No. 18-1140

IN THE

Supreme Court of the United States

AVCO CORPORATION,

Petitioner,

v.

JILL SIKKELEE,

Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Third Circuit

BRIEF OF AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

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CORPORATE DISCLOSURE STATEMENT

Amicus curiae, Aerospace Industries Association of America, Inc. (AIA) is a not-for-profit trade association representing the interests of the aerospace and defense industry in the United States. It has no publicly owned parent corporation, subsidiary, or affiliate, nor has it issued shares or debt securities to the public. No publicly held company owns 10% or more of any stock in AIA.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

TABLE OF AUTHORITIES—Continued

TABLE OF AUTHORITIES—Continued

OTHER AUTHORITIES

TABLE OF AUTHORITIES—Continued

INTEREST OF THE *AMICUS CURIAE*[1]

Founded in 1919, AIA represents more than 340 of the nation's major aerospace and defense manufacturers and suppliers, producers of products and systems ranging from commercial aircraft, engines and avionics, to manned and unmanned defense systems and space and satellite communications systems. *Amicus curiae* lists its members in the appendix herein. Together with *amicus curiae* General Aviation Manufacturers Association, Inc. (GAMA), AIA represents most of the aviation manufacturers in the United States.

AIA's member companies' comprehensive expertise in aircraft design, manufacturing, and certification will prove useful to the Court in considering the questions regarding aviation manufacturing, design, and safety presented in this case. Its members' products reach all corners of the commercial aviation industry in America, and are counted on to safely move America's passengers across the skies on a daily basis.

The Federal Aviation Administration (FAA) certifies these commercial aviation products as airworthy under federal regulatory safety standards, and AIA member companies work extensively with this agency through all phases of regulation covering safe design, manufacture, operation, and airworthiness of their products. The Third Circuit's decisions have profound

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[1] Counsel of record received timely notice of the intention to file this brief, and all parties have consented to its filing. Letters of consent to the filing of this brief executed by all parties have been lodged with the Clerk of the Court pursuant to Rule 37.2. In accord with Rule 37.6, *Amicus* states that no party or counsel for a party made a monetary contribution for the preparation or submission of this brief, and this brief was not authored, in whole or in part, by counsel for a party.

and sweeping implications for this regulatory framework, AIA, and the entire aviation industry.

SUMMARY OF ARGUMENT

Safe product design and manufacture are the cornerstones of America's aviation industry. For nearly a century, the federal government has recognized aviation safety as a paramount federal interest. Congress expressed its clear intent that federal law exclusively govern aviation safety by enacting the Federal Aviation Act and creating the Federal Aviation Administration (FAA) to serve as the sole regulator of aircraft design and manufacture. This clear congressional intent is furthered by the industry's constant pursuit of advancing safety pursuant to uniform federal regulations.

Congress authorized the FAA to establish this comprehensive regulatory framework to oversee the aviation industry and protect the flying public. The Third Circuit's decisions, which substitute state-court created law for well-crafted federal standards, usurp the FAA's role and disrupt Congress' carefully constructed regulatory framework.

This Court's "impossibility" conflict preemption standard, as set forth in *PLIVA, Inc. v. Mensing*, 564 U.S. 604, 623-24 (2011), establishes that federal law will have preemptive effect when a manufacturer may not alter a previously certified product without prior agency approval. The Third Circuit's refusal to correctly apply "impossibility" preemption to aviation manufacturing effectively dismantles the FAA's role as the sole arbiter of aviation safety by transferring the role of deciding design changes to state courts and juries - directly contrary to the Federal Aviation Act's instruction. By improperly placing conflict preemption analysis with respect to aviation design issues outside

the scope of *PLIVA*, the Third Circuit's decision thwarts the federal government's predominance in the matter of aircraft safety. Furthermore, the Third Circuit's earlier 2016 decision undermines the uniform safety regime in holding that the scope of preemption over the field of aviation safety is limited to "in-air operations." That decision directly contravenes longstanding federal policy aimed at uniformity, undercutting an entire industry's (and the flying public's) reliance on uniform air safety standards.

Upholding Congress' mandates for federal control over aviation safety and for uniform aviation safety standards is vital to the broader industry's task of advancing the significant federal interest in public safety. This Court should accordingly grant the petition for certiorari.

ARGUMENT

THE SIGNIFICANT FEDERAL SAFETY INTEREST AT STAKE WARRANTS GRANTING THE PETITION.

The Third Circuit's opinions on conflict and field preemption disregard this Court's clear directives on when federal law supplants state law as the "supreme law of the land." The Third Circuit's conflict preemption holding in *Sikkelee v. Precision Airmotive Corporation*, 907 F.3d 701, 712-16 (3d Cir. 2018) ("*Sikkelee II*") eviscerates the concept of "impossibility" that *PLIVA* recognizes: that state law is preempted when federal government approval is required **before** a design change. *PLIVA*, 564 U.S. at 623-24. Likewise, in rejecting field preemption in its 2016 decision, *Sikkelee v. Precision Airmotive Corporation*, 822 F.3d 680 (3d.Cir. 2016) ("*Sikkelee I*"), the Third Circuit failed to adequately take into account the significant

federal interest in aviation safety underpinning the comprehensive regulations governing aircraft design and manufacture. 822 F.3d at 687.

In fact, Congress' overarching interest in aircraft safety is precisely why it created the FAA and prescribed that design and manufacture of aviation products be governed solely by the FAA's regulations. Proper application of this Court's "impossibility preemption" analysis under *PLIVA*, and the related doctrine of field preemption, is necessary to achieving Congress' directive for uniform federal control over aviation safety.

I. The federal government's paramount interest in aircraft safety forged the comprehensive regulatory framework governing aircraft design and manufacture.

The federal interest in aviation safety and uniformity dates back nearly a century. Even prior to Congress' enactment of the current scheme under the Federal Aviation Act, Justice Jackson recognized the "intensive and exclusive" federal control of aviation under the Air Commerce Act of 1926 when he wrote that "[p]lanes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection . . . and under an intricate system of federal commands." *Northwest Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring). Justice Rehnquist later recognized that this led Congress to act with the "paramount substantive concerns" of federally regulating "all aspects of air safety . . ." when enacting the Federal Aviation Act of 1958. *City of Burbank v. Lockheed Air Terminal Inc.,* 411 U.S. 624, 644 (1973) (5-4 decision) (Rehnquist, J., dissenting) (disagreeing with the majority over whether the local noise rule at issue was preempted

but agreeing with the majority that the act impliedly preempted all aspects of air safety).

Thus in 1958, Congress expressed that "[i]t is essential that **one agency of government, and one agency alone**, be responsible for issuing safety regulations if we are to have timely and effective guidelines for safety in aviation." H.R. REP. NO. 85-2360 (1958), *reprinted in* 1958 U.S.C.C.A.N. 3741, 3761 (emphasis added); *see also Nat'l Fed'n of the Blind v. United Airlines Inc.*, 813 F.3d 718, 724 (9th Cir. 2016) (recognizing that "'preemptive intent is more readily inferred' in the field of aviation, because it is 'an area of the law where the federal interest is so dominant.'") (quoting *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007)).

By promulgating the Federal Aviation Act and establishing what is now known as the FAA, Congress codified the significance and primacy of the federal government's interest in aviation safety. Section 40101 of the Act (codifying the Federal Aviation Reauthorization Act of 1996), sets out the federal government's policy and mandates that in carrying out the Act, the FAA shall consider the public interest of "assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce." 49 U.S.C.A. § 40101(d)(1) (West 2000). Similarly, section 40101(a) (regarding economic regulations) mandates that the federal government shall recognize "the clear intent, encouragement, and dedication of Congress to further the highest degree of safety in air transportation and air commerce, and to maintain the safety vigilance that has evolved in air transportation and air commerce and has come to be expected by the traveling and shipping public." 49 U.S.C.A § 40101(a)(3).

This paramount safety interest drove Congress' mandate that the FAA prescribe the safety standards for design and manufacture of aircraft, aircraft engines, and propellers under 49 U.S.C.A. section 44701(a), which in turn required the FAA to promulgate the pervasive set of regulations that includes careful details for the design and manufacturing standards governing aviation products in the United States. *See* 49 U.S.C.A. § 44701; *see also* 14 C.F.R. pts. 23, 25, 27, 29, 33, 35.

The Third Circuit previously recognized that "aviation is unique among transportation industries in its relation to the federal government – it is the only one whose operations are conducted almost wholly within federal jurisdiction, and are subject to little or no regulation by States or local authorities." *Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 368 (3d Cir. 1999) (citing S. REP. NO. 85-1811 (1958)) ("the Federal Government bears virtually complete responsibility for the promotion and supervision of [the aviation] industry in the public interest.").

In 2018, however, the Third Circuit held that "impossibility preemption" does not apply to petitioner because it had the ability to request a design change from the FAA and had not shown that the FAA would reject such a request. *Sikkelee II*, 907 F.3d at 712-14. This holding usurps the federal government's role in exclusively controlling aviation safety, because it effectively gives state courts and juries the role of deciding design change issues. Such effect directly contravenes specific congressional intent, dating back nearly a century, that the federal government be the sole arbiter in the field of aviation for the sake of uniformity and safety. The Third Circuit's 2016 holding that federal law does not preempt the field of design

standards similarly disregards the Third Circuit's earlier recognition of federal exclusivity. In doing so, it ignores the established federal policy and interest in aviation safety, and undermines the uniform regime that has been the foundation of America's aviation industry.

II. Exclusive federal control and a uniform regulatory framework are vital to maintaining the safest and most advanced aviation industry in the world.

Commercial aviation is one of America's largest and most important industries, and the design and manufacture of safe products is central to industry success. The aviation industry accordingly works tirelessly to advance public safety and has achieved extraordinarily high levels of safety-conscious design, production, and operation under FAA control.

The significance of the aerospace industry's contribution to the United States economy is undisputable. AIA estimates that, in 2016, the U.S. Aerospace and Defense (A&D) industry supported 2.4 million American jobs, generated $872 billion in sales, and reduced the U.S. trade deficit by a record $90.3 billion. Aerospace Industries Ass'n, *2017 Facts and Figures U.S. Aerospace & Defense* (June 15, 2017), *available at* https://www.aia-aerospace.org/report/2017-facts-figures/. Commercial aerospace alone generated $303.5 billion in sales and accounted for 490,000 end-use manufacturing jobs. *See id.* at 3 - 4.

Moreover, U.S. A&D continues to be America's leading net exporting industry, with exports growing by 26 percent between 2012 and 2017. Aerospace Industries Ass'n, *Foreign Trade: The Facts on Trade,*

http://www.aiaaerospace.org/research-center/statistics/industry-data/foreign-trade/ (last visited Apr. 16, 2019).

These statistics demonstrate that the aviation industry generates tremendous economic benefits for the United States. As highlighted by a U.S. country report prepared by Oxford Economics, with the help of the International Air Transport Association (IATA), in 2011, "the U.S. has the world's largest aviation manufacturing sector" and "[t]he connections created between cities and markets represent an important infrastructure asset that generates benefits through enabling foreign direct investment, business clusters, specialization and other spill-over impacts on an economy's productive capacity." Oxford Economics, *Economic Benefits from Air Transport in the US*, 4 - 5 (2011), *available at* https://www.iata.org/publications/economics/Reports/voa-country-reports/Benefits-of-Aviation-US-2011.pdf.

Ultimately, "[t]he aviation sector contributes $669.5 billion in Gross Value Added (GVA) to the US, equivalent to 4.9% of the US economy"; it "supports 9.3 million jobs in the US"; and in 2010, it paid "over $57.4 billion in tax including income tax receipts from employees, social security contributions and corporation tax levied on profits." *Id*.

International trade within the aviation industry depends on the primacy of federal law. Article II of the Constitution empowers the federal government, not states, to enter into treaties and agreements with foreign nations. *See* U.S. Const. art. II, § 2, cl. 2; *see also Crosby v. National Foreign Trade Council*, 530 U.S. 363, 381 (2000) ("This clear mandate and invocation of exclusive national power belies any suggestion that Congress intended the President's effective voice to be obscured by state or local action.").

Currently, there are 48 bilateral treaties with foreign nations, including the European Union, permitting reciprocal certification of products manufactured and certified by the FAA when exported to signatory countries. *See* FAA, *Aviation Safety: Bilateral Agreement Listing* https://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/ (last visited Apr. 16, 2019). These bilateral agreements recognize the FAA's regulatory standards as preeminent in governing the design and manufacture of U.S. aviation products. *See, e.g.*, Agreement on Cooperation in the Regulation of Civil Aviation Safety, U.S.-E.U, art. 2, Jun. 30, 2008, T.I.A.S. 11-501.

In fact, the 10 year period between 2006 and 2015 demonstrates good reason for such treaties, as it was one of the safest periods of aviation in American history. *See* Boeing, *Statistical Summary of Commercial Jet Airplane Accidents, Worldwide Operations*, 1959 – 2017, 18 (Oct. 2018), *available at* http://www.boeing.com/resources/boeingdotcom/company/about_bca/pdf/statsum.pdf.

As discussed in further detail below, the FAA's role as the sole arbiter of safe product design and manufacturing compliance is paramount to achieving the track record of safety that exists in modern aviation. In enforcing this role, the FAA's regulatory framework requires not just three levels of product certification (type certification, production certification, and airworthiness certification), but it also imposes restrictions on the aviation industry where *any type of change* to a product's design, whether "minor change" or "major change" as defined in the regulations, require advance FAA approval. *See* FAA C.A. Br. 4 (citing 49 U.S.C. § 44704(b)); 14 C.F.R. §§ 21.113, 21.95 (2019). This control responsibility is

central to achieving the uniformity that Congress specifically sought when enacting the Federal Aviation Act and creating the FAA.

In sum, one of America's strongest industries depends on the federal regulatory framework arising from the robust Federal Aviation Act. The Third Circuit's holdings in *Sikkelee I* and *Sikkelee II*, and the uncertainty presented by division in the circuits, threaten to interfere with and disrupt the FAA's industry oversight and control, and the industry's ability to advance the federal safety interest as a result.

III. The Third Circuit's holdings usurp federal control of aviation safety and disrupt the FAA's entire regulatory framework.

In furtherance of the federal government's significant interest in public protection, the FAA and the aviation industry have worked interdependently and collaboratively to utilize engineering expertise to promote safety under a uniform and pervasive federal regulatory framework addressing the design, manufacture, and certification of aircraft and aircraft components. The Third Circuit's opinions in the instant matter disrupt the FAA's control under this regime. Without a determination from this Court, state juries, judges, and legislatures are free to create the very patchwork of varying safety standards that the Federal Aviation Act sought to prevent. Because the aviation industry relies on a *uniform* federal regulatory framework to advance public safety, the practical effect of the Third Circuit's opinions allowing for the potential of varied state standards is inherently disruptive.

The Third Circuit itself recognized that the FAA's certification process is "intensive and painstaking." *Sikkelee I*, 822 F.3d at 684. As a recent example,

General Electric Aviation's Passport engine for business jets accumulated more than 2,400 hours and 2,800 cycles in ground and flight testing during its type certification process. *See GE Passport Achieves FAA Certification for Business Jet Applications*, GE AVIATION (May 23, 2016), *available at* https://www. geaviation. com/press-release/business-general-aviation/ge-passport-achieves-faa-certification-business-jet. "By the time the Passport [engine] enters into service, it will have accumulated the equivalent of 10 years of flying for a [business jet] operator with more than 4,000 hours and 8,000 cycles." *Id*. Such magnitude of time and engineering analysis demonstrates the comprehensiveness of the federal regulations.

As the FAA noted in its *amicus* brief solicited by the Third Circuit, the issuance of a type certificate "involves the analysis of vast amounts of information, including data, drawings, and other details about the aircraft or part for which an applicant seeks approval." Letter Brief from the Dep't of Transp. and the FAA as Amici Curiae to Marcia M. Waldron, Clerk of the Court, United States Court of Appeals for the Third Circuit (Sept. 21, 2015) (Letter Brief of FAA), *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 684 (3d. Cir. 2016) (No. 14-4193), 2015 WL 5665724 at *14. "The type certification process is an exhaustive, iterative process" involving multiple stages and collaborative input from both the FAA and the applicant. *Id*.

The process encompasses five phases, including Conceptual Design, Requirements Definition, Compliance Planning, Implementation, and Post-Certification. 14 C.F.R. pt. 21; U.S. Dep't of Transp., FAA Order 8110.4C, *Type Certification* (Mar. 28, 2007). Interaction between applicants and the FAA is crucial to

ensuring safety throughout the process, which often spans upwards of a decade.

As part of the FAA's control over, and philosophy to engage, engineering expertise to advance safety during the process, the FAA, in conjunction with GAMA and AIA, has published *The FAA and Industry Guide to Product Certification* (the "FAA Guide"), describing these phases.

Each phase encompasses a series of tasks, requisite information, "deliverables" (i.e., documents and information that are prerequisites for subsequent Phases and must be completed before entering the next Phase, unless otherwise mutually agreed by the FAA and applicant), and mandatory criteria for success. *The FAA and Industry Guide to Product Certification*, 7-11 (3d ed. 2017), 7-11, *available at* https://www.faa.gov/aircraft/air_cert/design_approvals/media/CPI_guide_II.pdf.

The FAA Guide identifies two primary documents that advance this multi-phase certification process – the Partnership Safety Plan (PSP) and Project Specific Certification Plan (PSCP). *Id.* at 1. The FAA retains sole authority to approve these documents and sole approval authority at every step of the certification process. *See* Letter Brief of FAA, 2015 WL 5665724 at *15.

When appropriate, the FAA also possesses several practical tools to access the knowledge, experience, and expertise of an applicant's organization and thereby evaluate the entire "cradle-to-grave" life cycle of product development in performance of its regulatory mandate. *See* 14 C.F.R. §§ 183.41(a), 183.1(a), 183.29(a) - (i). This process enables the FAA to utilize additional engineering expertise held within the aviation industry's knowledge base, while eliminating

conflict-of-interest. *See* 14 C.F.R. §§ 183.41(a), 183.1(a), 183.29(a) - (i), 183.57. Even where the FAA taps industry expertise it retains its exclusive control over certification standards and whether they are met: "no matter what role a manufacturer plays in the type-certification process, the decision to approve the type design ultimately rests with the FAA." *See* Letter Brief of FAA, 2015 WL 5665724 at *15.

The FAA's regulations control certification of product design and manufacture at the outset, and require FAA review and approval before any design change may occur. *See*, Letter Brief of FAA 4 (citing 49 U.S.C. 44704(b)); 14 C.F.R. §§ 21.113, 21.95. This control responsibility is therefore central to achieving the uniformity that Congress specifically intended when enacting the Federal Aviation Act and creating the FAA. Permitting state courts and juries to mandate inconsistent design changes outside of the carefully constructed regulatory regime contravenes the foundational purpose of the Federal Aviation Act and FAA. Thus, proper application of this Court's "impossibility preemption" test from *PLIVA* is instrumental to maintaining the paramount federal interest in aviation safety and retaining the exclusive control that the FAA exercises over compliance of safe product design and manufacture.

The federal government's role in regulatory aviation safety does not stop with aircraft certification. The National Transportation Safety Board (Safety Board) is a coordinate federal entity that advances self-correction of safety issues arising in the context of civil aviation accidents and incidents. The Safety Board's regulations provide that it is "authorized to investigate . . . each accident involving a civil aircraft in the United States, and any civil aircraft registered in the

United States when an accident occurs in international waters." *See* 49 C.F.R. § 831.20(a)(1) (2018).

Importantly, regulation through liability under state law is not contemplated within the Safety Board's regulations governing its investigation of civil aviation accidents in America. *See* 49 C.F.R. pt. 831 (Investigation Procedures). Rather, in recognition of the complementary role of the FAA, the Safety Board regulations contemplate that "the [Safety Board] will provide for the participation of the Administrator of the FAA in the investigation of an aircraft accident when participation is necessary to carry out the duties and powers of the FAA Administrator." *See* 49 C.F.R. § 831.21(a) (2019).

Additionally, by exercising its exclusive Article II powers with respect to aviation, the federal government has long sought to unify safety regulation of aviation by promoting international standards as well. State-level intervention is contrary to – and inconsistent with – this federal priority. The federal government instead remains responsible for engaging in the bilateral agreements directly with other countries as referenced above. *See* U.S. Const. art. II, §2, cl. 2. Furthermore, under Article II, the federal government entered into the Convention on International Civil Aviation. This Convention places the United States amongst other signatory nations with the duty and power to regulate aviation under the International Civil Aviation Organization (ICAO). International Civil Aviation Organization, Convention on International Civil Aviation, Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295. The global system of aviation therefore also depends on the exclusive federal nature of aviation in America.

This comprehensive federal structure demonstrates a conscious effort to instill safety into all actions related to aviation via unified safety standards. In sharp contrast, the Third Circuit's opinion rejecting conflict preemption attacks this conscious effort. It opens up a patchwork of varying state laws and effectively places corrective decision-making with juries years after a crash occurs. Absent the preemptive effect of the federal regulations, a jury trial is subject to the limited focus of adjudicating rights and liabilities between partisan adversaries without considering the broader public policy to advance aviation safety both domestically and internationally. Under the Third Circuit's approach, inexperienced lay jurors will be in a position to supplant the many decades of safety expertise integrated into the overarching federal aviation system, and to undermine the industry's ability to achieve its unmatched record of safety under the uniform regulatory framework.

Furthermore, by rejecting the application of field preemption, the Third Circuit's earlier opinion undercuts the aircraft certification process carefully set forth by the FAA's regulatory framework. Permitting state judges, juries, and legislatures to second guess federal evaluation of aircraft design would have the potential to render virtually meaningless a certificate applicant's years of work and thousands of tests to obtain FAA approval. Determining the scope of the FAA regulations' preemptive effect will resolve that disruption, and advance the public safety interest at stake.

CONCLUSION

This Court should grant the petition for *certiorari*.

Respectfully submitted,

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APPENDIX

APPENDIX

List of Aerospace Industries Association of America, Inc. Member Companies

Source: http://www.aia-aerospace.org/membership/our-members/ (last accessed Apr. 16, 2019)

Full Members

- 3M Company
- AAR Corporation
- Accenture
- Acutec Precision Aerospace
- ACUTRONIC Group
- AD American Distributors, INC
- Aerion Corporation
- Aernnova Aerospace
- Aero Metals Alliance
- Aerojet Rocketdyne
- Aero-Mark, LLC
- AeroVironment, Inc.
- AGC Aerospace & Defense
- Aireon LLC
- Air Liquide
- Advanced Logistics for Aerospace (ALA)
- AlixPartners
- Allied Telesis, Inc.
- Alta Devices
- Amazon

- American Pacific Corporation
- Analytical Graphics, Inc.
- Apex International Management Co.
- Applied Composites
- Arch Tuscaloosa
- Arconic
- Astronautics Corporation of America
- Astronics Corporation
- Athena Manufacturing, LP
- AUSCO, Inc.
- Avascent
- B&E Group, LLC
- BAE Systems
- Ball Aerospace
- Belcan Corporation
- Benchmark Electronics, Inc.
- Bombardier Aerospace
- Boom Technology
- Booz Allen Hamilton
- Boston Consulting Group
- BRPH
- Burns & McDonnell
- BWX Technologies, Inc
- CADENAS PARTsolutions
- CAE

- Capgemini
- Celestica, Inc.
- Click Bond, Inc.
- Cobham
- CPI Aerostructures
- Crane Aerospace & Electronics
- Collins Aerospace
- Cubic Corporation
- Cyient Ltd.
- Cytec Engineered Materials, Inc.
- Deloitte Consulting LLP
- Delta Flight Products
- Denison Industries
- Ducommun Incorporated
- DXC Technology Company
- Eaton Corporation
- Elbit Systems of America
- Embraer Aircraft Holding, Inc.
- Enjet Aero, LLC
- EPS Corporation
- Ernst & Young LLP
- Esterline Technologies
- Exostar LLC
- Flight Safety International, Inc.
- FS Precision Tech, LLC

- FTG Circuits, Inc.
- Garmin
- Gamma Aerospace LLC
- General Atomics Aeronautical Systems Inc.
- General Dynamics Corporation
- General Electric Aviation
- Global Partner Solutions
- Google
- GSE Dynamics
- Harris Corporation
- HCL America, Inc.
- HEICO Corporation
- Hellen Systems LLC
- Hexcel Corporation
- Honeywell Aerospace
- Huntington Ingalls Industries
- IBM Corporation
- Integral Aerospace
- Iron Mountain
- Jabil Defense & Aerospace Services, LLC
- JRI, Inc.
- Kaman Aerospace Corporation
- KPMG, LLP
- Kratos Defense & Security Solutions, Inc.
- L3 Technologies

- Leidos Corporation
- LIMCO AIREPAIR, INC.
- Lockheed Martin Corporation
- LORD Corporation
- LS Technologies, LLC (LST)
- MAG (Momentum Aerospace Group)
- ManTech International Corporation
- Marotta Controls, Inc.
- Meggitt USA
- Mercury Systems
- Microsemi Corporation
- Moog, Inc.
- MTorres America, Inc.
- National Technical Systems (NTS)
- NEO Tech
- Net-inspect LLC
- New England Airfoil Products, Inc.
- Nokia
- Norsk Titanium
- Northrop Grumman Corporation
- O'Neil & Associates, Inc.
- Orbital ATK
- Pacific Design Technologies, Inc.
- Parker Aerospace
- Plexus Corp.

- PPG Aerospace-Sierracin Corporation
- Precision Hawk
- PRIMUS Technologies Corporation
- PTC
- PWC Aerospace & Defense Advisory Services
- Raytheon Company
- Range Generation Next, LLC
- Rhinestahl Corporation
- RIX Industries
- Rolls-Royce North America, Inc.
- Salesforce
- SAP America, Inc.
- Securitas Critical Infrastructure Services, Inc.
- Siemens PLM Software
- Sierra Nevada Corporation, Space Systems
- Sparton Corporation
- Special Aerospace Services, LLC
- Spirit AeroSystems
- Stratolaunch Systems Corporation
- SupplyOn North America, Inc.
- Tech Manufacturing, LLC
- Textron, Inc.
- The Aerospace Corporation, Civil Systems Group
- The Boeing Company
- The Lundquist Group

- The Padina Group (TPG), Inc.
- Therm, Inc.
- TIP Technologies
- Tribus Aerospace Corporation
- TriMas
- Triumph Group, Inc.
- TT Electronics
- Unitech Aerospace
- United Technologies Corporation
- Universal Protection Service
- Vantage Associates, Inc
- Verify, Inc.
- Virgin Galactic, LLC
- Woodward, Inc.

Associate Members

- Acme Industrial Company
- Acument Global Technologies
- Aerospace Alloys, Inc.
- Air Industries Group
- Airbus
- Airfasco Industries, Inc.
- Albany International
- Alfing Corporation
- Allen Aircraft Products, Inc.
- American Data Solutions

- AMI Metals, Inc.
- Anoplate
- Arnold Magnetic Technologies-Precision Thin Materials Division
- Arrow Electronics, Inc.
- Arrowhead Products Corporation
- Arundel Machine Tool Co., Inc.
- Asia-Pacific Engineering Consulting Services, LLC
- Assent Compliance, Inc.
- Astronova
- ATC Aerospace
- ATI Defense
- Automatic Screw Machine Products Company
- Barnes & Thornburg LLP
- Barnes Aerospace
- BE&K Building Group
- Boyle Ogata Bregman
- Breeze-Eastern Corporation
- Brogdon Machine, Inc.
- Butler America Aerospace, LLC
- Celltron, Inc.
- Chess Consulting LLC
- CIT Corporate Finance, Aerospace & Defense
- Concord Investment Partners
- Consolidated Industries, Inc.

- Consolidated Precision Products
- Co-Operative Industries Defense, LLC
- Craig Tools, Inc.
- Crestwood Technology Group
- Dassault Systemes
- Dayton T. Brown, Inc.
- Draper
- EEI Manufacturing Services
- EL-COM
- Electroimpact
- Embry-Riddle Aeronautical University
- Enduralock
- EnerSys
- ENSCO. Inc.
- Enterprise Florida, Inc.
- ETA Global, Inc.
- Etteplan
- Exotic Metals Forming Company, LLC
- Exxelia Group
- Fairmont Consulting Group
- Ferco Aerospace Group
- Flatirons Solutions, Inc.
- FLIR
- Freedom Alloys
- Frontier Electronic Systems Corporation

- Future Metals, LLC
- Gartner
- G.S. Precision
- GDCA
- General Motors
- H&S Swansons' Tool Company
- Hangsterfer's Laboratories, Inc.
- HDL Research Lab, Inc.
- Hercules Heat Treating Corporation
- Hi-Temp Insulation Inc.
- Hoar Program Management (HPM)
- Hogan Lovells
- Houlihan Lokey
- Howell Instruments
- Hughes Bros. Aircrafters, Inc.
- Impresa Aerospace, LLC
- Indiana Economic Development Corporation
- Industrial Metals Intl., Ltd.
- Integrated Support Systems, Inc.
- InterConnect Wiring
- ITT Corporation
- Janes Capital Partners
- Janicki Industries
- JAS Forwarding Worldwide
- Jones Day

- K&L Gates
- Kellstrom Defense, A Merex Group Company
- Kitco Defense
- Kulite Semiconductor Products, Inc.
- Lake Engineering
- Landstar Transportation Logistics
- Latitude Corp.
- Leonardo DRS
- Level 3 Inspection LLC
- LISI Aerospace
- LMI Aerospace, Inc.
- LMI (Logistics Management Institute)
- Materion Brush, Inc.
- Meyer Tool, Inc.
- Mid-Atlantic Aviation Partnership
- Mid-State Aerospace, Inc.
- Missouri Partnership
- Morris Machine Company, Inc.
- National Machine Group
- Norton/Saint-Gobain
- Oerlikon Balzers
- Ohio Aerospace Institute
- Omega Aerial Refueling Services, Inc.
- Pattonair
- Paulo

- Pentecom, LLC
- Perillo Industries, Inc.
- Philadelphia Gear, A Timken Power Systems Brand
- Phillips Screw Company
- Piedmont Triad Airport Authority
- Plymouth Engineered Shapes
- Precision Gear, Inc.
- Precision Tube Bending
- Proponent
- R&D Manco
- RA Industries
- Radant Technologies, Inc.
- RAM Company, Inc.
- Renaissance Strategic Advisors II, LLC
- Rocker Industries
- RUAG Aerostructures
- S&H Machine
- Safran USA
- Samuel Aerospace Metals
- SDL (formerly XyEnterprise)
- Seabury Capital
- Seacast, Inc.
- Seal Science, Inc.
- Sechan Electronics, Inc.
- SELEX Galileo Inc.

- Senior Aerospace
- Service Steel Aerospace
- Servotronics, Inc.
- Shapiro Metals
- SIFCO Industries, Inc.
- Signicast
- Smiths Interconnect
- Software AG Government Solutions
- Southern Manufacturing Tech, Inc
- Space Florida
- Spincraft
- Stanley Engineered Fastening – Helicoil Division
- Stroco Manufacturing, Inc.
- Supply Dynamics, LLC
- Tactair Fluid Controls, Inc.
- TATA Advanced Systems Limited
- Tata Consultancy Services
- TechSolve, Inc.
- TECT
- TEK Precision Company, Ltd.
- TEVET, LLC
- Thales USA, Inc.
- The Cirlot Agency
- Thermacore, Inc.
- Tiodize Co., Inc.

- TOMI Engineering, Inc.
- Torotel Products, Inc.
- Triman Industries
- TTI Inc.
- TTM Technologies, Inc.
- Turbine Controls Inc. (TCI)
- TW Metals
- Haslam College of Business Aerospace & Defense Business Inst. Associate
- Valbruna Stainless
- Venable
- VMH International
- Walbar Engine Components
- Web Industries, Inc
- Whitcraft, LLC
- WSI Industries
- X-Ray Industries, Inc.
- Yarde Metals