

No. 18-1140

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**In the Supreme Court of the United States**

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AVCO CORPORATION, PETITIONER

*v.*

JILL SIKKELEE, INDIVIDUALLY AND AS  
PERSONAL REPRESENTATIVE OF THE ESTATE OF  
DAVID SIKKELEE, DECEASED, ET AL.

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*ON PETITION FOR A WRIT OF CERTIORARI  
TO THE UNITED STATES COURT OF APPEALS  
FOR THE THIRD CIRCUIT*

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**BRIEF FOR THE UNITED STATES AS AMICUS CURIAE**

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### **QUESTION PRESENTED**

Whether the Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731, as amended, preempts state-law design-defect claims relating to an aircraft engine that the Federal Aviation Administration has determined complies with applicable federal aviation safety standards.

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**INTEREST OF THE UNITED STATES**

This brief is submitted in response to the Court's order inviting the Solicitor General to express the views of the United States. In the view of the United States, the petition for a writ of certiorari should be denied.

**STATEMENT**

1. The Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731, as amended, assigns to the Administrator of the Federal Aviation Administration (FAA) comprehensive responsibility for ensuring the safety of air travel. 49 U.S.C. 44701; see *United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797, 804 (1984). The FAA is charged, among other responsibilities, with “prescribing \* \* \* minimum standards required in the interest of safety

\* \* \* for the design, material, construction, quality of work, and performance of aircraft, aircraft engines, and propellers.” 49 U.S.C. 44701(a)(1) (as recodified by Act of July 5, 1994, Pub. L. No. 103-272, 108 Stat. 745); see 49 U.S.C. 44701(a)(5) (directing the FAA to set “regulations and minimum standards for other practices, methods, and procedure the Administrator finds necessary for safety in air commerce and national security”).

Pursuant to that statutory authority, the FAA has issued a comprehensive set of regulatory standards to oversee virtually every aspect of aviation safety. See 14 C.F.R. Pts. 1-147, 170-171. The FAA’s regulations govern, among many other matters, the design, manufacture, maintenance, and alteration of aircraft and aircraft parts. This “‘cradle to grave’ Federal regulatory oversight” of the aviation industry makes it “an industry whose products are regulated to a degree not comparable to any other.” H.R. Rep. No. 525, 103d Cong., 2d Sess. Pt. 2, at 5-6 (1994); see also S. Rep. No. 1811, 85th Cong., 2d Sess. 5 (1958) (1958 Senate Report) (“[T]he Federal Government bears virtually complete responsibility for the \* \* \* supervision of this industry in the public interest.”).

The FAA’s regulations impose a series of requirements regarding the design of aircraft and aircraft engines. See 14 C.F.R. Pt. 23 (airworthiness standards for certain general aviation airplanes); 14 C.F.R. Pt. 33 (airworthiness standards for aircraft engines). Most relevant here, the FAA requires that “[t]he fuel system of the engine must be designed and constructed to supply an appropriate mixture of fuel to the cylinders throughout the complete operating range of the engine under all flight and atmospheric conditions.” 14 C.F.R. 33.35(a). In addition, “[t]he suitability and durability of



materials used in the engine must \* \* \* [b]e established on the basis of experience or tests; and \* \* \* [c]onform to approved specifications.” 14 C.F.R. 33.15.

The Federal Aviation Act also establishes a three-step certification process to ensure that all certified aircraft meet the regulatory requirements. See *Varig Airlines*, 467 U.S. at 804-807. First, a manufacturer wishing to introduce a new aircraft, aircraft engine, or propeller must obtain from the FAA a “type certificate,” which describes the design in detail. 49 U.S.C. 44704(a). Second, in order to be authorized to duplicate or mass-produce aircraft, engines, or propellers conforming to an approved type design, a manufacturer must obtain from the FAA a “production certificate.” 49 U.S.C. 44704(c). Third, before an individual aircraft may be placed in service, the owner must obtain from the FAA an “airworthiness” certificate, which indicates that the aircraft conforms to its type certificate and, after inspection, is in a safe condition to operate. 49 U.S.C. 44704(d).

The type-certification process is governed by 14 C.F.R. Part 21, and is further described in FAA Order 8110.4C Chg. 6 (Mar. 6, 2017). A manufacturer applying for a type certificate must proceed through multiple stages. See *id.* at 18 (chart of the type certificate process). The applicant must develop and test its proposed design, and submit test reports and other data to the FAA “to show that the product to be certificated meets” all applicable regulatory requirements. 14 C.F.R. 21.21(b); see 14 C.F.R. 21.33, 21.35; see also *Varig Airlines*, 467 U.S. at 805 n.7 (noting that a manufacturer of a commercial aircraft seeking a new type certificate for a wide-body aircraft might submit upward of 300,000

drawings and 2000 engineering reports, apart from ground tests and flight tests).

The type certificate is supported by, among other things, a “type certificate data sheet” that provides detailed specifications for the product. See 14 C.F.R. 21.41 (“Each type certificate is considered to include the type design, the operating limitations, the certificate data sheet, the applicable regulations of this subchapter with which the FAA records compliance, and any other conditions or limitations prescribed for the product in this subchapter.”). The type certificate also may specify, or incorporate by reference, aircraft systems or components that are themselves covered by a separate type certificate or other form of FAA approval, such as Parts Manufacturer Approvals. See 14 C.F.R. Pt. 21, Subpt. K. The issuance of a type certificate reflects the FAA’s determination that the product “is properly designed and manufactured, performs properly, and meets the regulations and minimum standards prescribed” by the FAA. 49 U.S.C. 44704(a); 14 C.F.R. 21.21.

Once a type certificate has issued, a manufacturer must follow exactly the design specifications in the certificate, unless a change to the design is approved by the FAA after the submission of additional data, which results in an amended or supplemental type certificate. See 49 U.S.C. 44704(b); 14 C.F.R. 21.53, 21.93(a). The regulations make an exception for a change that “has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product.” 14 C.F.R. 21.93(a). The FAA “classifie[s]” that type of change as “minor,” *ibid.*, and allows a manu-

manufacturer to make that change “under a method acceptable to the [Administrator],” 14 C.F.R. 21.95. In practice, the FAA enters into agreements with manufacturers that specify which kinds of changes may be treated as minor and that establish the level of authorization that is needed before different types of changes may be implemented by the manufacturer. See *The FAA and Industry Guide to Product Certification* A-11 to A-12 (3d ed. May 2017), [https://www.faa.gov/aircraft/air\\_cert/design\\_approvals/media/cpi\\_guide.pdf](https://www.faa.gov/aircraft/air_cert/design_approvals/media/cpi_guide.pdf).

Once a type-certificate holder has put an aircraft or aircraft parts into service, it has an ongoing duty to “report any failure, malfunction, or defect in any product or article manufactured by it” that it determines “has resulted in,” or “could result in,” any “occurrence[.]”—a serious failure or hazard that includes, for example, damage to the engine or propeller failure. 14 C.F.R. 21.3. Manufacturers also may respond to problems that emerge following type certification by issuing service bulletins to notify customers of maintenance that is necessary to address a problem or potential problem, see, e.g., FAA Order 8110.117A (June 18, 2014), or by “submit[ing] appropriate design changes for approval” to the FAA, 14 C.F.R. 21.99(b).

The FAA has plenary authority to respond to safety concerns by requiring the modification, suspension, or revocation of a certificate if it determines that the public interest or safety of air commerce so requires. See 49 U.S.C. 44709(b), 14 C.F.R. 39.1, 39.3. If the FAA determines that an unsafe condition exists in an aircraft or engine, the FAA may issue airworthiness directives, which are legally enforceable rules that prohibit operation of the aircraft or engine until the unsafe condition has been remedied by specific actions. 14 C.F.R. 39.3,

39.5, 39.9, 39.11. “If the FAA finds that design changes are necessary to correct the unsafe condition,” the FAA may require the manufacturer to “submit appropriate design changes for approval,” and “[u]pon approval of the design changes, make available the descriptive data covering the changes to all operators of products previously certificated under the type certificate.” 14 C.F.R. 21.99(a).

The FAA may seek civil penalties when a regulated party fails to follow an airworthiness directive or another regulatory duty. See 49 U.S.C. 46301; 14 C.F.R. 13.14, 13.16. The Federal Aviation Act also includes a savings clause providing that “[a] remedy under this part is in addition to any other remedies provided by law.” 49 U.S.C. 40120(c).

The Federal Aviation Act permits the FAA to delegate certain of its inspection and certification responsibilities to properly qualified private persons. See 49 U.S.C. 44702(d). For decades, the FAA has by regulation “provided for the appointment of private individuals to serve as designated engineering representatives to assist in the FAA certification process.” *Varig Airlines*, 467 U.S. at 807; see 14 C.F.R. Pt. 183. “These representatives are typically employees of aircraft manufacturers who possess detailed knowledge of an aircraft’s design based upon their day-to-day involvement in its development.” *Varig Airlines*, 467 U.S. at 807. “In determining whether an aircraft complies with FAA regulations,” these designees “are guided by the same requirements, instructions, and procedures as FAA employees.” *Ibid.*<sup>1</sup>

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<sup>1</sup> In more recent years, the FAA has delegated some certification work through the Organization Designation Authorization program.

2. This case arises from a plane crash in 2005 that resulted in the death of the pilot, respondent's husband. Pet. App. 2a. The plane included a model O-320-D2C engine that was manufactured by petitioner's predecessor entity, Textron Lycoming (Lycoming).<sup>2</sup> *Id.* at 3a-4a. The engine that was on respondent's husband's plane when it crashed was produced in Pennsylvania in 1969, based on a type certificate that the FAA had issued to Lycoming in 1966. *Id.* at 4a-5a. That type certificate "included approval of an MA-4SPA carburetor, which was manufactured by a different company, Marvel-Schebler." *Id.* at 4a. Respondent alleges that the carburetor was defectively designed because its two halves were ineffectively secured with hex-head bolts and lock-tab washers—as opposed to safety wire—causing the carburetor to separate, which in turn caused the crash of her husband's plane. See *id.* at 4a, 8a, 14a.

Prior to the FAA's issuance of the type certificate for the O-320-D2C engine in 1966, the FAA had at times required that the two halves of the MA-4SPA and similar carburetors be secured by safety wire. Pet. App. 4a (citing 29 Fed. Reg. 16,317, 16,318 (Dec. 5, 1964)). In 1965, the FAA issued an order permitting the use of hex bolts and lock-tab washers on certain Marvel-Schebler carburetors that were similar to the MA-4SPA. 30 Fed. Reg. 8034 (June 22, 1965). Later in 1965, a Lycoming designated engineering representative issued an engineering change order directing that the MA-4SPA carburetor would be secured by hex bolts and lock-tab

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See 49 U.S.C. 44736; FAA Order 8100.15B Chg. 3 (June 15, 2018); 14 C.F.R. 183.41-183.67.

<sup>2</sup> Petitioner Avco Corporation later acquired Lycoming. See Pet. App. 2a. To avoid confusion and consistent with the opinions below, this brief refers to the defendant as Lycoming.

washers, not safety wire. See Pet. App. 4a-5a. It is now undisputed that, when the FAA issued the type certificate for the O-320-D2C engine in 1966, the type design included a carburetor secured by hex bolts and lock-tab washers. See C.A. App. 969 (respondent's counterstatement of material facts stating that the "defective method of throttle body to bowl attachment for the O-320 series engines was part of the O-320 engine type design, and approved by Lycoming in 1965"); see also Pet. App. 4a-5a.

In 1971 and 1972, the FAA warned Lycoming about incidents in which bolts on Marvel-Schebler carburetors had become loosened, and it requested that Lycoming "propose" "action" "that will help in alleviating this problem." Pet. App. 5a-6a (citation omitted). Lycoming responded in 1973 by issuing Service Bulletin 366, advising that the bolts should be checked during inspection and, if necessary, retightened. *Id.* at 6a.

In 1998, the O-320-D2C engine at issue here was installed on a Cessna 172N aircraft, along with a different MA-4SPA carburetor than the one that had been shipped by Lycoming in 1969. Pet App. 7a. In 2004, Kelly Aerospace, which is unaffiliated with Lycoming, overhauled the replacement carburetor using hex bolts and lock-tab washers, consistent with the Lycoming type design. *Id.* at 7a-8a.

Also in 2004, Lycoming was informed by Precision Airmotive LLC, which had acquired the Marvel-Schebler carburetor line, that it had received reports of additional problems with bolts becoming loose on the MA-4SPA model carburetor, especially on Cessna 172 aircraft. Pet. App. 6a-7a. Lycoming did not attempt to alter the type design for the O-320-D2C engine before respondent's husband's fatal crash. The parties to this

case dispute whether, if Lycoming had sought to alter the type design for securing the carburetor, Lycoming would have been required to use the FAA-approval process for a major change, or whether that change would have been classified as minor. Compare Br. in Opp. 11-12, with Reply Br. 3 n.1.

3. After respondent's husband's plane crashed in 2005, she sued Lycoming and other defendants in the United States District Court for the Middle District of Pennsylvania, asserting causes of action for strict liability and negligence under Pennsylvania state law. Pet. App. 8a.

a. As relevant here, the district court applied principles of field preemption and held that, in light of the comprehensive federal regulatory scheme that governs aircraft design and certification, federal law preempted state-law standards of care regarding the design and manufacture of aircraft engines. Pet. App. 275a-296a. Respondent then filed an amended complaint pleading causes of action under Pennsylvania law based on alleged violations of multiple FAA regulations. *Id.* at 8a.

The district court granted partial summary judgment to Lycoming on respondent's amended design-defect claims. Pet. App. 219a-274a. The court stated that the FAA's regulations establish the requirements that a manufacturer like Lycoming must satisfy in order to obtain a type certificate; that the FAA "alone \* \* \* decides whether a certificate should be issued"; and that the issuance of a type certificate therefore precluded a jury from "revisit[ing] Lycoming's compliance with the design and construction regulations." *Id.* at 258a, 260a; see *id.* at 260a-265a.

b. Respondent appealed the district court's preemption ruling under 28 U.S.C. 1292(b). Upon invitation

from the court of appeals, the FAA filed a letter brief explaining its longstanding positions regarding the preemptive scope of the Federal Aviation Act. Gov't C.A. Amicus Br. at 2, *Sikkelee v. Precision Airmotive Corp.*, No. 14-4193 (3d Cir. Sept. 21, 2015) (stating that the government adheres to its position regarding preemption in its brief in *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438 (10th Cir.), cert. denied, 510 U.S. 908 (1993)). The FAA explained that the Act's comprehensive federal regulation of air safety occupies the field of aircraft design and thereby preempts state-law standards of care. *Id.* at 11, 13. Thus, the FAA maintained, although plaintiffs are permitted to bring tort suits arising from aviation injuries under state-law causes of action (by virtue of the Act's savings clause), those claims must "be adjudicated on the merits by reference to the federal standards of care found in the Federal Aviation Act and its implementing regulations." *Id.* at 11. The FAA additionally explained that, because it has authoritative responsibility for application of the federal standards, where the FAA has expressly approved a specific design aspect, a plaintiff's claim that the design should have been different would conflict with the FAA's regulatory determination and would therefore be preempted. *Id.* at 3.

The court of appeals vacated and remanded. Pet. App. 163a-216a. The court held that the FAA regulations do not preempt state-law standards of care for multiple reasons: because the regulations are insufficiently "comprehensive" and are not phrased as a "catch-all standard of care" to govern aircraft design, *id.* at 176a; because Congress directed the FAA to create "minimum standards" for safe aircraft design, *id.* at 182a (quoting 49 U.S.C. 44701); because the Federal



Aviation Act’s savings clause preserves “other remedies provided by law,” *ibid.* (quoting 49 U.S.C. 40120(c)); and because the court viewed the General Aviation Revitalization Act of 1994 (GARA), Pub. L. No. 103-298, 108 Stat. 1552 (49 U.S.C. 40101 *et seq.*), which had imposed a federal statute of repose on certain products liability suits against manufacturers of general-aviation aircraft, as weighing against preemption, Pet. App. 190a-195a.

The court of appeals remanded the case to the district court to determine whether Lycoming could demonstrate that, under “conflict preemption principles,” Pet. App. 215a-216a, Lycoming’s “compliance with both the type certificate and a state law standard of care” would have been “‘a physical impossibility’ or would pose an obstacle to Congress’s purposes and objectives,” *id.* at 205a (citation omitted).

This Court denied Lycoming’s petition for a writ of certiorari. 137 S. Ct. 495.

c. On remand, the district court granted summary judgment to Lycoming, holding that it was impossible for Lycoming to comply with its alleged state-law duty to use safety wire in light of Lycoming’s federal-law obligation to manufacture the O-320-D2C engine exactly as described in the type certificate (which included securing the two halves of the MA-4SPA carburetor using hex bolts and lock-tab washers, see p. 8, *supra*), unless Lycoming obtained approval from the FAA to alter the type certificate. Pet. App. 103a-137a. Separately, the court also granted summary judgment to Lycoming on respondent’s claims based on Lycoming’s alleged failure to report known defects to the FAA. *Id.* at 157a-162a.

d. The court of appeals, in a divided decision, reversed as to respondent’s design-defect claims. Pet. App. 1a-28a. In the majority’s view, petitioner’s impossibility-preemption defense required “clear evidence” that the FAA would have denied a request from Lycoming to change its type certificate for the O-320-D2C engine to specify the use of safety wire. *Id.* at 20a (quoting *Wyeth v. Levine*, 555 U.S. 555, 571 (2009)). The majority found that Lycoming could not meet that burden because the FAA had allowed similar changes in the past. See *id.* at 19a-23a.

Judge Roth, in dissent, urged that because Lycoming could not “*independently* do under federal law what state law required of it”—*i.e.*, change from the hex bolts and lock-tab washer design to a safety wire design—it would have been impossible for Lycoming to comply with both requirements simultaneously, and the federal requirements therefore preempted the contrary state requirements. Pet. App. 40a (citing *PLIVA, Inc. v. Mensing*, 564 U.S. 604 (2011)) (emphasis added); see *id.* at 28a-44a.

#### DISCUSSION

In the view of the United States, the court of appeals erred in holding that respondent’s design-defect claims against Lycoming may proceed based on alleged violations of a state-law standard of care, even though the FAA-issued type certificate for the aircraft engine at issue specified the particular design feature that respondent alleges was defective. Design standards for aircraft engines are within a “field” that Congress has “reserved for federal regulation.” *United States v. Locke*, 529 U.S. 89, 111 (2000). And where, as here, the FAA has determined that an engine design satisfies the federal safety standard, a plaintiff’s attempt to invoke

state law to impose different or higher obligations on the manufacturer is impliedly preempted under principles of both field and conflict preemption. See, e.g., *Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 160-168 (1978).

Nevertheless, the United States does not believe that this case warrants this Court’s review at this time. No court of appeals has directly disagreed with the Third Circuit’s holding that issuance of a type certificate does not necessarily preempt aviation design-defect claims under state law. And importantly, the Third Circuit’s opinions leave room for Lycoming to attempt to prove that the particular state-law duties that respondent seeks to impose would conflict with the FAA’s regulatory regime for the O-320-D2C engine. Lycoming’s conflict-preemption defense would be better suited for appellate review after additional development of the factual record.

**A. The Court Of Appeals Erred In Holding That Respondent’s Design-Defect Claims Are Not Preempted**

Even when a federal statute does not contain an express preemption provision, a state law is impliedly preempted where it regulates in a field “that Congress intended federal law to occupy \* \* \* exclusively.” *Kurns v. Railroad Friction Prods. Corp.*, 565 U.S. 625, 630 (2012) (citation omitted). “The scheme of federal regulation may be so pervasive as to make the reasonable inference that Congress left no room for the States to supplement it,” or “the federal interest” may be “so dominant” that the courts assume Congress intended to “preclude enforcement of state laws on the same subject.” *Ray*, 435 U.S. at 157 (citation omitted). In addition, “[e]ven if Congress has not completely foreclosed” state law “in a particular area,” a state law is impliedly preempted where it “conflicts” with federal law. *Id.* at

158. A state law may create an impermissible conflict either because, ““under the circumstances of th[e] particular case,” the state law would be an “obstacle” to “the accomplishment of a federal objective,” or because it would be “‘impossible’ for private parties to comply with both state and federal law.” *Geier v. American Honda Motor Co.*, 529 U.S. 861, 873 (2000) (citations omitted).

1. It is undisputed in this case that the particular design feature that respondent challenges—the use of a carburetor secured by hex bolts and lock-tab washers instead of safety wire—was approved on the type certificate for the O-320-D2C engine that was on respondent’s husband’s plane when it crashed. See p. 8, *supra*. As a result, the court of appeals should have held that respondent’s design-defect claims, insofar as they attempt to apply a state-law standard of care notwithstanding the FAA’s determination that the engine design met the applicable federal safety standard, are preempted by the FAA regulatory regime that Congress established.<sup>3</sup>

This Court has long recognized the importance of a uniform, federal system governing the development of aviation. See *Northwest Airlines, Inc. v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring) (“Air

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<sup>3</sup> The United States takes no position on any other claims that respondent may have against Lycoming beyond the design-defect claims, such as a claim that Lycoming breached its duty under federal law to warn the FAA or end users about known hazards. See Pet. App. 9a, 27a-28a. Moreover, this case does not implicate the distinct question of preemption of any other aviation tort claims besides products liability claims.

as an element in which to navigate is even more inevitably federalized by the commerce clause than is navigable water.”). That principle is embodied in the Federal Aviation Act, which creates “a uniform and exclusive system of federal regulation” to protect safety and ensure the efficient use of airspace. *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 638-639 (1973) (holding that a municipal ordinance attempting to regulate aircraft takeoff times at a local airport was preempted by the Federal Aviation Act); see also H.R. Rep. No. 2360, 85th Cong., 2d Sess. 1-2 (1958); 1958 Senate Report 5.

The regulatory role that Congress assigned to the FAA includes comprehensive oversight of the design of aircraft and aircraft engines. See pp. 1-3, *supra*. The FAA has implemented Congress’s objectives for the Federal Aviation Act by requiring approval of the design of an aircraft or aircraft engine through the multi-stage type-certification process, and by requiring a manufacturer thereafter to conform to that design until it is changed using the applicable procedures. See pp. 3-5, *supra*. The regulations also set out the circumstances in which manufacturers must report to the FAA regarding concerns or problems that arise after certification, and the steps that manufacturers must take in response to airworthiness directives that are issued after a plane or engine is certified. See pp. 5-6, *supra*.

Congress’s decision to have the FAA exercise pervasive regulation of aircraft engine design impliedly preempts the States from using their law (whether common law or positive law) to impose their own standards of care. The assignment of responsibility to the FAA to create and enforce uniform national standards for de-

sign and construction of aircraft shows Congress's intention to make those standards a "field reserved for federal regulation," *Locke*, 529 U.S. at 111, that "foreclose[s] the imposition of different or more stringent state requirements," *Ray*, 435 U.S. at 163. Without affording preemptive force to the FAA's judgments, Pennsylvania might prescribe aircraft-engine design standards "of one sort, Oregon another, California another, and so on." *Id.* at 166 n.15 (citation omitted). That problem is particularly acute for aircraft, some of which frequently travel among, and carry passengers from, multiple States. Congress would not have anticipated that an aircraft design that has been certified by the FAA as safe under the controlling federal standards would nevertheless be deemed unsafe by the law of a particular State. Cf. *id.* at 164.

State-law standards of care are preempted for the additional reason that they would conflict with the FAA's federal regulatory regime. See *Geier*, 529 U.S. at 883 (affording "some weight" to a federal agency's interpretation of the "objectives" of its federal regulation and to "its conclusion" that the tort suit at issue would stand as an obstacle to the execution of those objectives). In the judgment of the FAA, aircraft manufacturers must maintain their focus on using the type-certification process to ensure that every aircraft engine design, and every certified aircraft that flies, achieves compliance with the federal safety standards, as opposed to diverting time and resources to accommodate a patchwork of additional design requirements that have been or may be imposed by state laws across the Nation. Cf. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 157 (1989) (holding that States' attempts to "creat[e] \* \* \* patent-like rights" are

preempted in order to prevent States from “redirect[ing] inventive efforts away from the careful criteria of patentability developed by Congress over the last 200 years”). Enforcement of state-law aircraft-design standards would frustrate Congress’s intention to establish uniform federal aircraft design standards—a view that the FAA has consistently maintained for decades. See Gov’t C.A. Amicus Br. at 2, *Sikkelee*, *supra* (No. 14-4193); cf. *Ray*, 435 U.S. at 165.

Importantly, Congress’s preemption of state-law standards of care for aircraft design does not foreclose all products liability suits arising from allegedly defective aircraft. The Federal Aviation Act’s savings clause provides that “[a] remedy under this part is in addition to any other remedies provided by law.” 49 U.S.C. 40120(c). That provision entitles injured plaintiffs to bring state-law causes of action against aircraft manufacturers for alleged violations of the federal safety standards, as found in the statute and FAA regulations. For example, plaintiffs injured by alleged aircraft defects might assert, among other potentially viable theories of tort liability, that a manufacturer failed to make appropriate disclosures during the type-certification process; failed to obtain the required form of approval for a particular design element on the type certificate; changed the type certificate without the necessary approvals in contravention of the FAA regulations; failed to build an aircraft in conformance with the type certificate; failed to issue needed warnings to consumers or was negligent in issuing a service bulletin; or failed after issuance of a type certificate to adequately monitor its design and to report known or suspected problems to the FAA.<sup>4</sup> But

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<sup>4</sup> A claim alleging that a manufacturer failed to report known or suspected problems to the FAA would not raise the same concerns

for a suit like respondent's here, "[t]he Supremacy Clause dictates that the federal judgment" that a particular aircraft engine design "is safe \* \* \* [must] prevail over [a] contrary state judgment." *Ray*, 435 U.S. at 165.

2. The reasons given by the court of appeals for refusing to hold that respondent's state-law design-defect claims are preempted by the FAA's approval of the O-320-D2C engine type design are not persuasive.

First, the court of appeals erred by applying a presumption against preemption. Pet. App. 177a-181a. That presumption does not apply when "the State regulates in an area where there has been a history of significant federal presence." *Locke*, 529 U.S. at 108. As described above, the design, certification, and operation of aircraft have been comprehensively regulated by federal law for decades, see pp. 1-3, *supra*, and in one form or another by federal law since 1926. See Air Commerce Act of 1926, ch. 344, 44 Stat. 568.

Second, preemption of state-law design standards would not undermine the Federal Aviation Act's savings clause, Pet. App. 182a-183a, by "granting complete

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about interference with federal enforcement powers that this Court addressed in *Buckman Co. v. Plaintiffs' Legal Committee*, 531 U.S. 341, 347-351 (2001). Unlike the statutory regime for pharmaceutical labeling at issue in *Buckman*, Congress anticipated that state tort-law remedies might be available for a manufacturer's failure to adhere to its federal disclosure obligations, because Congress created an exception to GARA's statute of repose, p. 11, *supra*, "if the claimant pleads with specificity the facts necessary to prove \* \* \* that the manufacturer \* \* \* knowingly misrepresented to the Federal Aviation Administration, or concealed or withheld from the Federal Aviation Administration, required information that is material and relevant to the performance or the maintenance or operation of [a general aviation] aircraft, or the component, system, subassembly, or other part, that is causally related to the harm which the claimant allegedly suffered." 49 U.S.C. 40101 note 2(b)(1).



immunity from design-defect liability to an entire industry,” *id.* at 189a, because manufacturers can be sued under state law for violations of their federal obligations. See pp. 17-18, *supra*. For those products liability claims against general aviation manufacturers, GARA’s 18-year statute of repose (with an exception for suits alleging manufacturer fraud), Pet. App. 190a-192a & n.13, continues to be relevant. What a plaintiff should not be permitted to do, however, is ask a jury to rely on state law to override the FAA’s judgments about what the applicable safety standard should be or whether a particular design met that standard. See *Locke*, 529 U.S. at 106-107 (this Court has “decline[d] to give broad effect to saving clauses where doing so would upset the careful regulatory scheme established by federal law”).

The court of appeals also erred by finding that the Federal Aviation Act’s requirement that the FAA adopt “minimum standards” indicated that the FAA’s regulations can be supplemented without conflict by more stringent state regulations. Pet. App. 182a, 186a (citing 49 U.S.C. 44701(a)). This Court found implied preemption despite the presence of similar language in *Ray*. See 435 U.S. at 168 n.19. Here, as in *Ray*, “it is sufficiently clear that Congress directed the promulgation of standards on the national level, as well as national enforcement,” without an additional role for alternative state standards. *Ibid.*

Last, the court of appeals was wrong to find that the FAA’s regulations for aircraft engine design are less than comprehensive, or that they do not carry preemptive force because they are not phrased as a standard of care that “sound[s] in common law tort.” Pet. App. 188a; see *id.* at 186a-188a. As explained above, the FAA

closely regulates the design of aircraft engines, and requires a type certification that considers every aspect of the engine's design. See pp. 1-4, *supra*. And this Court's precedents do not require the FAA to write regulatory standards that sound similar to common-law tort standards in order for the FAA's safety judgments to preclude conflicting state-law duties. Instead, it suffices for preemption that the state tort law that respondent would apply is "aim[ed] precisely at the same ends" as the federal design standards in the FAA regulations, and that respondent "[r]efus[es] to accept the federal judgment" that Lycoming's engine design was "certified \* \* \* as having acceptable design characteristics." *Ray*, 435 U.S. at 165.

**B. This Court's Review Is Not Warranted At This Time**

Although the court of appeals' decision to permit respondent's design-defect claims to go forward under a state-law standard of care is incorrect, the United States believes that this Court's review is not warranted at this time. As the court of appeals observed, no other circuit court has disagreed with its conclusion that the issuance of a type certificate does not necessarily preempt state-law aviation design-defect claims. See Pet. App. 208a-212a.

Moreover, the court of appeals' opinions in this case, although flawed in several respects, appear to preserve the legal principle that has paramount importance to the FAA: Any mandatory directive from the FAA regarding aircraft design "conflict preempt[s]" any tort claim (or other state law) that would attempt to impose a different design. Pet. App. 205a. The court agreed that the FAA's judgments regarding aircraft design "must be accorded due weight under a conflict preemption analysis." *Id.* at 215a. And the court held that a

plaintiff's state-law claims will be preempted anytime they would "pose an obstacle to Congress's purposes and objectives," *id.* at 205a, or where a manufacturer can show by "clear evidence that the [FAA] would not have approved a change" to type design suggested by the plaintiff, *id.* at 21a (quoting *Wyeth v. Levine*, 555 U.S. 555, 571 (2009)) (brackets in original).

The court of appeals' most recent decision was focused on Lycoming's asserted impossibility-preemption defense. See Pet. App. 11a. The majority and the dissent evaluated that claim by comparison to this Court's decisions in *Wyeth* and *PLIVA, Inc. v. Mensing*, 564 U.S. 604 (2011), both of which arose in the context of regulation of pharmaceutical labeling. That regulatory context is similar in some respects to the FAA's regulation and certification of aircraft designs, but it is also different in some relevant respects, and resolution of the larger conflict-preemption issue would benefit from additional factual development and consideration by the courts below.

Respondent observes (Br. in Opp. 22-24), for example, that the FAA authorizes some type certificate holders to make at least some minor design changes without FAA pre-approval, see pp. 4-5, *supra*, to argue that Lycoming could have made some changes independently. The parties here dispute, however, whether Lycoming would have been permitted to use the minor change procedure to alter the type certificate's prescribed mechanism for securing the two halves of the MA-4SPA carburetor. See pp. 8-9, *supra*. In particular, it is not obvious that respondent can reconcile her theory that switching from hex bolts and lock-tab washers to safety wire would have significantly improved the safety of Lycoming's engine with her contention that

Lycoming would have been permitted to make that change unilaterally. See 14 C.F.R. 21.93(a) (a minor change “has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product”).

On the other hand, respondent is correct that even if Lycoming was not permitted to act entirely independently to change the carburetor type design, Lycoming—as the manufacturer of the O-320-D2C engine that dealt directly with the FAA regarding its design and had an ongoing responsibility for monitoring that design, pp. 3-5, *supra*—is differently situated in relevant respects than the generic drug manufacturer in *PLIVA*, whose principal federal duty was to maintain “sameness” with the label of the brand-name drug. 564 U.S. at 613 (citation omitted).

It appears that Lycoming will have an opportunity on remand to attempt to develop additional evidence to support its defense that it could not have implemented the type-design changes that respondent contends were required by state law without creating a conflict with the FAA’s regulatory requirements. In the view of the United States, further development of the record and consideration by the courts below is warranted before this Court addresses the preemptive scope of this distinct regulatory regime.

Finally, in light of the recent crashes of Boeing 737 MAX aircraft, denying review at this interlocutory stage of this case (which involves general-aviation aircraft) also would afford the FAA and the lower courts an opportunity, in addressing preemption, to take account of the aviation-safety regulatory regime as it applies to claims concerning commercial aircraft, as well as an

opportunity for the FAA to assess possible modifications of that regime.

**CONCLUSION**

The petition for a writ of certiorari should be denied.

Respectfully submitted.

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