OF THIS AMENDMENT IS TO DO THE FOLLOWING:
 - A. INCREASE THE QUANTITY OF CLIN 0003 BY 80 EACH AS DELINEATED IN THE FOLLOWING SECTION B.
 - B. INCORPORATE ATTACHMENT 019 THAT WAS INADVERTENTLY OMITTED FROM THE BASIC SOLICITATION.
- 2. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.
- 3. THE DATE FOR RECEIPT OF PROPOSALS HAS NOT CHANGED AND REMAINS AT 1400 CENTRAL TIME 23 JULY 2004.

*** END OF MARRATIVE A 003 ***

-_ 1. THE PURPOSE OF THIS AMENDMENT IS TO PROVIDE THE FOLLOWING AS CLARIFICATION ON DRAWING 2151776:

Drawing 2151776 "Plastic Material, Pressure Sensitive Adhesive" Rev Al states "When applied to the assembly or component on which usage is intended, there shall be no peeling, fading, cracking, blistering, diffusion or bleeding of color, loss of adhesion or wrinkling after NIL-STD-331 test 105". This requirement will be verified by the manufacturer by sampling using SQAP 402-004, page 6. Table I. Level VI. The SQAP in included in the TDP.

- 2. THE DATE FOR RECEIPT OF PROPOSALS REMAINS UNCHANGED AT 1400 23 JULY 2004.
- 3. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

*** END OF NARRATIVE A 004 ***

Reference No. of Document Being Continued PHN/SHN W52P1J-04-C-0098 MOD/AMD

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Vame of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS				
		,	1		
0001	NSN: 1370-01-144-3561				
	FSCM: 10001		ł		
	PART NR: 5932237 SECURITY CLASS: Unclassified				
		-			
0001AA	DATA ITEM	1	ь	\$** NSP **	s ** nsp
	NOUN: FIRST ARTICLE TEST REPORT				
	With First Article Approval				
	TACIL ALLEGE RELIGIOS OFFICE OFFICE OF THE PROPERTY OF THE PRO			\$	\$
	Delivery Shall be FOB Carrier's Equipment.				
	Wharf or Freight Station (at the Government's			1	
	option) at or near the Contractor's plant at a specified city or shipping point.		}		
				٠.	
	(End of narrative 8001)				
				-	
	Packaging and Marking		'		
	Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin				
	Deliveries on Performance				
	DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD				
	REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 3				
	DEL REL CO QUANTITY DEL DATE OD1 1 29-AFR-2005				
	FOR POINT: Destination				
			i		
	SHIP TO: FREIGHT ADDRESS (Z55555) SEE SECTION E				
001AB	PRODUCTION QUANTITY	648	EA	\$ 46.21000	\$ 29,944
	Noun: Signal, Smoke&illum MK124-0				

Reference No. of Document Being Continued PHN/SIIN W52P1J-04-C-0098 MOD/AMD

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Vame of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	FRON: R14A0F534I PRON AMD: 01 ACRN: AA AMS CD: 41475038030				
	Packaging and Marking				
	Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin				
	Deliveries or Performance DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 N490654086001B W53XMD J 3 DEL REL CD OUANTITY DEL DATE 001 648 18-JUL-2005				
	FOB POINT: Origin				
	SHIP TO: PARCEL POST ADDRESS (W53XMD) SU W392 MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-5099			N.	
	TRANSPORTATION (FDT/TAG) CODE: N82B				
	(End of narrative P001)	·			
001AC	PRODUCTION QUANTITY	30600	BA	\$46.21 <u>000</u>	\$ <u>1,414,026</u>
	MOUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: R14AOR\$941 PRON AMD: O1 ACRN: AA AMS CD: 41476038030 CUSTOMER ORDER NO: N4802904MPA4B21				
i	Packaging and Marking			• '	
	Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin				
	Deliveries or Performance		,		
	002 3,7#3 17-AUG-2005	,			
	FOB POINT: Origin				

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PHN/SHN W52P1J-04-C-0098 MOD/AMD

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Same of Offerer or Contractor: PYROTECHNIC SPECIALTIES INC. UNIT PRICE AMOUNT ITEM NO SUPPLIES/SERVICES QUANTITY UNIT SHIP TO: PARCEL POST ADDRESS (W53XMD) SO W39Z MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-8099 SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TO CD 002 N490654086003B N00109 J YTITMAUQ DEL REL CO DBL DATE 17-AUG-2005 1,217 001 16-SBP-2005 002 7,566 FOB POINT: Origin SHIP TO: PARCEL POST ADDRESS (N00109) ATLANTIC ORDNANCE COMMAND P O BOX 410 YORKTOWN VA 23691-0410 SUPPL DOC ADDR SIG CD MARK FOR TP CD REL CD MILSTRIP 003 N490654086004B N47615 J : QUANTITY DEL REL CD DEL DATE 2,434 16-SEP-2005 002 10,000 17-0CT-2005 600 003 15-NOV-2005 FOB FOINT: Origin SHIP TO: PARCEL FOST ADDRESS (N47615) NAVAL WEAPONS STATION SEAL BEACH \$00 SEAL BEACH BLVD SEAL BEACH CA 90740-5000 TRANSPORTATION (FDT/TAC) CODE: N\$28 (End of narrative F001) 0001AD 5868 EA 46.23000 \$ 271,160.28 PRODUCTION QUANTITY NOUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: R14A0F424I PRON AMD: 01 ACRN: AA AMS CD: 41476038030 CUSTOMER ORDER NO: N0007404MPDFQ32

Reference No. of Document Being Continued PIIN/SIIN W52P1J-04-C-0098 MOD/AMD

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Name of Offeror or Contractor: Pypothernic Specialities INC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and Marking				
	Inspection and Acceptance				
	INSPECTION: Origin ACCEPTANCE: Origin				
					The state of the s
	Deliveries or Performance DOC SUPPL				
	REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD				
	001 N4906533184Q01 N00109 J 3				ļ
	DEL REL CD QUANTITY DBL DATE 001 3,908 15-NOV-2005				
	FOB POINT: Origin				
	SHIP TO: PARCEL POST ADDRESS				
	(NGO109) ATLANTIC ORDNANCE COMMAND				
	F O BOX 410				
	YORKTOWN VA 23691-0410				
	DOC SUPPL			•	[
	REL CD MILSTRIR ADDR SIG CD MARK FOR TP CD 002 N4906533184Q02 N47615 J 3]		
	DEL REL CD QUANTITY DEL DATE 001 1,960 15-NOV-2005				
	001 1,960 15-NGV-2005		i I		
	FOB POINT: Origin			1	
	SHIP TO: PARCEL POST ADDRESS				}
	(N47615) NAVAL WEAPONS STATION SEAL BEACH				
	\$00 SEAL BEACH BLVD				
	SEAL BEACH CA 90740-5000				
	TRANSPORTATION (FDT/TAC) CODE: N82B				
	(End of narrative F001)				
	1				
	TRANSPORTATION (FDT/TAC) CODE: N82B				
	(End of narrative F002)				
001AE	PRODUCTION QUANTITY	.5112	BA .	\$ 46.21000	\$236,225
	NAMES OF THE PROPERTY OF THE P				
	NOUN: SIGNAL, SMOKE&ILLUM MK124-0 PRON: R14A0F554I PRON AMD: 01 ACRN: AA				
,	AMS CD: 41476038030				
	CUSTOMER ORDER NO: N4802904MPA3B20				
	Packaging and Marking				
		•	1		

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Vame of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

TEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin	ı		ļ	
	31320				ш
	Deliveries or Werformance				
	DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD				
	001 N4906540#6005B W53XMD J 3				
	DEL REL CD QUANTITY DEL DATE				
	001 3,532 15-NOV-2005				
	002 1,580 15-DEC-2005				
	FOB POINT: Origin				ŀ
	SHIP TO: PARCEL POST ADDRESS				
	(W53XMD) SU W392 MAC CRANE ARMY AMMO ACT				
	WHOLESALE SUPPLY ACCOUNT . BLDG 13 300 HWY 361			i	
	CRANE IN 47522-5099	•			
	TRANSPORTATION FDT/TAC CODE: N82B				
	(End of narrative F001)				
	TRANSPORTATION FDT/TAC CODS: NS2B				
	(End of narrative F002)				
002	DATA ITEM			\$ ** NSP **	\$ <u>** NSP</u>
	NOUN: 1423 CDRL DATA			,	
	SECURITY CLASS: Unclassified				
	Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Grigin			·	-
	,				
003	MSN: 1370-01-030-8330				
-	FSCM: 10001				
	PART NR: DL3139734 SECURITY CLASS: Unclassified				
		•			
AAEO	PRODUCTION QUANTITY	18252	EA	\$ <u>46.21000</u>	\$
	NOUN: SIGNAL, SMOKE & ILLUM, MK124-0				
	PRON: Ul4A0X194I PRON AMD: 01 ACMN: AA		1		į

Reference No. of Document Being Continued PHN/SHN W52P1J-04-C-0098 MOD/AMD

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC. AMOUNT UNIT UNIT PRICE ITEM NO SUPPLIES/SERVICES QUANTITY AMS CD: 41476038030 CUSTOMER ORDER NO: FD20200418018 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance DOC SUPPL REL CO MILSTRIP ADDR SIG CD MARK FOR TP CD 001 FW202632612007 W22PVK L DEL REL CD QUANTITY DEL DATE 001 8,420 15-DEC-2005 06-JAN-2006 992 9,532 FOR POINT: Origin SHIP TO: PARCEL POST ADDRESS (W22PVK) XU MUNITIONS STORAGE POINT BLUE GRASS ARMY DEPOT 2091 KINGSTON HWY RICHMOND KY 40475-5000 TRANSPORTATION (FDT/TAC) CODE: F8D1 (End of narrative F001) 3,604.3 0003AB 78 EA 46.21000 \$___ PRODUCTION QUANTITY NOUN: SIGNAL, SMOKEGILLUM MK124-0 ACRN: AA PRON: W14A0M864I PRON AMD: 01 AMS CD: 41476038030 CUSTOMER ORDER NO: MIPR4F0SC10109 Packaging and Marking Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin Deliveries or Performance SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 WelywB4155A654A WS3XMD J DEL REL CD QUANTITY DEL DATE 14-JAN-2006 001 28 FOB POINT: Origin

Reference No. of Document Being Continued PHN/SIIN W52P1J-04-C-009# MOD/AMD

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SHIP TO: PARCEL POST ADDRESS (W53XMD) SU W392 MAC CRANE ARMY AMMO ACT WHOLESALE SUPPLY ACCOUNT BLDG 13 300 HWY 361 CRANE IN 47522-5099				
				·	
·					
	·				

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

Regulatory Cite ______ Title _____ Date

C-1 52.210-4501

52.210-4501 DRAWINGS/SPECIFICATIONS LOCAL MAR/1988

In addition to the drawing(s) and/or specifications listed below, other documents which are part of this procurement and which apply to Preservation/Packaging/Packing and Inspection and Acceptance are contained elsewhere.

The following drawing(s) and specifications are applicable to this procurement.

THE POLLOWING IS APPLICABLE TO CLIN 0001:

Drawings and Specifications in accordance with enclosed AUTOMATED DATA LIST (ADL) 5532237 with revisions in effect as of 7/28/1995 (except as follows):

THE FOLLOWING DRAWINGS, SPECIFICATIONS AND DOCUMENTS ARE APPLICABLE TO THIS PROCUREMENT: AUTOMATED DATA LIST 5532237, REV D, DATED 20
JUL 1995 AND REVISIONS OF DOCUMENTS THEREON. IN ADDITION SUPPLEMENTAL QUALITY ASSURANCE PROVISIONS 402-004 APPLY.

THE FOLLOWING ADL CHANGE NOTICES APPLY:

5532237D001, DATED 11/14/95 552237D002, DATED 3/25/04

THE FOLLOWING IS APPLICABLE TO CLIN COO3:

rewings and Specifications in accordance with enclosed AUTOMATED DATA LIST (ADL) 3139734 REV G with revisions in effect as of 15 JUN -94 AND REVISIONS OF DOCUMENTS THEREON. IN ADDITION, SUPPLEMENTAL QUALITY ASSURANCE PROVISIONS 402-004 APPLY AND ADL CHANGE NOTICE 3139734G001 DATED 3/25/04 APPLIES:

(CS6100)

C-2 52.247-4503

LOCAL

STATEMENT OF WORK - TRANSPORTATION SECURITY REQUIREMENTS

MAR/2004

Supplies procured under this contract are identified as SENSITIVE CATAGORY IV, requiring Transportation Protective Service (TPS) in accordance with DoD 5100.76M (Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives) and DoD 4500.9R, Defense Transportation Regulation, parts II and III, as added to or amended by applicable military service policies in accordance with guidance provided by Defense Logistics Agency (DLA)/Defense Contract Management Agency (DCMA) or other components assigned to provide contract administration services (CAS) within designated/delegated geographic areas as specified under DOD 4105.59H, DOD Directory of Contract Administration Service Components, dated January 1985, and subsequent issues thereof for offshore/OCONUS procurements.

(End of statement of work)

(CS6101)

C-3 52.225-4502

STATEMENT OF WORK-ENGLISH LANGUAGE DOCUMENTATION

FBB/1992

LÓCAL

All contractor prepared material to be furnished under this contract shall be written in the English language.

(End of statement of work)

(CS7103)

C-4 52.246-4506

STATEMENT OF WORK FOR STATISTICAL PROCESS CONTROL

PEB/1999

LOCAL

In accordance with DI-MGMT-80004 and contract clause 52.246-4506, the following supplemental information shall be considered

Reference	No.	of Document	Reina	Continued
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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

and used when designing your general and detailed SEC plans.

1.0 General Management Plan

This section shall define management's SPC responsibilities and involvement and shall include management's commitment to continuous process improvement. The plan shall embrace a total commitment to quality and shall be capable of standing on its own merit.

- 1.1 Policy/Scope: Describe the Contractor's policy for applying SPC, including goals and management commitment to SPC.
- 1.2 Applicable Document: List documents that are the basis for the contractor's SPC program (i.e., ANSI standard, textbooks, Government documents).
- 1.3 SPC Management Structure: Define the SPC management structure within the organization. Identify and include interrelationships of all departments involved in SPC (i.e., Production, Quality, Engineering, Purchasing, etc.). Identify by job title or position all key personnel within departments involved in the application of SPC. Describe which functions are performed by key personnel and when these functions are performed (i.e., include personnel responsible for performing inspections/audits, charting and interpreting data; personnel responsible for determining, initiating and implementing corrective action upon detecting assignable causes, etc.).
- 1.4 SPC Training: Identify by job title or position the primary individual responsible for overseeing that SPC training is accomplished. Describe the qualification program required and in use for all personnel utilizing SPC techniques, including the qualification of trainers. Identify who is to be trained and the type, extent and length of such training (i.e., on-the-job, classroom, etc.). Identify when refresher training is required and how personnel using SPC techniques are monitored.
- 1.5 Manufacturing Controls: Identify the criteria for performing SPC gage capability studies and describe how and when these studies should be applied. Repeatability and accuracy of gages should be addressed.
- 1.6 Determination of SPC Use: Describe how the process/operation parameters are determined appropriate for SPC application and explain what actions are taken if SPC is not deemed appropriate for critical, special and major process/operation parameters (i.e., Fareto analysis, analysis of characteristics with tight tolerances, etc.).

.7 Process Stability and Capability:

- a. Identify the criteria for performing process capability studies and describe how and when these studies are applied. Describe how the process capability index is calculated and include the frequency of these calculations. Describe what actions are taken as methodologies when process capability is for variable and attribute data. To determine a capable process, the process/operation parameters shall meet the following requirements:
- (1) Variable data: Process capability (Cp) shall be determined. Process performance index shall be greater than or equal to 1.33 (Cpk). For critical parameters/characteristics, the process performance index shall be greater than or equal to 2.0 (Cpk).
- (2) Attribute data: Process capability/performance shall be the percent beyond the upper/lower specification limit less than or equal to .003 percent (Cpk = 1.33).
- b. Describe what actions will be taken if process/operation is sub-marginal or marginal (Cpk less than 1.33 or 2.0 for criticals or grand average fraction defective is greater than .003 percent).
 - c. Include analysis of statistical distributions and define all formulas and symbology utilized.

1.# Control Chart Policy:

- a. Type of charts to be used (i.e., x bar/R x bar/S, etc.) and rationale for use; the criteria for selection of sample size, frequency of sampling and rational subgroups.
 - b. Procedures for establishing and updating control limits, including frequency of adjustments.
- c. Criteria for determining out-of-control conditions (i.e., trends, points beyond control limits, etc.) and the corrective action taken, to include failure analysis when the process is unstable or when nonconforming product has resulted from unstable processes. Illustrate out-of-control tests.
 - d. Describe the method of recording pertinent facts on control charts such as changes in raw material, machines, manufacturing thods and environment, and corrective actions taken and describe how control charts are traceable to the product.
- -1.9 Vendor/Subcontractor Purchase Controls: Identify whether suppliers are required to utilize SPC and describe the extent the vendor's policies and procedures are consistent with in-house procedures of the prime contractor. Describe the following: methods utilized to

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

determine that suppliers have adequate controls to assure defactive product is not produced and delivered; the system utilized to audit suppliers, what will be audited and how often, what action will be taken when out-of-control conditions exist at subcontractor/vendor facilities.

- 1.10 SPC Audit System: At a minimum, the contractor's SPC Audit System shall consist of auditing compliance with the planned arrangements specified in the general and detailed SPC plans followed by a review and analysis of the outcome to include implementation of necessary corrective action.
- 1.11 SPC Records: Identify various records to be used in support of SPC and describe their use. Identify retention periods.

2.0 Detailed Plan:

This section shall detail specific manufacturing process/operation parameters under control.

- 2.1 Control of Process/Operation Parameters or Characteristics:
 - a. Identify the following for each process/operation by name or characteristic under control:
- (1) Identify process/operation by name or characteristic and provide rationale for selection; justification for nonselection if the parameter or characteristic is identified as critical, special and/or major.
- (2) Describe how the characteristic is proceduced; the chain of events, type and number of machines involved, location of manufacturing facility, tolerances maintained, etc.
- (3) Production and inspection machinery used. Includ the production rate, number of shifts and length of shifts plus whether inspection is fully or semi-automatic or manual. If manual, identify the type of gages in use.
- (4) Identify the type of charts to be maintained and whether the process/operation is performed in-house or subcontracted out; identify facility/vendor where process/operation parameters are targeted for SPC.
- .2 Reduction or Blimination of Inspection/Test: The Procuring Contracting Officer (PCO) will accept submissions of requests for reduction or elimination of final acceptance inspection/testing when the requirements of the SPC contract clause and this SOW are met. Bach request shall contain and/or address the following: control charts documenting twenty (20) consecutive production shifts or more for the same process/operation parameter under control; type of control chart utilized; control chart limits and process average or grand average fraction defective (as applicable); definition of out-of-control condition and corrective actions taken during out-of-control conditions; specification and part number.

(End of statement of work)

(CS7100)

C-5 \$2.246-4535

STATEMENT OF WORK - AMMUNITION DATA CARDS AND REPORT OF CONTRACTOR

AUG/2002

LOCAL

BALLISTIC TESTING

Ammunition Data Cards shall be prepared in accordance with MIL-STD-1168 and shall follow the format required by the world wide web application identified as WARP or Worldwide Ammunition-data Repository Program. The Report of Contractor Ballistic Testing is prepared IAW DI-MISC-80246. Additional details on both of these WARP applications are provided below. Prior to gaining access to WARP contractor/facility personnel involved in the preparation of ammunition data cards shall obtain a userid and password for the Army Electronic Product Support (AEPS) network. Instructions and help for obtaining an AEPS userid and password are as follows:

ABPS Access Procedures

The Army Electronic Product Support (AEPS) is a Department of Defense logistics website. Entering AEPS will allow you access to the SECURED AREA of the Army Electronic Product Support Network. A username and password are required to enter this area. Only authorized DoD personnel and contractors with current active contracts with DoD will receive access into the AEPS website. If you have a requirement for the AEPS website, you must fill out and submit the AEPS Access Request Form found at the following web address:

http://aeps.ria.army.mil/aepspublic.cfm

You must click on "Access Request Form" and continue through the steps until Completion and click on SUBMIT. You are required

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dame of Offeror or Contractor: Pyrotechnic specialities inc.

to provide a supervisor name, email and phone number if you are a DoD civilian or military. Government contractors are required to provide CAGE code, Contract Number and COR/COTR with "Government" email address. All requestors must provide their Information Assurance Security Officer's (IASO, formerly ISSO) name, email, DSN phone and commercial phone.

After submitting the request, your supervisor/COTR/COTR will be emailed a copy of your request and will be asked to verify your information before a user ID will be issued. AEPS User ID and AEPS Login Name mean the same. Your supervisor must REPLY back to the email provding the following:

Approval? (YES/NO) Supervisor Name Supervisor B-Mail Supervisor Phone

The COR/COTR must also provide the same information stated above in his/her REPLY plus provide the Contract Expiration Date (format - MM/DD/YYYY).

Upon notification from your supervisor/COR/COTR, you will be emailed an ABPS User Login Name and instructions for logging into the ABPS website. You will use the ABPS password that you assigned to yourself when you filled out the access request form.

Once you gain access to the ASFS website, you can change your personal information when needed to keep your file current.

ABPS HELP-DESK and Problem Reporting Procedures

Reporting Problems - The AEPS Help Desk has several means of reporting problems:

Call 1-98%-LOG-HELP (1-883-564-4357) to speak to an AEPS representative
Contact the AEPS Help-Desk at Comm. (309) 782-0699 or DSN 793-0699 or (309) 782-1426 or DSN 793-1426
Contact the AEPS Help-Desk by FAX: (309) 782-1426 or DSN 793-1426
Contact the AEPS Webmaster by Email: Webmaster (martinj2@ria.axmy.mil)

.ch phone call, email or fax is handled in a prompt and courteous manner. Responses to problems are provided by phone and/or — émail.

Other means to help assist you in identifying your problems can be found on the ABPS Help Section at web link:

http://aeps/ria.army.mil/help.cfm

Here you will find Questions and Answers by clicking in either of the two FAQ subcategories reflected under the HELP tab:

PAQs - ARPS Access Request Process or SSL PAQs - Secured Socket Layer

You may also check out our new Frequently Asked Questions (https://aeps.xia.army.mil/aepsqa.cfm) page to get answers on access problems as another means of assistance.

The ASPS Help Section screen http://aeps.ria.axmy.mil/help.cfm also reflects two other topics that can be clicked on to provide further assistance:

- "Password Problems or Request Status" at https://aeps.ria.army.mil/request/info/UserScreen.cfm
- "Ask the AEPS Public Help Knowledge Base" at http://aeps.ria.army.mil/help/aepshelpmain.cfm

Worldwide Ammunition-data Repository Program (WARP)

Once you have obtained an ABPS userid and password allowing entry to the secured area of ABPS you can access the WARP application by soxolling to the bottom of the list of ABPS applications. The WARP opening main page and all subsequent pages contain multiple navigational aids to guide you through the process of inputting information necessary for creating a new ammunition data card. An online users manual will provide additional help in the development of an ammunition data card and it is recommended that you download and read the users manual prior to inputting your initial data card. The user's manual also contains screen shots, which depict what the inputter will see during the ADC input process.

Ammunition Data Card Input

To input allows current contractors and government facilities the capability to create, and submit for approval, ADCs which set the format requirement of MIL-STD-1168B. ADCs are automatically forwarded to the respective Governmental Agency — Responsible for Acceptance (GARA). The GARA, in most cases the Defense Contract Management Agency (DCMA) Quality Assurance Representataive (QAR), reviews contractor input for accuracy and completeness, and after updating the disposition code for the

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

specific lot, submits the ADC to the database. The inputter is granted access only to ADCs identified with its specific manufacturing code, as identified in MIL-HDBK-1461A, Manufacturer's Symbols. The use of previously inputted ADCs through the TEMPLATE option, significantly reduces input effort, while increasing accuracy and consistency of data.

Email Notification

WARP provides immediate, automated notification to process participants when actions are required. When the producer has completed an ADC submission, an email message is routed to the GARA advising that an ADC awaits review and approval. If the GARA approves the ADC as submitted, the ADC is released to the base and an email, with approved data card, is routed back to the originator. If the ADC requires modification or correction to be in accordance with MIL-STD-1168B requirements, an email is provided to the ADC originator advising that corrective action is required prior to approval.

Information Updates

It is important that the System Administrators are apprised when a producer receives a new contract. The producer shall notify OSC-WARP@osc.army.mil within 30 days after receipt of a new contract. Information to be included shall be the contract number, item, GARA, Manufacturer's identification symbol and the names of the individuals who will be inputting ADCs into the system. If you are a new producer and do not have a Manufacturer's identification symbol, you can obtain one by sending an email to OSC-WARP@osc.army.mil. The email must contain manufacturer's name, address where performance of the contract will take place, and a point of contact.

Report of Contractor Ballistic Testing Module

In addition to its ADC function, WARP also servces as a repository for reports of contractor ballistic (or functional) testing. Whenever the contract requires contractor performance of ballistic testing, the results of such testing shall be captured by you, the performing contractor, within a specially designed Lot Acceptance Test Report (LATR) module.

Within the LATR module, you are required to provide a report of any contractor ballistic testing and to submit the report in electronic fashion via the WWW. The report must be a .pdf file for the upload process to work.

a LATE tab on the WARP opening page provides access to the upload process.

An online users manual will provide additional help in the upload process for a Report of Contractor Ballistic Testing. It is recommended that you download and read the users manual prior to uploading your initial Report of Contractor Ballistic Testing. The users manual also contains screen Shots which depict the upload process.

The upload process is simple and direct. After inputting several key pieces of information (contract number, noun, etc.) on the LATA initial page the inputter selects the upload button and the LATA module will browse the inputter's hard drive until the correct file is found. At the click of a button the file is uploaded to WARP and the process is complete.

(End of statement of work)

(CS7200)

C-6 52.248-4502

LOCAL

CONFIGURATION MANAGEMENT DOCUMENTATION

MAY/2001

The contractor may submit Engineering Change Proposals (ECPs), Value Engineering Change Proposals (VECPs) (Code V shall be assigned to an engineering change that will effect a net life cycle cost), including Notices of Revision (NORs), and Requests for Deviation (RFDs) for the documents in the Technical Data Package (TDF). The contractor shall prepare these documents in accordance with the Data Item Descriptions cited in block 04 on the enclosed DD Form 1423, Contract Data Requirements List.

Contractor ECPs/VECPs shall describe and justify all proposed changes and shall include NORs completely defining the changes to be made. Contractors may also submit RFDs, which define a temporary departure from the TDP or other baseline documentation under Government control. The contractor shall not deliver any units incorporating any change/deviation to Government documentation until notified by the Government that the change/deviation has been approved and the change/deviation has been incorporated in the contract.

If the Government receives the same or substantially the same VECFs from two or more contractors, the contractor whose VECP is received first will be entitled to share with the Government in all instant, concurrent, future, and collateral savings.

uplicate VECFs, which are received subsequently, will be returned to the contractor(s) without formal evaluation, regardless of whether or not the first VECP has been approved and accepted by the Government.

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(End of clause)

(C\$7600)

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Name of Offeror or Contractor: pyrotechnic specialties inc.

SECTION D - PACKAGING AND MARKING

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

Requistory Cite <u>Title</u> Date

52.211-4508

PACKAGING REQUIREMENTS

JUL/1997

LOCAL

THE FOLLOWING APPLIES TO CLIN DOGL:

Packaging shall be in accordance with 2128249 revision C, dated 17 JUL 1995 AND 7223910, REVISION - DATED 9 NOV 95.

When lot numbering is required, no more than one lot shall be packaged in an outer shipping container.

Marking shall be in accordance with 2128249, REVISION C DATED 17 JUL 1995 AND 7223910, REVISION -, DATED 9 NOV 95.

EXCEPTION : 5. The following shall apply to drawing 2128249, REVISION C, DATED 17 JUL 95:

EXCEPTION TO DOCUMENTATION found on the ADL applies to this drawing.

2D bar marking shall be applied in accordance with MTL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

IDENTIFICATION MARKING: Correct quantity from *18 Signal, " to "36 Signal,"

PROPER SHIPPING MARKING: Correct to "SIGNAL DEVICES, HAND UN 0191".

PERFORMANCE ORIENTED PACKAGING:

The United Nations (UN) Performance Oriented Packaging (POP) marking provided on drawing 2128249 does not apply to this procurement. Prior to shipment, the manufacturer shall make sure the container has been tested for compliance with UN POP requirements in accordance with Title 49 Code of Federal Regulations. Test shall be at a sufficient weight to more than cover the actual gross weight of the box. All performance test requirements shall be supported by certificates and reports attesting to the date and the data results obtained from performance oriented packaging testing. The contractor, if not a selfcertifier, shall be responsible for assuring that third party sources providing performance testing services are in fact, registered with the Department of Transportation. All certificates and reports shall be available for inspection by authorized government representatives, for a period of three years. All exterior containers will be marked with the UN POP marking provided by the contractor in accordance with Title 49 Code of Federal Regulations and MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING (POF) VERIFICATION: In no case shall a container be shipped if the gross weight marked on the package is greater than the POP certified weight. If the average gross weight of the packed containers (determined by weighing two representative samples and averaging the weight) is greater than the certified weight, container marking operations shall cease and the procuring activity shall be contacted immediately.

EXCEPTION TO PERFORMANCE ORIENTED PACKAGING (POP) MARKINGS: If manufactured outside the USA, contractor shall not apply the UN POP certification marking provided on drawing 2128249. Contractors (outside the USA) are responsible to perform UN POF tests on packaging requirements provided in this contract and apply UN POP certification marking authorized by the Competent Authority of the state (country) of manufacture.

HEAT TREAT WOOD QUALITY MARKING:

All non-manufactured wood used in packaging shall be heat treated to a

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core temperature of 56 degrees Celsius for a minimum of 30 minutes.

The box manufacturer and the manufacturer of wood used as inner packaging, shall be affiliated with an inspection agency accredited by the American Dumber Standards Committee. The box manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment. Each box shall be marked to show the conformance to the International Plant Protection Convention Standard. Boxes and any wood used as inner packaging made of non-manufactured wood shall be heat treated. The quality mark shall be placed on both ends of the outer packaging, between the and cleats or end battens. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program.

METALLIC SEAL: Use 8794342. Rev AB.

The following shall apply to drawing 7223910, revision -, dated # NOV 95:

2D bar marking shall be applied in accordance with MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING MARKING: Correct from "4A1" to "4A".

PROPER SHIPPING MARKING: Correct to "SIGNAL DEVICES, HAND UN 0191".

UN POP markings may be marked on the top of the M2Al container if sufficient space is not available on the side opposite the nomenclature.

JE POLLOWING APPLIES TO CLIN 0003:

Packaging shall be in accordance with 3139738 revision R. dated 17 MAR 94

When lot numbering is required, no more than one lot shall be packaged in an outer shipping container.

Marking shall be in accordance with 313973# revision R, dated 17 MAR 94.

The following shall apply to drawing 3139738, REVISION R. DATED 17 MAR 94:

2D bar code markings are required in accordance with MIL-STD-129, Rev P, with Change Notice 2, dated 10 Feb 2004.

PERFORMANCE ORIENTED PACKAGING (POP) VERIFICATION: In no case shall a container be shipped if the gross weight marked on the package is greater than the POP certified weight. If the average gross weight of the packed containers (determined by weighing two representative samples and averaging the weight) is greater than the certified weight, container marking operations shall cease and the procuring activity shall be contacted immediately.

EXCEPTION TO PERFORMANCE ORIENTED PACKAGING (POP) MARKINGS: If manufactured outside the USA, contractor shall not apply the UN FOP certification marking provided on drawing 313973\$. Contractors (outside the USA) are responsible to perform UN POP tests on packaging requirements provided in this contract and apply UN FOP certification marking authorized by the Competent Authority of the state (country) of manufacture.

HEAT TREAT WOOD QUALITY MARKING:

All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box manufacturer and the manufacturer of wood used as inner packaging, shall be affiliated with an inspection agency accredited by the American Lumber Standards Committee. The box manufacturer and the manufacturer of wood used as

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inner packaging shall ensure traceability to the original source of heat treatment. Each box shall be marked to show the conformance to the International Plant Protection Convention Standard. Boxes and any wood used as inner packaging made of non-manufactured wood shall be heat treated. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program.

(End of clause)

(DS6303)

D-2 52.247-4517

PALLETIZATION INSTRUCTION

MAR/1992

LOCAL

THE FOLLOWING APPLIES TO CLIN 0001:

Palletization shall be in accordance with 19-48-4116/1078, revision 1, dated OCT 88 AND 19-48-4116 REV 8, DATED JUNE 2003. MARKING SHALL SE IN ACCORDANCE WITH DRAWING ACVOSSI, REV C, DATED 11 JULY 2003. HEAT TREAT REQUIREMENTS FOR ALL NON-MANUFACTURED WOOD USED IN THE PALLATIZED LOAD APPLIES TO THIS CONTRACT.

THE FOLLOWING APPLIES TO CLIN 0003:

ulletization shall be in accordance with 19-48-4116/107H, revision 2, dated Aug 94 and 19-48-4116 REV 8, DATED JUNE 2003. MARKING HALL BE IN ACCORDANCE WITH DRAWING ACVO0561, REV C. DATED 11 JULY 2003. HEAT TREAT REQUIREMENTS FOR ALL NON-MANUFACTURED WOOD USED IN THE PALLATIZED LOAD APPLIES TO THIS CONTRACT. FOREIGN MANUFACTURERS SHALL HAVE THE HEAT TREATMENT OF NON-MANUFACTURED WOOD PRODUCTS VERIFIED IN ACCORDANCE WITH THEIR NATIONAL PLAN T PROTECTION ORGANIZATIO CONFLIANCE PROGRAM.

(End of clause)

(DS6204)

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Name of Offeror or Contractor: Pyrotechnic speciality

SECTION E - INSPECTION AND ACCEPTANCE

For Local Clauses See: http://www.afsc.army.mil/ac/aais/loc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DoD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated berein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schedule.

Any company/individual wishing to purchase a copy of the Pederal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402

(EA7001)

	Regulatory Cite	Title	Date
E-1	52.246-2	INSPECTION OF SUPPLIES-FIXED-PRICE	AUG/1996
E-2	52.246-16	RESPONSIBILITY FOR SUPPLIES	APR/1984
E-3	52.209-4511 LOCAL	FIRST ARTICLE TEST (GOVERNMENT TESTING)	MAY/1994

- a. The first article shall consist of: IN ACCORDANCE WITH THE SPECIFICATION; which shall be examined and tested in accordance with contract requirements, the item specification (s), the Quality Assurance Provisions (QAFS) and drawings listed in the Technical Data Fackage.
- b. The first article shall be delivered to: NSWC, CRANE IN. The first article shall be delivered by the Contractor Free on Board —(FOB) destination except when transportation protective service or transportation security is required by other provision of this contract. If such is the case, the first article shall be delivered FOB origin and shipped on Government Bill of Lading.
- c. The first article shall be representative of items to be manufactured using the same processes and procedures as contract production. All parts and materials, including packaging and packing, shall be obtained from the same source of supply as will be used during regular production. All components, subassemblies, and assemblies in the first article sample shall have been produced by the Contractor (including subcontractors) using the technical data package provided by the Government.
- d. Prior to delivery, each of the first article assemblies, subassemblies, and components shall be inspected by the Contractor for all contract, drawing, QAF and specification requirements except for any environmental or destructive tests indicated below: NONE. The Contractor shall provide to the Contracting Officer at least 15 calendar days advance notice of the schedule date for final inspection of the first article. Those inspections which are of a destructive nature shall be performed upon additional sample parts selected from the same lot(s) or batch(es) from which the first article was selected. Results of contractor inspections (including supplier's and Vendor's inspection records when applicable) shall be verified by the Government Quality Assurance Representative (QAR). The QAR shall attach to the contractor's inspection report a completed DD Form 1222. One copy of the contractor's inspection report with the DD Form 1222 shall be forwarded with the first article; two copies shall be provided to the Contracting Officer. Upon delivery to the Government, the first article my be subjected to inspection for all contract, drawing, specification, and QAP requirements.
- e. Notwithstanding the provisions for waiver of first article, an additional first article sample or portion thereof, may be ordered by the Contracting Officer in writing when (i) a major change is made to the technical data, (ii) whenever there is a lapse in production for a period in excess of 90 days, or (iii) whenever a change occurs in the place of performance, manufacturing process, material used, drawing, specification or source supply. When conditions (i), (ii), or (iii) above occurs, the Contractor shall notify the Contracting Officer so that a determination can be made concerning the need for an additional first article sample or portion thereof, and instructions provided concerning the submission, inspection and notification of results. Costs of the first article testing resulting from production process change, change in the place of performance, or material substitution shall be borne by the Contractor.
- f. Rejected first articles or portions thereof not destroyed during inspection and testing will be held at the government first article test site for a period of 30 days following the date of notification of rejection, pending receipt of instructions from the Contractor for the disposition of the rejected material. The Contractor agrees that failure to furnish such instructions within said 30 by period shall constitute abandonment of said material by the Contractor and shall confer upon the Government the right to destroy or chewise dispose of the rejected items at the discretion of the Government without liability to the Contractor by reason of such destruction or disposition.

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(End of clause)

(BS6033)

E-4 92.245-4537 ACCEPTANCE INSPECTION EQUIPMENT (ALE)

FEB/2002

- a. Acquisition, maintenance, and disposition of Acceptance Inspection Equipment (AIE) shall be in accordance with ANSI/NCSL 2540-1 or ISO 10012-1. AIE shall be used to assure conformance of components and end items to contract requirements. AIE shall include all types of inspection, measuring, and test equipment whether Government furnished, contractor designed, or commercially acquired, along with the necessary specifications, and the procedures for their use.
- b. The Contractor shall provide all Acceptance Inspection Equipment (AIE) necessary, except for the Government Furnished Equipment (GFE) listed in paragraph (g. s). The GFE shall be provided in accordance with the Government Property clause of this contract. The Contractor is responsible for contacting NSWC Corona at least 45 days in advance of the date the GFE is required to schedule delivery. Government furnished AIE shall not be used by the contractor or his subcontractor in lieu of in-process or work gages.
- c. Contractor AIE designs, specifications, and procedures for Critical, Major, Special, and Minor characteristics shall be submitted to the Government for review and approval in accordance with the Contract Data Requirements List, DD Form 1423. All Contractor AIE documentation requiring Government approval shall contain sufficient information to permit evaluation of the AIE's ability to test, verify or measure the characteristic or parameter with the required accuracy and precision. Contractor designed AIE requiring Government approval shall be made either in accordance with the equipment drawings specified in section C of contract (Description/Specification Section), or in accordance with any other design documentation provided that it is approved by the Government. The Government will approve the AIE documentation or provide requirements for approval within 45 days of receipt. The Contractor shall be responsible for any delays resulting from late submission of AIE documentation to the Government for approval, and any delays resulting from the submission of inadequate or incomplete AIE documentation.
- d. The contractor must ensure that all AIE is approved and available for use prior to First Article Submission, if First Article is required, or prior to initiation of production under this contract.
- e. Resubmission of AIE design, specification, and procedure documentation for approval on a follow-on contract is not required provided inspection characteristic parameters specified in the current technical data package and the previously approved AIE documentation remain unchanged. The contractor shall provide the contract number and identify previously approved AIE documentation that meets the above prerequisites.
- f. The Government reserves the right to disapprove at any time during the performance of this contract, use of any AIE not meeting the requirements of the approved design, specification, or procedure documentation.
 - g. Navy Special Interface Gage Requirements (NSIG)
- 1. The Navy Special Interface Gages listed under this clause will be forwarded to the Contractor for joint use by the Contract Administration Office (CAO) and the Contractor.
- 2. The Contractor may substitute contractor designed and built AIE for the NSIG noted as applicable in paragraph g.\$. However, the designs require Government approval and the contractor AIE hardware requires Government certification. AIE designs shall be submitted in accordance with paragraph c. The contractor shall notify NSWC Corona prior to submission of AIE for certification. Two copies of each Government approved contractor AIE drawing shall accompany the contractor AIE hardware sent to the Government for certification. The Government shall perform the contractor AIE certification, return the hardware and provide notification of acceptance or rejection to the Contractor within 45 days of receipt of the contractor AIE. The contractor shall be responsible for any delays resulting from late submission of documentation or hardware. The Contractor shall also submit the calibration periods for each contractor AIE for approval. The Government shall affix Calibration stickers to the contractor AIE for Quality Assurance Representative (QAR) identification.
- 3. The NSIGs are provided for verification of selected interface dimensions and do not constitute sole acceptance criteria of production items or relieve the Contractor of meeting all drawing/specification requirements under the contract.
- 4. Items that fail to be accepted by the applicable MSIGS may be inspected by another means to determine acceptance or rejection, provided the alternate inspection method is acceptable to the government approval authority.
- 5. The Government shall not be responsible for discrepancies or delays in production items resulting through misuse, damage or cossive wear to the NSIGs.
- 6. Calibration and repair of the NSIGs shall only be performed as authorized by the Naval Surface Warfare Center (NSWC), Corona Division. Repair is at no cost to the Contractor unless repair is required due to damage to the gages resulting from Contractor fault

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or negligence. Damaged, worn, or otherwise unserviceable NSIGs shall be brought to the immediate attention of the CAO and NSWC Corona. The Contractor shall not make any adjustments, alterations or add permanent markings to NSIG hardware unless specified by the NSIG operating instructions or authorized by the Designated Technical Activity.

- 7. Within 45 days after final acceptance of all production items, the NSIGs shall be shipped to NSWC, Corona Division, ATTN: Receiving Officer, Bldg 575, Gage Laboratory, 1999 Fourth St., Norco, CA 92860-1915. The following specifications are applicable:
 - (i) Shipping, MIL-STD-2073, "DOD Standard Practice for Military Packaging"
 - (ii) Marking, MIL-STD-129, "Marking for Shipment and Storage".
 - 8. The following NSIGs shall be provided and are mandatory for use except as noted by an (x) for paragraph (g.2) applicability.

Para. g.2

applies Drawing Rev Char NSIG Qty Dimensions Weight Value

(End of clause)

(ES6032)

E-5 52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT

FEB/2004

- (a) Definition. "Contract date", as used in this clause, means the date set for bid opening; or if this is a negotiated contract or a modification, the effective date of this contract or modification.
 - (b) The Contractor shall comply with:
 - () ISO 9002
 - (X) ISO 9001-2000; only design/development exclusions permitted
 - () ISO 9001-2000; no exclusions permitted

or an alterate program/system approved by the activity listed in block 7 of the Standard Form 33, in effect on the contract date and which is hereby incorporated into this contract.

(End of clause)

(ES6001)

E-6 52.246-4506 STATISTICAL PROCESS CONTROL (SPC)

FEB/2004

- a. In addition to the quality requirements of the technical data package, the Contractor shall implement Statistical Process Control (SPC) in accordance with a government accepted SPC Frogram Plan. Control chart techniques shall be in accordance with the American National Standards Institute (ANSI) B1, B2 and B3. Alternate SPC charting methods may be proposed and submitted to the Government for review.
- b. The SFC Program Plan developed by the contractor shall consist of a general plan and a detailed plan. The plans shall be ructured as delineated on the Data Item Description referenced in the DD Form 1423. The general and the detailed plans shall be ibmitted to the government for review per DD Form 1423 requirements. Notification by the Government of acceptance or nonacceptance of the plans shall be provided in accordance with the timeframes specified on the DD Form 1423. Once a general plan for a facility has been approved by this Command, the approval remains in effect for subsequent contracts as long as the contractual requirements remain

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substantially unchanged from contract to contract. Therefore, resubmission of a previously accepted general SPC plan is not required if current SPC contract clause and Data Item Description (DID) requirements are fulfilled. If this Command has previously accepted the general SPC plan under essentially the same SPC contractual requirements, so indicate by providing the Contracting Officer with the following information:

Date	of	Acceptance	
Contr	ract	: Number(s)	

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- c. The contractor is responsible for updating the general plan to current SPC contractual requirements. If errors or omissions are encountered in a previously accepted SPC general plan, opportunities for improvement will be identified by the Government, and corrective action shall be accomplished by the contractor.
- d. A milestone schedule will be submitted for those facilities who do not have, or have never had, a fully implemented SPC program and will not have a fully operational SPC program once production is initiated. The milestones shall provide a time phased schedule of all efforts planned relative to implementation of an SPC program acceptable to the Government. A milestone schedule shall include implementation start and complete dates for those SPC subjects addressed in the Statistical Process Control Statement of Work located in Section C. The milestone schedule shall only include those actions that can not be accomplished prior to first article or the initiation of production, if a first article is not required. Milestones shall be developed for each commodity identified for SPC application. Milestones shall be submitted through the Government Quality Assurance Representative to the Contracting Officer for review and acceptance. Any deviations from the accepted milestones, to include justification for such deviations, shall be resubmitted through the same channels for review. The Government reserves the right to disapprove any changes to the previously accepted milestones. Notification by the Government of the acceptance or nonacceptance of the milestones shall be furnished to the Contractor by the Contracting Officer.
- e. The Contractor shall review all process and operation parameters for possible application of SPC techniques. This review shall include processes and operations under the control of the prime contractor and those under the control of subcontractor or vendor facilities. A written justification shall be included in the detailed plan for each process and operation parameter that controls or influences characteristics identified as critical, special, or major which have been deemed impractical for the application of SPC characteristics. A pamphlet on application of SPC for short production runs is available through the Contracting Officer.
- f. Statistical evidence in the form of control charts shall be prepared and maintained for each process or operation parameter identified in the detailed plan. These charts shall identify all corrective actions taken on statistical signal. During production runs, control charts shall be maintained in such a manner to assure product is traceable to the control charts. At the conclusion of the production run, a collection of charts traceable to the product, shall be maintained for a minimum of 3 years. The control charts shall be provided to the Government for review at any time upon request.
 - g. When the process or operation parameter under control has demonstrated both stability and capability, the Contractor MAY request, in writing, through Administrative Contracting Officer (ACO) and Contracting Officer (CO) channels to the Product Assurance and Test Directorate, that acceptance inspection or testing performed in accordance with contract requirements be reduced or eliminated. Upon approval by the CO, acceptance shall then be based upon the accepted SPC plan, procedures, practices and the control charts.
 - h. The Government will not consider requests for reduction or elimination of 100% acceptance inspection and testing of parameters or characteristics identified as critical in the technical data package, specifications or drawings of this contract if any one of the following conditions exist:
 - (1) The existing process currently utilizes a fully automated, cost effective, and sufficiently reliable method of 100% acceptance inspection or testing for an attribute-type critical parameter or characteristic.
 - (2) The Contractor utilizes attribute SPC control chart methods for the critical parameter or characteristic.
 - (3) The critical parameter or characteristic is a first order, single point safety failure mode (nonconformance of the critical parameter or characteristic in and of itself would cause a catastrophic failure).
 - i. The Government will only consider reduction or elimination of the 100% acceptance inspection or test requirement for other critical parameters or characteristics if either of the following conditions are met:
 - (1) The process is in a state of statistical control utilizing variable control chart methods for the critical parameter or characteristic under control and the process performance index (Cpk) is at least 2.0. The Contractor shall maintain objective quality evidence through periodic audits that the process performance index is being maintained for each production delivery.
- (2) The critical parameter or characteristic is conclusively shown to be completely controlled by one or more process or operation transfers earlier in the process, and those parameters are in a state of statistical control utilizing variable data, and the product of the probability of the conformance for each earlier parameter associated to the critical characteristic is better than or equal to a value equivalent to that provided by a Cpk of at least 2.0. The Contractor shall maintain objective quality evidence through periodic

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audits that the process performance indexes are being maintained for each production delivery.

- j. For characteristics other than critical, requests for reduction or elimination of acceptance inspection and testing shall be considered when the process performance index is greater than or equal to a Cpk of 1.33 for variables data. Requests shall be considered for attributes data when the percent beyond the specification limits is less than or equal to .003 (Cpk=1.33).
- k. Process or operation parameters under reduced or eliminated inspection or testing that undergo a break in production less than 6 months in length, may continue to operate under reduced or eliminated inspection or testing provided there has been no degradation below a Cpk of 1,33 (2.0 for criticals). Any break in production greater than 6 months shall require resubmission of the request for reduction or elimination of inspection or testing through the same channels cited in paragraph g above.
 - 1. Not used.
- m. Immediately following a change to a process or operation parameter under reduced or eliminated inspection, the process capability (Cp) or process performance indexes (Cpk) shall be recalculated and documented for variable data; the grand average fraction defective shall be recalculated for attribute data. If any of these values have deteriorated, immediate notification shall be made to the Government along with the associated documentation. Return to original inspection and test requirements may be imposed as stipulated in paragraph n below.
- n. The Government reserves the right to withdraw authorization to reduce or eliminate final acceptance inspection or testing and direct the Contractor to return to original contract inspection or test procedures at any indication of loss of process control or deterioration of quality.

(End of clause)

(ES6034)

E-7 52.246-4530 SUBMISSION OF PRODUCTION LOT SAMPLES (GOVERNMENT TESTING) MAY/1994

a. A lot acceptance test sample is required to be submitted by the Contractor from each production lot tendered to the Government for acceptance. This sample shall consist of: AS REQUIRED BY THE MK124 SPECIFICATION. The sample units shall be delivered by the Contractor Free on Board (FOB) destination, except when transportation protective service of transportation security is required by other provision of this contract. When such is the case, the sample units shall be delivered FOB oxigin and shipped to the test facility identified below on a Government Bill of Lading for the following tests:

TEST REQUIREMENTS SAMPLE
AS REQUIRED BY THE MK124 SPECIFICATION

TEST FACILITY: MSWC CRANE, IN

b. When the production lot sample consists of components parts which require uploading at a Government Load, Assemble, and Pack (LAP) facility, and a shipping address is provided below, the contractor shall ship the sample units as specified above directly to the LAP facility. The LAP facility, upon completion of the uploading, will be responsible for shipping the samples to the tests facility indicated above in paragraph a.

LAP PACILITY:

- G. The sample units shall be randomly selected from the entire lot by or in the presence of the Government Quality Assurance Representative. Unless otherwise specified, the sample units are considered to be destructively tested and are in addition to the units deliverable under the contract.
- d. Prior to selection of the sample units, the lot shall have been inspected to and meet all other requirements of the contract. A sample shall not be submitted from a lot rejected for nonconformance to the detailed requirements of the specifications) and drawing(s) unless authorized by the Contracting Officer.
- e. Unless authorized by the Contracting Officer, the lot from which the samples are drawn shall not be shipped until official notification has been provided by the Contracting Officer that the tested units have satisfactorily met the established requirements. Final acceptance of the lot shall not proceed until such notification has been provided.
- f. If the production lot sample contains samples for ballistic testing, the test samples shall be identified as such on the outer cks and the applicable Ballistic Test Request (BTR) number shall be stenciled on all outer packs and included on all shipping documents.

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- g. The Contracting Officer shall by written notice to the Contractor within 45 days after receipt of the sample units by the government, approve, disapprove, or conditionally approve the lot acceptance sample.
- h. If the production lot sample fails to meet applicable requirements, the Contractor may be required at the option of the Government, to submit an additional production lot test sample for test. When notified by the Government to submit an additional production lot test sample, the Contractor shall at no additional cost to the Government make any necessary changes, modifications, or repairs and select another sample for testing. The additional test sample shall be furnished to the Government under the terms and conditions and within the time specified in the notification. The Government shall take action on this test sample within the time limit specified in paragraph g above. All costs associated with the additional testing shall be boxne by the Contractor.
- i. If a ballistic test sample fails to meet contractual performance or functional requirements, the Contractor shall reimburse the Government for transportation costs associated with the failing sample, including the cost of transportation protective service and transportation security requirements when such security is required by other provision of this contract. An exception to this requirement for reimbursement of Government transportation costs will occur if the Government determines that the functional test samples failed to meet contractual performance requirements through no fault of the contractor.
- j. If the Contractor fails to deliver any production lot test sample(s) for test within the time or times specified, or if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract. Therefore, this contract may be subject to termination for default. Failure of the Government in such an event to terminate this contract for default shall not relieve the contractor of the responsibility to meet the delivery schedule for production quantities.
- k. In the event the Contracting Officer does not approve, conditionally approve, or disapprove the production lot test sample(s) within the time specified in paragraph g above, the Contracting Officer shall equitably adjust the delivery or performance dates, or the contract price, or both, and any other contractual provision affected by such delay in accordance with the procedures provided in the Changes clause. Failure to agree to any adjustment shall be a dispute concerning a question of the fact within the meaning of the clause of this contract entitled Disputes.

(End of Clause)

.S60351

E-8 52.245-4545 MIL-STD-1916 LOCAL

OCT/2000

The Department of Defense (DoD) Preferred Methods for this Acceptance of Product, MIL-STD-1916, shall be used for this procurement action. All references to MIL-STD-105, MIL-STD-414, MIL-STD-1235, and ANSI 21.4 appearing in the Technical Data Package (TDP) are replaced by MIL-STD-1916. Verification Levels (VL) shall replace AQLs and shall be VL IV for major characteristics and VL II for minor characteristics.

(End of clause)

(E87650)

E-9 52.246-4528 REWORK AND REPAIR OF NONCOMFORMING MATERIAL LOCAL

MAY/1994

- a. Rework and Repair are defined as follows:
- (1) Rework The reprocessing of nonconforming material to make it conform completely to the drawings, specifications or contract requirements.
- (2) Repair The reprocessing of nonconforming material in accordance with approved written procedures and operations to reduce, but not completely

eliminate, the nenconformance. The purpose of repair is to bring nonconforming material into a usable condition. Repair is distinguished from rework in that

the item after repair still does not completely conform to all of the applicable drawings, specifications or contract requirements.

- b. Rework procedures along with the associated inspection procedures shall be documented by the Contractor and submitted to the overnment Quality Assurance
- presentative (QAR) for review prior to implementation. Rework procedures are subject to the QAR's disapproval.
- c. Repair procedures shall be documented by the Contractor and submitted on a Request for Deviation/Waiver, DD Form 1694, to the

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Contracting Officer for

review and written approval prior to implementation.

d. Whenever the Contractor submits a repair or rework procedure for Government review, the submission shall also include a description of the cause

for the nonconformances and a description of the action taken or to be taken to prevent recurrence.

e. The rework or repair procedure shall also contain a provision for reinspection which will take precedence over the Technical Data Package

requirements and shall, in addition, provide the Government assurance that the reworked or repaired items have met reprocessing requirements.

(End of clause)

(ES7012)

E-10

52.246-4532

LOCAL

DESTRUCTIVE TESTING

MAY/1994

- a. All costs for destructive testing by the Contractor and items destroyed by the Government are considered as being included in the contract unit price.
- b. Where destructive testing of items or components thereof is required by contract or specification, the number of items or components required to be destructively tested, whether destructively tested or not, shall be in addition to the quantity to the delivered to the Government as set forth in the Contract Schedule.
- c. All pieces of the complete First Article shall be considered as destructively tested items unless specifically exempted by other provisions of this contract.
- d. The Contractor shall not reuse any components from items used in a destructive test during First Article, lot acceptance or .- improcess testing, unless specifically authorized by the Contracting Officer.
 - e. The Government reserves the right to take title to all or any items or components described above. The Government may take title to all or any items or components upon notice to the Contractor. The items or components of items to which the Government takes title shall be shipped in accordance with the Contracting Officer's instructions. Those items and components to which the Government does not obtain title shall be rendered inoperable and disposed of as scrap by the Contractor.

(End of clause)

(E\$7011)

B-11

92.246-4550

LOCAL.

CRITICAL CHARACTERISTICS

FBB/2004

- a. The contractors processes shall be designed to prevent the creation or occurrence of critical nonconformances. The contractor shall establish, document and maintain specific procedures, work and handling instructions and process controls relating to any critical characteristics.
- b. The contractor shall assure his critical processes are robust in design such that product and performance are relatively insensitive to design and manufacturing parameters. A robust design anticipates changes and problems. Robust processes shall be designed to yield less than one nonconformance in one million.
- c. An inspection/verification system shall be employed that will verify the robustness of your critical processes. Maximum use should be made of automated inspection equipment to accomplish verification of product quality. Mistake proofing techniques of your material handling and inspection systems are encouraged.
- d. Previous Practices/Special Characteristics. As a result of previous practices, the governments technical data may refer to Critical (not annotated with I or II) and Special characteristics. Characteristics classified as Critical (not annotated with a I or II) shall be subject to all requirements herein associated with Critical (I) characteristics and level I Critical nonconformances. Unless otherwise stated in Section C, characteristics classified as Special shall be subject to all requirements herein associated with Critical (II) and Level (II) Critical nonconformances.
- --e. Contractor Identified Critical Characteristics List (CICCL). Not including critical characteristics defined in the governments technical data (drawings, specifications, etc.), the contractor shall identify and document all material, component, subassembly and sembly characteristics whose nonconformances may result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product. All additional critical characteristics identified by the contractor shall comply with the critical characteristic requirements of the technical data package, supplemented herein. The contractors additional critical characteristics

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shall be classified as Critical (I) or Critical (II), and shall be reviewed and approved by the procuring activity prior to manufacturing (DI-SAFT-80970A). The following definitions are provided.

Level I critical nonconformance. A nonconformance of a critical characteristic that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product; or a nonconformance that judgment and experience indicate would prevent performance of the tactical function of a weapon system or major end item. The following (as a minimum) are classified as Level I critical nonconformances:

- (1) A nonconformance that will result in a hazardous or unsafe condition (often referred to as a single point failure).
- (2) A nonconformance that will remove or degrade a safety feature (such as those in a safe and arm device or fuzing system).
- (3) A nonconformance that will result in violation of mandatory mafety policies or standards.

Level II critical nonconformance: A nonconformance of a critical characteristic, other than Level I. This includes the nonconformance of a characteristic that judgment and experience indicate may, depending upon the degree of variance from the design requirement, the presence of other nonconformances or procedural errors:

- (1) result in a hazardous or unsafe conditions for individuals using, maintaining or depending upon the product, or
- (2) prevent performance of the tactical function of a major end item.
- f. In the event that a Critical monconformance is found anywhere in the production process, the contractor, as part of his quality system, shall have procedures in place to ensure:
- (1) The nonconformance is positively identified and segregated so that there is no possibility of the item inadvertently reentering the production process. This control shall be accomplished without affecting or impairing subsequent defect analysis.
- (2) The operation that produced the defective component or assembly and any other operations incorporating that component or assembly is immediately stopped.
- (3) The government is immediately notified of the critical nonconformance (telephonically and electronic mail.) (DI-SAFT-#0970A).
- (4) Any suspect material (material in process that may contain the same defect) is identified, segregated and suspended from any further processing.
- (5) An investigation is conducted to determine the cause of the deficiency and required corrective actions. A report of this investigation shall be submitted to the government (DI-SAFT-\$0970A). The use of the DID report shall not delay notification to the government.
- (6) A request to restart manufacturing or to use any suspect material associated with the critical nonconformance is submitted to the government (DI-SAFT-80970A). Restart of production shall not occur until the investigations are complete or upon authorization om the producing contracting officer. All objective evidence of the investigations to date shall be available for review at the time restart. Suspect material found to be nonconforming shall not be used without Government approval.
 - §. The contractor may develop alternative plans and provisions relative to government or contractor identified Critical level (I) and Critical Level (II) characteristics. The provisions shall be submitted to the government for advanced approval and shall address the following:
 - (1) Complete explanation of potential failure mode(s) together with supporting historical and statistical data.
 - [2] Pre-established plan of action (POA) to be taken when a critical nonconformance occurs and a description of controls to ensure there is no possibility of the nonconforming item inadvertently entering the production process.
 - (3) Means of tracking nonconformance rate, investigative results and corrective actions taken.
 - (4) Method to immediately verify that a produced critical nonconformance is consistent with the identified failure mode(s) and does not exceed the historical nonconformance rate.

The contractor can resume production without specific government approval based upon the pre-approved alternate plans and provisions for Critical (I) characteristics and level (I) Critical monconformances and Critical (II) characteristics and level (II) Critical monconformances.

- h. If a critical nonconformance is discovered during further processing or loading, the original manufacturer who introduced the critical nonconformance shall bear responsibility for the nonconformance.
- i. The Government Quality Assurance Representative will perform the surveillance actions necessary to ensure compliance with this clause.

(End of clause)

(ES7500)

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SECTION P - DELIVERIES OR PERFORMANCE

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DoD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated herein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schedule.

Any company/individual wishing to purchase a copy of the Federal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402.

(FA7001)

	Regulatory Cite	Title	Date
F-1	52.211-17	DBLIVERY OF EXCESS QUANTITIES	SEP/1989
F-2	52.242-15	STOP-WORK ORDER	AUG/1989
F-3	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-4	52.247-29	F.O.B. ORIGIN	JUN/1988
F-5	52.247-55	F.O.B. POINT FOR DELIVERY OF GOVERNMENT-FURNISHED PROPERTY	APR/1984
F-6	52.247-58	LOADING, BLOCKING, AND BRACING OF FREIGHT CAR SHIPMENTS	APR/1984
F-7	52.247-59	F.O.B. ORIGIN - CARLOAD AND TRUCKLOAD SHIPMENTS	APR/1984
P-8	52.247-61	F.O.B. ORIGIN-MINIMUM SIZE OF SHIPMENTS	APR/1984
F-9	252.247-7023 DFAR\$	TRANSPORTATION OF SUPPLIES BY SEA	MAY/2002
P-10	52.247-4504 LOCAL	TRANSPORTATION SECURITY REQUIREMENTS FOR CONTRACTOR-TO-CONTRACTOR SHIPMENTS	MAR/2004

- (a) Supplies procured or furnished under this contract/subcontract, which are shipped between two or more contractors, and which are qualified as sensitive in accordance with DoD 5100.76-M (Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives), or are shipped as DOT Class A or B Explosives, require special Transportation Protective Service (TPS) during shipment from all points of origin to all destinations. TPS will be equivalent to the DoD security standard for the applicable sensitive Category or explosive class identified under DoD 4500.9R, Defense Transportation Regulation, parts II and III, as added to or amended by applicable military service policies in accordance with guidance provided by Defense Logistics Agency (DLA)/Defense Contract Management Agency (DCMA).
- (b) Shipper's Defense Contract Management Agency (DCMA) transportation offices will furnish assistance in providing the sensitive dategory of items to be shipped, determining the TPS required, and obtaining the TPS from commercial caxxiers as necessary.
 - (c) This clause must be entered in all contracts/subcontracts at any tier.

(End of clause)

(FS7115)

F-11 52.247-4531 LOCAL COGNIZANT TRANSPORTATION OFFICER

MAY/1993

- (a) The contract administration office designated at the time of contract award, or the office servicing the point of shipment if subsequently designated by the original office, will be the contact point to which the contractor will:
- (1) Submit, as necessary, DD Form 1659, Application for U.S. Government Bill(s) of Lading/Export Traffic Release, in triplicate at least ten days prior to date supplies will be available for shipment;
 - (2) Obtain shipping instructions as necessary for F.O.B. Destination delivery, and
- (3) Furnish necessary information for MILSTRIP/MILSTAMP or other shipment documentation and movement control, soluding air and water terminal clearances.
 - (4) For FMS, at least ten days in advance of actual shipping date the contractor should request verification of "Ship

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to" and "Notification" address from the appropriate DCMAO.

- (b) The contract administration office will provide to the contractor data necessary for shipment marking and freight routing.
- (c) The contractor shall not ship directly to a military air or water port terminal without authorization by the designated point of contact.

(End of clause)

(FS7240)

F-12 47.305-15(E

SPECIAL TRANSPORT/LOADING REQUIREMENTS (HAZARDOUS)

FEB/1996

- (a) In addition to requirements set forth under General Provision, "Loading, Bracing, and Blocking of Freight Car Shipments." rail shipments will be loaded, blocked and braced in accordance with rules and methods contained in the current editions of Uniform Freight Classification, Association of American Railroads Pamphlet No. 14. Circular 42G and Rules Governing Loading of Commodities on Open Top Cars, Bureau of Explosives Tariff No. BOE 6000 publishing Hazardous Materials Regulations of the Department of Transportation, and Bureau of Explosives Pamphlete No. 6, 6A as applicable. Uniform Freight Classification may be procured from the regulatory classification agent covering territory from which shipment will be made. AAR Pamphlets, Circular and Rules may be procured from the Bureau of Explosives, S9 E. Van Buren St., Chicago, IL 60605. Bureau of Explosives Tariff No. BOE 6000 and Burea of Explosives pamphlets may be procured from the Burea of Explosives, Association of American Railroads, 1920 L Street, Washington, D.C. 20036. U.S. Army Defense Ammunition Center (USADAC) approved drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components is specifically applicable to rail loading, blocking and bracing of this item and may be secured by the Contracting Officer or the Defense Contract Management Agancy (DCMA).
- (b) Truck shipments will be loaded, blocked and braced in accordance with rules and methods contained in the current editions of National Motor Preight Classification and American Trucking Association, Inc., Motor Carrier's Explosives and Dangerous Articles
 Tariff, as applicable and effective at the time of shipment. These publications may be procured from the American Trucking Association, c., Tariff Order Section, 1616 P St., N.W., Washington, D.C. 20036. USADACS approved drawings contained within Index of U.S. Army itization, Storage and Outloading Drawings for Ammunition and Components is specifically applicable to motor, loading, blocking and foracing of this item and can be secured from the Contracting Officer or DCMA.
- (c) TOFC "Piggyback" shipments will be loaded, blocked and braced in accordance with Mureau of Explosives Pamphlet No. 6C or ARR Circular No. 43, copies may be obtained from addresses given in para (a) above. USADAC approved drawings contained within Index of U.S. Army Unitization, Storage and Curloading Drawings for Ammunition and Components is specifically applicable to loading, blocking and bracing for TOFC shipments and may be obtained from the Contracting Officer or DCMA.
- (d) Container shipments will be loaded, blocked and braced in accordance with USADAC drawings contained within Index of U.S. Army Unitization, Storage and Outloading Drawings for Ammunition and Components which is specifically applicable to loading, blocking and bracing of container shipments and may be secured from the Contracting Officer or the DCMA.

Except as the carrier(s) may be liable, the contractor shall be liable to the Government for any loss or damage resulting from improper loading and/or furnishing and installing dunnage material by the contractor for shipments to be made under this contract.

(End of clause)

(F87007)

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PRON/		002112111					IN/SIIN W5291	J-04-C-0098	MOD	/AMD		
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FD20200418018 D003AB M14A0M664I AA 2 21 42034000041B1B06F41476026BB \$28017	AAE000	U14A0K194I	AA	2	21	42034909041 B1B 0	6 P 41476026EB	\$29017	4P1K19	W52P1J	\$	843,424.92
0003AB W14A0M664I AA 2 21 42034000041B1B06P41476026BB \$28017		41476038030										
4147603\$030 MIPR4FDSC10109 TOTAL \$ 2,79\$,385.14 PROPER ACCOUNTING OBLIGATED STATION STATION AMOUNT		PD202004180	1 6									
MIPREFOSCIOIOS TOTAL \$ 2,79\$,385.16 PERVICE RECOUNTING OBLIGATED RAMB TOTAL BY ACRN ACCOUNTING CLASSIFICATION STATION AMOUNT	0003AB	W14A0M864I	AA	2	21	42034000041B1B0	674147602 68 3	S26017	4P1M86	W52P1J	\$	3,604.3
TOTAL \$ 2,79\$,385.14 PERVICE ACCOUNTING CLASSIFICATION STATION AMOUNT												
BERVICE ACCOUNTING OBLIGATED ACCOUNTING CLASSIFICATION STATION AMOUNT		MIPR4FDSC10:	109									
NAME TOTAL BY ACRN ACCOUNTING CLASSIFICATION STATION AMOUNT	•									TOTAL	\$	2,798,385.18
NAME TOTAL BY ACRN ACCOUNTING CLASSIFICATION STATION AMOUNT	, a [*]											
	BERVICE								ACCOU	nting		obligated
lrmy AA 21 42034000041B1B06P41476026RB S28017 W52P1J \$ <u>2,798,34</u> 5.10	TAME	TOTAL	BY.	<u>ACRN</u>	ACCOU	NTING CLASSIFIC	ATION		<u>Stati</u>	<u>On</u>		AMOUNT
	rmy		AA		21	42034000041B1B0	6741476026RB	S28017	W52P1	J	\$_	2,758,385.10

Reference No. of Document Being Continued Page 32 of 43 CONTINUATION SHEET P[IN/S[IN WS2P1J-04-C-0058 MOD/AMD dame of Offeror or Contractor: Pyrotecenic specialties inc.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

The following Federal Acquisition Regulation (FAR), DoD FAR Supplement clauses and provisions, the full text of which will be made available upon request, are incorporated herein by reference with the same force and effect as if set forth in full text.

The text of the clauses incorporated by reference herein are available from the contract specialist indicated in block 7 of the Standard Form 33 or (as applicable) the contracting officer and will be furnished upon request. Other documents are available as indicated in the schedule.

Any company/individual wishing to purchase a copy of the Federal Acquisition Regulation (FAR), the Army FAR Supplement or the DOD FAR Supplement, may do so from the Superintendent of Documents, US Government Printing Office, Washington DC 20402.

(HA7001)

	Regulatory Cite	Title	Date
H-1	223.370-	DISPOSAL OF REMAINING GFM AMMUNITION AND EXPLOSIVES FOLLOWING	JUN/1999
	4(A)(3) OSC	CONTRACT COMPLETION OR TERMINATION	
H-2	252.223-7001 DFAR\$	HAZARD MARNING LABELS	DBC/1991

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b) (1) through (5) of this clause instead of the zard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with e Hazard Communication Standard.

> MATERIAL (If none, insert "None") ACT

> > (End of Clause)

(HBS704)

245.7330-1 H-3 **DEMILITARIZATION**

(a) DEMILITARIZATION. Item(s) 0001 AND 0003 require demilitarization by the Furchaser in the manner and to the degree set forth below:

JUE-/1496

- (1) For property located in the United States insert item number(s) and specific demilitarization requirements for item(s) shown in Attachment 1. Part 2 of Defense, Demilitarization Manual;
- (2) For property located outside the United States, insert item number(s) and specific demilitarization requirements for item(s) shown in Attachment 1, Part 3 of DoD 4160.21-M-1, Defense Demilitarization Manual.
- (b) DEMILITARIZATION ON GOVERNMENT PREMISES. Property requiring demilitarization shall not be removed, and title shall not pass to the Purchaser, until demilitarization has been completed and approved by an authorized Contractor and Government representative. Demilitarization will be accomplished as specified in the contract. Components parts vital to the military or lethal purpose of the property shall be rendered unusable. The Purchaser agrees to assume all cost incident to the demilitarization and to restore the working area to its present condition after removing the demilitarized property.
- (c) DEMILITARIZATION ON NON-GOVERNMENT PREMISES. Property requiring demilitarization shall be demilitarized by the Purchaser under supervision of qualified Department of Defense personnel. Title shall not pass to the Purchaser until demilitarization has been completed by the Furchaser and approved by an authorized Contractor and Government representative. Demilitarization will be -complished as specified in the contract. Component parts vital to the military or lethal purpose of the property shall be rendered meable. The Purchaser agrees to assume all costs incident to the demilitarization.
- (d) FAILURE TO DEMILITARIZE. If the Furchaser fails to demilitarize the property as specified in the contract, the Contractor may,

CONTINUATION SHEET Reference No. of Document Being Continued Page 33 of 43 PHN/SIIN W52P1J-04-C-0098 MOD/AMD

Same of Offeror or Contractor: Pyrotechnic specialties inc.

upon giving ten days written notice from date of mailing to the Purchaser --

- (1) Repossess, demilitarize, and return the property to the Furchaser. The Furchaser hereby agrees to pay to the Contract, prior to the return of the property, all costs incurred by the Contractor in repossessing, demilitarizing, and returning the property to the Furchaser.
- (2) Repossess, demilitarize, and resell the property, and charge the defaulting Furchaser with all excess costs incurred by the Contractor. The Contractor shall deduct these costs from the purchase price and refund the balance of the purchase price, if any, to the Furchaser. In the event the excess costs exceed the purchase price, the defaulting Furchaser hereby agrees to pay theses excess costs to the Contractor.
- (3) Repossess and resell the property under similar terms and conditions. In the event this option is exercised, the Contractor shall charge the defaulting Purchaser with all excess costs incurred by the Contractor. The Contractor shall deduct these excess costs from the original purchase price and refund the belance of the pypurchase price, if any, to the defaulting Purchaser. Should the excess costs to the Contract exceed the purchase price, the defaulting Furchaser hereby agrees to pay these excess costs to the Contractor.

(End of clause)

(HA6800)

H-4 52.242-4506

PROGRESS PAYMENT LIMITATION

MAR/1988

OSC

Prior to first article approval, only costs incurred for the first article are allowable for progress payments; however, such payments shall not exceed TBN percent (10%) of the initial award value of the contract.

(End of Clause)

'S6002)

H-5

246.671 LOCAL

MATERIAL INSPECTION AND RECEIVING REPORTS (DD FORM 250)

JAN/1995

Material Inspection and Receiving Report (DD Form 250), required to be prepared and furnished to the Government under the clause of this contract entitled 'Material Inspection and Receiving Report', will be distributed by the Contractor in accordance with DOD FAR Supplement Appendix F, Fart 4.

Send copies to:

- Purchasing Office
 HQ, AFSC
 ROCK IBLAND ARSENAL
 ATTN: AMSFS-CCA-M/JULIE COUGHLIN
 ROCK ISLAND, IL 61299-6500
- 2. Production Management

Purchasing Office HQ, JMC 1 ROCK ISLAND ARSENAL ATTN: SPSJM-CDC/CLIFF DAY ROCK ISLAND, IL 61299-6500

3. Send additional copies to NSWC, CRANE IN in accordance with Table 1 and Table 2.

(End of clause)

(HA6025)

H-6 242-1107(B)

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PRODUCTION PROGRESS

JUN/1996

LOCAL

REPORTS - AMMO (NAVY SPECIAL)

a. Production Progress Report (DD Form 375) and Production Progress Report Continuation (DD Form 375c) shall be prepared in

Reference No. of Document Being Continued

CONTINUATION SHEET

PHN/SIIN WS221J-04-C-0098

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

accordance with instructions thereon. These forms shall be submitted as required for each separate contract item (identified by noun description not by line item number).

b. The form(s) shall be submitted on a monthly basis within two workdays after each reporting period, beginning with the end of the first full month following contract date. In addition, the contractor shall promptly submit a DD Form 375 reporting any delay in the scheduled delivery or completion as soon as known or anticipated. The forms shall be distributed as follows:

1. Purchasing Office:

HQ, AFSC 1 ROCK ISLAND ARSENAL ATTN: AMSFS-CCA-M/JULIB COUGHLIN ROCK ISLAND, IL 61299-6500

2. Administration Office:

See Award Dogument

Production Manager:

HQ, JMC

1 ROCK ISLAND ARSENAL

ATTN: SFSJM-CDC/CLIFF DAY

ROCK ISLAND, IL 61299-6500

- 4. Additional Distribution (As Indicated):
 - () a. Navy Ships Parts Control Center ATTN: Code 852 P.O. Box 2020 Mechanicaburg, PA 17055-0788
 - (X) b. Commanding Officer Naval Weapons Support Center ATTN: Code PN4 Crane, IN 47500-5000
 - () C. Commanding Officer
 Naval Air Systems Command
 ATTN: AIR-11411
 Washington, DC 20361-1140
 - () d. Commander Naval Special Waxfare Command ATTN: N9, NAB Coronado San Diego, CA 92155-5037
 - () e. Commander Naval Warfare Assessment Center ATTN: Code 2063 Foint Mugu, CA 93042-5000

(End of clause)

(HS6027)

H-7 252.247-7023 DFARS TRANSPORTATION OF SUPPLIES BY SEA

MAY/2002

(f)(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written whent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM

CONTRACT

CONTINUATION SHEET		F	Reference No. of Documen	Being Continued	Page 3s of 43	
·	CONTINUATION		PHNA	SHN W52P1J-04-C-0098	MOD/AMD	
Name of	f Offeror or Contractor:	PYROTECHNIC	SPECIALTIE	s INC.		
	DESCRIPTION	LINE	ITEMS	YTITKAUQ		
TOTAL						
		•	(Enc	i of Clause)		
(HA7502)						
H-8	252.247-7024 DFARS	NOTIFICAT	I ON OF TRANS	PORTATION OF SUPPLIES B	y sea	NOV/1995
***			(End	of clause)		
(HA7503)					•	
H-9	52.247 -4545 QSC	place of (CONTRACT SHI	PRING POINT, RAIL INFOR	MATION	MAY/1993
The bidde section.		in the 'Ship	ped From' ad	drass, if different fro	m 'Place of Performance'	indicated elsewhere in this
	Shipped From:					
	· · · · · · · · · · · · · · · · · · ·					
, z*						
. <u>-</u>						
for Contr	racts involving F.O.B.	Origin ship	ments furnis	h the following rail in	formation:	
	Does Shipping Point h	ave a privat	e railroad	siding//// YES	NO	
	If YES, give name of	rail carries	serving it	·		•
	If No, give name and	address of :	earest rail	freight station and car	rrier serving it:	
	Rail Freight Station	Name and Ado	lxess:			
	Serving Carrier:	.				
			(End of C	lause)		
	(RS7600)					•

CONTINUATION SHEET

Reference No. of Document Being Continued

PIIN/SIIN W52P1J-04-C-0091

MOD/AMD

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

SECTION I - CONTRACT CLAUSES

For Local Clauses See: http://www.afsc.army.mil/ac/aais/ioc/clauses/index.htm

		Regulatory Cite	Title	Date
	I-1	52.202-1	DEFINITIONS	DEC/2001
	1-2	52.203-3	GRATUITIES	APR/1984
	I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1964
	I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL/1995
	I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
٠	I-6	52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
	I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
	1-4	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JUN/2003
	1-9	52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
	I-10	52.204-7	CENTRAL CONTRACTOR REGISTRATION	QCT/2003
	1-11	52.209-€	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH	JUL/1995
			CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	
	I-12	52.21 1-S	MATERIAL REQUIREMENTS	AUG/2000
	I-13	52.211-15	DEPENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
	1-14	52.213-2	AUDIT AND RECORDS - NEGOTIATION	JUN/1999
	I-15	52.215-4	ORDER OF FRECEDENCE-UNIFORM CONTRACT FORMAT	QCT/1997
	I-16	52.215-14	INTEGRITY OF UNIT PRICES	OCT/1997
	X-17	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	JUN/2003
	I-16	52.219-8	utilization of small adsiness concerns	MAY/2004
	I-19	52.222-19	CHILD LABOR-COOPERATION WITH AUTHORITIES AND REMEDIES	JAN/2004
	I-20	52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	DEC/1996
	I-21	52.222-26	EQUAL OPPORTUNITY	APR/2002
	1-22	52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	DEC/2001
- 1	I-23	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1996
	1-24	52.222-37	employment reports on special disabled veterans, veterans of the vibtnam era, and other eligible veterans	DEC/2001
	I-25	\$2,223-6	DRUG-PREE WORKPLACE	MAY/2001
	1-26	52.229-3	FEDERAL, STATE, AND LOCAL TAKES	APR/2003
	1-27	52.232-1	PAYMENTS	APR/1984
	I-29	52.232-4	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
	I-29	52.232-11	EXTRAS	APR/1984
	1-30	52.232-16	PROGRESS PAYMENTS (APR 2003) - ALTERNATE I	MAR/2000
	I-31	52.232-17	INTEREST	JUN/1996
	1-32	52.232-23	ASSIGNMENT OF CLAIMS (JAN 1996) - ALTERNATE I	APR/1984
	Z-33	52,232-25	PROMPT PAYMENT	OCT/2003
	1-34	52,232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR	OCT/2003
			REGISTRATION	,
	X-35	52.233-1	DISPUTES	JUL/2002
	I-36	52.233-3	PROTEST AFTER ANARD	AUG/1996
	I-37	52,242-2	PRODUCTION PROGRESS REPORTS	APR/1991
	I-38	52.242-12	REPORT OF SHIPMENT (REPSHIP)	JUN/2003
	1-39	52.242-13	MANKRUPTCY	JUL/19#S
	I-40	\$2,243-1	CHANGES - FIXED FRICE	AUG/1947
	I-41 I-42	52.243-7	NOTIFICATION OF CHANGES	APR/1984
	1-43	52. 244~5 52.246-1	COMPETITION IN SUBCONTRACTING	DEC/1996
	1-44	52.246-23	CONTRACTOR INSPECTION REQUIREMENTS LIMITATION OF LIABILITY	APR/1984
	I-45	\$2.247-63		FEB/1997
	1-46	52,248-1	PREFERENCE FOR U.S PLAG AIR CARRIERS VALUE ENGINEERING	JUN/2003
	I-47	52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)	FEB/2000 MAY/2004
	I-48	52.249-8	DEPAULT (FIXED-PRICE SUPPLY AND SERVICE)	MAY/2004 APR/1984
	I-49	52.253-1	COMPUTER GENERATED FORMS	
	I-50	252,203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-	JAN/1591 WAR/1808
		4501203-1407	RELATED FELONIES	MAR/1999
	I-51	252.203-7002 DFARS	DISPLAY OF DOD HOTLINE POSTER	DEC/1991
	I-52	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

	Regulatory Cita DEARS	Title	Date
I-53	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
	DFARS		
I-54	252,204-7004	REQUIRED CENTRAL CONTRACTOR REGISTRATION	NOV/2003
	DFARS		
I-55	252.205-7000 DFARS	FROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
1-56	252.209-7000 Dfars	ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ON-SITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY	NOV/1995
I-57	252.219.7011 DFARS	NOTIFICATION TO DELAY PERFORMANCE	JUN/1998
1-58	252.223-7002 DFARS	SAFETY PRECAUTIONS FOR AMMUNITION AND EXPLOSIVES	MAY/1994
I-59	252.223-7003 DFARS	CHANGE IN PLACE OF PERFORMANCE-AMMONITION AND EXPLOSIVES	DEC/1991
1-40	252.223-7004 DFARS	DRUG-FREE WORK FORCE	SEP/1988
I- 6 1	252.225-7012 DFARS	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	MAY/2004
I-62	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	OCT/2003
1-63	252,231-7000 DFARS	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
I- 6 4	252.232-7003 DPARS	ELECTRONIC SUBMISSION OF PAYMENT REQUESTS	JAN/2004
1-65	252.232-7004 DFARS	DOD PROGRESS PAYMENT RATES	OCT/2001
I- 6 6	252.242+7000 DFARS	POSTAWARD CONFERENCE	DEC/1991
I-67	252.242-7004 DFARS	MATERIAL MANAGEMENT AND ACCOUNTING SYSTEM	DEC/2000
I-6 8	252.243-7001 DFARS	PRICING OF CONTRACT MODIFICATIONS	DEC/1991
t-6 9	252,245-7001 DFARS	REPORTS OF GOVERNMENT PROPERTY	MAY/1994
-70	252.246-7000 DFARS	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2003
E-71	52.209-4	FIRST ARTICLE APPROVAL-GOVERNMENT TESTING	SEP/19#9

(a) The Contractor shall deliver *_unit(s) of Lot/Item * within ** calendar days from the date of this contract to the Government at NSWC CRANE, IN for first article tests. The shipping documentation shall contain this contract number and the Lot/Item identification. The characteristics that the first article must meet and the testing requirements are specified elsewhere in this contract.

(b) Within 60 calendar days after the Government receives the first article, the Contracting Officer shall notify the Contractor, in writing, of the conditional approval, approval, or disapproval of the First article. The notice of conditional approval or approval shall not relieve the Contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the Contractor. A notice of disapproval shall cite reasons for the disapproval.

* (See instructions regarding submission of First Article clause)

** (See Schedule B)

(End of clause)

(IF8003)

EVALUATED OPTION FOR INCREASED QUANTITY

MAR/1989

CONTINUATION SHEET Reference No. of Document Being Continued Page 38 of 43 PIIN/SIIN N52P1J-04-C-0058 MOD/AMD

Name of Offerer or Contractor: PYROTECHNIC SPECIALTIES INC.

- a. This solicitation includes an evaluated option (See Section M).
- b. The Government reserves the right to increase the quantity of item(s) 0001 AND 0003 by a quantity of up to and including but not exceeding 150 percent as an evaluated option at the price(s) quoted below.
- c. If the Contractor does not quote a price hereundar, the lowest price offered/bid in the Schedule for item(s) 0001 AND 0003 shall be the price used for evaluation/award of any option quantities. All evaluation factors identified in the solicitation, except F.O.B. origin transportation costs, will be applied to the option quantity for evaluation purposes.
- d. The Contracting Officer may exercise the evaluated option at any time preceding ACCEPTANCE OF \$0% OF THE BASIC CONTRACT QUANTITY by giving written notice to the Contractor.
- e. Delivery of the items added by exercise of this option shall continue immediately after, and at the same rate as delivery of like items called for under the contract, unless the parties agree otherwise.
 - f. Subject to the limitations contained in this clause, the Government may exercise this option on one or more occasions.
 - g. Offered Unit Prices for the Option Quantities are:

Onit Price

\$42.00______ CLIN 0001

\$42.00_____CLIN 0003

Evaluated Option (F.O.B. Origin)

Varying prices may be offered for the option quantities actually ordered and the dates when ordered. In as much as the unit price for the basic quantity may contain starting, load, testing, tooling, transportation or other costs not applicable to option quantities, ferors are requested to take these factors into consideration while setting forth the unit price(s) for the option quantities. The tion price is expected (but not required) to be lower than the unit price for the initial quantity.

(End of Clause)

(IF60#0)

-73 52,243-7 MOTIFICATION OF CHANGES

APR/1984

- (a) Definitions. "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer. "Specifically Authorized Representative (SAR)." as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this paragraph and shall be issued to the designated representative before the SAR exercises such authority.
- (b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within ______ (to be negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oxal communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state-
 - (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
 - (3) The identification of any documents and the substance of any oral communication involved in such conduct;
 - (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including-
 - (i) What contract line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
- (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued _performance have been or may be caused by the alleged change;
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are timated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost. delay or disruption of performance.

CONTROL TION CINETE	Reference No. of Document Be	Page 39 of 43	
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ame of Offeror or Contractor: PYROTECHNIC	SPECIALTIES INC.		

- (c) Continued performance. Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.
- (d) Government response. The Contracting Officer shall promptly, within 15 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either-
- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
 - (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under paragraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.
 - (e) Equitable adjustments.
- (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made-
 - (i) In the contract price or delivery schedule or both; and
 - (ii) In such other provisions of the contract as may be affected.
- (2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay assonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the miractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

Note: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of clause)

(IP6250)

I-74 52.246-17 WARRANTY OF SUPPLIES OF A NONCOMPLEX NATURE JUN/2003

- (b) Contractor's obligations.
- (1) Notwithstanding inspection and acceptance by the Government of supplies furnished under this contract, or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that for 1095 DAYS AFTER ACCEPTANCE.
 - (c) Remedies available to the Government.
- (1) The Contracting Officer shall give written notice to the Contractor of any breach of warranties in paragraph (b)(1) of this clause within 45 days after discovery of the defect.

(End of clause)

`TF6070)

-75 252.223-7007 SAFEGUARDING SENSITIVE CONVENTIONAL ARMS, AMMUNITION, AND EXPLOSIVES SEP/1999

CONTINUATION SHEET

Reference No. of Document Being Continued

PHN/SHN W52P1J-04-C-0098

MOD/AMD

Page 40 of 43

Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

DFARS

- (a) Definition. Arms, ammunition, and explosives (AAAE), as used in this clause, means those items within the scope (chapter 1, paragraph B) of DoD 5100.76-M. Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives.
- (b) The requirements of DoD 5100.76-M apply to the following items of AARE being developed, produced, manufactured, or purchased for the Government, or provided to the Contractor as Government-furnished property under this contract:

NOMENCLATURE

NATIONAL STOCK NUMBER

SENSITIVITY/CATEGORY

MK124-0 SIGNAL

1370-01-144-3561 AND

IV

1370-01-030-3310

- (c) The Contractor shall comply with the requirements of DoD 5100.76-M, as specified in the statement of work. The edition of DoD 5100.76-M in effect on the date of issuance of the solicitation for this contract shall apply.
- (d) The Contractor shall allow representatives of the Defense Security Service (DSS), and representatives of other appropriate offices of the Government, access at all reasonable times into its facilities and those of its subcontractors, for the purpose of performing surveys, inspections, and investigations necessary to review compliance with the physical security standards applicable to this contract.
- (e) The Contractor shall notify the cognizant DSS field office of any subcontract involving AASE within 10 days after award of the subcontract.
 - (f) The Contractor shall ensure that the requirements of this clause are included in all subcontracts, at every tier
 - (1) For the development, production, manufacture, or purchase of AA&E; or
 - (2) When AAGE will be provided to the subcontractor as Government-furnished property.
- (g) Nothing in this clause shall relieve the Contractor of its responsibility for complying with applicable Federal, state, and hotal laws, ordinances, codes, and regulations (including requirements for obtaining licenses and permits) in connection with the erformance of this contract.

(End of clause)

(IA6200)

I-76 52.209-3

FIRST ARTICLE APPROVAL -CONTRACTOR TESTING (SEP 85) - ALTERNATE I

**

(End of clause)

(IP7019)

I-77 52.252-

AUTHORIZED DEVIATIONS IN CLAUSES

APR/1984

JAN/1997

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (49 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of ''(DEVIATION)'' after the date of the clause.
- (b) The use in this solicitation or contract of any DOD FAR SUPPLEMENT (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of ''(DEVIATION)'' after the name of the regulation.

(End of clause)

{IF7016}

T-72

252.211-7005 SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS

FEB/2003

(a) Definition. SPI process, as used in this clause, means a management or manufacturing process that has been accepted reviously by the Department of Defense under the Single Process Initiative (SPI) for use in lieu of a specific military or Federal ecification or standard at specific facilities. Under SPI, these processes are reviewed and accepted by a Management Council, which ancludes representatives of the Contractor, the Defense Contract Management Agency, the Defense Contract Audit Agency, and the military departments.

COMPINITATION CITORE	Reference No. of Document B	eing Continued	Page 41 of 43
CONTINUATION SHEET	PHN/SHN W52P1J-04-C-0094	MOD/AMD	
same of Offeror or Contractor: PYROTECHNIC	SPECIALTIES INC.		
(b) Offerors are encouraged to propose limitation. A listing of SPI processes at tp://www.doma.mil/onebcok/7.0/7.2./7.2.6/2	ccepted at specific facilities is av	_	
(c) An offeror proposing to use an Si	PI process in lieu of military or Fe	deral specifications or :	standards cited in the
(1) Identify the specific mil (2) Identify each facility at secifications or standards cited in the sol (3) Identify the contract liv	ne items, subline items, components, ass has been accepted at the facility	or elements affected by y at which it is proposed	in lieu of military or Fede the SPI process; and i for use, but is not yet li
rocess.			
(d) Absent a determination that an SP cocesses in lieu of military or Federal spe	-	s procurement, the Contra	actor shall use the following
Offeror insert information for each SET pro	ccess)		
I Process:			
cility:			
litary or Federal Specification or Standar	rd:		
fected Contract Line Item Number, Subline	Item Number, Component, or Element:		
(e) If a prospective offeror wishes to coess is an acceptable replacement for miliferor (1) May submit the information		standards required by the	solicitation, the prospect
offer; but	on to the Contracting Officer at lea		
	(End of clause)		
A7015)			
I-79 252.243-7002 REQUESTS FO DFARS *	r equitable adjustment		MAR/1998
(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjust e of submission, the following certi	ment to contract terms t	hat exceeds the simplified

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official s	Name)

CONTINUATION SHEET

Reference No. of Document Being Continued

PHN/SHN W52P1J-04-C-009#

MOD/AMD

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Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

(Title)

(End of clause)

(IA7035)

1-80

\$2,201-4500

AUTHORITY OF GOVERNMENT REPRESENTATIVE

FEB/1993

OSC

AUTHORITY OF GOVERNMENT REPRESENTATIVE

52.201-4500 OSC

(PEB 1993)

The Contractor is advised that contract changes, such as engineering changes, will be authorized only by the Contracting Officer or his representative in accordance with the terms of the contract. No other Government representative, whether in the act of technical supervision or administration, is authorized to make any commitment to the Contractor or to instruct the Contractor to perform or terminate any work, or to incur any obligation. Project Engineers, Technical Supervisors and other groups are not authorized to make or otherwise direct changes which in any way affect the contractual relationship of the Government and the Contractor.

(End of clause)

(IS7025)

CONTINUATION SHEET

Reference No. of Document Being Continued

Page 43 of 43

PHN/SHN W52PlJ-04-C-0098

MOD/AMD

Name of Offeror or Contractor: PYROTECHNIC SPECIALTIES INC.

SECTION J - LIST OF ATTACHMENTS

List of		•		Number	
Addenda		Title	Date	of Pages	Transmitted By
Exhibit A		CONTRACT DATA REQUIREMENTS LIST DD FORM 1423 FOR CLIN 0001			
Exhibit B		CONTRACT DATA REQUIREMENTS LIST DD FORM 1423 FOR CLIN 0003			
Attachment	001	DATA DELIVERY DESCRIPTION-ECP			
Attachment	002	DATA DELIVERY DESCRIPTION-RFD			•
Attachment	003	DOCUMENT SUMMARY LIST FOR CLIN 0001			
Attachment	004	ADDRESS CODE DISTRIBUTION ECP/RFD/VECP			
Attachment	005	ADDRESS LIST			
Attachment	006	GUIDANCE FOR DD FORM 1423			•
Attachment	007	INSTRUCTION FOR COMPLETING DD FORM 1423			
Attachment	800	IOC FORM 715-3 DEFENSE PRIORITY AND ALLOCATION SYSTEM			
Attachment	909	10C FORM 715-4 LISTING OF GOVERNMENT OWNED PROPERTY			
Attachment	010	DISCLOSURE OF LOBBY ACTIVITIES/STD FORM LLL			
Attachment	011	INCREASE YOUR PROFITS THROUGH VALUE ENGINEERING			•
Attachment	012	CD FROM TECHNICAL DATA PACKAGE			
Attachment	013	LIST OF GOVERNMENT FURNISHED MATERIAL			
Attachment	014	SECTION L. PAST PERFORMANCE INFORMATION 15.305(A)(2)(II)			
		OCTOBER 1997 AND OTHER REQUIRED INFORMATION			
Attachment	015	SECTION M, EVALUATION FACTORS FOR AWARD (BASIS FOR AWARD,			
		FACTORS AND SUBFACTORS TO BE EVALUATED, EVALUATION			
		APPROACH) 15.204-5(C) OCT 1997			
Attachment	016	SECTION M, EVALUATION FACTORS AND SIGNIFICANT SUBFACTORS FOR			
		AWARD 15.304-5(C) OCTOBER 1997			
Attachment	017	SECURITY SOW			
Attachment	018	DOCUMENT SUMMARY LIST FOR CLIN 0003			
ttachment	019	HAZARDOUS WARNING LABEL AFSC FORM 715-7		001	

From: Coughlin, Julie A USA CIV (US)
To: "nsi.bobhirst@windstream.net"

Cc: Pierce, Ryan C USA CIV (US); Coughlin, Julie A USA CIV (US)

Subject: W52P1J-04-C-0098

 Date:
 Monday, September 26, 2011 1:30:00 PM

 Attachments:
 PSI MK124 T4D Notice 26 Sep 2011.pdf

Importance: Hig

Mr. Hirst,

Attached please find official Government correspondence regarding Notification of Termination for Default under subject contract. The original will be sent to you via return receipt mail. If you have further questions please contact the Procuring contracting officer Mr. Ryan Pierce (309) 782-8446.

Julie A. Coughlin HQ, Army Contracting Command, Rock Island Contracting Center

ATTN: CCRC-AM 1 Rock Island Arsenal Rock Island, IL 61299-6500 Phone: (309) 782-6139 FAX: (309) 782-5713

email: julie.a.coughlin.civ@mail.mil



DEPARTMENT OF THE ARMY ARMY CONTRACTING COMMAND -- ROCK ISLAND 1 ROCK ISLAND ARSENAL ROCK ISLAND, IL 61299-8000

CCRC-AM

26 September 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

SUBJECT: Contracting Officer Determination to Terminate for Default and Final Decision re: Contract No. W52P1J-04-C-0098, Pyrotechnic Specialties, Inc., MK124 Smoke & Illum Signal

Mr. Robert Hirst Pyrotechnic Specialties, Inc. 1661 Juniper Creek Rd. Byron, GA 31008

Dear Mr. Hirst.

Reference:

- a. Contract No. W52P1J-04-C-0098
- b. Letter, Army Contracting Command Rock Island, dated 29 June 2011. Cure Notice
- c. Pyrotechnic Specialties, Inc. Letter dated July 11, 2011, Reponse to Cure Notice
- d. Letter, Army Contracting Command Rock Island, dated 9 September 2011, Show Cause Notice
- e. Pyrotechnic Specialties, Inc. Letter dated 14 September 2011, Response to Revised Show Cause Notice

Determination to Terminate and Final Decision

The Government has reviewed all the information and matters relevant to the Cure Notice and Show Cause letters and PSI's response to the same referenced above. As a result of this review, it is the determination of the Contracting Officer that the above referenced contract is hereby terminated for default, pursuant to the Default Clause FAR 52.249-8 of the contract. The reasons therefore and further instructions in regard to the Default action are set forth below.

I. Review and Relevant Facts

- a. On 27 September 2004 the U.S. Army Field Support Command (now the Army Contracting Command Rock Island) awarded a contract to Pyrotechnic Specialties Inc., located in Byron, GA, Contract W52PlJ-04-C-0098 for the quantity of 42,228 each MK124 Signals at a unit price of \$46.21 for a total contract award of \$2,798,385.18. In the following years, additional quantities were added to the contract for a total quantity of 152,180 and a total dollar amount of \$7,575,305.82.
- b. The Government issued reference b. Cure Notice to Pyrotechnic Specialties Inc. on 29 June 2011, informing Pyrotechnic Specialties,

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Inc. that the Government considered PSI's recent failure to pass consecutive First Article Tests to be a condition endangering performance of the contract. PSI was further notified that, unless the condition was cured within ten (10) days after receipt of the notice, the Government may terminate for default under the terms and conditions of clause 52.249-8, Default (Fixed-Price Supply and Service).

Response from PSI was due 10 days from the date of receipt of this letter, or 11 July 2011.

- c. On 11 July 2011 PSI's response to the Government's Cure Notice was received (reference c.). Below are the key issues PSI provided as rationale regarding recent failures and their plan of action for successful contract performance and completion:
- (1) PSI claims cause of function, delay and display time failures are attributable to the age of the ignition disks used. They were assembled in 2008 and had been in storage since that time.
- (2) The Air Force CLINs will be completed by the September 2, 2011 requirement. Inventories of candles and subassemblies have been built ahead. The quantity required will be manufactured with an experienced crew of 10 employees.
- (3) PSI will recruit, hire and train additional employees over the next three months to meet the manpower requirements of the remaining part of the schedule. All new employees will go through a formal training program. Each employee will have to meet a qualification standard of job proficiency before working on the production line.
- (4) All suppliers are able deliver raw materials to meet the requirements of the schedule provided below.

SCHEDULE

Lot 1 - 5,400 - Complete 8/5/11 Lot 2 - 17,128 - Complete 9/2/11 Lot 3 - 10,000 - Complete 1/13/12 Lot 4 - 10,000 - Complete 3/2/12

Lot 5 - 5,397 - Complete 4/13/12

The above schedule was reviewed and modified slightly by PSI (and subsequently incorporated into the contract via Modification PT0035) to the following:

Lot 1 - 5,400 - Accept Date 8/17/11 Lot 2 - 9,416 - Accept Date 8/31/11 Lot 3 - 7,712 - Accept Date 9/14/11 Lot 4 - 10,000 - Accept Date 1/25/12 Lot 5 - 10,000 - Accept Date 3/14/12 Lot 6 - 5,397 - Accept Date 4/18/12

d. The Government issued reference d. Show Cause Letter on 9
September 2011 after PSI failed to deliver acceptable product in
accordance with the contractual delivery schedule. Specifically, Lot
2 (9,416 Signals due 31 August 2011) was rejected by DCMA due to
several quality-related failures encountered during the Lot Acceptance

Test (LAT). The rejection of this lot placed 9,416 signals into a delinquent status per the contractual schedule proposed by PSI to cure the conditions endangering performance as described to PSI in the Cure Notice referenced at attachment 002 to this MFR.

Response from PSI was due 10 days from the date of receipt of this letter, or 19 September 2011.

- e. On 14 September 2011 PSI's response to the Show Cause notice was received (reference e.). Below are the key issues that PSI provided as rationale to support a determination not to terminate for default the contract.
- (1) The root cause of the delinquency on the contract is clearly due to the sealing disk in the TDP.
- (2) PSI successfully resolved the problem with the sealing disk.
- (3) It took PSI until March of 2011 to complete work on qualifying the new disk.
- f. The Government has reviewed the facts provided in PSI letter dated 14 September 2011 and have found that PSI did not provide a detailed response sufficient to demonstrate that your failure to perform arouse out of causes beyond your control and without fault or negligence on your part.

The following is the Government's response to the assertions in reference e. letter:

PSI's claim that the delinquency is "clearly" due to the sealing disk is unfounded/irrelevant, particularly as it pertains to the CURRENT contractual schedule, which was revised on 25 July 2011 based upon PSI's response to the 29 June 2011 Cure Notice. As PSI states in numbered paragraph 2 of the Show Cause response, the sealing disk issue has apparently been successfully resolved since the new disk was introduced into production in July 2011 (performing perfectly according to PSI). If the sealing disk issue has been solved since July, then the most recent quality issues/failures cannot be blamed on a defective TDP. Additionally, documentation exists showing that PSI has recently failed to follow procedures and/or has mishandled product during LATs (Government reports as well as admission by PSI in an RFD). The delinquency against the CURRENT schedule is due to the aforementioned contractor quality-related failures and not a defective TDP, regardless of what may have happened in the past under this contract.

PSI's numbered paragraph 3 discusses the window of opportunity to complete Air Force CLINs, which implies that the Show Cause notice was issued primarily because PSI could not finish the expiring CLINs quickly enough, which is not the case. The Show Cause notice was issued due to quality workmanship/ procedural problems exhibited by PSI on every single FAT/LAT conducted in recent history. Again - the delay in the CURRENT (25 July 2011) schedule simply cannot be attributable to the time it took to find a suitable replacement for the "faulty" sealing disk since PSI has already admitted that the new

disk (implemented in July 2011) performs perfectly. The replacement was already determined and implemented by the time the current schedule was incorporated.

While it is true that Lot 1 was accepted on deviation for ONE long display time on the smoke end of the signal, that was the extent of the quality problems on that lot. Lot 2, however, encountered significantly more problems (leaker, 20+ long burns, leaker during T&V (hole in sealing disk due to improper handling), drop test done incorrectly, Tay test performed without protective caps, etc.). Further, during the quality production surveillance for Lot 3 LAT, a critical escape was discovered by the DCMA QAR. The smoke end striker did not line up with the primer holder. A Corrective Action Request (CAR) was issued and production halted pending 100% screening. after this issue was resolved the lot failed the test in two categories. Sample number 48 failed the 100% leak test. Sample number 48 was part of the ambient subgroup, with testing criteria as accept on 0 and reject on 1. Multiple signals (on the smoke side) from the low temperature subgroup and the ambient subgroup exceeded the burn time requirement of 25 seconds which results in a failure to meet the LAT requirements. Also sample number 48 did not ignite during the function portion of the testing. Again, Lot 1 was accepted on RFD because there was only one long display time, whereas Lots 2 and 3 were rejected by DCMA due to several failure modes. There is no evidence that a Government employee with authority to bind the Government, i.e. a Contracting Officer, ever said that Lots 2 or 3 would be accepted. Regardless, any indication of acceptability of the failed lots was not an official position relayed through the PCO.

II. Government Termination Decision

Based upon Pyrotechnic Specialties failure to show the Government reasonable cause not to terminate their contract for default, this letter is a Notice of Termination of Contract No. W52PlJ-04-C-0098 awarded 24 September 2004 to Pyrotechnic Specialties, Inc., for the remaining quantity of 48,719 MK124 Signals for a total dollar amount of \$1,850,496.52. The Government exercises its right under contract clause 52.249-8 Default (Fixed-Priced Supply and Service) of the aforementioned contract. The act of failing to deliver acceptable product in accordance with the delivery schedule is a failure to meet the following provisions in PSI contract:

- a. Section B Delivery Schedule Modification PT0035
- b. Clause C-1 Drawings/Specifications 52.210-4501 (March 1988); TDP for the Mk124 Signal, AUTOMATED DATA LIST (ADL) 3139734 REV G; Weapons Specification (WS) 13697N, dated 8 March 1994
- c. Clause E-3 First Article Test (Government Testing) 52.209-4511 (May 1994)
- d. Clause E-5 Higher Level Contract Quality Requirement 52.246-11 (Feb 2004)
 - e. Clause E-11 Critical Characteristics 52.246-4550 (Feb 2004)

Pyrotechnic Specialties Inc's failure to meet the requirements of the contract listed above, among others, violated the terms of their contract and hereby constitutes the default.

III. Appeal Rights

Pyrotechnic Specialties has the right to appeal this decision to terminate under contract clause 52.233-1 Disputes of this contract. Established within this clause is the right to appeal in accordance with Contract Disputes Act of 1978, Public Law 95-563 (codified at 41 U.S.C. Section 601 et.seq) to the Armed Services Board of Contract Appeals (ASBCA). If you wish to appeal, PSI must mail or otherwise furnish written notice thereof to the ASBCA within 90 days after the date of receipt of this notice. In lieu of appealing to the ASBCA, PSI may bring an action directly in the U.S. Court of Claims (except as provided in the Contract Disputes Act of 1978, 41 U.S.C. 603, regarding Maritime Contracts) within 12 months of the date you receive this decision.

IV. Action required Upon Termination

In accordance with FAR Part 49 you should take the following steps for cessation of work and notification to immediate subcontractors.

- (1) Stop all work, make no further shipments, and place no further orders relating to the contract, except for -
 - (i) The continued portion of the contract, if any;
- (ii) Work-in-process or other materials that you may wish to retain for your own account; or
- (iii) Work-in-process that the Contracting Officer authorizes you to continue
 - (A) for safety precautions,
 - (B) to clear or avoid damage to equipment,
- (C) to avoid immediate complete spoilage of work-inprocess having a definite commercial value, or
- (D) to prevent any other undue loss to the Government, (If you believe this authorization is necessary or advisable, immediately notify the Contracting Officer by telephone or personal conference and obtain instructions.)
- (2) Keep adequate records of your compliance with subparagraph (11) above showing the
 - (i) Date you received the Notice of Termination;
 - (ii) Effective date of the termination; and
- (iii) Extent of completion of performance on the effective date.
- (3) Furnish notice of termination to each immediate subcontractor and supplier that will be affected by this termination. In the notice-
 - (i) Specify your Government contract number;
- (ii) State whether the contract has been terminated completely or partially;
 - (iii) Provide instructions to stop all work, make no further

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shipments, place no further orders, and terminate all subcontracts under the contract, subject to the exceptions in subparagraph (1) above;

- (iv) Provide instructions to submit any settlement proposal promptly; and
- (v) Request that similar notices and instructions be given to its immediate subcontractors.
- (4) Notify the Contracting Officer of all pending legal proceedings that are based on subcontracts or purchase orders under the contract, or in which a lien has been or may be placed against termination inventory to be reported to the Government. Also, promptly notify the Contracting Officer of any such proceedings that are filed after receipt of this Notice.
- (5) Take any other action required by the Contracting Officer or under the Termination clause in the contract.
- (6) Settlements with subcontractors. You remain liable to your subcontractors and suppliers for proposals arising because of the termination of their subcontracts or orders. You are requested to settle settlement proposals as promptly as possible. For purposes of reimbursement by the Government, settlements will be governed by the provisions of Part 49.

(7) Employees affected.

- (1) If this termination, together with other outstanding terminations, will necessitate a significant reduction in your work force, you are urged to -
- (i) Promptly inform the local State Employment Service of your reduction-in-force schedule in numbers and occupations, so that the Service can take timely action in assisting displaced worker;
- (ii) Give affected employees maximum practical advance notice of the employment reduction and inform them of the facilities and services available to them through the local State Employment Service offices;
- (iii) Advise affected employees to file applications with the State Employment Service to qualify for unemployment insurance, if necessary;
- (iv) Inform officials of local unions having agreements with you of the impending reduction-in-force; and
- (v) Inform the local Chamber of Commerce and other appropriate organizations which are prepared to offer practical assistance in finding employment for displaced workers of the impending reduction-in-force.
- (2) If practicable, urge subcontractors to take similar actions to those described in subparagraph (1) above.

Please contact myself, Ryan C. Pierce at ph: 309-782-8446 or email ryan.c.pierce.civ@mail.mil for further questions regarding this notification or the rights of Pyrotechnic Specialties Inc. In my absence, you may contact Julie Coughlin at ph: 309-782-6139 or email julie.a.coughlin.civ@mail.mil.

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I am forwarding a copy of this letter to DCMA Eastern Regional Office and the Small Business Administration Region III. Your point of contact for this letter is Julie Coughlin at ph: 309-782-6139 or email julie.a.coughlin.civ@mail.mil.

Sincerely,

Ryan C. Pierce

Procuring Contracting Officer

Mr. Charlie E. Williams, Jr. Director, DCMA Alexandria, Virginia

May 3,2010

By letter dated April 23, 2010 issued by DCMA, PSI was notified that, due to a change in DCMA's management office structure, starting may 27, 2010, PSI's government contracts will be administered by the DCMA Atlanta office. M

PSI takes strong exception to this anticipated change. As will be detailed below, PSI has a long and tortured history with DCMA Atlanta, which has resulted in false criminal charges being filed against PSI and PSI personnel, which were subsequently dismissed. They were the result of the perjured testimony of a DCMA Atlanta QAR and the improper withholding of exculpatory evidence. Additionally, as will be detailed below, DCMA Atlanta, for a number of years, has conducted a bad faith continuous course of action for the purpose of destroying PSI as a viable government contractor. These actions by DCMA Atlanta have resulted in PSI filing numerous Claims for Equitable Adjustment, which are presently before the ASBCA. Additionally, PSI has also recently had one of its contracts improperly terminated for default, because of actions of DCMA Atlanta personnel, which is also presently before the ASBCA.

As result of the obvious animosity exhibited by DCMA Atlanta toward PSI and the continuing and protracted litigation between PSI and the government, in which DCMA Atlanta plays a large part, PSI alleges that it is impossible for DCMA Atlanta personnel to maintain objectivity in its future dealings with PSI. As support for its allegation, PSI presents the following history of its relationship with DCMA Atlanta.

PSI HISTORY WITH DCMA ATLANTA

R4-231-1

Prior to 2004, PSI and DCMA Atlanta had a good professional relationship with DCMA Atlanta, who was inspection authority for PSI's government contracts. Issues that arose during the contracts were usually resolved in an amicable manner.

However, starting in 2004, the long-standing relationship between PSI and DCMA Atlanta began to inexplicably deteriorate, which resulted in DCMA's interference with PSI's contracts. The documentation evidences that the problem began in early 2004, when a dispute arose between the Navy, the end customer, and the DCMA QAR Michael King, who was assigned to PSI to inspect the MK141 units under contract No. N0164-02-D-0005. The disagreement arose because of the Navy's need for quick delivery of critical war items and Michael King's method of inspection, which was delaying the delivery of the units. The disagreement became so vitriolic, that because of Mr. King's actions, the Navy subsequently removed him as inspector for the MK141 program at PSI. This removal of Mr. King was achieved by the Navy taking the unusual step of modifying the contract, changing the point of acceptance from "source" to "destination".

Angered at his removal, Mr. King began to pursue a course of action to prove that the Navy was wrong and that he was needed at PSI. It was shortly thereafter, in May 2004, that Mr. King "discovered" an allegedly illegal product re-labeling by PSI, which he reported to the Fraud and Abuse Hotline. As a result of a four-year criminal investigation, no crimes were found to have occurred. Mr. King and other Government employees conspired to fabricate a crime and commit perjury in front of a Grand Jury which resulted in a criminal indictment being issued against PSI and PSI personnel, and which also resulted in PSI being suspended from government contracting. Throughout these years, Mr. King and the other QARs assigned to PSI began to over/mis-inspect PSI's processes and product and began to harass PSI's employees, which had a significant effect on its ability to perform. Numerous questionable Corrective Action Reports (CARs) were issued, which in many instances essentially stopped production, while either minor or non-existent issues were resolved.

In the autumn of 2004, a vehicle containing three FBI agents experienced an accident when one of the MK141s supplied by PSI under a Purchase Order exploded, resulting in severe injuries to three FBI agents. As a result, PSI became the target of a multifaceted and multiple-agency criminal investigation, whose purpose was to destroy PSI as a company, and the reputation of its personnel. In addition, these agencies, as will be discussed below, were attempting to extort a civil settlement for lawsuits filed by the injured FBI agents against PSI.

This investigation was initiated without PSI knowing of the accident or the true reason for the investigation. Once the criminal investigation of PSI began, the NCIS investigator recruited Michael King to improperly partake in the investigation and illegally conduct warrantless searches of PSI's facility in order to supply information regarding plant layout, location and content of the computer system and details regarding various PSI employees. The documentation clearly show Mr. King's growing obsession with getting PSI, fully supported by the management at DCMA Atlanta.

After the alleged relabling incident and at the same time the criminal investigation was being conducted, Mr. King and the other QARs began to step up their already onerous, bad faith

and improper inspections and their continual harassment and intimidation of PSI personnel. Additionally, having already been put in the mindset that PSI was allegedly engaging in criminal activities, these inspections were not now limited to performing the required inspections, but every performance issue was now being viewed as possible fraud. This is further evidenced by the fact that QARs started to include various government counsel and investigators in the e-mail loop discussing even the most minor performance issues that arise on the various PSI contracts.

The situation at PSI continued to deteriorate which resulted in the further delay in the delivery of the much needed product. The situation finally got to the point that in 2006, the Army, one of the end users of the products being produced, interjected themselves into the fray. Robert Kowalski of the Army conducted meetings with PSI and DCMA in an attempt to identify the problems and arrive at a solution. As a result of this investigation, Mr. Kowalski wrote a memo, which noted that the problems were more severe than originally suspected and that teamwork between DCMA and PSI was almost non-existent, which was affecting all of PSI's contracts. "If allowed to continue on its present course PSI will go bankrupt..." Unless cooperation and teamwork was reestablished, the Army would be forced to pull its inspection authority delegation from DCMA. "I articulated our need for production and a quality product and emphasized that the mission to meet the warfighters needs come first. Any agency that does not want to be part of the solution does not have to be part in our program."

As a result, Mr. King was removed as QAR. As is clearly evident from Mr. Kowalski's report, the DCMA was acting as a rogue agency, conveniently forgetting who gave them the authority to conduct the inspections and what the actual purpose of the program was, thereby creating serious problems not only for PSI but for the warfighters, who critically needed the products being produced by PSI. Despite the serious problems that were being created, these bad faith actions remained essentially unchecked because the government was intent on using any means to prove that PSI was engaging in fraudulent, if not, criminal activity.

CRIMINAL INVESTIGATION

As was previously stated, the initial instances of bad faith actions by the QARs were the result of Michael King engaging in a power struggle with the Navy customer. Once he lost that battle, he began to conduct his own crusade to prove that he was right about PSI, which resulted in the discovery of the alleged improper mislabeling, that was reported to the Abuse and Fraud Hotline, and his over-inspection and mis-inspection. His "crusade" was subsequently fueled by the initiation of the criminal investigation. The history of the criminal investigation and its effect on the viability of PSI as a company and the reputations of its personnel clearly evidences that the intent of the government was to put PSI out of business which is clearly a breach of the government's implied duty to cooperate and not to hinder performance.

Pursuant to a Purchase Order issued by the FBI, PSI supplied MK141 flash bang grenades in 2004. These were some of the same units that Mr. King alleged were improperly relabeled in of 2004, which precipitated his reporting of the "incident" to Abuse and Fraud Hotline. After the previously described accident involving the FBI agents occurred, a lengthy investigation of PSI followed the accident, despite the fact that PSI was never notified of the

accident. As part of this investigation, in March, 2005, the Government conducted a raid at PSI facilities, which included 30 agents of the FBI, NCIS, ATF, Army CID and GBI. The raid was conducted utilizing the "inside" information gathered by Mr. King, at the request of the Navy investigator. All PSI employees cooperated, giving full and truthful information to the investigators. This raid and investigation was conducted despite the fact that a report from the FBI Laboratory in Quantico, VA, dated January 13, 2005, regarding the examination of the grenade involved in the 2004 incident, clearly stated while a definite determination of the causes of the fracture could not be made, the physical evidence indicated that the safety pin was not in place when the device malfunctioned. Therefore, as evidenced by the FBI's own Lab Report, PSI was not responsible for the accident. What is most egregious is that the FBI illegally, and in violation of ethical standards, failed to turn over this report to PSI. However, despite this exculpatory evidence, a campaign to put PSI out of business was conducted by DCMA, the FBI and the NCIS. PSI had no knowledge of the accident resulting in the investigation until civil suits were filed by the injured FBI agents in 2006 (For example see; 2:06-cv-04428-BWK Scanazno et al). Therefore, PSI was being subjected to a massive inter-Agency investigation, without even knowing the cause.

Despite the fact that by the beginning of 2005 the FBI knew that PSI was not criminally or civilly liable for the accident that resulted in injuries to its agents, the FBI, in conjunction with NCIS and DCMA, continued to attempt to extract their "pound of flesh" from PSI, attempting to pave a way for the injured agents to obtain money from PSI/Karlson. The FBI then threw their net wider, "shot gunning" every aspect of PSI in an attempt to find any criminal wrongdoing, including looking into any possible IRS or EPA violations and any possible wrongdoing by PSI under the subject contracts. It was essentially a "search and extort" mission.

It initially appeared that this improper, illegal, pervasive, and invasive investigation, performed in violation of PSI personnel's civil rights paid off. On or about April 17, 2008, a criminal indictment was issued in the United States District Court for the Middle District of Georgia (see for example; Case No. 5:08-CR-24-CAR-CWH), against PSI, David Karlson, Brad Swann, Sales Representative for PSI, Daniel Ramone, Production Manager for PSI, and Glen Cundiff, Engineering Technician at the Naval Surface Warfare Center in Crane, Indiana. As a result, immediately thereafter, the government formally suspended PSI from receiving any additional government contracts. To add insult to injury, Mr. Karlson was publically arrested and shackled. Major media outlets televised and published this humiliating incident worldwide. CNN even did an alleged exposé on the agents that were injured, besmirching PSI and Mr. Karlson in the process.

On or about December 18, 2008, the Government filed a Second Superseding Indictment. The main allegation contained in the superseding indictment was that Defendants attempted to defraud the Government by causing to be sold to the FBI, MK141 diversionary charges that they knew were defective, and did not meet the controlling Navy specification as required under the fixed price contract awarded PSI in 2001. The bases of the allegations were as follows:

1. Pursuant to the terms of PSI's contract with the FBI, PSI was to supply FBI with the MK141 charges that met the controlling Navy specification. Counsel alleged that

- there were numerous purchase orders and invoices issued under the umbrella of the contract.
- In or about 2003, the Navy discovered that the Government specification contained a design defect that could and did cause premature detonation, which could cause injuries to the users. As a result of the existence of the defect PSI developed a procedure to correct the defect. All units that were reworked to correct the defect would have a label containing the letter "A" ("alpha designation"), which indicated that the unit was reworked.
- 3. However, even after the defect was found, the Government alleged that PSI caused to be shipped to the FBI a shipment of MK141 charges that consisted of units that were reworked by PSI and other charges that were not reworked. Pursuant to the Grand Jury testimony of Michael King, the same QAR who was engaging in the improper actions under the subject contracts, stated that he, along with Greg McClendon of the FBI, Mike Earnest of the Navy Criminal Investigation Service, and Ernie Newberry of the DCMA, went to the FBI facility in Quantico, Virginia to look at the MK141 rounds supplied by PSI to the FBI. Mr. King testified that the charges supplied to the FBI were all labeled with an "A", thereby fraudulently representing that all units supplied had been reworked, despite the fact that approximately one-half of them were not reworked. As a result of the alleged fraud, FBI agents were severely injured when one the MK141 charges prematurely detonated.

In response to this superseding indictment, on or about January 5, 2009, Defense Counsel filed with the criminal court a Joint Motion to Dismiss based upon evidence that the indictment contained numerous critical allegations that were false, which warranted the dismissal of the indictment. Specifically, the Motion alleged:

- 1. The Government allegations that the FBI issued numerous purchase orders under the 2001 contract, which required that the units meet the Navy specification, which would allegedly include the rework process developed by PSI, was false. The 2001 contract between PSI and the FBI specifically stated that "...The term of this contract shall be for a one-time purchase of items..." The 2001 contract did require that the units be manufactured per the Navy Specification. Therefore, the additional orders placed by the FBI for the units in 2003 and 2004 were not issued under the 2001 contract, but were issued under separate and distinct Purchase Orders, which made no reference to the Navy specification.
- 2. The Government's allegation that one of the allegedly defective parts fraudulently supplied to the FBI prematurely detonated and resulted in serious injuries to three agents, was equally false. Defense Counsel had repeatedly made requests for all investigative reports relating to the FBI incident. During the Pretrial Conference, the Prosecutor informed the Court and all parties that the Government had no "mishaps reports". Despite these representations, on December 31, 2008, the Prosecutor turned over to Defense Counsel the previously referenced FBI Lab Report, which proved that there were no defects in the units supplied by PSI that caused the premature detonation of the unit, which caused the injuries to the agents. In its Motion, the Defense Counsel stated:

"The Defendants adamantly believe that the October 2004 incident and the injuries to [the] Agents.... were the driving force behind the investigation of the Defendants and the initiation of this prosecution. The January 13, 2005, FBI Laboratory Report establishes that the Agents' injuries were not the result of any alleged wrongdoing by the Defendants, but were the result of another cause. Most egregiously, the FBI has been in possession of the Report for nearly four (4) years, and has been aware of the truth regarding the October 2004 incident while withholding the Report and permitting PSI and its officers and employees to be criminally indicted, as well as subjected to costly civil lawsuits and to false and defamatory coverage and allegations on national television, with devastating consequences for PSI's business and the Defendants' lives. The government's withholding of the Report constitutes extreme governmental misconduct warranting dismissal of the government's indictment..."

3. The Government's allegation that PSI mixed reworked charges with charges that had not been reworked and had labeled them with the rework "A" designation before fraudulently shipping the mixed lot to the FBI was also false and was based upon the perjured testimony of Michael King (QAR-DCMA Atlanta). On December 29, 2008, Barry Lindsey of PSI and Defense Counsel traveled to the FBI Quantico facility and examined the charges inspected by Mr. King plus an additional 200 charges. It was discovered that none of the charges examined, including the ones examined by Mr. King, had been reworked and none of the charges were labeled with the "A" designation indicating that rework had been performed, which was in total contradiction to the Grand Jury testimony of Michael King. It is imperative to note that Defense Counsel had attempted to make this trip to Quantico to verify the statements made by Mr. King for a number of months, but were denied access to the site by the FBI. It was only after the Court issued an order demanding that the FBI allow PSI access to the site was this blatant perjury discovered. As stated in the Defendant's Motion to Dismiss:

"Accordingly, the government's 'mixing' and 'camouflage' allegation is demonstrably false, and King's grand jury testimony was knowingly false. This additional false representation further urges dismissal of the government's Indictment against the Defendants."

In the Prosecution's Response to Defendant's Joint Motion to Dismiss, filed January 8, 2009, the Government admitted to the "mistakes and "errors" contained in the indictment and moved to dismiss the indictment without prejudice, which was granted by the Court on January 15, 2009.

The above scenario strongly evidences the Government's harassing and defamatory behavior that PSI and its employees have been forced to endure. It has resulted in the nationwide destruction of PSI's and its employees' reputations that even the dismissal of the indictment cannot rectify. It had further resulted in PSI being formally suspended from Government contracting, which has had a devastating effect on the viability of PSI, which depends of government contracting for over 90% of its business. As is also clearly evidenced from the

foregoing, a vendetta was being carried out by the Government, most notably by the FBI, with the full cooperation of NCIS and DCMA.

The effect of this criminal investigation and the pivotal role played by DCMA was devastating on PSI's ability to complete the subject contracts. Not only was PSI subjected to the bad faith over-inspection and mis-inspection of the QARs, which in itself constituted a breach of contract, it was also subjected to the egregious actions of the government with the complicity of the DCMA, which resulted in every issue, however minor, that arose on the contracts, to be investigated for possible fraud. This mindset, that PSI may be engaged in wholesale fraud, destroyed whatever required objectivity that may have remained on the part of the QARs. This lack of objectivity and the exhibiting of bad faith by the QARs went to the extent that QAR Michael King perjured himself before the Grand Jury for the purpose of destroying PSI and the reputations of its personnel. The interference of the FBI and the NCIS and the continuing bad faith of DCMA eliminated any possibility that the contracts could be performed with any sort of normalcy.

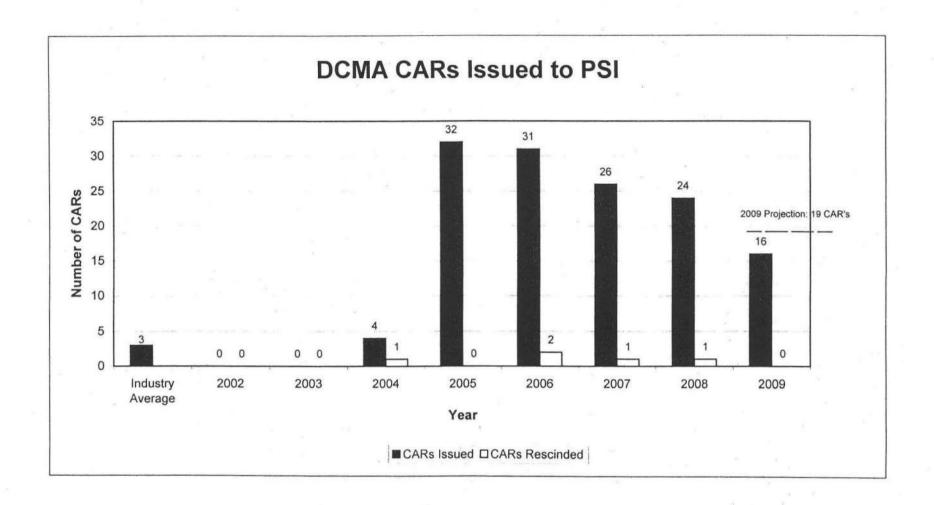
Even after the dismissal of the criminal charges and the lifting of the government imposed suspension of contracting, it appeared that DCMA Atlanta still did not learn its lesson, and continued its efforts to destroy PSI. One of the contracts DAA09-02-C-0030, that had been subjected to the previously described over/mis-inspections by DCMA Atlanta QARs, continued to be made a victim of the same bad faith behavior. The improper behavior of the government and more specifically the QARs resulted in PSI being precluded from performing the contract, which resulted in an improper Termination for Default being issued on the contract in 2009. This termination is presently before the ASBCA.

Therefore, PSI it is clearly evident from the foregoing that it has been made a victim of a malicious and vindictive attempt by the Government to put it out of business which was aided and abetted by the DCMA, more specifically by the QARs who abrogated their responsibility to objectively perform their inspection duties. PSI alleges that these actions by the Government clearly constituted a breach of its contractual duty of fair dealing and its duty to cooperate with PSI and not to impede their performance. As further evidence of the problems created by DCMA Atlanta, after a different DCMA office (St. Petersburg) was given the inspection authority for PSI's contracts, morale has significantly improved and a professional and mutually cooperative relationship has been developed, which has allowed PSI to perform its contracts with minimal problems.

PSI alleges that if its contracts are again assigned to DCMA Atlanta, given the long-standing bad blood between itself and the Atlanta office, there will be a decided and intentional lack of objectivity on the part of the QARs, which will again significantly hinder its ability to perform its contracts. For the past six years, PSI has been forced to fight for its very existence because of the improper and bad faith actions of the Atlanta office. It will not allow the previous scenario to be repeated. Therefore, it is respectfully requested that the DCMA office in St. Petersburg be allowed to continue its position as the inspection authority.

Sincerely,

Dave Karlson CEO



Note: The industry average for receiving government corrective action requests is estimated to be 2-3 per year. Surveyed companies indicated that they were allowed to handle routine quality issues with internal CARs under ISO 9001.

Pierce, Ryan C USA CIV (US)

From:

Stark, Doug E CIV PEO IWS, PEO IWS [douglas.stark@navy.mil]

Sent:

Thursday, September 22, 2011 3:24 PM

To:

Pierce, Ryan C USA CIV (US)

Cc:

White, Robert E Jr USN CIV (US); Gunderson, Veronica A USN CIV (US); Rozanski, Jeffrey

R USN CIV (US)

Subject:

RE: HOT! Request for Review, MFR re: Mk124 Contract (FOUO)

Signed By:

douglas.stark@navy.mll

Ryan,

The USN does not concur with the decision for termination for default. The USN believes that continuing to work with PSI to achieve delivery of useable products will be a less costly option and achieve a better value for DOD compared to the costs of litigation and settlement with little chance of recouping any prior payments to PSI.

If the USN continues to be in the minority of opinion about initiating contract termination, then the USN shall not be liable for future court costs, legal fees or other future expenses requiring funds from current operating budgets. The USN will meet its obligations as the configuration manager of the MK 124 MOD 0 by providing technical information and expertise, pertaining to the engineering and design of the MK 124 MOD 0 Signal, to support the termination proceedings. If the PCO decides to pursue termination for default, the USN . requests to make the option available to accept the two (2) most recent production lots at a negotiated cost as part of the termination settlement.

V/R Doug

Douglas E. Stark APM 2T COG Conventional Ammunition PEO IWS 3C5 2450 Crystal Drive Suite 700 Arlington, VA 20222 Office 703-872-1021 Cell 202-607-6448 Fax 703-872-1097

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Separate MFR Convo GRI AFRANON

APPX827

PCO-004499

PH-288-1

MK124 Meeting Minutes

04 60098

Date/Time: Tuesday, 24 May 2010, 1500-1600 EDT

Location: B183 IEDD Conference Room, PM-CCS Conference Line

Purpose: MK124 Status of PSI negotiations and technical efforts

Attendance:

Attendance:		The second second second	TANK STANKS STANKS	
LAST NAME	First	Organization	Telephone	E-Mail Address
Adams	Mary S.	CCRC-AM	309-793-4841	mary.s.adams@us.army.mil
Adams	Matthew	USAF HIII AFB	DSN 777-9679	matthew.adams@hill.af.mil
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Coughlin	Julie	CCRC-AM	309-782-6139	julie.coughlin@us.army.mil
Cowart	Dean	DCMA (PSI)	478-956-6321	dean.cowart@dcma.mil
Dodge	Mark	USAF HIII AFB	DSN 777-7058	mark.dodge@hill.af.mil
Firenze	Bill	Robbins-Gioia, LLC	973-724-4194	william.firenze@us.army.mil
Frush	Tom	PM-Ammo	703-432-8767	thomas.frush@usmc.mil
Havey	Ray	USAF HIII AFB	DSN 777-2103	ray.havey@hill.af.mil
Keller	Kristina	AMSJM-ISP	309-782-6845	kristina.keller@us.army.mil
Lowry	Deanne	USAF HIII AFB	DSN 777- 5753	deanne.lowry@hill.af.mil
Mangat	Lovelyn	ESED	760-731-3858	lovelyn.mangat@navy.mil
Moore	John	AMSJM-CDC	309-782-1971	john.r.moore1@us.army.mil
Nemeth	Claire	AMSJM-CDC/BDA	309-782-8653	claire.nemeth@us.army.mil
Rozanski	Jeff	NAVSEA	973-724-9250	jeffrey.rozanski@navy.mil
Stark	Douglas	NAVSEA	812-854-2996	douglas.stark@navy.mil
Yuen	Harvard	SFAE-AMO-CCS	973-724-7757	harvard.yuen@us.army.mil

Status of Negotiations with PSI:

- PSI and the Government completed negotiations on the REA from the stop work order.
 PSI and the Government settled on the amount of \$916K.
- Harvard Yuen stated that in prior meetings that all the services had agreed to pay the REA by reducing deliverable product. The USAF, USMC, NAVSEA, and Army confirmed their agreement to reducing the number items received. The USCG was not represented at the IPT.
- Harvard Yuen requested that contracting provide the remaining quantities on the contract for each service after the REA is taken into consideration. Approximately 21K fewer items will be produced in order to pay for the REA.

Status of RCA and restart:

- NAVSEA confirmed that the root cause for the initial test failures was not due to the 3M sealant disk production being relocated to Mexico as first identified by engineering.
- On the recent LAT and retest failures, Dean Cowart heard that PSI disagrees with the CAR issued. PSI does not believe that these were critical defects. PSI believes it is a major defect. Dean Cowart and Kevin Bowen witnessed the testing in which the issue occurred and they agree that these were critical defects.
- PSI is still working on the RCA and has not submitted a request for restart.
- PSI will continue to work on the issue. Doug Stark stated that there will be an
 engineering test in the near future to provide some confidence on the proposed fix.

1

Other Discussion:

- The Ari Force expressed disagreement with the PM-CCS office opinion that the TDP is not producible. It was noted that PSI had produced 9 lots prior to having issues 2 years ago.
- Harvard Yuen stated that he also believes that the sealant manufacturing concern has not been put to rest.
- Harvard Yuen's response: After delivery of the USAF referenced 9 lots, production was shut down for 2+ years for failure to pass LAT T&H requirements. Repeated attempts have failed to prove out a technical solution. NAVSEA RCA determined adhesive failure of the 3M foil, TDP source controlled component, as the root cause due to 3M moving domestic production to Mexico. The "Mexico product", however, continues to meet 3M product specifications. To date, NAVSEA continues to try to technically resolve the TDP deficiency to produce CC-A product with confidence. Recently, the IPT was informed that 3M foil production never moved to Mexico. The identified root cause may no longer be valid, thus further increasing risk to successfully produce the MK124 with the TDP 3M product.
- The Air Force indicated that Kilgore and MEI have expressed interest in the MK124. The Air Force is proposing a bridge contract emergency buy using new funds to obtain product if the issues at PSI are not resolved quickly. The buy would be for approximately 50K units. Harvard Yuen will get back to the Air Force on this option.

Restart Production Path Forward: (From Prior Meetings)

- Harvard Yuen stated that the PM office has concern step 5 of the proposed path forward to restarting production listed in the prior minutes and listed below here:
 - 1. Reject Lot 003-003A for two failure modes: failed Leak Test and Trigger Assembly detaching during Function
 - 2. Reject PSI RFD 8476-D024R01 to accept lot despite noted failures.
 - ** IF PM-NCAS decides to accept and sign off on RFD, that will be the Navy's decision.
 - 3. As a part of the resolution of the Critical failure (post-rework) shown in LAT 003-003A, PSI will be requested to conduct a correlation study with a Torque Test vs. a Pushout Test. Recommended that two sets of samples be utilized; one with a "good" crimp and one with a "marginal" crimp.
 - 4. With 7 month elapsing since last production, a FA is now required. PSI will need to pass a full FAT prior to resuming production. PSI will have the option at this point to revert to the previously used foil, at their discretion.
 - 5. Upon completion of #3 and #4 above. PSI would be authorized to resume production.

Action Items:

IPT Actions Items					
Action	Owner	Date Issued	Date Completed		
Provide update on RCA of critical defect and provide path forward.	Jeff Rozanski NAVSEA	7 Jul 10			
Provide Air Force with PM-CCS decision on bridge contract for Mod 0 if needed.	Harvard Yuen	7 Jul 10			

The next IPT meeting:

TBD

No. 2019-2024

IN THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PYROTECHNIC SPECIALTIES, INC., *Appellant*,

v.

SECRETARY OF DEFENSE, *Appellee*.

Appeal from the Armed Services Board of Contract Appeals
ASBCA Nos. 57890, 58335, 59103
Reba Page, Mark Stempler, and Richard Shackleford, Administrative Judges

BRIEF OF APPELLEE SECRETARY OF DEFENSE

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April 20, 2020

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LIST OF ACRONYMS USED

Administrative Procedure Act (APA)

Contract Disputes Act (CDA)

Defense Contract Management Agency (DCMA)

Federal Acquisition Regulation (FAR)

First Article Test (FAT)

Lot Acceptance Test (LAT)

Quality Assurance Representative (QAR)

Request for Deviation (RFD)

STATEMENT OF RELATED CASES

Pursuant to Fed. Cir. R. 47.5, appellee's counsel is unaware of any other appeals taken from the same proceedings before the Armed Services Board of Contract Appeals to this Court or any other appellate court. Also, counsel is unaware of any cases that will directly affect or be directly affected by this Court's decision in this appeal.

No. 2019-2024

IN THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PYROTECHNIC SPECIALTIES, INC. *Appellant*,

v.

SECRETARY OF DEFENSE, *Appellee*.

Appeal From The Armed Services Board Of Contract Appeals
ASBCA Nos. 57890, 58335, 59103,
Reba Page, Mark Stempler, and Richard Shackleford, Administrative Judges

BRIEF FOR APPELLEE

STATEMENT OF THE ISSUES

- 1. Whether the decision of the Armed Services Board of Contract
 Appeals (ASBCA or board) sustaining the default termination of the Department of
 the Army's (Army) contract with Pyrotechnic Specialties, Inc. (PSI) is supported
 by substantial evidence.
- 2. Whether the board abused its discretion in limiting some testimony based on foundation, hearsay, and other evidentiary rules.

STATEMENT OF THE CASE SETTING FORTH THE RELEVANT FACTS

I. NATURE OF THE CASE AND PROCEEDINGS BELOW

PSI appeals the board's decision sustaining the Army's default termination of PSI's contract to produce MK 124 signals. Appx1.¹ *Pyrotechnic Specialties, Inc.*, ASBCA Nos. 57890, 58335, 59103, 17-1 BCA ¶ 36,696, at 178,692-93 (Appx66-68). Subsequently, the board denied PSI's request for reconsideration. *Pyrotechnic Specialties, Inc.*, ASBCA Nos. 57890 *et al.*, 19-1 BCA ¶ 37,304 (Appx3131-3143).

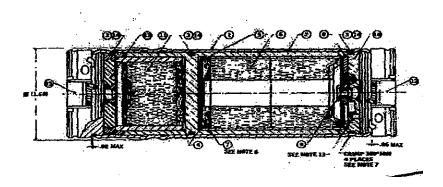
II. STATEMENT OF FACTS

On September 27, 2004, the Army awarded contract number W52P1J-04-C-0098 (the contract) to PSI to supply 60,558 units of the MK124 Mod 0 Signal, Smoke & Illumination (MK 124 or signal) – later modified to increase the total quantity to 152,180 signals. Appx1-2. The MK 124 is a distress signal used by all the services that allows military personnel to signal reconnaissance aircraft. Appx2; Appx559. The Navy originally designed the signal for when a service

¹ PSI does not appeal the board's denial of its appeals regarding its affirmative claims. PSI's opening brief challenges only the board's decision sustaining the default termination. Accordingly, PSI has waived any challenges to the denial of its affirmative claims in ASBCA Nos. 58335, 59103. PSI also mentions that the Army sought reimbursement from PSI for unliquidated progress payments of \$1,433,315.42. Appellant's Opening Brief at 10 (ECF No. 18). However, PSI never filed a claim for the unliquidated progress payments and that issue was never before the board and is not before this Court.

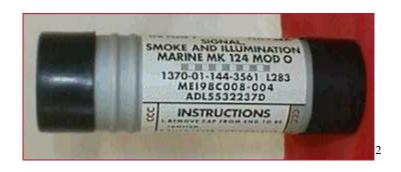
member fell overboard or to allow a downed pilot to signal for help. Appx2; Appx570.

The MK 124 signal is a 5.408 inch-long tube with a 1.700 inch diameter, weighs approximately a half pound, and includes two subassemblies, with a flare candle subassembly at one end of the tube that will produce a red flare when triggered (for use at night) and a smoke candle subassembly at the other end of the tube, which produces a reddish, orange smoke when triggered (for use during the day). Appx6; Appx1106, Appx1115. The specification includes the following drawing of the MK 124:



Appx1666. An Army website includes a picture of the completed MK 124 signal, for reference:

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A foil sealing disk sits at the end of each of the two candle subassemblies between their respective igniters. Appx6; Appx570-571. The sealing disk is used to create a "hermetic waterproof seal" at each end of the canister so that the candles stay dry and to keep in heat to assist in igniting the candles when triggered. Appx6; Appx571. Each sealing disk is secured by a rubber O-ring placed around the circumference of the igniter on each end of the canister. Appx7. The canister is then crimped and the O-ring and crimp together seal the unit. Appx7.

Although the Army awarded the contract, the contract contained contract line items designating signals for Army, Navy, and Air Force customers. Appx1; Appx1010-1015. The Army supplied the contracting officer for the contract; the Defense Contract Management Agency (DCMA) supplied Quality Assurance Representatives (QARs), who were responsible for issuing Corrective Action Requests; and the Navy provided personnel to oversee the specifications (which had originated with the Navy). Appx1-2.

²

https://www.pica.army.mil/pmccs/SupportMunitions/_images/Mk124_big.jpg (visited on March 19, 2020).

The contract incorporated several clauses pertinent to PSI's performance obligations when conducting tests of the MK 124 signal prior to acceptance by the Army.

The contract incorporated by reference the Federal Acquisition Regulation's (FAR) Inspection of Supplies – Fixed-Price clause (48 C.F.R. § 52.246-2), which provides that the

Contractor shall provide and maintain an inspection system acceptable to the Government covering supplies under this contract and shall tender to the Government for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Contractor to be in conformity with contract requirements

Appx1026; 48 C.F.R. § 52.246-2(b). The clause provides that "the Government has the right either to reject or to require correction of nonconforming supplies," which are supplies "defective in material or workmanship or otherwise not in conformity with contract requirements." 48 C.F.R. § 52.246-2(f). Also, as to quality control, the contract incorporated the Higher-Level Contract Quality Requirement clause (52.246-11), which required PSI to follow ISO 9001-2000 quality control standards. Appx1028.

The contract incorporated the First Article Test clause (52.209-4511), which required PSI to provide a "first article" to be "examined and tested in accordance with contract requirements, the item specification(s), the Quality Assurance

Provisions (QAPS) and drawings listed in the Technical Data Package."

Appx1026. The clause provides that the first article must be produced "using the technical data package provided by the Government." Appx1026. The contracting officer may order a new first article test (FAT) when "(i) a major change is made to the technical data, (ii) whenever there is a lapse in production for a period in excess of 90 days, or (iii) whenever a change occurs in the place of performance, manufacturing process, material used, drawing, specification or source of supply." Appx1026; Appx3.

The contract also incorporated the Submission of Production Lot Samples clause (52.246-4530), which states, "A lot acceptance test is required to be submitted by the contractor from each production lot tendered to the Government for acceptance." Appx1030; Appx3-4. The sample was required to conform to the MK 124 specifications incorporated in the contract. Appx1030; Appx4. If PSI failed to deliver lot samples within the agreed-upon contractual times or "if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract. Therefore, this contract may be subject to termination for default." Appx1031; Appx4.

The contract also incorporated the Critical Characteristics clause (52.246-4550), which stated that the technical data package "may refer to Critical . . . and

Special characteristics." Appx1032. A critical nonconformance would occur if, among other reasons, the nonconformance results in a hazardous or unsafe condition for users or prevents the tactical function of a major end item.

Appx1033; Appx4-5. If a critical nonconformance were found, then PSI would be required to immediately stop production, conduct an investigation to determine the cause of the deficiency, submit a report of the investigation to the Government with suggested corrective action, and then request a restart of the production.

Appx5; Appx1033.

The contract also incorporated by reference the Default (Fixed-Price Supply and Service) clause, which provides that the Government may terminate the contract if "the Contractor fails to (i) [d]eliver the supplies or to perform the services within the time specified in the contract or any extension; (ii) [m]ake progress, so as to endanger performance of this contract . . .; or (iii) [p]erform any of the other provisions of this contract" 48 C.F.R. §§ 52.249-8(a)(1)(i) – (iii); Appx1041 (incorporating this Default clause by reference in the contract).

The contract's specifications included the technical data package for the MK 124, which controls the design, production, and testing of the signal. Appx6; Appx1104. Consistent with the Critical Characteristics clause, characteristics of the signal were "classified as Critical, Major and Minor" for inspections and testing. Appx1106. "Critical characteristics are identified by the symbol (C), and

Major characteristics by the symbol (M)." Appx1106. A critical characteristic failure risked life or limb and a major characteristic failure risked successful completion of the mission. Appx574. The contract required that the lot samples meet the specifications and ignite from both ends, display the correct color, and have the proper minimum and maximum display times for the smoke or flare function. Appx1107. The specifications required the sample signals for lot acceptance tests (LAT) and FATs to undergo up to eight tests, each of which was listed as either Critical or Major: (1) five-foot drop test; (2) 40-foot drop test; (3) transportation & vibration test; (4) temperature & humidity test; (5) high temperature test; (6) low temperature test; (7) sealing integrity test; and (8) x-ray test. Appx1107-1108; Appx1113-1114. For each test, the specifications stated how many failures were permissible from a sample lot before the Army would reject the lot or FAT, stating that one signal's failure was sufficient to reject the lot for many of the tests. Appx1111-1112 (discussing for most characteristics it is "Ac 0 Rej 1," which means accept the lot with no failures, reject the lot with one failure).

As pertinent to this appeal, the sealing test required submersion of samples into a water vacuum tank. Appx8; Appx1114. A defective unit was to be labeled a leaker: "Leakers are indicated by air bubbles issuing from the signal." Appx1114; Appx8; Appx569. A leaker usually results from defective manufacture of the

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signal, including a tear in the foil sealing disk or improper crimping around the Oring. Appx569. As noted above, the signal must be able to perform in water conditions, given that its main purpose is to act as a distress signal for men overboard or downed pilots who are in the sea. Appx570; Appx2.

A. PSI Performs With Occasional Quality Control Issues During Interfixes 1 Through 3

PSI encountered quality control problems while producing MK 124s. PSI's production of MK 124s resulted in four "interfixes" – which identified four points when production was restarted after work had stopped because of a critical characteristic failure in production or because of a major change to the manufacture of the signals. Appx16. During each of the interfixes, PSI produced several lots of signals, and the parties referred to lots by interfix number and lot number – for example, Interfix 1, lot one is simply referred to as Lot 1-1. Appx16-17.³ Although PSI contended that the technical data package was defective, the record before the board demonstrated that PSI's quality control problems resulted in defective signals.

Before the Army had awarded the MK 124 contract to PSI, Martin Electronics had performed multiple contracts for the Army producing over one million MK 124 signals using the same technical data package in the contract.

³ Like the board, we remove the two zeros before each interfix and lot number, such as Lot 001-001. Appx17 n.8.

Appx668-669; Appx15. An engineer from the Naval Surface War Center, Kevin Bowen, oversaw the technical data package and observed most of the FATs and LATs for both Martin Electronics' and PSI's contracts. Appx636-637; Appx668; Appx582; Appx15. Based on his years of experience with the technical data package and seeing both contractors perform, Mr. Bowen concluded there was no problem with the technical data package, but rather any issues had resulted from PSI's "quality control and other glitches hitting" PSI during production. Appx669.

Interfix 1: During the first interfix of production, PSI needed three attempts to pass the FAT. Appx638. After PSI passed the FAT, PSI produced 11 lots. Lot 1-1 failed the LAT because of "leakers" – *i.e.* sample signals leaked after testing. PSI's subcontractor had improperly prepared certain materials for PSI, causing PSI to have difficulty crimping around the O-ring. Appx17; Appx638-639; Appx672-673. The Army rejected Lot 1-1.

Lot 1-2 failed its LAT due to long smoke display times beyond the 19 seconds permitted by the contract's specifications for the sealing function test, with some lasting as long as 31 seconds. Appx17; Appx640. The Army approved PSI's request for deviation from the smoke display times for this lot and the Army accepted it on deviation, with Mr. Bowen telling PSI that around 30 seconds was the working maximum for smoke display times. Appx17; Appx640-641. Lot 1-3 passed all inspections, and the Army accepted it. Appx17; Appx641.

Lot 1-4 failed due to long smoke display times (like Lot 1-2), with the longest display time of 22 seconds. Appx18. After that test, PSI and the Army agreed to a deviation (Request for Deviation 13 (RFD 13)) to permit acceptance of signals with smoke display times of up to 25 seconds on the sealing test (increased from the 19 seconds in the specifications). Appx18-19; Appx1338-1340. The contract's testing specifications stated that the maximum permitted smoke display times would vary depending on the specific test; varying from 18 seconds for the high temperature test, 19 seconds for the five-foot drop, transportation and vibration, and sealing function tests, 22 seconds for the temperature and humidity test, and 25 seconds for the low temperature test. Appx1107; Appx7-8. For much of the contract, the parties treated RFD 13 as increasing the maximum smoke display times for all tests to 25 seconds. The Army accepted Lot 1-4.

Thereafter, Lot 1-5 and Lot 1-9 passed all inspections and the Army accepted each lot. Appx19-20; Appx642-643, Appx647. However, Lot 1-6 and Lot 1-8 had several signals that exceeded the 25 second smoke display time (one display time as high as 34 seconds), which the Army accepted after PSI had requested deviations for these lots. Appx19-20; Appx643, Appx647. Lot 1-7 failed the initial LAT based on tight trigger assemblies – *i.e.* the signals could not be triggered by a thumb or forefinger. Appx20; Appx644-645. The Army attributed this to PSI's "workmanship issue." Appx20; Appx646. PSI culled

through the lot, eliminated non-conforming signals, and submitted a reduced number of signals for the lot, which the Army accepted after a second LAT. Appx20; Appx645-646.

For Lots 1-2 through 1-9, none of the lots had leakers during the sealing tests. Appx21; Appx648. The LAT for Lot 1-10 revealed multiple leakers (and long ignition times – the time between triggering signal and when it smokes or flares). Appx21; Appx648-649. The Army rejected Lot 1-10. Appx21. PSI stopped further production, but submitted signals already produced as Lot 1-11 for a LAT, which failed due to leakers, and the Army rejected Lot 1-11. Appx21; Appx649.

Interfix 2: After the failures of Lots 1-10 and 1-11 due to leakers during the sealing tests, PSI identified the 3M 433L sealing disk as the root cause of the problem. Appx21-22. To qualify a new disk, PSI tested several sealing disks under FAT standards before a Government witness and concluded that it would substitute 3M's 363L sealing disk (which was thicker, but used the same adhesive material as the 3M 433L disk). Appx585-589; Appx22. PSI requested and received a deviation to use a thicker sealing disk (although not specifically the 3M 363L disk). Appx22-24; Appx629-630; Appx1429, Appx1456.

Using the 3M 363L disk, PSI submitted Lots 2-1 and 2-2 for LATs at the same time. Appx24. Both lots failed the critical characteristic temperature and

humidity test, with 10 of 20 samples in Lot 2-1 failing and 13 of 20 samples in Lot 2-2 failing. Appx24; Appx1108. Also, several trigger assemblies fell off after testing, but the Government concluded these were "minor" defects because the failures had occurred after (and not during) testing. Appx25-26; Appx610-611. Lot 2-3 failed its LAT based on short burn times, which was a result of lost calibration control of the press operation used to manufacture the flare – *i.e.* a manufacturing error. Appx652; Appx26. Despite the failures, the Army accepted Lots 2-1, 2-2, and 2-3 under "Condition Code B," which meant that the signals were for restricted use such as for training purposes or for use in areas above a certain temperature. Appx26; Appx15 n.4; Appx653.

After Lot 2-3 failed the LAT, the Army issued a stop work order, which it later lifted after the parties settled PSI's request for equitable adjustment seeking payment for Lot 2-3. Appx26.

Interfix 3: After the stop work order, PSI restarted production (again using the 3M 363L disk), and Lot 3-1 passed the FAT. Appx26-27. Lot 3-2 had one leaker during the seal integrity test, the Army initially rejected it because the acceptance criteria required rejection with one failure. Appx27; Appx1111; Appx654. However, PSI requested a deviation to standard procedure to allow PSI to screen 100 percent of Lot 3-2 with a Government witness – a time consuming process that required 80-plus hours to screen the lot. Appx654-656; Appx27-28.

The Army accepted PSI's requested deviation in exchange for obtaining additional signal units and, after the screening procedure, the Army accepted Lot 3-2. Appx28.

Lot 3-3 failed the LAT and the Army rejected the lot because one signal had a critical defect during a function test when a signal "blew apart" scattering parts of the signal 141 feet from the test location. Appx617; Appx2232; Appx28. Four additional signals separated during function (but without blowing apart). Appx2345-2346; Appx28. Consistent with the Critical Characteristics clause, PSI stopped production, DCMA issued a corrective action request, and in response PSI determined that poor crimping of the flare end was the sole cause of the defective signals— *i.e.* a manufacturing error. Appx28; Appx2352-2355.

PSI requested and received approval to re-work Lot 3-3 by re-crimping the lot – referred to now as Lot 3-3A. Appx28-29; Appx2351. However, PSI used a torqueing test in an attempt to prove that the re-crimping was proper, but DCMA warned PSI that the test was not in the MK 124 specifications, was not approved, and PSI used the test at its own risk because the unnecessary torque test could result in breaking the seal to create leakers. Appx29-34; Appx2252-2254; Appx605-606; Appx710. PSI claimed its torque test proved it had properly crimped Lot 3-3A, but the board found insufficient proof that the lot had been properly crimped. Appx34. During the LAT for Lot 3-3A, one signal failed the

sealing test and another signal had its flare igniter assembly separate during function (the same critical function defect as in Lot 3-3). Appx31; Appx2248-2249.

On March 29, 2010, DCMA rejected the lot and invoked the Critical Characteristics clause, including requesting a corrective action response from PSI and stopping production. *Id.* On April 13, 2010, PSI requested a deviation for Lot 3-3A, but the Army disapproved the request on May 13, 2010. Appx2261; Appx34. After the Government continued to request a root cause of the problem, PSI eventually concluded that the thickness of 3M 363L sealing disk was the cause of the defects in Lot 3-3A because it kept the signals from crimping properly. Appx34-36; Appx1592-1593. On January 28, 2011, PSI submitted a schedule to re-start production, conditioned on its request that the Government permit PSI to qualify and use the 3M 433 foil sealing disk to manufacture the MK 124 signals. Appx36; Appx1592. The 3M 433 sealing disk is virtually identical to the 3M 433L sealing disk used during Interfix 1, except the 3M 433 sealing disk has slightly higher adhesion strength and a different adhesive backing material. Appx36-37; Appx589-590; Appx592-593. DCMA rejected PSI's root cause analysis from its test data: "The test data as presented appears to show more of a quality deficiency with the production line than a sealing disc issue." Appx1635; Appx1640; Appx37.

On February 11, 2011, the Army responded to PSI, requesting PSI provide an updated schedule for re-starting production and a new FAT (although the Army stated it agreed with DCMA regarding the root cause problems of Lot 3-3A).

Appx1639-1640; Appx37-38. Because production had lapsed for more than 90 days, the First Article Test clause required a new FAT of the signals. Appx1589-1590; Appx1639-1640. After Government and PSI representatives met to discuss re-starting production consistent with correcting the prior problems, the parties bilaterally modified the contract to update the schedule, including conducting a new FAT in April 2011. Appx38-40. Consistent with PSI's condition of restarting the production, PSI used the 3M 433 disk for Interfix 4. Appx40; Appx589.

B. <u>Interfix 4, Failure of FATs, And Cure Notice</u>

PSI conducted and failed the FAT for Interfix 4 that took place in April 2011. Appx41. In particular, 42 units leaked and failed the sealing test, 21 units failed the transportation and vibration test because they leaked, and three units failed the five-foot drop test because they leaked. Appx41; Appx1810-1811. PSI asserted the leaks were caused by crimping the signals at a higher pressure than normal and requested a modified FAT with fewer samples (60 rather than the normal 185 samples for a FAT). Appx41-44; Appx1805.

The Army permitted the modified FAT, which occurred on June 13, 2011.

Appx43. PSI's modified FAT failed because: (1) two smoke end units out of 20

were "Duds" that failed to function during the transportation and vibration test and the high temperature test and the contract required rejection if two failed in a test; (2) 10 smoke end units out of 20 tested exceeded the three-second delay time in the cold test and the contract required rejection if three failed the test; and (3) nine smoke end units out of 20 tested exceeded the 25-second maximum display time, with the longest lasting 28 seconds, and the contract required rejection if three failed this test. Appx1963-1964; Appx45; Appx1991; Appx46-47.

On June 29, 2011, the Army issued a cure notice to PSI because it had failed two consecutive FATs and those failures endangered performance of the contract. Appx1985; Appx46. The Army requested that PSI respond in 10 days with a plan regarding how and when the problems would be cured. *Id*.

On July 11, 2011, PSI responded with a proposed cure regarding the defects in the modified FAT. Appx1991-1993. It stated that the primary problem regarding the duds was the age of the ignition disks and that tests using the new ignition disks did not face the same problems. Appx46; Appx1991. PSI stated that the smoking issues related to a bad batch of smoke candles, which it stated it would not use in future units. Appx46-47; Appx1991-1993. PSI proposed a schedule to test and deliver the lots for Interfix 4. Appx47; Appx1993.

After the Army and PSI exchanged additional correspondence discussing the Army's concerns and a schedule for completing the lots for Interfix 4, the parties agreed to the following schedule proposed by PSI:

	Quantity	Production	Lot Acceptance Test Date	Acceptance
		Complete		Date
Lot 1	5,400	8/5/2011	8/9/2011 - 8/11/2011	8/17/2011
Lot 2	9,416	8/19/2011	8/23/2011 - 8/25/2011	8/31/2011
Lot 3	7,712	9/2/2011	9/6/2011 – 9/8/2011	9/14/2011
Lot 4	10,000	1/13/2012	1/17/2012 - 1/19/2012	1/25/2012
Lot 5	10,000	3/2/2012	3/6/2012 - 3/8/2012	3/14/2012
Lot 6	5,397	4/13/2012	4/10/2012 - 4/12/2012	4/18/2012

Appx2000-2003; Appx49. The parties bilaterally modified the contract to revise the delivery schedule and the Army agreed to permit PSI to conduct a joint FAT and LAT together for Lot 4-1. Appx2027-2038; Appx49.

Consistent with the new schedule, PSI conducted the joint FAT and LAT during the week of August 8, 2011. Appx50. Lot 4-1 failed these tests due to long smoke display times beyond 25 seconds and PSI requested the Army accept the lot on deviation. Appx50; Appx2065-2066. On August 25, 2011, the Army approved the request for deviation and accepted Lot 4-1. Appx2065-2066; Appx51.

At the same time, PSI again requested that the Army change the delivery schedule, including, among other things, at first proposing a reduction to the quantity of signals for Lot 4-2 by 4,000 units, terminate the remainder of units for Lot 4-2 for convenience (and increasing the number of units for Lots 4-3 and 4-6).

Appx51-52. Later, PSI proposed reducing the number of units for Lots 4-3 and 4-6 rather than Lot 4-2. Appx51-52. Although discussed, the parties never modified the contract. Appx52; Appx891-892.

C. The Army Terminates The Contract For Default Because PSI Failed To Timely Perform When Lots 4-2 and 4-3 Fail Critical And Major Characteristics Tests During LATs

On August 29, 2011, PSI submitted Lot 4-2 for a LAT at PSI's facilities. Appx52. This lot failed several critical or major characteristics tests required for acceptance and there were several test quality issues. Appx52-55; Appx2083-2106.

One signal (sample number 40) of 135 failed the sealing integrity test, a major characteristic failure. Appx53; Appx2087; Appx1108 ("Sealing (M105)"). The contract's acceptance criteria stated that the Army would reject the lot for one failure (and accept only with none). Appx1111; Appx13, Appx53. While PSI later conducted another "informational" sealing test, this signal had already failed this major characteristics sealing test. Appx53; Appx2087.

One signal, sample number 109, of 20 signals tested, failed the transportation and vibration sealing test, a critical characteristic under the contract's specifications. Appx53; Appx2087; Appx1108 ("Transportation vibration (C4)"). The contract's acceptance criteria stated that the Army would reject the lot for one failure (and only accept with no failures). Appx1111;

Appx13. The QAR, Dean Cowart, identified several "disparities" in how PSI conducted this test, including that PSI removed sample number 109 to take pictures (even though testing samples were never to leave the Government's control during testing), PSI inadvertently repeated a test twice, PSI removed the transportation vibration rounds from their casing without Government oversight, and removed the same samples from soaking contrary to Government instruction and without Government oversight. Appx53-54; Appx2101 ("PSI employees continue to misunderstand the importance of following directions.").

Additionally, Lot 4-2 failed several smoke tests by exceeding the display times for smoking, including 19 of 20 failures for the low temperature test, 3 of 20 for the high temperature test, and 4 of 20 for the five-foot drop test. Appx2088; Appx2101; Appx54. On September 2, 2011, DCMA rejected Lot 4-2. Appx2101; Appx54.

On September 9, 2011, the Army issued a show cause notice to PSI stating that PSI had "failed to deliver acceptable product in accordance with the delivery schedule for" the contract, which required delivery of 9,416 MK 124s by August 31, 2011, "placing this contract in a delinquent status." Appx2108; Appx55. "DCMA has rejected the applicable lot due to several quality-related failures encountered during the Lot Acceptance Test (LAT)." Appx2108. The Army also noted the June 29, 2011 cure notice had previously found "conditions endangering"

performance" and PSI failed to meet its own schedule proposed to remedy that prior cure notice. Appx2108. The Army stated it was considering termination for default because of PSI's failure to timely perform and requested PSI respond within 10 days to provide any excuses for PSI's failure to perform. Appx2108-2109.

On September 12, 2011 – three days after the show cause letter – PSI submitted Lot 4-3, which PSI tested that week. Appx56. After a visual review of the sample lot during the LAT, the QAR found that three of the signals had a critical defect because the alignment pin of the igniter was not in the alignment pin hole of the smoke primer and holder – a failure of a critical requirement in the specifications (Appx1666). Appx3033; Appx56; Appx2111. Lot 4-3 (like Lot 4-2) failed the sealing test, because one of 20 samples leaked – a major characteristic failure. Appx3034; Appx56. Also, like Lot 4-2, Lot 4-3 also had long smoke display times under several tests. Appx3034-3035; Appx56. After DCMA issued a request for a corrective action report for the alignment pin defect, PSI responded by concluding that it occurred "[d]uring the crimping process," which resulted in the misalignment of the pin with the igniter. Appx56; Appx2111.

On September 14, 2011, PSI responded to the Army's show cause letter regarding Lot 4-2. Appx2115-2116. PSI stated that it was "optimistic" that the Army would grant a deviation regarding the long smoke times based on a meeting

with the "government team." Appx2115; Appx57. PSI provided three excuses, which all related to the old sealing disk that had been resolved in March 2011: (1) the technical data package was defective because it relied on the 3M 363L sealing disk; (2) PSI had successfully resolved the problem with the sealing disk by gaining approval to use the 3M 433 sealing disk, which was introduced into production in July 2011; and (3) PSI's delay was due to the time it took to qualify to use the replacement 3M 433L sealing disk. Appx2115-2116; Appx57. As the board found, "PSI's response did not provide any excuses for the delays that occurred after the delivery schedule was modified in July 2011." Appx57.

Consistent with the requirements of the FAR (48 C.F.R. §§ 49.402-5 & 49.402-3(f) & (g)), the contracting officer prepared a memorandum dated September 21, 2011, which outlined the basis for termination. Appx57; Appx2123-2124.

The Navy disagreed that the Army should terminate, although the Coast Guard and Air Force both concurred with the Army. Appx861-862; Appx3079. The contracting officer considered the Navy's position that it would be less costly to continue to work with PSI to remedy Lots 4-2 and 4-3 rather than terminate. Appx3079; Appx861-862. But, the Navy did not disagree with the basis of the termination. Appx861; Appx3079. On September 26, 2011, the Army terminated the contract for default. Appx2131-2137.

PSI filed appeals with the ASBCA under the Contract Disputes Act (CDA), including the Army's decision to terminate for default PSI's contract to produce MK 124 signals and the Army's denial of PSI's claims for costs of a rejected lot of MK 124 signals. Appx1. The board held a hearing and concluded that the Army had established a *prima facie* case justifying the default termination because PSI had failed to timely deliver two lots of MK 124 signals. Appx67-68; *Pyrotechnic Specialties, Inc.*, ASBCA Nos. 57890, 58335, 59103, 17-1 BCA ¶ 36,696, at 178,692-93. The board also rejected PSI's assertions that its default was excusable because (1) the Army's specifications in the technical data package were defective, (2) the Army's termination decision was arbitrary and capricious, and (3) the Army acted in bad faith in terminating the contract. Appx69-84, 17-1 BCA ¶ 36,696, at 178,693-702.

Subsequently, the board denied PSI's request for reconsideration.

Pyrotechnic Specialties, Inc., ASBCA Nos. 57890 et al., 19-1 BCA ¶ 37,304.

This appeal followed.

SUMMARY OF ARGUMENT

PSI attempts to retry its case on appeal, challenging the board's factual findings and weighing of evidence. The board's findings were supported by substantial evidence and the board did not abuse its discretion in making evidentiary rulings, including allowing PSI to present evidence when PSI laid a

proper foundation, demonstrated the relevance of the evidence to PSI's claims before the board, established the evidence was not hearsay, or was within the scope of cross-examination.

The board's conclusion that the Army had justifiably terminated PSI for default when PSI failed to deliver two lots of MK 124s consistent with the modified delivery schedule (which PSI had proposed) is supported by substantial evidence. In particular, PSI failed to deliver 9,416 MK 124 conforming signals in Lot 4-2 by the August 31, 2011 contractual delivery date. And, PSI failed to deliver 7,712 MK 124 conforming signals in Lot 4-3 by the September 14, 2011 contractual delivery date.

On appeal, PSI has failed to establish that the board's rejection of its proffered excuses for its default is unsupported by substantial evidence. As an initial matter, PSI asserts that the board should have found that the Army's decision-making process was "arbitrary and capricious," but the board was required to review the default termination *de novo* under the CDA, and it lacked any statutory authority to conduct the Administrative Procedure Act (APA)-type of review advocated by PSI here and before the board. In any event, the board's findings that PSI's default was not excused by allegedly defective specifications, by alleged procedural violations by the Army, and by alleged bad faith are supported by substantial evidence. PSI encountered quality control and other

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manufacturing problems – particularly with crimping signals throughout the production – that prevented PSI from meeting the requirements of the Contract. PSI's process, not the specifications, resulted in PSI's default. And the board's findings that PSI had failed to prove any procedural violations, as well as any bad faith by clear and convincing evidence, are similarly supported by substantial evidence. Indeed, the evidence demonstrates that most of the bad faith allegations relate to other contracts involving another DCMA QAR, who no longer worked on any PSI contracts after 2006 – when PSI's production of the MK 124s under the Contract started. The evidence demonstrates that the contracting officer and QAR Mr. Cowart, who worked as QAR throughout the contract, acted without any intent to injure PSI during the administration of the contract.

ARGUMENT

I. STANDARD OF REVIEW

Under the Contract Disputes Act, the board's findings of fact are "final and conclusive and may not be set aside unless the decision is – (A) fraudulent, arbitrary, or capricious; (B) so grossly erroneous as to necessarily imply bad faith; or (C) not supported by substantial evidence." 41 U.S.C. § 7107(b)(2); *Empire Energy Mgmt. Sys., Inc. v. Roche*, 362 F.3d 1343, 1350 (Fed. Cir. 2004). The board's determination is adequately supported if based on "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Gen.*

Dynamics Corp. v. Panetta, 714 F.3d 1375, 1378 (Fed. Cir. 2013) (internal citations and quotation marks omitted). This Court reviews the board's legal conclusions *de novo*. 41 U.S.C. § 7107(b)(1); *Gen. Dynamics*, 714 F.3d at 1378.

II. THE BOARD'S DECISION SUSTAINING THE DEFAULT TERMINATION IS SUPPORTED BY SUSTANTIAL EVIDENCE

The contract's Default clause permitted the Army to terminate PSI for default where, among other things, "the Contractor fails to (i) [d]eliver the supplies or to perform the services within the time specified in the contract or any extension;" or (ii) [m]ake progress, so as to endanger performance of this contract. ..." 48 C.F.R. §§ 52.249-8(a)(1)(i), (ii); Appx1041 (incorporating this Default clause by reference in the contract). "A contractor's failure to make timely delivery of agreed-upon goods establishes a prima facie case of default." Gen. Injectables & Vaccines, Inc. v. Gates, 519 F.3d 1360, 1363 (Fed. Cir.), modified denying reh'g, 527 F.3d 1375 (Fed. Cir. 2008). A defaulted contractor bears the burden of demonstrating that its default was excusable, arising "from causes beyond the control and without the fault and negligence of the contractor." 48 C.F.R. § 52.249-8(c); Gen. Injectables, 519 F.3d at 1363 ("The burden then shifts to the contractor to show that the failure to deliver the goods was excusable."). "Whether or not a default is excusable is . . . a question of fact," and a board's determination will be upheld if "supported by substantial evidence." Copeland v.

Veneman, 350 F.3d 1230, 1233 (Fed. Cir. 2003) (internal citations and quotation marks omitted).

Here, the board found that the Army had justifiably terminated the contract when PSI had failed to timely deliver Lots 4-2 and 4-3 of MK 124 signals. The board's finding that PSI had failed to demonstrate its default was excused is supported by substantial evidence.

A. The Default Termination Was Justified

The Army justifiably terminated the contract for default because PSI had failed to "[d]eliver the supplies or to perform the services within the time specified in the contract or any extension." 48 C.F.R. § 52.249-8(a)(1)(i); Appx1041 (incorporating this Default clause by reference in the Contract). Failure to timely deliver supplies under a contractual schedule constitutes a *prima facie* basis for default termination. *Gen. Injectables*, 519 F.3d at 1363. Here, PSI failed to timely deliver two lots of MK 124 signals and, thus, the Army terminated PSI for default.

The parties bilaterally modified the contract to set the schedule for lots in Interfix 4, modifying prior schedules to require PSI to deliver Lot 4-2 by August 31, 2011, and Lot 4-3 by September 14, 2011. Appx2027-2038; Appx49; Appx67. The contract's Submission of Production Lot Samples clause stated, "if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default

clause of this contract. Therefore, this contract may be subject to termination for default." Appx1031; Appx4; Appx67. Thus, the Army's rejection of a lot during a LAT constituted a failure to timely deliver under the Default clause.

The Government rejected two lots due to multiple problems (and not mainly because of the long smoke times). First, the Government rejected Lot 4-2 on September 2, 2011, for failing to meet the acceptance criteria in the Solicitation's specifications for three reasons reflected in PSI's own testing report: (1) one signal leaked during the sealing test – a major defect; (2) one signal failed the transportation and vibration sealing test, a critical defect; and (3) numerous signals had long smoke display burn times under multiple tests with the longest display time at 41.48 seconds. Appx 2087-2088 (PSI test report); Appx2101 (DCMA) rejection); Appx1111-1112 (specification testing criteria); Appx1107-1108 (referencing critical and major characteristics); Appx53. DCMA also noted that PSI's testing had some "disparities" in how it tested the signal samples, showing PSI was not "following directions." Appx2101. Indeed, in the show cause notice, the Army concluded that DCMA rejected Lot 4-2 "due to several quality-related failures" by PSI during the LAT. Appx2108. Thus, PSI failed to deliver 9,416 MK 124 conforming signals in Lot 4-2 by the August 31, 2011 contractual delivery date.

Second, the Government also rejected Lot 4-3 because the lot included critical or major defects, including (1) misalignment of the alignment pin on several signals – a critical defect, (2) a sample failed the Sealing test – a major defect, and (3) multiple samples exhibited long smoke display times. Appx3033-3034; Appx2111; Appx56. Thus, PSI failed to deliver 7,712 MK 124 conforming signals in Lot 4-3 by the September 14, 2011 contractual delivery date.

Ultimately, PSI failed to timely deliver two lots of MK 124 signals and the Army justifiably terminated PSI for default. Thus, the board's finding that the Army had made a *prima facie* showing justifying PSI's default termination is supported by substantial evidence. Appx67-68.

B. PSI Failed To Prove That Its Default Should Be Excused

PSI failed to prove that its default should be excused. PSI bore the burden of demonstrating its excuse after the Army had established a *prima facie* basis for terminating PSI for default. *Gen. Injectables*, 519 F.3d at 1363. As it did before the board, PSI argues its default should be excused because (1) the Army's specifications were defective, (2) the Army's decision to default PSI was arbitrary and capricious, and (3) the Army had acted in bad faith. Appellant's Opening Brief at 10-20 (ECF No. 15) (PSI Br.). Whether to excuse a defaulted contractor is a question of fact. *Copeland*, 350 F.3d at 1233. As demonstrated below, the

board's findings rejecting PSI's excuses are supported by substantial evidence. Appx69-84.

1. The Board's Finding That PSI Had Failed To Prove That The Army's Specifications Were Defective Is Supported By Substantial Evidence

PSI failed to meet its burden to prove that the Army's MK 124 specifications were defective. On appeal, PSI challenges the board's findings and the Army's default termination as primarily based on the long smoke display times. PSI Br. at 18-20. But, as noted above, PSI was in default for numerous reasons relating to its poor quality control in manufacturing the MK 124 signals. The board's finding that PSI had failed to prove the Army's specifications were defective is supported by substantial evidence. Appx70-74.

"[T]he government is entitled to strict compliance with contract specifications." *TEG-Paradigm Envtl., Inc. v. United States*, 465 F.3d 1329, 1342 (Fed. Cir. 2006); *Jet Constr. Co. v. United States*, 531 F.2d 538, 543 (Ct. Cl. 1976) ("In undertaking a contract, the contractor promises to perform according to the contract specifications, and the Government has the right to insist on contractor performance in compliance with them."). Design specifications carry an "implied warranty that the specifications are free from design defects" that "protects contractors that fully comply with the design specifications" in a contract. *White v. Edsall Constr. Co.*, 296 F.3d 1081, 1084-85 (Fed. Cir. 2002). To establish that the

Government breached its implied warranty, a contractor must prove that the contractor performed in "substantial conformity with contract specifications." *Radiation Tech., Inc. v. United States*, 366 F.2d 1003, 1006 (Ct. Cl. 1966).

As the board found, "PSI offers little evidence to support its assertion that it substantially complied with the specifications." Appx70. On appeal, PSI asserts that (1) the board's fact-finding did not support the board's conclusion, because the record allegedly contains no evidence that PSI had committed manufacturing error regarding Lot 4-2; (2) the Army terminated mainly because of the long smoke display times, which were caused by the 3M 433L or 3M 433 sealing disks; and (3) the prior contractor – Martin Electronics – produced millions of signals, but PSI denies that demonstrated the technical data package was sound. PSI Br. at 18-20. The board's decision dispatched with each of these defenses, finding that PSI's production problems had resulted from poor quality control and manufacturing error, not from a problem with the technical data package for the MK 124. Appx69-74.

Crimping – Manufacturing Error: The board found that PSI's quality control problems had resulted in repeated failures to properly crimp MK 124 samples – a manufacturing error – that produced leakers that failed sealing tests and caused other critical malfunctions. Appx72 ("[A]ppellant has failed to carry its burden proving that its crimps were proper and were not the cause of the

failure."). Proper crimping both hermetically seals the signals at each end and keeps the trigger assembly from blowing apart the MK 124. Appx72. The board's findings that PSI's manufacturing process resulted in improper crimping throughout contract performance and that PSI had failed to adduce evidence that crimping was not the problem are supported by substantial evidence. Appx72-73.

PSI experienced difficulty with crimping throughout contract performance, including failing its first LAT in Lot 1-1 for poor crimping. Appx17; Appx638-639. PSI's poor crimping led to the critical malfunctioning of samples in Lot 3-3 and Lot 3-3a (as PSI itself concluded), which resulted in shutting down the production line for a year. Appx28; Appx2352-2355. PSI failed the first FAT for Interfix 4 because it over-crimped signals (as PSI itself acknowledged), resulting in numerous leakers that failed the sealing test. Appx41-44; Appx1805; Appx72. Lot 4-2 failed multiple tests regarding sealing (the sealing, and transportation and vibration tests) and PSI failed to follow procedures while conducting its testing of Lot 4-2. Appx53-54; Appx2101. The board found that PSI failed to "furnish proof that it complied with all relevant TDP requirements for crimping," adducing no evidence that it properly crimped Lot 4-2. Appx72-73. Lot 4-3 included a critical defect regarding the alignment pin, which PSI concluded was the result of its crimping process. Appx56; Appx2111. Thus, from Lot 1-1 to Lot 4-3, PSI continued to encounter problems crimping the MK 124 signals – a manufacturing

and quality control error. The board did not err in concluding PSI failed to demonstrate that it properly crimped the signals. Appx72-74. Improper crimping, not defective specifications, resulted in PSI's failure to provide proper signals.

Long Smoke Display Times: PSI asserts that the Army "primarily rejected Lots 004-002 and 004-003 on the basis that the lots had long smoke display times" and that the technical data package was defective because the sealing disk suggested in the specifications inherently led to long smoke display times. PSI Br. at 18-19. First, the Army did not "primarily" reject Lots 4-2 and 4-3 for long smoke display times, but rather primarily "due to several quality-related failures" that resulted in critical and major defects in those lots. Appx2108. In the termination notice, the Army explained that long smoke display times were not the main reason for termination, contrasting its acceptance of Lot 4-1 on deviation for the long smoke display times, with rejection of Lots 4-2 and 4-3 that had other critical and major defects: "Lot 2, however, encountered significantly more problems (leaker, 20+ long burns, leaker during T&V (hole in sealing disk due to improper handling), drop test done incorrectly, T&V test performed without protective caps, etc.)." Appx2134. The Army also explained that Lot 4-3 had the critical alignment pin defect and several other critical or major defects, including another leaker. Id. Thus, PSI was not "primarily" in default because of long

smoke display times, but rather because of the numerous critical or major defects in Lots 4-2 and 4-3.

Second, PSI failed to prove that the 3M 433L sealing disks (used in Interfix 1) or 3M 433 sealing disks (used in Interfix 4) in the specifications inherently caused long smoke display times. Appx72, Appx74. The board acknowledged that Interfixes 2 and 3, which used the 3M 363L, did not appear to have long smoke display times. Appx71. However, during Interfix 4, PSI had concluded that the long smoke display times during the FAT were the result of "flaws in the smoke candle inventory or possibly improper brushing of the bore of the smoke candle during assembly," not due to the sealing disk. Appx71; Appx46-47; Appx1991-1993. Moreover, while the five lots accepted in Interfixes 2 and 3 did not have long smoke display times (but included other defects), the board found that in Interfix 1 (using the supposedly flawed 3M 433L sealing disk) PSI had produced three lots without long smoke display times or any other defects. Appx74; Appx17-20; Appx641-643; Appx647. Thus, the board's finding that the long smoke display times were not caused by the sealing disks is supported by substantial evidence. Appx71.

Martin Electronics Produced 1 Million Signals: Martin Electronics, the prior contractor who had produced MK 124 signals for the Government, successfully manufactured more than one million signals using the same technical

data package without encountering the problems that PSI did. Appx15; Appx668-669. PSI attempts to challenge this straightforward fact with testimony of PSI's employee – Andy Long, who previously worked for Martin Electronics – and an incomplete letter from Martin Electronics (PSI provided only the first page). PSI Br. at 20; Appx911-912 (board admitting the document only to allow PSI to refresh recollection of witness, but calling the incomplete letter "somewhat suspect").

The board discounted Mr. Long's testimony because he had acknowledged that he was not involved in testing the MK 124s while with Martin Electronics and had no knowledge whether Martin Electronics had ever failed any LATs. Appx15; Appx536. Instead, the board credited a Government official – Mr. Bowen – who had observed most of the LATs during Martin Electronics' contract (and PSI's) and testified that Martin Electronics had successfully performed, including producing over one million signals, without leakers (or other problems). Appx15; Appx667-669; Appx915. Indeed, when presented with the excerpted Martin Electronics letter that expressed concerns about testing the MK 124 and the amount of signals accepted, Mr. Bowen stated that "the entire quantity on the contract was completed" by the time Martin Electronics had completed the contract. Appx912-913. The ability of another manufacturer to supply the MK 124s within the specifications serves to rebut PSI's defective specification claims.

See GLR Constructors, Inc., ENGBCA No. 6128, 96-1 BCA ¶ 28,218 (ENGBCA 1996) ("The ability of other contractors to meet the specifications also dictates against any conclusion that the specifications were either defective or commercially impracticable of performance."), aff'd, 114 F.3d 1206 (Fed. Cir. 1997) (unpubl. tbl. dec.).

Ultimately, PSI failed to prove that the contract's specifications were defective. Appx74. The board's findings are supported by substantial evidence.

2. The Board's Finding That The Army Did Not Abuse Its Discretion In Terminating The Contract For Default Is Supported By Substantial Evidence

PSI similarly failed to establish that the termination process involved an abuse of discretion that would excuse its default termination. The board's rejection of this excuse is likewise supported by substantial evidence. Appx74-81.

a. The Standard For Abuse Of Discretion In Terminations

As an initial matter, PSI can cite no statute that authorized the board to engage in the type of Administrative Procedure Act (APA) review of the agency's termination decision that it demands here. *See* 5 U.S.C. § 706 (authorizing review of agency action based on an administrative record). PSI asserts the Army was "arbitrary and capricious" because (1) its termination decision allegedly failed to consider certain factors; (2) the Navy allegedly disagreed with the Army's determination that Lots 4-2 and 4-3 included defective signals; and (3) the leakers

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in Lot 4-2 do not support the decision to terminate PSI for default. PSI Br. at 16-18. But the board was required under the CDA to review the termination for default de novo, and it lacked any statutory authority to review the contracting officer's termination decision under a traditional APA standard of review. Compare 41 U.S.C. § 7103(e) ("The contracting officer's decision shall state the reasons for the decision reached and shall inform the contractor of the contractor's rights as provided in this chapter. Specific findings of fact are not required. If made, specific findings of fact are not binding in any subsequent proceeding."); 41 U.S.C. § 7104(b)(4) (actions brought in court shall proceed de novo) with 5 U.S.C. §§ 706(2)(a), (d) ("The reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be [] arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; or . . . without observance of procedure required by law[.]").

Although this Court's post-CDA precedent does allow for an abuse of discretion analysis when a court or board conducts a *de novo* review of a termination, *e.g.*, *McDonnell Douglas Corp. v. United States*, 182 F.3d 1319, 1326 (Fed. Cir. 1999), neither PSI nor the board recognized that the nature of this review is unlike traditional APA review. Rather, the board was supposed to apply a fourpart test in reviewing the termination for abuse of discretion: (1) evidence of subjective bad faith on the part of the government official, (2) whether there is a

reasonable, contract-related basis for the official's decision, (3) the amount of discretion given to the official, and (4) whether the official violated an applicable statute or regulation. *United States Fidelity & Guaranty Co. v. United States*, 676 F.2d 622, 630 (Ct. Cl. 1982) (*USF&G*).

Prior to enactment of the CDA in 1978, agencies' resolutions of contractual disputes were subject to review much more akin to APA review. In the nineteenth century, the Government was allowed to designate contractually an authorized representative to decide disputes between the parties. *See Kihlberg v. United States*, 97 U.S. 398 (1878). This representative's determination was final and binding, and absent fraud or gross mistakes implying bad faith "cannot, therefore, be subjected to the revisory power of the courts without doing violence to the plain words of the contract." *Id.* at 401.

In 1951, the Supreme Court held in *United States v. Wunderlich*, 342 U.S. 98 (1951), that the decisions of the contractually-designated representatives were final and binding unless there was evidence of fraud, which the Court defined as "conscious wrongdoing, an intention to cheat or be dishonest." *Id.* at 100. Three years later, Congress enacted the Wunderlich Act to override the Court. The Wunderlich Act provided that the decision of the Government's authorized representative shall be final and conclusive "unless the same is fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith, or

is not supported by substantial evidence." 41 U.S.C. § 321 (2006), *repealed by*, Pub. L. No. 111-350, 124 Stat. 3677, 3859 (Jan. 4, 2011). The Act further provided that "no Government contract shall contain a provision making final on a question of law the decision of any administrative official, representative, or board." 41 U.S.C. § 322 (2006), *repealed by*, Pub. L. No. 111-350, 124 Stat. 3677, 3859 (Jan. 4, 2011).

But, in 1978, the standard of review for a contracting officer's final decision dramatically changed when Congress enacted the CDA. For one thing, the CDA allowed the board to entertain appeals from contracting officer final decisions. 41 U.S.C. § 7104(a). And because the contracting officer's specific findings of fact are not binding in any subsequent proceeding, *see* 41 U.S.C. § 7103(e), the board, like the Court of Federal Claims, 41 U.S.C. § 7104(b)(4), reviews the contracting officer's final decision *de novo*. *E.g.*, *Precision Specialties*, *Inc.*, ASBCA No. 48717, 96-1 BCA ¶ 28,054 (final decision retains no presumptive evidentiary weight nor is it binding on the board).

To be sure, this Court has cited Wunderlich Act-era precedent in reviewing termination decisions for an abuse of discretion. *See McDonnell Douglas*, 182 F.3d at 1326 (citing *Schlesinger v. United States*, 390 F.2d 702 (Ct. Cl. 1968); *John A. Johnson Contracting Corp. v. United States*, 132 F. Supp. 698 (Ct. Cl. 1955)) (also citing *Darwin Constr. Co. v. United States*, 811 F.2d 593, 598 (Fed.

Cir. 1987)). But the Court has articulated a four-part test for abuse of discretion that is not incompatible with the *de novo* review mandated by the CDA. As the Court explained in McDonnell Douglas, "[p]roperly understood, then, Schlesinger and its progeny merely stand for the proposition that a termination for default that is unrelated to contract performance is arbitrary and capricious, and thus an abuse of the contracting officer's discretion." 182 F.3d at 1326. This Court then linked "[t]his proposition" to "the well established law governing abuse of discretion by a contracting official." Id. (citing USF&G, 676 F.2d at 630, which listed "four factors to be used in determining if conduct by a government official is arbitrary and capricious: (1) evidence of subjective bad faith on the part of the government official, (2) whether there is a reasonable, contract-related basis for the official's decision, (3) the amount of discretion given to the official, and (4) whether the official violated an applicable statute or regulation").

This Court's established four-part abuse of discretion test as applied to a termination decision is a far cry from the wide-ranging APA-style review demanded by PSI here and erroneously conducted by the board below. In *McDonnell Douglas*, for example, the trial court held, after trial, that the contracting officer had abused his discretion in terminating the contract for default because he personally did not wish to terminate the contract at all. 182 F.3d at 1326-27. This Court reversed not the trial court's findings, but rather the holding,

because the Navy had terminated the contract for default for performance-related reasons. *Id*.

Because the Army here plainly terminated the contract for default for performance-related reasons, Appx2131-2134, PSI's argument that the Army did not adequately consider the subjective opinions and beliefs of the *Navy customer* (not even the contracting officer) could not plausibly serve as a basis for an abuse of discretion. *Cf. Empire Energy*, 362 F.3d at 1357 (stating that "the subjective knowledge of the contracting officer herself is irrelevant"). The board should have stopped its analysis there. Instead, the board needlessly examined PSI's argument and concluded that the Army was not arbitrary and capricious because it had, in fact, considered and terminated despite the Navy's subjective opinions and beliefs. Appx59; Appx79. The board did not apply the Court's four-factor test but rather impermissibly engaged in a traditional APA-type review of the termination decision regarding this and other "arbitrary and capricious" allegations by PSI.

b. The Board's Finding Of No Abuse Of Discretion Is Supported By Substantial Evidence

Even assuming, for argument's sake, that PSI plausibly presented arguments that the Army had abused its discretion in terminating the contract for default, the board's findings that there was no abuse of discretion would still be supported by substantial evidence.

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First, PSI contends that the Army failed "to consider factors" and that was "coupled with premature consideration of default." PSI Br. at 16-17. The FAR includes a list of factors that a contracting officer should consider when exercising discretion to terminate a contractor for default, 48 C.F.R. § 49.402-3(f),⁴ but "the regulation does not confer rights on a defaulting contractor." *DCX, Inc. v. Perry*, 79 F.3d 132, 135 (Fed. Cir. 1996). In any event, the board found that the Army contracting officer weighed the FAR's seven factors in the memorandum recommending termination. Appx57-59; Appx79-80. This finding is supported by substantial evidence. Appx2125-2128, Appx57-59; Appx79-80.

Moreover, the Army did not act prematurely in terminating PSI's contract.

The Army permitted PSI numerous opportunities to successfully perform, but PSI kept failing. Its critical failure resulted in shutting down production for over a year between Interfix 3 and Interfix 4. Appx28-49. PSI failed both FATs in Interfix 4 and, after the Army had issued a show cause notice for failure to make progress,

⁴ The FAR lists seven factors, including: "(1) The terms of the contract and applicable laws and regulations. (2) The specific failure of the contractor and the excuses for the failure. (3) The availability of the supplies or services from other sources. (4) The urgency of the need for the supplies or services and the period of time required to obtain them from other sources, as compared with the time delivery could be obtained from the delinquent contractor. (5) The degree of essentiality of the contractor in the Government acquisition program and the effect of a termination for default upon the contractor's capability as a supplier under other contracts. (6) The effect of a termination for default on the ability of the contractor to liquidate guaranteed loans, progress payments, or advance payments. (7) Any other pertinent facts and circumstances." 48 C.F.R. § 49.402-3(f)(1)-(7).

the Army allowed PSI to supply lots in Interfix 4 with a modified schedule proposed by PSI. Appx1985; Appx2012; Appx2027-2038; Appx46-50. And, the Army provided PSI with an opportunity to argue it should be excused from late delivery of Lot 4-2 (Appx2115-2116), even though the Army was not required to issue a cure notice for PSI's failure to timely deliver supplies. 48 C.F.R. §§ 49.402-3(c) & 52.249-8(a)(1)(i); *Delfasco LLC*, ASBCA No. 59153, 17-1 BCA ¶ 36659 ("[W]hen the legal basis for default is failure to deliver by the time required by the contract (i.e., the basis set forth in FAR 52.249-8(a)(1)(i)), as it is here, the contractor is entitled to no cure notice, whatsoever."). These findings, too, are supported by substantial evidence.

Second, even assuming, for argument's sake, that the Navy's views on termination somehow could provide a basis for an abuse of discretion finding, while the Navy had expressed interest in potentially purchasing Lots 4-2 and 4-3, it did not disagree that those lots were defective. Appx3079. The Navy stated "that continuing to work with PSI to achieve delivery of useable products will be a less costly option and achieve a better value for DOD compared to the costs of litigation and settlement with little chance of recouping any prior payments to PSI." Appx3079. Indeed, Mr. Bowen, the Navy official who witnessed most of PSI's LATs and FATs (including the defective Lot 4-3) over the course of the contract, confirmed that "the Navy did not take issue at all with the basis for the

termination for default" but "merely" viewed it from a "financial perspective" regarding the termination. Appx666-667; Appx663-664 (witnessed Lot 4-3). The board's conclusion that the Army properly terminated the contract despite the Navy's "objections" was supported by substantial evidence. Appx79.

Third, the board's finding that the leaker signals in Lot 4-2 provided a basis for terminating PSI is supported by substantial evidence. Appx77 ("The Board determines that there was no error in the government's treatment of these tests as failures."). As the board found, sample signal 40 in Lot 4-2 failed the initial sealing integrity test and the test specifications instructed that one failure of this test was sufficient to reject the entire lot. Appx77; Appx53; Appx2087; Appx1108, Appx1111. PSI asserts that signal 40 later passed another "informational" sealing test during the separate five-foot drop test. PSI Br. at 17. However, the board rejected PSI's argument because PSI had never explained what it meant by an "informational test" and, moreover, "a single failure of either test is sufficient basis for rejection of the lot." Appx77. Indeed, the board concluded that "there is nothing to suggest that a signal passing one sealing test forgives the signal failing a separate, required sealing test." Appx77. The board's finding that leaker signals in Lot 4-2 supported the default termination is supported by substantial evidence.

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Additionally, Lot 4-2 had a second leaker – signal 109 during the transportation and vibration test. Appx78. One failure during this test also independently justifies rejection of the entire lot. Appx78; Appx53; Appx2087; Appx1108, Appx1111. PSI argues again on appeal that this leaker was not a manufacturing error, but due to PSI's technician failing to seal the cap properly on signal 109 during testing at PSI's facility. PSI Br. at 17. The board found PSI "admits that the testing error was caused by its own personnel's failure to follow contract required test procedures, and there is no evidence that failure to follow procedures was due to government action." Appx78 (citing Appx8, Appx53-54). DCMA's QAR documented other testing irregularities during Lot 4-2, including that PSI removed sample number 109 to take pictures (even though testing samples were never to leave the Government's control during testing), PSI inadvertently repeated a test twice, PSI removed the transportation vibration rounds from their casing without Government oversight, and removed the same samples from soaking contrary to Government instruction and without Government oversight. Appx53-54; Appx2101. The board rejected PSI's argument: "PSI furnishes no legal authority, and we are aware of none, to support appellant's position that the government must disregard failure of a test required by the contract because the contractor failed to conduct the test in accordance with contractually required procedures." Appx78. The board's findings that these additional test failures

served as a basis to reject Lot 4-2 and to terminate the contract for default are also supported by substantial evidence. Appx78.

3. The Board's Finding That PSI Failed To Meet Its High Burden To Establish Bad Faith Is Supported By Substantial Evidence

PSI failed to demonstrate that the Government acted in bad faith in terminating the contract for default. Substantial evidence supports the board's finding that PSI had failed to prove bad faith by clear and convincing evidence. Appx81-84.

A contractor's default may be excused if it can prove that the agency acted in bad faith in terminating the contractor for default. *Securiforce Int'l Am., LLC v. United States*, 125 Fed. Cl. 749, 798-99 (2016), *aff'd-in-part and vacated-in-part on other grounds*, 879 F.3d 1354 (Fed. Cir. 2018), *cert. denied*, 139 S. Ct. 478 (2018); *USF&G*, 676 F.2d at 630 (discussing bad faith as one method of demonstrating that an agency abused its discretion in terminating a contract). "The contractor's burden to prove the Government acted in bad faith, however, is very weighty." *Krygoski Constr. Co. v. United States*, 94 F.3d 1537, 1541 (Fed. Cir. 1996). "[G]overnment officials are presumed to discharge their duties in good faith." *Road & Highway Builders, LLC v. United States*, 702 F.3d 1365, 1368 (Fed. Cir. 2012). To overcome this burden, a contractor must demonstrate that the Government had a "specific intent to injure' the plaintiff by clear and convincing

evidence." *Id.* at 1369 (quoting *Am-Pro Protective Agency v. United States*, 281 F.3d 1234, 1240 (Fed. Cir. 2002)). PSI asserts incorrectly that it need only show "some evidence of specific intent to injure" and not clear and convincing evidence. PSI Br. at 11. Clear and convincing evidence "produces in the mind of the trier of fact an abiding conviction that the truth of a factual contention is 'highly probable." *Id.* at 1368 (quoting *Am-Pro*, 281 F.3d at 1240).

PSI accuses three different Government officials of acting in bad faith: (1) Mr. Cowart, DCMA's QAR, for much of the contract; (2) Mike King, a DCMA QAR who left before PSI had begun production on the contract; and (3) Ryan Pierce, who served as the contracting officer at the end of the contract. PSI Br. at 10-15. The board's findings that PSI had failed to establish bad faith by clear and convincing evidence are supported by substantial evidence.

RFD 13 And Smoke Display Times: PSI accuses DCMA's Mr. Cowart and the Army's contracting officer, Mr. Pierce, of intending to injure PSI by changing its interpretation of an earlier request for deviation – RFD 13 – and reverting to the original testing specifications regarding the maximum permitted smoke display times. PSI Br. at 11-12, 14. The board rejected this contention. Appx82 ("There is no specific evidence that the change in the maximum smoke display time acceptance criteria during Interfix 4, which resulted from the government changing its interpretation of RFD 13, arose from an intent injure PSI.").

As discussed above, the contract's testing specifications stated that the maximum permitted smoke display times were to vary from 18 to 25 seconds, depending on the specific test. Appx1107. During Interfix 1, the parties agreed to PSI's request for deviation – RFD 13 – for Lot 1-4 to raise the sealing function test maximum smoke display time from 19 seconds to 25 seconds. Appx18-19; Appx1338-1340. However, as the Navy's Mr. Bowen testified, the parties generally treated RFD 13 as changing the maximum smoke display times for all tests to 25 seconds (with Mr. Bowen generally considering allowing signals to smoke up to 30 seconds as permissible on deviation). Appx576-577; Appx664-665; Appx18-19. Mr. Bowen explained that smoke display times beyond 30 seconds could be problematic, because the smoke candles only included "so much material" and, if it smokes too long, it is less "robust" and would not be seen by a "reconnaissance craft" when a pilot is "bobbing around out on the ocean" waiting for rescue. Appx665. At the time of RFD 13, Mr. Pierce was not the contracting officer.

Mr. Pierce became the contracting officer before Interfix 4 and interpreted RFD 13 to only raise the smoke display times for the sealing function test and not the other tests. Appx82; Appx2046. Thereafter, PSI (and DCMA's Mr. Cowart) reverted to using the maximum display times used in the contract's specifications, and no longer treated RFD 13 as raising the maximum display times for all tests,

not only the sealing function test. Appx51. The board concluded that there was "no evidence to suggest CO Pierce's interpretation was the result of anything more than unfamiliarity with past performance and a differing interpretation of the RFD." Appx82. Notably, even if Mr. Pierce had applied the 25 second maximum smoke display time for all tests, PSI still would have failed the Lot 4-2 low temperature test, in which 19 of 20 of the signals exceeded the 25 second maximum smoke display time from RFD 13 (and 10 of those signals exceeded 30 seconds, with the longest smoking for 41.48 seconds). Appx2092; Appx78-79. Similarly, Lot 4-3 had 10 signals with smoke display times longer than 25 seconds in the low temperature test. Appx78. Thus, the board concluded that any change was immaterial because the Army had ultimately terminated the contract for other, independently justifiable grounds, including the leakers in Lots 4-2 and 4-3, and PSI had failed the low temperature tests even using the 25-second maximum smoke times. Appx82; Appx2133-2134; Appx78-79.

Intent to Terminate After Cure Notice: PSI also asserts that Mr. Pierce never intended to permit PSI to complete the contract when the Army issued the June 2011 cure notice, and that the parties had bilaterally modified the contract to extend the performance schedule for Interfix 4; according to PSI, an e-mail from another employee advocating PSI's termination shows bad faith. PSI Br. at 13. The board rejected PSI's interpretation and, as the trier of fact, found differently.

Appx83; Appx48. In particular, a member of the integrated product team (IPT) for the MK 124 sent an email to Mr. Pierce's supervisor (and copied Mr. Pierce) suggesting that the team consider terminating PSI. Appx3082. Mr. Pierce never responded to the email and mostly disregarded the email because it was not directed to him. Appx884-889. The board concluded, "There is no evidence that the IPT at large or the CO concurred in the opinion." Appx83; Appx79.

PSI envisions there was some nefarious plan to terminate PSI, but as of July 2011, the Army could have terminated PSI for failure to make progress because production had been stopped for over a year and PSI had just failed two FATs for Interfix 4. Instead, the Army allowed PSI to implement a cure to the problems, and the Army and PSI bilaterally agreed to modify the contract to adopt a schedule provided by PSI. Appx2027-2038. Ultimately, PSI could not meet its own suggested modified schedule.

No Additional Modification: In August 2011, the contracting officer, Mr. Pierce, and PSI communicated about potentially modifying the contract again with another revised production schedule and terminating units for convenience at no cost to the Government. Appx51-52; Appx2057-2058. PSI asserts that the parties had an "agreement" that somehow modified the contract. PSI Br. at 13. However, no agreement was reached. Appx52; Appx83.

On August 19, 2011, PSI proposed a new schedule, reduction of units for Lot 4-2, and increasing units for Lots 4-3 and 4-6. Appx52. Although Mr. Pierce indicated he was "amenable to modifying the current contractual schedule," he explicitly stated that any agreement would "be memorialized in a modification to PSI's referenced contract pursuant to the authority of FAR 43.103(a)(3)" and would terminate for convenience 2,150 signals at no cost to the Government because PSI's proposed schedule would result in the Government losing funding for those signals. Appx2057; Appx52. On August 29, 2011, PSI countered with yet another revised schedule, which would result in terminating for convenience 5,015 signals from the contract, particularly Lots 4-3 and 4-6. Appx52; Appx83-84; Appx2069.

On that same day, PSI provided Lot 4-2 for testing and, that week, Lot 4-2 failed the LAT, which resulted in the Army's show cause notice. Appx52-53. The discussions of modifying the contract "were overcome by events" due to the Lot 4-2 LAT failure and that any potential modification was premised on PSI continuing to produce acceptable lots. Appx52; Appx891-892; Appx838. As the board found, "the contract was never modified" to include these new proposed terms. Appx52; Appx83-84. The board found that there was "no evidence of bad faith in the government's attempts to work with the contractor to execute such agreements" modifying the contract. Appx84.

PSI also asserts that because it informed Mr. Pierce that PSI was having difficulty with some supplies based on a subcontractor, its inability to timely deliver units should be excused as beyond the control of PSI. PSI Br. at 14. However, "an unexcused default by a subcontractor does not excuse nonperformance by the prime contractor." *Gen. Injectables*, 527 F.3d at 1376. PSI never offered evidence proving that PSI's default was caused by its subcontractor, much less evidence that PSI should be excused from that cause. Appx855.

Mr. King Was Not Involved In The Contract: PSI asserts that the actions of DCMA's QAR Mr. King to allegedly falsely accuse PSI of fraud adversely affected PSI's contract performance. PSI Br. at 2-3, 12. However, Mr. King was no longer serving as a QAR for PSI's facility after 2006, when PSI began production under the contract, and his fraud allegations about PSI had no relationship with the contract. Appx252; Appx241-242 (acknowledging that Mr. King was not a QAR after 2006). All the actions described by PSI regarding Mr. King related to other contracts. Appx245-247; Appx251-252; Appx15 ("None of the fraud allegations are related to the contract at issue in these appeals or the MK 124."); Appx84. And, Mr. King's actions and fraud allegations played no role in the Army's termination of this contract. Appx902. Thus, the board properly rejected PSI's assertions regarding Mr. King. Appx84; Appx15-16.

Mr. Cowart's Actions Were Proper: PSI asserts that QAR Mr. Cowart acted improperly in overseeing PSI and unnecessarily issued Corrective Action Requests. PSI Br. at 3, 11-12. However, PSI relied on the testimony of a witness – Richard Profeta – who did not work on the MK 124 contract, based his impressions on one event on another contract, and did not observe Mr. Cowart's actions regarding this contract. Appx250-252; Appx265. Indeed, Mr. Cowart properly issued Corrective Action Requests throughout the contract, including when a signal blew apart in Lot 3-3. Appx2345-2346; Appx2351-2355. And, in response to the alignment pin problem on Lot 4-3. Appx2111-2112; Appx56. And, contrary to PSI's implication, when PSI complained about Mr. Cowart, his supervisors found PSI's complaints "non-valid." Appx726-727.

Ultimately, the board found that PSI had failed to prove, by clear and convincing evidence, any intent by the Government to injure PSI. Appx82-84.

PSI fails to establish that these findings are unsupported by substantial evidence.

III. PSI HAS FAILED TO ESTABLISH THAT THE BOARD ABUSED ITS DISCRETION IN RULING ON EVIDENTIARY OBJECTIONS

The board did not abuse its discretion in ruling on evidence PSI attempted to present during the hearing. Indeed, the board permitted PSI to present its evidence when PSI laid a proper foundation, demonstrated the relevance of the evidence to PSI's claims before the board, established the evidence was not hearsay, or was within the scope of cross-examination. *Pyrotechnics*, 19-1 BCA ¶ 37,304, at

181,472, Appx3140-3141. PSI raised these same concerns to the board in its motion for reconsideration, but the board denied PSI's motion. *Id*.

"Procedural matters relative to discovery and evidentiary issues fall within the sound discretion of the board and its officials." *Johnson Mgmt. Grp. CFC, Inc. v. Martinez*, 308 F.3d 1245, 1252 (Fed. Cir. 2002) (internal quotation marks and citation omitted). This Court will not overturn an evidentiary ruling of the board "unless an abuse of discretion is clear and is harmful." *Id.* (internal quotation marks and citation omitted). "Appellate review of evidentiary rulings is extremely restricted; it must be shown that there was manifest error, such as a reasonable likelihood that the improper exclusion of evidence prejudiced the outcome." *Nat'l Presto Indus., Inc. v. West Bend Co.*, 76 F.3d 1185, 1197 (Fed. Cir. 1996). Here, the board neither abused its discretion nor committed manifest error in ruling on the Army's evidentiary objections.

PSI challenges the board's evidentiary decision to exclude deposition testimony of Michael King (a former Army QAR) that related to a fraud investigation of PSI that pre-dated the termination of PSI's contract by four years. PSI Br. at 21-23 (citing Appx188-191). ASBCA Rule 8(b)(2) states: "No testimony taken by deposition shall be considered as part of the evidence in the hearing of an appeal until such testimony is offered and received in evidence at

such hearing. It will not ordinarily be received in evidence if the deponent can testify at the hearing." ASBCA R. 8(b)(2), 48 C.F.R. Ch. 2, Appx A.

The board properly excluded this document because PSI had failed to lay a foundation for the relevance of the document and failed to call Mr. King as a witness. Appx190-191. In particular, the board judge explained to PSI that it needed to lay a foundation for why it intended to use the deposition. Appx188-189 ("[I]t is necessary for you to lay a foundation to explain why this is relevant to the matter before us now."). The board then permitted PSI to question the witness – PSI's CEO, David Karlson – to lay a foundation for the document. Appx189-191. The board stated that it would permit PSI "to provide background in context . . . using Mr. Karlson's testimony" but "unless you can give me direct relevance to the matters at issue here, then I will only allow you to examine Mr. Karlson with respect to background in context and I will not give this document any weight." Appx190-191.

The board also excluded the deposition testimony because PSI had stated it did not intend to call Mr. King as a witness and never asserted Mr. King was unavailable. Appx191. PSI now asserts that "PSI believed Mr. King was stationed abroad and unable and unavailable to be subpoenaed to testify." PSI Br. at 23 n.1. However, that was not what PSI told the board during the hearing. The board judge attempted to determine why Mr. King was not testifying (including asking if

he was deceased – one of the standard reasons a deposition transcript is permitted in Federal courts). Appx211; Fed. R. Civ. P. 32(a)(4)(A); see Phoenix Data Solutions LLC, ASBCA No. 60207, 18-1 BCA ¶ 37164, at 180,928 n.6 (ASBCA 2018) (noting that deposition testimony was permitted because party demonstrated that witness was unavailable under Federal Rules). PSI acknowledged that Mr. King was alive. Appx211. However, PSI stated it was not intending to call Mr. King as a witness: "To the best of my knowledge, we're not going to call him as a witness, but if the government plans on it." Appx211-212. PSI did not state that Mr. King was unavailable or that they would have called him if they thought they could. Instead, PSI simply hoped that the Army would call Mr. King as a witness (even though Mr. King was not on the Army's witness list). Appx212. Given PSI's failure to explain or argue that Mr. King was unavailable, the board did not abuse its discretion and properly excluded the deposition testimony under ASBCA Rule 8(b)(2), 48 C.F.R. Ch. 2, Appx A.

Next, PSI selectively quotes from the hearing transcript (Appx215-216), but fails to acknowledge that the board admitted the document at issue during the hearing. PSI Br. at 23-34. PSI sought to use a document that related to Mr. King accusing PSI of "fraudulently signing" his name. Appx213-214. The board admitted the evidence over the Army's objection: "Objection overruled. I'll admit it for its probative value." Appx216.

PSI next quotes pages from the transcript (Appx216-217) regarding another objection lodged by the Army. PSI Br. at 24-25. However, the board permitted PSI to lay a foundation and heard testimony regarding this line of questioning. Appx219 ("I will give you the opportunity to lay a foundation."). Thereafter, the board permitted further testimony and finally explicitly overruled the Army's objection as to relevance. Appx219-222.

PSI next quotes another of the Army's objections (Appx227-229), but the board judge again denied the objection and admitted the evidence: "I will admit it for its probative value and as I explained to you earlier, the probative value will be high or low depending on the level of connection you can make in the authority of the witness that you're using to testify about a particular event document, et cetera." Appx229.

PSI quotes an exchange (Appx238-239) where the Army objects to PSI's "failure to lay the foundation to tie the events with respect to the FBI investigation and contract to the matter before us." Appx239; PSI Br. at 26-27. The board then explicitly offers PSI the "opportunity to lay that foundation." Appx239. But, PSI's representative stated, "I have nothing further to say on that." Appx239. Given PSI's failure to lay a foundation after being given the chance to do so, the board properly sustained the foundation objection. Appx239. The board did not abuse its discretion in sustaining the objection.

PSI quotes another foundation objection made by the Army regarding testimony related to Mr. King. Appx241-242; PSI Br. at 27. Again, the board allowed PSI to lay a foundation and the board overruled the objection and permitted the testimony. Appx242.

Finally, PSI quotes its cross-examination of the Army's contracting officer, Mr. Pierce, and the Army's objection that PSI's questions went beyond the scope of direct. PSI Br. at 27-29; Appx899-902. Under the Federal Rules of Evidence (which the board uses as a guide), "Cross-examination should not go beyond the subject matter of the direct examination and matters affecting the witness's credibility. The court may allow inquiry into additional matters as if on direct examination." Fed. R. Evid. 611(b); ASBCA R. 10(c), 48 C.F.R. Ch. 2, Appx A ("The Federal Rules of Evidence are not binding on the Board but may guide the Board's rulings."). Here, the Army objected to the scope of cross-examination because the Army did not ask the contracting officer "anything about fraud" and he was not listed as a witness for PSI. Appx899. The board partially sustained the objection, but permitted PSI to ask the contracting officer "whether he considered fraud in terminating this contract." Appx900. PSI then elicited testimony, in which the contracting officer stated he did not consider fraud as part of his termination decision. Appx902. Thus, the board did not abuse its discretion by

limiting PSI's cross-examination to relevant testimony to the termination of the contract.

PSI asserts that the board erred and "appeared to recognize its error and slowly admitted more evidence" as the hearing continued. PSI Br. at 29. The board rejected PSI's assertion that it had ruled inconsistently or done so because the evidence related to bad faith allegations: "The contested questioning was not rejected because it dealt with bad faith per se, but because PSI failed to lay a proper foundation; demonstrate the relevance of the attempted examination; or establish that it was not eliciting unacceptable hearsay from a nondeclarant." Pyrotechnics, 19-1 BCA ¶ 37,304, at 181,472; Appx3141. "Appellant was allowed to proceed after laying at least a minimal foundation and the testimony was accepted for its probative value and after narrowing the scope of cross-examination to matters raised during direct questioning." *Id.* (internal citations omitted). Indeed, as it did before the board, PSI fails to explain what rule or other legal authority the board transgressed. Id. The board's evidentiary rulings were consistent with law.

Ultimately, as discussed above, the board admitted much of PSI's evidence after it established foundation and relevance regarding its bad faith allegations.

And, as discussed above, the board explicitly found it had jurisdiction to consider bad faith. Appx81-84. After weighing the evidence and PSI's arguments, the

board concluded that PSI had failed to demonstrate the Army had acted in bad faith administering and terminating PSI's contract. Appx81-84. PSI has failed to establish that the board abused its discretion in making the challenged evidentiary rulings.

CONCLUSION

For these reasons, the Secretary of Defense respectfully requests that this Court affirm the board's decision sustaining the Army's termination of PSI's contract for default.

Respectfully submitted,

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April 20, 2020

CERTIFICATE OF SERVICE

I hereby certify under penalty of perjury that on April 20, 2020, a copy of the foregoing BRIEF OF APPELLEE was filed electronically. This filing was served electronically to all parties by operation of the Court's electronic filing system.

/s/ Daniel S. Herzfeld

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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a)(7)(B), this brief contains 13,584 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b) (cover page, disclosure statement, tables of contents and citations, certificates of counsel, addendum with statutes, rules, or regulations, signature block, proof of service, and statement of related cases), calculated by Microsoft Word – the word processing program used to prepare this brief – using a 14-point proportionally spaced typeface and type style pursuant to Fed. R. App. P. 32(a)(5) & (6).

/s/ Daniel S. Herzfeld