

No. 14-4193

**In the United States Court of Appeals
for the Third Circuit**

JILL SIKKELEE, APPELLANT

v.

PRECISION AIRMOTIVE CORPORATION; PRECISION AIRMOTIVE LLC;
BURNS INTERNATIONAL SERVICES CORPORATION; TEXTRON LYCOMING
RECIPROCATING ENGINE DIVISION; AVCO CORPORATION;
KELLY AEROSPACE, INC.; KELLY AEROSPACE POWER SYSTEMS, INC.;
ELECTROSYSTEMS, INC.; CONSOLIDATED FUEL SYSTEMS, INC.,
APPELLEES

*ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA
(CIV. NO. 07-886) (THE HONORABLE MATTHEW W. BRANN, J.)*

BRIEF OF APPELLEE AVCO CORPORATION

CATHERINE SLAVIN
SARA ANDERSON FREY
GORDON REES SCULLY MANSUKHANI LLP
*2005 Market Street, Suite 2900
Philadelphia, PA 19103
(215) 717-4006*

KANNON K. SHANMUGAM
SARAH K. CAMPBELL
DANIEL J. FEITH*
WILLIAMS & CONNOLLY LLP
*725 Twelfth Street, N.W.
Washington, DC 20005
(202) 434-5000*

CHRISTOPHER CARLSEN
CLYDE & Co US LLP
*The Chrysler Building
405 Lexington Avenue
New York, NY 10174
(212) 710-3900*

* Admitted in Maryland and practicing law in the District of Columbia pending application for admission to the D.C. Bar under the supervision of bar members pursuant to D.C. Court of Appeals Rule 49(c)(8).

CORPORATE DISCLOSURE STATEMENT

Appellee AVCO Corporation is wholly owned by Textron Inc. Textron Inc. has no parent corporation. T. Rowe Price Associates, Inc., owns 10% or more of Textron Inc.'s stock. T. Rowe Price Associates, Inc., is a privately held subsidiary of T. Rowe Price Group, Inc., which is a publicly held company. In her complaint, appellant named Textron Lycoming Reciprocating Engine Division as a separate defendant. Lycoming Engines is an unincorporated operating division of appellee AVCO Corporation and is not a distinct corporate entity.

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STATEMENT OF JURISDICTION

The district court had jurisdiction under 28 U.S.C. § 1332(a). The district court entered an order on September 10, 2014, granting in part and denying in part the motion for summary judgment by appellee AVCO Corporation.¹ App. A66. The district court certified its order for interlocutory appeal. App. A68-A69. Plaintiff then filed a petition in this Court for permission to appeal, which was granted on October 16, 2014. App. A2. The jurisdiction of this Court rests on 28 U.S.C. § 1292(b), which provides jurisdiction over “the entire certified order of the District Court, including any portions that were decided in [plaintiff’s] favor.” *Tristani ex rel. Karnes v. Richman*, 652 F.3d 360, 366 (3d Cir. 2011).

STATEMENT OF THE ISSUES

1. Whether the district court correctly held, based on binding Third Circuit precedent, that federal standards of care for aircraft design and manufacture preempt state standards of care.

2. Whether the district court correctly held that the Federal Aviation Administration’s type certification—*i.e.*, a certification that Lycoming’s design of the engine at issue satisfied the requirements of all applicable fed-

¹ AVCO is litigating on behalf of Lycoming Engines, an unincorporated operating division. Consistent with appellant’s practice, we refer to AVCO as “Lycoming.”

eral regulations—conclusively established Lycoming’s compliance with the applicable federal standards of care.

3. Whether, under Pennsylvania product-liability law, Lycoming owes any duty regarding an allegedly defective replacement carburetor that Lycoming did not place into the stream of commerce.

STATEMENT OF RELATED CASES AND PROCEEDINGS

Lycoming is unaware of any related cases currently pending before this Court.

STATEMENT OF THE CASE

Plaintiff Jill Sikkelee, whose husband died when the aircraft he was piloting crashed, brought an action against Lycoming and various other defendants in the United States District Court for the Middle District of Pennsylvania. The operative complaint asserts negligence and strict-liability claims under Pennsylvania law based on allegations that a replacement carburetor installed on the aircraft’s engine in 2004—more than three decades after the engine was originally manufactured by Lycoming—violated applicable federal standards of care and thus was defective at the time of the crash, and that Lycoming failed to report information concerning those defects to the Federal Aviation Administration (FAA). As is relevant here, Lycoming filed a motion for summary judgment, arguing that the FAA’s issuance of a type certificate for the engine—*i.e.*, a certificate that the engine’s

design satisfied the requirements of all applicable federal regulations—conclusively established Lycoming’s compliance with the federal standards of care. The district court granted Lycoming’s motion as to the claims alleging defective design of the carburetor, but denied it as to the claim alleging a failure to report. This appeal followed.

STATEMENT OF THE FACTS

A. Statutory and Regulatory Background

1. The federal government has long regulated air commerce and air safety. Just over two decades after the Wright brothers’ first flight, Congress enacted the Air Commerce Act of 1926 to regulate the safety and promote the development of civil aviation. *See* Pub. L. No. 69-254, 44 Stat. 568. That legislation was soon followed by the more comprehensive Civil Aeronautics Act of 1938. *See* Pub. L. No. 75-706, 52 Stat. 973. Over the next two decades, it became apparent to Congress that existing legislation was inadequate. Authority was diffused so widely across the government that, at one point, a total of seventy-five interagency groups were working on aviation policy and planning. *See* S. Rep. No. 85-1811, at 6, 9-10 (1958). Civil aviation, in particular, was “plague[d]” by “a pattern of division of responsibility in air-safety rulemaking.” H.R. Rep. No. 85-2360, at 3 (1958).

Congress responded by enacting the Federal Aviation Act of 1958 (the Act). *See* Pub. L. No. 85-726, 72 Stat. 731. As this Court has explained, the

Act's purpose was to "rest sole responsibility for supervising the aviation industry with the federal government." *Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 368 (3d Cir. 1999). Congress recognized that, because the aviation industry's "operations are conducted almost wholly within the Federal jurisdiction, and are subject to little or no regulation by States or local authorities, . . . the Federal Government bears virtually complete responsibility for the promotion and supervision of this industry in the public interest." S. Rep. No. 85-1811, at 5. The Act accomplished that goal by establishing the Federal Aviation Agency, known today as the Federal Aviation Administration, and centralizing within it "full responsibility . . . for the advancement and promotion of civil aeronautics generally, including the promulgation and enforcement of safety regulations." H.R. Rep. No. 85-2360, at 1; *see* Act § 301(a), 72 Stat. 744.

2. The Act gives the FAA sweeping regulatory authority. Given the "essentially indivisible" nature of aviation safety, S. Rep. No. 85-1811, at 11, the Act directs the FAA to regulate virtually every facet of a plane's useful life. The FAA must prescribe safety regulations governing the maintenance of aircraft and aircraft engines; the facilities where such maintenance is to be performed and the equipment to be used in performing such maintenance; the reserve supplies of fuel and oil that aircraft must carry in flight; the maximum hours or periods of service of pilots and other persons employed

aboard aircraft; and any other matters the FAA “finds necessary for safety in air commerce.” 49 U.S.C. § 44701(a)(2)-(5) (2012 & Supp. 2013). Of particular relevance here, the Act requires the FAA to issue “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).

With respect to aircraft engines, the FAA’s current safety standards are codified in the Federal Aviation Regulations (FARs), 14 C.F.R. pt. 33 (2014).² In keeping with the FAA’s broad mandate, the standards govern everything from the durability of the engine’s design and materials to the informational markings each engine must bear to the performance of fuel and induction, ignition, and lubrication systems. *See* 14 C.F.R. §§ 33.11-33.39. Any manufacturer wishing to mass-produce an engine must demonstrate that the engine complies with all of the standards, 14 C.F.R. § 33.1(a), and that the manufacturer’s production process ensures that all duplicate engines conform precisely to the specifications contained in the standards, 14 C.F.R. § 21.137.

3. The FAA enforces its safety regulations with respect to aircraft engines through a multistep certification process. This case primarily con-

² Those standards were previously codified in part 13 of the Civil Air Regulations (CARs); the CARs were recodified as the FARs in the mid-1960s.

cerns the first step, type certification. At that step, the FAA ascertains that the engine “is properly designed and manufactured, performs properly, and meets the regulations and minimum standards prescribed under [49 U.S.C. § 44701(a)].” 49 U.S.C. § 44704(a)(1). An application for a type certificate has two major components: (1) a “type design,” which includes detailed drawings, specifications, and instructions regarding the engine’s design, construction, and maintenance, *see* 14 C.F.R. § 21.31; 14 C.F.R. pt. 23, app. G, ¶ G23.4, and (2) a prototype engine that has undergone “all inspections and tests necessary to determine that the [engine] comports with FAA airworthiness requirements,” *United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797, 805 (1984) (*Varig*); *see* 14 C.F.R. §§ 21.15, 21.21(b), 21.33.

The FARs prescribe the battery of tests that each engine must undergo in order to qualify for type certification, covering such matters as vibration, calibration, and endurance. *See* 14 C.F.R. §§ 33.41-33.57; *see also* 14 C.F.R. § 21.33(a) (permitting the FAA to require any additional testing necessary to determine compliance with safety standards). For example, the endurance test requires each engine to operate at specified settings in specified temperature conditions for specified lengths of time, totaling at least 150 hours, and then to be disassembled to determine whether each component maintained conformity with its type design. *See* 14 C.F.R. §§ 33.49(a),

33.55(a)-(b). Although manufacturers conduct those tests on their own, *see Varig*, 467 U.S. at 805, the FAA itself makes the ultimate determination about whether to issue a type certificate, *see* Government Accountability Office (GAO), GAO-05-40, *Aviation Safety: FAA Needs to Strengthen the Management of Its Designee Programs* 8 (2004) (*Designee Programs*).³

The second step of the certification process, production certification, ascertains that any duplicates of an engine for which a type certificate has been issued “will conform to the certificate.” 49 U.S.C. § 44704(c). To obtain a production certificate, a manufacturer must establish and document a “quality system” for monitoring its supply chain and production line. 14 C.F.R. § 21.137. The system must include procedures for, *inter alia*, ensuring “that each supplier-furnished product or article conforms to its approved design”; calibrating equipment according to FAA standards; “controlling manufacturing processes to ensure that each product and article conforms to

³ The FAA also delegates routine testing and certification tasks to private parties, known as designees. *See* 49 U.S.C. § 44702(d). The GAO has found that the FAA benefits from designees’ familiarity with different technologies and platforms and that designees contribute to air safety by “allowing FAA staff to focus on new and complex aircraft designs and design changes.” GAO, GAO-11-14, *Aviation Safety: Certification and Approval Processes Are Generally Viewed as Working Well, but Better Evaluative Information Needed To Improve Efficiency* 20 (2010) (*Certification and Approval Processes*); *Designee Programs, supra*, at 12.

its approved design”; and inspecting and testing “to ensure that each product and article conforms to its approved design.” 14 C.F.R. § 21.137(c)-(f).

The third step, airworthiness certification, must occur before an engine can enter service. 49 U.S.C. § 44704(d). An airworthiness certificate signifies that the aircraft as a whole “conforms to its type certificate and, after inspection, is in condition for safe operation.” 49 U.S.C. § 44704(d)(1). It is unlawful to operate an aircraft without an airworthiness certificate. 49 U.S.C. § 44711(a)(1).

FAA oversight does not end with those certifications. Holders of type certificates have an ongoing duty to report failures, malfunctions, or defects in their products to the FAA, *see* 14 C.F.R. § 21.3, and they may not alter a type design without FAA approval, *see* 14 C.F.R. §§ 21.95, 21.97(a). Similarly, holders of production certificates must allow the FAA to inspect their quality systems and must submit any changes for FAA review. *See* 14 C.F.R. §§ 21.140, 21.150(a). The FAA also prescribes detailed regulations governing the maintenance of engines, *see* 14 C.F.R. pt. 43, and retains authority to issue airworthiness directives ordering changes to engines and type designs if it discovers unsafe conditions, *see* 14 C.F.R. pt. 39. Finally, the FAA regulates aftermarket-parts manufacturers, which must obtain Parts Manufacturer Approvals (PMAs) certifying that their products are either identical to type-certificated products or otherwise have been deter-

mined to satisfy applicable airworthiness requirements. *See* 14 C.F.R. § 21.303. “The result of this extensive Federal involvement is an industry whose products are regulated to a degree not comparable to any other.” H.R. Rep. No. 103-525, pt. 2, at 6 (1994).

4. The FAA’s “‘cradle to grave’ . . . regulatory oversight” of aviation manufacturers, H.R. Rep. No. 103-525, at 5, has yielded products that are remarkably dependable. A 2009 FAA study found that the average general-aviation airplane was forty years old. *See* GAO, GAO-13-36, *General Aviation Safety: Additional FAA Efforts Could Help Identify and Mitigate Safety Risks* 3 (2012). Until 1994, however, that dependability was a source more of problems than of pride for manufacturers, exposing them to product-liability claims for decades-old aircraft even though the vast majority of aviation accidents were due to pilot error and improper maintenance. *See* GAO, GAO-01-916, *General Aviation: Status of the Industry, Related Infrastructure, and Safety Issues* 53, 57 (2001) (*Status of the Industry*).

To relieve general aviation manufacturers from that long tail of liability, Congress in 1994 enacted the General Aviation Revitalization Act (GARA), Pub. L. No. 103-298, 108 Stat. 1552 (codified at 49 U.S.C. § 40101 note). GARA established an eighteen-year statute of repose for civil claims against manufacturers arising from general-aviation accidents. GARA §§ 2(a), 3(3), 108 Stat. 1552-1553. The congressional reports accompanying

GARA explained that the statute of repose was needed in light of “the durability and quality of aircraft produced,” S. Rep. No. 103-202, at 2 (1993), and the deterrent effect of product-liability claims on further investments in research and development that would make general-aviation aircraft even safer, *see* H.R. Rep. No. 103-525, pt. 1, at 4. And, indeed, in the seven years following GARA’s enactment, manufacturers increased their investment in research and development by more than 150%. *Status of the Industry, supra*, at 28-29.

B. Facts and Proceedings Below

1. Lycoming designs and manufactures aircraft engines. In 1966, the FAA issued Lycoming a type certificate for an engine with model number O-320-D2C (hereinafter the “O-320 engine”). *See* App. A19 (Summary Judgment Mem.). The issuance of the type certificate reflected the FAA’s determination that the engine’s design complied with part 13 of the CARs, a previous version of the federal safety standards applicable to aircraft engines. *See id.*; Dkt. 234-9 (Type Certificate Data Sheet), at 2. The type design the FAA approved included a carburetor, and the specific carburetor covered under the type certificate was manufactured by Marvel-Schebler⁴ with model number MA-4SPA. *See* App. A20. The FAA also issued Ly-

⁴ Marvel-Schebler was an operating division of Borg-Warner Corporation; Marvel-Schebler’s carburetor line was later acquired by Precision Airmotive Corporation. *See* Dkt. 152.

coming a production certificate allowing it to manufacture O-320 engines in conformance with the approved type design. *See id.*

In 1969, Lycoming manufactured an O-320 engine in Williamsport, Pennsylvania. *See App. A8, A15.* On September 4, 1969, Lycoming shipped that engine to Beagle Aircraft, Ltd., in England, along with an MA-4SPA carburetor manufactured by Marvel-Schebler. *See App. A16.* Lycoming thereafter had no physical contact with either. *See Dkt. 221-1 (Decl. of James R. Stabley) (¶¶ 5-6).*

The engine was placed in long-term storage, where it remained for nearly thirty years. *See App. A16.* In 1998, the engine was installed on a Cessna 172 single-engine aircraft. *See App. A16, A182 (Second Amended Complaint) (¶ 8).*⁵ An overhauled MA-4SPA carburetor with a different serial number was also installed on the engine at that time. *See App. A16.*

In 2004, Triad Aviation, Inc., overhauled the engine. *See Dkt. 234-6, at 8.* As part of that overhaul, Triad installed a replacement MA-4SPA carburetor bearing a still different serial number. *See App. A16-A17, A182 (¶ 9).* That carburetor was originally manufactured by Marvel-Schebler in 1978,

⁵ Because the O-320 engine was not originally approved for use in the Cessna 172, the owner of the aircraft had to obtain special field approval from the FAA before installing the engine. *See Dkt. 234-6 (Aeroscope Report), at 8.* Lycoming thus had no way of knowing that its engine had been installed on that model of aircraft.

see Dkt. 152 (Aff. of Donna Williams) (¶ 11), but was “completely rebuilt or overhauled” in 2004 by Kelly Aerospace, Inc., and Kelly Aerospace Power Systems, Inc. (collectively, “Kelly”), before being installed on the engine, App. A182 (¶ 9); *see also* App. A16-A17. As part of the overhaul, Kelly installed a number of replacement parts. *See* Dkt. 234-11 (Kelly Overhaul Record), at 8. Most of those parts were manufactured by Kelly pursuant to a PMA, and none was manufactured pursuant to a license agreement from Lycoming. *See* App. A17; Dkt. 221-2 (Kelly Requests for Admission) (¶¶ 7-17); Dkt. 234-6, at 9. Before shipping the overhauled replacement carburetor to Triad, Kelly stamped the carburetor with its own data tag. *See* Dkt. 221-2 (¶ 17).

Kelly performed the overhaul in accordance with Lycoming and Precision manuals and service bulletins, including a Lycoming service bulletin indicating that instances of “leakage through the gasket between the bowl assembly and throttle body of the carburetor” had been reported and that such leakage was “accompanied by loose screws that attach the bowl and throttle body.” Dkt. 234-6, at 9; *see also* Dkt. 234-10 (Service Bulletin No. 366); Dkt. 234-11, at 8. The bulletin advised that the “throttle body attaching screws” should be checked for tightness during inspection; if the screws were loose,

the bowl should be disassembled from the throttle body and reassembled using “new lockwashers.” Dkt. 234-10.⁶

On July 10, 2005, more than thirty-five years after Lycoming’s manufacture of the original engine, the Cessna 172 on which the overhauled engine and replacement carburetor were installed crashed shortly after takeoff from an airport in North Carolina. *See* App. A183 (¶ 11). Plaintiff’s husband, David Sikkelee, was the pilot of the aircraft and died from injuries sustained in the crash; a passenger was injured. *See* App. A413-A414 (Reconsideration Mem.).

2. On May 16, 2007, plaintiff brought suit in the United States District Court for the Middle District of Pennsylvania against Lycoming and various other defendants. *See* Dkt. 1.⁷ The original complaint asserted

⁶ To the extent there had been reports of loose screws in the MA-4SPA carburetor, the evidence shows that Lycoming was aware that the FAA had been informed of such reports and had approved Lycoming’s issuance of the service bulletin in 1973. *See* Dkt. 234-8 (letter from FAA to Lycoming); Dkt. 234-10; *see also* Dkt. 268-7, at 4 (FAA Service Difficulty Report Data listing reports of loose throttle-to-body screws in MA-4SPA carburetors and noting that Lycoming had issued a service bulletin to address the issue). The FAA also approved superseding versions of the service bulletin, which Lycoming issued in 2007 and 2008. *See* Dkt. 431-2; Dkt. 431-3.

⁷ The other defendants included Precision and Kelly, both of which eventually settled with plaintiff. All of the other defendants either were dismissed from the case or settled. *See* App. A5. The settling defendants remain parties to the litigation for purposes of apportioning liability, but they are not participating in the appeal.

claims of misrepresentation, negligence, strict liability, breach of warranty, and concert of action against Lycoming under Pennsylvania law, based on alleged breaches of common-law standards of care. *See id.* The complaint alleged that the Cessna 172 “lost power as a result of an engine fuel delivery system malfunction/defect,” which “caus[ed] the aircraft and its pilot to lose control and crash.” *Id.* (¶ 11).

In 2009, Lycoming joined with other defendants in moving for judgment on the pleadings on preemption grounds. *See* Dkt. 111. The district court granted the motion, holding that plaintiff’s claims, which sought to impose Pennsylvania common-law tort and contract standards of care on the manufacture and design of aircraft engines, were preempted under this Court’s decision in *Abdullah v. American Airlines, Inc.*, 181 F.3d 363 (1999). App. A153-A154.⁸

3. On August 31, 2010, plaintiff filed an amended complaint. *See* Dkt. 160. Lycoming moved to dismiss plaintiff’s claims. The district court granted Lycoming’s motion in part, concluding that plaintiff had abandoned her misrepresentation, breach-of-warranty, and concert-of-action claims by failing to address them in opposition to Lycoming’s motion. *See* App. A165.

⁸ This case was originally assigned to Judge Jones; it was reassigned to Judge Brann on January 17, 2013.

The district court denied Lycoming's motion as to plaintiff's negligence and strict-liability claims. *See* App. A168-A169.

4. On April 18, 2011, plaintiff filed a second amended complaint, re-asserting her negligence and strict-liability claims against Lycoming but now basing them on alleged breaches of *federal* standards set out in FAA air-safety regulations. *See* App. A285-A297 (negligence), A275-A284 (strict liability). Plaintiff's theory of liability was that the attachment system used to connect the carburetor's throttle body to the float bowl was defective; plaintiff alleged that the defects in the attachment system, as well as Lycoming's failure to report or adequately to warn of them, violated numerous federal regulations and ultimately caused the Cessna 172 to crash. *See* App. A277-A284 (¶¶ 142-144), A285-A291 (¶ 153).

Lycoming filed two motions for summary judgment. First, Lycoming sought summary judgment to the extent plaintiff's claims were based on alleged defects in the replacement carburetor, on the ground that Lycoming did not manufacture, sell, or supply that carburetor or any of its parts. *See* Dkt. 223. Second, Lycoming sought summary judgment to the extent plaintiff's claims were based on alleged defects in the engine at the time it was first sold. *See* Dkt. 257.

On July 3, 2012, the district court denied Lycoming's first motion for summary judgment but granted the second in part. *See* App. A370-A405.

As to the second motion, the court concluded that plaintiff “ha[d] offered no evidence, expert or otherwise, demonstrating that the engine was defective when it left Lycoming’s Williamsport manufacturing plant in 1969 or that a defect existing at that time caused the 2005 aircraft accident.” App. A382. As to the first motion, the court agreed with Lycoming that plaintiff’s negligence and strict-liability claims required her to prove that “Lycoming is a manufacturer, distributor, or seller of the allegedly offending product.” App. A380. While acknowledging that Lycoming did not actually manufacture the allegedly defective replacement carburetor, the court determined that “the record contains ample evidence from which a reasonable finder of fact could conclude that Lycoming is, in essence, a *de facto* manufacturer of the allegedly defective engine upon its 2004 overhaul, subjecting it to products liability under Pennsylvania law.” App. A388. Lycoming moved for reconsideration of that ruling. *See* Dkt. 332. Although Judge Brann, to whom the case had been reassigned, found it “worrisome” that no case applying Pennsylvania law had ever “imposed products liability on a *de facto* manufacturer,” App. A425, he concluded that Judge Jones did not commit a clear error of law because Lycoming could be liable as a “non-manufacturing designer” of the replacement carburetor, App. A430, A432.

4. In November 2013, one month before trial was scheduled to begin, the district court postponed the trial and ordered plaintiff to file a

brief “provid[ing] support for each and every federal regulation purportedly comprising the standard of care that governs Lycoming’s carburetor designs/warnings.” App. A451. The court’s order followed a hearing at which plaintiff’s counsel had proven “all but completely unable to assist the Court” in developing proposed jury instructions, and had made the “incredible suggestion that the Court could . . . deliver[] Pennsylvania pattern instructions on negligence.” Dkt. 456, at 5-6.

In her brief, plaintiff identified ten federal regulations that Lycoming had allegedly breached. *See* Dkt. 463.⁹ As is relevant here, Lycoming argued in its response brief that the FAA’s issuance of a type certificate for the O-320 engine “conclusively demonstrate[d]” that the engine complied with the standards applicable at the time the type certificate was issued: namely, CAR §§ 13.100, 13.101, 13.104, and 13.110. Dkt. 470, at 6.¹⁰ On February 10, 2014, the district court set a briefing schedule for another motion for summary judgment by Lycoming and indicated that “[p]ermissible grounds” for

⁹ Those ten regulations were CAR §§ 13.100, 13.101, 13.104, and 13.110 (later recodified as 14 C.F.R. pt. 33), and 14 C.F.R. §§ 21.3, 21.20, 21.99, 21.303, 33.4, and 145.221. In subsequent briefing, plaintiff also identified CAR § 13.21 and 14 C.F.R. § 21.165 (recodified as 14 C.F.R. § 21.146). *See* Dkt. 487, at 27-38.

¹⁰ Lycoming also disputed whether those regulations were even applicable to this case and, if so, whether plaintiff had established the breach and causation elements of her claims, but the district court’s decision did not address those arguments.

the motion encompassed the arguments in Lycoming's response brief. App. A611. Lycoming subsequently sought summary judgment on all of plaintiff's claims. *See* App. A613-A615; Dkt. 484 (Summary Judgment Br.).

5. On September 10, 2014, the district court issued the order under review, granting Lycoming's motion for summary judgment in part and denying it in part. *See* App. A4-A66.

As is relevant here, Judge Brann first declined to "revisit" Judge Jones' determination that *Abdullah* controlled plaintiff's design-defect claim, which, he noted, Judge Jones had "reached after a careful effort to be faithful to the Third Circuit's precedents." App. A32. Instead, the court focused on "[plaintiff's] second-best arguments purporting to show that the impact of *Abdullah* on her claims is limited." App. A33.

The district court first rejected plaintiff's invitation to read an "overall concept of careful conduct into the federal regulations," rather than simply applying "the standards specifically enunciated in the relevant federal regulations." App. A37 (internal quotation marks omitted). Then, turning to those specific regulations, the district court concluded that Lycoming was entitled to summary judgment on claims asserting violations of CAR §§ 13.100(a), 13.101, 13.104, and 13.110 because the FAA's issuance of a type certificate for the O-320 engine was "conclusive of the engine's compliance with the design and construction regulations." App. A55. The court ex-

plained that the FAA's issuance of a type certificate "denotes the Administrator's finding that the engine met all applicable requirements." App. A47. Allowing a jury to second-guess that determination, the court continued, would require a court to "read [the regulations] as freestanding mandates possessing a meaning independent of that given them by the Administrator's application." *Id.* And it would also require the court to "dethrone[]" the Administrator as "the arbiter of whether the requirements set forth in the . . . regulations have been met." App. A48. The court rejected plaintiff's argument that the FAA "would benefit from a jury's assistance." App. A50. The court reasoned that allowing jurors to set the standard "case by case and engine by engine" would "result[] in an elusive and undeterminable standard, as opposed to the 'one, consistent means of regulating aviation safety' that Congress intended." App. A54 (quoting *Abdullah*, 181 F.3d at 372).

The district court concluded that Lycoming was also entitled to summary judgment on claims asserting violations of most of the remaining federal standards, either because the standards were intended to ensure that products conform to a certified type design (and plaintiff did not allege that the carburetor failed to conform); plaintiff abandoned the standards by failing to address them in her brief; or the standards were permissive, rather than mandatory. *See* App. A55-A61. The district court, however, did deny summary judgment on plaintiff's claim based on 14 C.F.R. § 21.3, which im-

poses certain reporting obligations on type-certificate holders. *See* App. A60-A65. The court acknowledged that the causation element of the claim would be difficult for plaintiff to prove, App. A64, but concluded that plaintiff had proffered “a variety of evidence tending to show” that Lycoming knew of a defect in the O-320 engine, failed to report the defect, and thereby arguably prevented the FAA from taking corrective action, App. A61. Lycoming filed a motion for reconsideration of that ruling. App. A667-A673. The briefing schedule for that motion was suspended “pending resolution of the interlocutory appeal in this case.” Dkt. 499.

The district court certified its order for interlocutory appeal under 28 U.S.C. § 1292(b). App. A68-A69. Plaintiff and Lycoming then filed petitions in this Court for permission to appeal. App. A2. On October 16, 2014, this Court granted plaintiff’s petition and denied Lycoming’s petition. *See* App. A1-A2.

STANDARD OF REVIEW

This Court reviews an order granting summary judgment de novo. *See, e.g., Azur v. Chase Bank, USA, N.A.*, 601 F.3d 212, 216 (3d Cir. 2010). In so doing, the Court may affirm on any ground supported by the record. *See, e.g., id.*

SUMMARY OF ARGUMENT

In *Abdullah v. American Airlines, Inc.*, 181 F.3d 363 (1999), this Court held that federal law preempts the “entire field” of aviation safety. *Id.* at 367. Under that decision, federal law establishes the applicable, and exclusive, standards of care for aviation safety. *Abdullah* squarely controls this appeal. Plaintiff’s theory of liability here—that a jury should be allowed to second-guess the FAA’s determination that Lycoming’s design of the O-320 engine complied with the applicable federal standards of care—would turn *Abdullah* on its head and thwart Congress’s clear intent to vest the FAA with exclusive regulatory authority for aircraft design and manufacture.

I. The district court correctly held that plaintiff must plead violations of federal—rather than state—standards of care. Contrary to plaintiff’s assertions, that result is required by *Abdullah* and consistent with Congress’s clearly expressed intent in enacting the Federal Aviation Act.

A. As this Court held in *Abdullah* and reaffirmed in *Elassaad v. Independence Air, Inc.*, 613 F.3d 119 (2010), federal law preempts the entire field of aviation safety, not just certain aspects thereof. Regulations governing aircraft design and manufacture lie squarely within the preempted field. Plaintiff’s contrary argument—that *Abdullah*’s holding applies only to the in-air operation of commercial aircraft—runs directly counter to *Abdullah* and *Elassaad* and defies common sense.

Plaintiff's attempt to recast *Abdullah*'s preemption holding as nonbinding dictum is equally unavailing. In both *Abdullah* and *Elassaad*, this Court consistently referred to the relevant language as its holding, and the Court's conclusion in *Abdullah* that federal regulations provided the standard of care depended on its determination that the entire field of aviation safety is preempted.

B. In *Abdullah*, this Court correctly interpreted Congress's intent in passing the Federal Aviation Act. Congress vested complete and exclusive authority over aviation safety in the FAA in order to create a uniform, expertly administered regulatory scheme. Accordingly, the FAA has promulgated pervasive, "cradle-to-grave" regulations covering virtually all facets of air safety, including the design and manufacture of aircraft engines.

The federal government's predominant interest in air safety provides a second, independent basis for *Abdullah*'s broad preemption rule. That interest derives from the uniquely national (and indeed international) nature of aviation, the FAA's historic responsibility for promoting civil aviation, and the FAA's responsibility for ensuring the United States' compliance with the web of international agreements governing aviation.

II. The district court also correctly held that the FAA's issuance of a type certificate for the O-320 engine conclusively established Lycoming's compliance with the applicable federal standards of care. That holding di-

rectly follows from, and represents a faithful application of, this Court's reasoning in *Abdullah*.

A. By definition, the FAA's issuance of a type certificate for the O-320 engine signifies that the engine's design complied with precisely the same federal safety standards that plaintiff now alleges Lycoming violated. While plaintiff concedes that the purpose of the type-certification process is to determine compliance with applicable federal regulations, she contends that a jury should nevertheless be permitted to disregard that determination and decide for itself what the federal standards require. That position is flatly inconsistent with *Abdullah*, and it cannot be reconciled with Congress's intent to vest exclusive regulatory authority in the FAA.

B. When the FAA has determined, through the type-certification process, that a particular aircraft or aircraft part complies with the applicable federal standards, allowing a jury to find a violation of those very same standards would amount to the imposition of a standard of care *other than* the federal standard, in direct contravention of *Abdullah*. Allowing such second-guessing by a jury, in turn, would undermine the Act's goals of ensuring aviation safety and promoting the development of aviation commerce. Congress charged the FAA with striking the right balance between those goals, and the FAA brings extensive expertise and familiarity with complex, ever-evolving technology to that delicate task. A lay jury has neither the ex-

pertise nor responsibility to complement the FAA's efforts. The inevitable result of jury second-guessing would be to substitute a patchwork of regulation for the uniform, nationwide standards that Congress intended. Under such a regime, aircraft and part manufacturers could be subjected to conflicting standards that make it impossible seamlessly to navigate the Nation's airspace.

C. Plaintiff errs in contending that the district court's order would immunize type-certificate holders such as Lycoming from civil liability. In this very case, the district court allowed a claim to proceed based on 14 C.F.R. § 21.3, which imposes certain reporting obligations on type-certificate holders, among others. As in the medical-devices context, claims that truly parallel the FAA's safety determinations—such as claims based on manufacturers' failure to conform to FAA-approved designs—would also avoid preemption.

Because state-law remedies would remain available for actual violations of articulated federal standards of care, the district court's order is entirely consistent with *Abdullah* and with GARA. The FAA's issuance of a type certificate does not strip a plaintiff of any remedies; instead, it simply establishes that no violation of the federal standards has occurred.

III. In the alternative, Lycoming is entitled to summary judgment because Lycoming's remote relationship to the allegedly defective replace-

ment carburetor does not give rise to any duty under Pennsylvania product-liability law. Lycoming did not manufacture, distribute, or sell the replacement carburetor, nor did it otherwise place the carburetor in the stream of commerce. Because there is no indication that the Pennsylvania Supreme Court would impose a duty on a party that is not in the chain of distribution of an allegedly defective product, plaintiff's claims fail as a matter of law.

ARGUMENT

The only federal safety standards at issue in this appeal are those that formed the basis of the type certificate for Lycoming's engine. *See* CAR §§ 13.100, 13.101, 13.104, 13.110(a) (1964).¹¹ In the proceedings below, the district court correctly applied this Court's precedents in holding that those federal standards, like other federal standards regulating aviation safety, are

¹¹ Plaintiff has not challenged the district court's decision to grant summary judgment as to the remaining federal standards, and she has therefore abandoned any claims based on those standards for purposes of this appeal. *See, e.g., Menkes v. Prudential Insurance Co. of America*, 762 F.3d 285, 294 n.7 (3d Cir. 2014); *Nagle v. Alspach*, 8 F.3d 141, 143 (3d Cir. 1993). Moreover, summary judgment as to those standards was proper. The district court correctly concluded that plaintiff had proffered no evidence that the replacement carburetor failed to conform to its type design, as 14 C.F.R. § 21.165 requires, or that Lycoming failed to prepare an approved manual for the engine, as CAR § 13.21 and 14 C.F.R. § 33.4 require. It also correctly held that plaintiff had abandoned any claims based on 14 C.F.R. §§ 21.20, 21.303, and 145.221 by failing to address those standards in her summary judgment briefing, and that 14 C.F.R. § 21.99 imposes no requirement on Lycoming in the first place. *See* App. A55-A61.

exclusive and therefore preempt claims based on otherwise applicable state standards of care. Given the exclusivity of the federal regulatory scheme, moreover, the district court correctly held that issuance of a type certificate for the O-320 engine conclusively established Lycoming's compliance with those federal standards and thus precluded plaintiff's claims based on those standards.

I. THE DISTRICT COURT CORRECTLY HELD THAT FEDERAL SAFETY STANDARDS FOR AIRCRAFT DESIGN AND MANUFACTURE PREEMPT STATE STANDARDS OF CARE

In *Abdullah v. American Airlines, Inc.*, 181 F.3d 363 (1999), this Court held that “federal law establishes the applicable standards of care in the field of air safety, generally, thus preempting the entire field from state and territorial regulation.” *Id.* at 367. This case involves a straightforward application of that principle. If federal regulation of aviation safety is exclusive, as *Abdullah* held, then plaintiff cannot ask a jury to second-guess the FAA's determination that the O-320 engine complies with all applicable federal design safety regulations.

Plaintiff resists that conclusion by attacking its premise. She argues that Congress did not intend federal law to dictate the standard of care applicable to her claims and that *Abdullah* does not hold otherwise. But plaintiff misreads *Abdullah* and misconstrues Congress's intent. As discussed below, the district court correctly construed *Abdullah* as holding that federal

law preempts the *entire* field of aviation safety, including aircraft design and manufacture. That holding finds ample support in the text, history, and purpose of the Federal Aviation Act.

A. Binding Third Circuit Precedent Holds That Federal Law Occupies The Field Of Aviation Safety, Including Aircraft Design And Manufacture

The doctrine of preemption arises from the supremacy of federal law. *See* U.S. Const. Art. VI. This case involves the branch of that doctrine known as field preemption, which occurs when Congress has indicated “an intent to occupy a given field to the exclusion of state law.” *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300 (1988). Such an intent “may be inferred where the pervasiveness of the federal regulation precludes supplementation by the States [or] where the federal interest in the field is sufficiently dominant.” *Id.*

This Court first addressed federal preemption of claims concerning aviation safety in *Abdullah*, a case involving personal-injury claims against American Airlines brought by passengers injured as a result of in-flight turbulence. 181 F.3d at 365. The passengers alleged that the flight crew had acted negligently by failing to avoid the turbulence and issue adequate warnings. *Id.* Applying state and territorial standards of care, a jury agreed, but the district court granted American Airlines’ motion for a new trial. *Id.* at 365-366. It held that federal law occupies the field of aviation safety and that

it had therefore erred at trial by basing the standard of care on state and territorial law instead. *Id.* This Court affirmed. In contrast with other rulings that “found federal law to preempt discrete aspects of air safety,” the Court stated plainly: “[W]e hold that federal law establishes the applicable standards of care in the field of air safety, generally, thus preempting the entire field from state and territorial regulation.” *Id.* at 367.

This Court reaffirmed *Abdullah*’s holding in *Elassaad v. Independence Air, Inc.*, 613 F.3d 119 (2010), a case that further defined the boundaries of the preempted field of air safety. In *Elassaad*, a plaintiff injured while disembarking from an Independence Air flight brought a common-law negligence claim against the airline. *Id.* at 122. The district court held that, under *Abdullah*, federal law dictated the standard of care applicable to the plaintiff’s claim. *Id.* at 123-124. This Court reversed, reasoning that *Abdullah*’s “primary holding”—that “federal law preempted ‘the entire field of aviation safety’”—was “limited to in-air safety,” and concluding that “the disembarkation process by a flight crew” fell outside that field. *Id.* at 126-127 (quoting *Abdullah*, 181 F.3d at 365). At the same time, however, the Court noted that “regulations detail[ing] certification and ‘airworthiness’ requirements for aircraft parts”—the very class of regulations at issue here—were among the “regulations . . . concern[ing] aspects of safety that are associated with

flight” and thus within the scope of the preempted field identified in *Abdullah*. *Id.* at 128.

1. Seeking to sidestep *Abdullah*, plaintiff claims that its holding applies only to the in-air operation of commercial aircraft. *See* Br. 50-51. But that argument is wrong as a matter of law and logic. *First, Ellassaad* foreclosed that argument by recognizing that the design and construction of aircraft are part of the preempted field. Indeed, among the design regulations *Ellassaad* identified as pertaining to flight safety were ones in 14 C.F.R. part 23. *See* 613 F.3d at 128 n.9. That part prescribes safety standards for aircraft with nineteen seats or fewer—the category in which most general-aviation aircraft fall. *See* GARA § 2(c), 108 Stat. 1553.

Second, plaintiff’s argument simply defies common sense. It leads to the absurd conclusion that regulations governing alcohol service aboard aircraft would be more germane to flight safety than regulations governing aircraft design and construction, simply because alcohol service takes place during flight. *See US Airways, Inc. v. O’Donnell*, 627 F.3d 1318, 1328 (10th Cir. 2010) (holding that state regulation of alcohol service is preempted). But the whole point of regulating design and construction is to ensure that planes fly safely. In short, *Abdullah* and *Ellassaad* meant what they said: federal law preempts the entire field of air safety, and that field includes aircraft design and manufacture.

2. Plaintiff also attempts to escape *Abdullah* by recasting its holding as nonbinding dictum. See Br. 50-51 & n.30. *Abdullah*, however, was clear. Rejecting the narrower course taken by other courts, it stated: “[W]e hold that federal law . . . preempt[s] the entire field [of air safety] from state and territorial regulation.” *Abdullah*, 181 F.3d at 367 (emphasis added). To put it mildly, it is hard to characterize a sentence beginning with “We hold” as dictum. *Elassaad* confirms that plaintiff is incorrect: it recognized that *Abdullah*’s “primary holding was that federal law preempted the entire field of aviation safety,” and then went on to clarify the boundaries of that field. *Elassaad*, 613 F.3d at 126 (emphasis added) (internal quotation marks omitted).

In addition, even if this Court had not labeled its language in *Abdullah* as a holding, its conclusion that Congress intended to preempt the entire field of aviation safety was a necessary logical step to its ultimate conclusion that federal regulation of seatbelts is exclusive; as such, it unquestionably constitutes a binding holding, even if this Court could arguably have reached the same result on narrower grounds. See *Seminole Tribe of Florida v. Florida*, 517 U.S. 44, 67 (1996); *Burnham v. Superior Court of California, County of Marin*, 495 U.S. 604, 613 n.2 (1990) (plurality opinion); *In re National*

Football League Players Concussion Injury Litigation, 775 F.3d 570, 583 n.18 (3d Cir. 2014).¹²

B. This Court Correctly Held That Congress Intended The Federal Aviation Act To Vest Exclusive Regulatory Authority With The FAA

The Federal Aviation Act itself confirms that federal law occupies the entire field of aviation safety, including aircraft design and manufacture. Congress vested exclusive authority over this field in the FAA, and the FAA has duly exercised that authority by promulgating a pervasive scheme of regulation that leaves no room for supplementation by the States.¹³

1. In passing the Act, Congress recognized the uniquely national nature of aviation. Observing that aviation is the only transportation indus-

¹² Plaintiff also attempts to distinguish this case from *Abdullah* on the ground that aircraft design, unlike aircraft operation, is not subject to a “catch-all” standard of care such as 14 C.F.R. § 91.13(a). *See* Br. 54-55. But even leaving aside the fact that the text of the Act contains such a catch-all, *see* p. 42, *infra*, this Court in *Abdullah* concluded that federal law preempted the field of aviation safety before it even mentioned section 91.13. 181 F.3d at 371. Accordingly, this Court recognized in *Elassaad* that *Abdullah*’s holding “was primarily supported by the Aviation Act’s legislative history and its judicial interpretation in *City of Burbank*,” rather than by section 91.13. 613 F.3d at 125.

¹³ The evidence of congressional intent to occupy the field of aviation safety here would be sufficient to justify field preemption regardless of whether a presumption against preemption applies. Contrary to plaintiff’s suggestion, however, the presumption is inapplicable here given the “history of significant federal presence” in the field. *United States v. Locke*, 529 U.S. 89, 108 (2000); *see also O’Donnell*, 627 F.3d at 1325.

try “whose operations are conducted almost wholly within the Federal jurisdiction[] and are subject to little or no regulation by States or local authorities,” Congress asserted that “the Federal Government bears virtually *complete* responsibility for the promotion and supervision of this industry in the public interest.” S. Rep. No. 85-1811, at 5 (1958) (emphasis added).

The Act carries out that responsibility by centralizing authority in the FAA to issue national, uniform regulations. Embracing the Eisenhower Administration’s recommendation that “‘one agency of government, and one agency alone, be responsible for issuing safety regulations,’” both the Senate and House emphasized that the Act gave the Administrator of the FAA “full responsibility and authority for the advancement and promotion of civil aeronautics generally, including the promulgation and enforcement of safety regulations.” H.R. Rep. No. 85-2360, at 1-2, 22 (1958) (quoting Letter from E.R. Quesada, Chairman, Airways Modernization Board, to Oren Harris, Chairman, House Committee on Interstate and Foreign Commerce (July 24, 1958)); S. Rep. No. 85-1811, at 1. Indeed, the Senate specifically rejected a proposal to allow a multi-member board to review the FAA Administrator’s safety regulations, explaining that such review would “continu[e] the present dichotomy in rulemaking” that the Act sought to eliminate. S. Rep. No. 85-1811, at 11.

In deciding to centralize authority in the FAA, Congress also recognized the “indivisible” nature of aviation safety regulation. S. Rep. No. 85-1811, at 11. Although plaintiff contends that the Act preempts only matters related to the operation of commercial aircraft, Congress in fact understood that air safety requires exclusive federal control over every important aspect of aviation. In a letter setting forth his administration’s recommendations, which Congress ultimately followed, *see* H.R. Rep. No. 85-2360, at 7, President Eisenhower explained that “the preparation, issuance, and revision of regulations governing matters of safety can best be carried on by the agency charged with the day-to-day control of traffic, the inspection of aircraft and service facilities, the certification of pilots and related duties.” S. Rep. No. 85-1811, at 27 (quoting Letter from President Eisenhower to Congress (June 13, 1958)). Thus, after the “plague” of divided authority under earlier legislation, H.R. Rep. No. 85-2360, at 3, the Act sought to bring all safety oversight under one roof.

Various provisions of the Act further confirm that Congress intended the FAA’s regulation of aviation safety to be exhaustive. Section 601 requires the FAA to regulate not just what occurs during flight, *see, e.g.*, Act § 601(a)(4)-(5), 72 Stat. 775, but also how aircraft are designed, manufactured, inspected, and maintained, *see id.* § 601(a)(1)-(3), 72 Stat. 775. Other sections of the Act require the regulation of pilots, *id.* § 602, 72 Stat. 776; air

carriers, *id.* §§ 604-605, 72 Stat. 778; air navigation facilities, *id.* § 606, 72 Stat. 779; and flight schools, *id.* § 607, 72 Stat. 779—in other words, the full range of matters affecting aviation safety.

Section 604, which concerns the operation of air carriers, is particularly instructive, because that provision is the source of the FAA’s authority to regulate the operation of commercial flights—a field that plaintiff appears to concede is fully preempted. *See* Act §§ 101(3), (10), (21), 72 Stat. 737-739; Br. 50-51. Although, under plaintiff’s theory, one would expect section 604 to stand in contrast to section 601(a)(1), the provision pertaining to the supposedly non-preempted field of aviation design, the opposite is actually true. Not only do those provisions appear in the same title of the Act, but they use tellingly similar language, directing the FAA Administrator to establish “minimum” standards concerning their respective areas. Those provisions thus merely reinforce what the Act’s legislative history makes plain: Congress viewed the field of aviation safety as indivisible and intended that the FAA occupy it completely.

The Supreme Court and virtually every court of appeals to have considered the issue have reached the same conclusion. As the Supreme Court observed, the Act “requires a uniform and exclusive system of federal regulation if the congressional objectives underlying [it] are to be fulfilled.” *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 639 (1973); *see also*

O'Donnell, 627 F.3d at 1326; *Air Transport Ass'n of America, Inc. v. Cuomo*, 520 F.3d 218, 224 (2d Cir. 2008) (per curiam); *Greene v. B.F. Goodrich Avionics Systems, Inc.*, 409 F.3d 784, 794-795 (6th Cir. 2005); *Kohr v. Allegheny Airlines, Inc.*, 504 F.2d 400, 403-04 (7th Cir. 1974); *United States v. Christensen*, 419 F.2d 1401, 1404 (9th Cir. 1969); *Air Line Pilots Ass'n International v. Quesada*, 276 F.2d 892, 894 (2d Cir. 1960).

2. Acting pursuant to the authority conferred by the Act, the FAA has pervasively regulated the entire field of aviation safety. The FARs sweep widely and systematically, translating Congress's broad directives into a precise regulatory scheme "addressing virtually all areas of air safety." *Cuomo*, 520 F.3d at 224. The FARs covering aircraft design and manufacture are a case in point. As discussed above, *see pp. 4-8, supra*, those regulations are "comprehensive" and "delineat[e] the minimum safety standards with which the designers and manufacturers of aircraft must comply before marketing their products." *Varig*, 467 U.S. at 805.

Although the Supreme Court has not yet considered whether the Act, as administered through the FARs, preempts state law, it has found field preemption under the Ports and Waterways Safety Act of 1972 (PWSA), Pub. L. No. 92-340, 86 Stat. 424 (codified as amended at 33 U.S.C. §§ 1221-1232b), a closely analogous regulatory scheme governing ship design. The PWSA directed the Secretary of Transportation to promulgate "minimum

standards” for the safe design and construction of oil tankers and to enforce those standards through inspections and certifications. *See* 46 U.S.C. § 391a (1970 ed., Supp. V). In *Ray v. Atlantic Richfield Co.*, 435 U.S. 151 (1978), the Court concluded that “Congress intended uniform national standards for design and construction of tankers that would foreclose the imposition of different or more stringent state requirements.” *Id.* at 161-163.

The Court gave three main reasons for this conclusion. *First*, the PWSA demonstrated that Congress had entrusted the Secretary of Transportation with determining which ships are safe to enter United States waters. *Ray*, 435 U.S. at 163. *Second*, ship design standards had long been recognized as an appropriate subject for national attention. *Id.* at 166 n.15. And *third*, the PWSA manifested Congress’s intent to conform American design standards to international ones. *Id.* at 166-168.¹⁴

If anything, the Court’s reasoning in *Ray* applies with even greater force to the regulations governing aircraft design. Not only are they more pervasive than regulations under the PWSA, but, as Justice Jackson observed, “air as an element in which to navigate is even more inevitably feder-

¹⁴ Significantly, *Ray* also rejected the notion that Congress must have intended to permit States to impose higher standards by establishing only “minimum standards.” 435 U.S. at 168 n.19 (internal quotation marks omitted). In so doing, the Court pointed to the sheer breadth of federal regulation and the strong national and international reasons why “the Nation was to speak with one voice with respect to tanker-design standards.” *Id.* at 166.

alized by the commerce clause than is navigable water.” *Northwest Airlines, Inc. v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring). It thus stands to reason that, if the PWSA occupies the field of tanker design, then the Act occupies the field of aircraft design as well.

Plaintiff attempts to evade that conclusion by inventing a new interpretive principle. She contends that, because the FAA has chosen to regulate aircraft design and manufacture through standards rather than rules, the inference of preemption is weaker than in *Abdullah*, where precise rules dictated when seat belts were to be worn and warning lights illuminated. *See* Br. 51-53. But the FAA’s choice to regulate aircraft design and manufacture through standards is not an invitation to state regulation, and plaintiff cites no authority suggesting that it is. And the FAA’s choice is thoroughly understandable, because the use of performance-based standards accommodates the complexity and diversity of aircraft design—a challenge not presented by such simple and binary matters as seat-belt use. *See* FAA Advisory Circular No. 120-16F, Air Carrier Maintenance Programs 2 (Nov. 15, 2012) <tinyurl.com/faacircular> (explaining that using performance-based standards “permits [the FAA’s] regulations to apply to a wide variety of certificate holders” but with a “defined result” that is “always the same”); *Certification and Approval Processes*, *supra*, at 14 (explaining that performance-

based regulations “can accommodate technological change in ways that prescriptive regulations that focus on a specific technology generally cannot”).

Plaintiff is therefore wrong to suggest that the FAA’s use of standards somehow renders its regulation less pervasive. The FARs still set mandatory performance requirements for every important design element, albeit in a manner suited to a technologically dynamic field. Plaintiff simply fails to recognize the crucial difference between leaving discretion to manufacturers, which the FAA has done, and leaving discretion to the States, which it has not.

3. The dominant federal interest in aviation safety provides an additional, independent basis for field preemption. That interest is the result of three factors: the uniquely national (and indeed international) nature of aviation; the FAA’s historic responsibility for promoting the development of civil aviation; and the vital role of international law in ensuring aviation safety.

By its nature, aviation demands federal control. Because planes can travel farther and faster than any other means of transportation, aviation requires a unique degree of national coordination. As early as 1944, Justice Jackson recognized that federal control over aviation is “intensive and exclusive” because planes “move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate

system of federal commands.” *Northwest Airlines*, 322 U.S. at 303 (Jackson, J., concurring).

The dominant federal interest is also the result of the FAA’s historic responsibility for promoting the development of aviation. From the outset, the FAA has balanced its interest in ensuring aviation safety with its interest in promoting the development of aviation commerce. *See, e.g.*, Act § 601(c), 72 Stat. 776 (permitting the Administrator to grant exemptions from safety regulations in the interest of promoting civil aviation). The FAA’s authority to strike that balance would be vitiated if juries could second-guess the FAA’s judgments. Indeed, citing the Act’s “delicate balance between safety and efficiency,” the Supreme Court has recognized that “[t]he interdependence of these factors requires a uniform and exclusive system of federal regulation if the congressional objectives underlying the Federal Aviation Act are to be fulfilled.” *City of Burbank*, 411 U.S. at 638-639.¹⁵

In addition, exclusive federal control also reflects the need for uniform application of the United States’ myriad international obligations with re-

¹⁵ In 1996, Congress clarified that safety is the FAA’s highest regulatory priority. *See* Federal Aviation Reauthorization Act of 1996, Pub. L. No. 104-264, § 401, 110 Stat. 3213, 3255 (codified as amended at 49 U.S.C. § 40101(d)). Notably, however, the Act continues to give the Administrator broad authority to grant exemptions from safety regulations in the interest of “encouraging and developing civil aeronautics.” *See* 49 U.S.C. §§ 40101(d)(3), 44701(f). That authority would be negated if States could impose their own safety requirements on top of federal standards.

spect to aviation. Take, for example, the Convention on International Civil Aviation, which specifies conditions under which the aircraft of one signatory nation can use the airspace of another. *See* Convention on International Civil Aviation, art. 33, Dec. 7, 1944, 61 Stat. 1180, 1189, 15 U.N.T.S. 295. The Act charges the FAA with implementing that agreement by authorizing it to accept a foreign airworthiness certification in lieu of requiring its own, provided that the certifying nation is “in compliance with its obligations under international law for the safety oversight of civil aviation.” 49 U.S.C. § 44701(e)(1), (3). The Act also allows the FAA to exempt foreign aircraft and pilots from federal safety requirements altogether if it determines that the public interest so requires. *See* 49 U.S.C. § 44711(b).

The foregoing provisions clearly contemplate FAA control over the presence of foreign aircraft in the United States and thus over United States compliance with the convention. But plaintiff’s position would give juries the final word over these issues, allowing them to impose standards beyond what international law requires and thus to affect the operation of foreign aircraft in their State’s airspace. Congress surely could not have intended to allow States, let alone state juries, to disrupt international law and usurp federal prerogatives in this manner. Rather, the United States’ obligation to implement international aviation agreements, and the FAA’s authority to do so,

constitute powerful evidence that Congress “demanded national uniformity regarding [air] commerce.” *United States v. Locke*, 529 U.S. 89, 103 (2000).

4. Plaintiff offers two additional arguments against finding federal preemption of aviation safety, neither of which is persuasive.

First, plaintiff contends that, by enacting a statute of repose in GARA, Congress signaled its intent not to substantively preempt product-liability claims against aviation manufacturers more generally. *See* Br. 54. But even if that is true, it is not inconsistent with the proposition that federal law alone establishes standards of care for aviation manufacturers. The standards governing aircraft design and the repose periods governing product-liability claims are entirely discrete matters. Congress’s decision to address the latter in 1994 tells us nothing about whether Congress intended to preempt state laws concerning the former in 1958. That is simply an application of the familiar principle that “the views of a subsequent Congress form a hazardous basis for inferring the intent of an earlier one.” *United States v. Price*, 361 U.S. 304, 313 (1960).¹⁶

¹⁶ Plaintiff’s argument also ignores Congress’s recognition, in passing GARA, that aviation is federally regulated to an unparalleled degree. The House Report accompanying GARA described “‘cradle to grave’ Federal regulatory oversight” as one of the general aviation industry’s “distinguishing characteristics.” H.R. Rep. No. 103-525, pt. 2, at 5. The report further noted that “[t]he result of this extensive Federal involvement is an industry whose products are regulated to a degree not comparable to any other.” *Id.* at 6.

Second, plaintiff contends that the absence of a “catch-all” federal standard of care for aircraft design in the FARs means that there is a gap for state regulation to fill. *See* Br. 54-55. In fact, however, the text of the Act does contain such a catch-all. After directing the FAA to prescribe safety regulations for various specific matters, the Act directs the FAA to prescribe “regulations and minimum standards for other practices, methods, and procedure the Administrator finds necessary for safety in air commerce and national security.” 49 U.S.C. § 44701(a)(5). That provision clearly illustrates that Congress did not want the FAA to leave unregulated any matter affecting aviation safety. And the FAA has not done so. Tellingly, plaintiff fails to identify any gaps in the FARs, nor could she. As numerous courts have recognized, the FARs implement a “comprehensive regulatory scheme,” *O’Donnell*, 627 F.3d at 1326, covering “virtually all areas of air safety,” *Cuomo*, 520 F.3d at 224. Having occupied the field of air safety, the federal government has left “no room for the States to supplement” its enactments. *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

II. THE DISTRICT COURT CORRECTLY HELD THAT THE FAA’S ISSUANCE OF A TYPE CERTIFICATE ESTABLISHED COMPLIANCE WITH THE APPLICABLE FEDERAL STANDARDS OF CARE

Having held that federal law occupies the field of aviation safety, the district court proceeded to hold that the FAA’s issuance of a type certificate

for the O-320 engine conclusively established Lycoming's compliance with the federal safety standards for aircraft engine design and, as a matter of law, precluded plaintiff from proving a violation of those standards. *See* App. A55. That holding was correct for two reasons. *First*, the issuance of the type certificate necessarily reflected the FAA's determination that the engine satisfies applicable federal safety standards. *Second*, allowing juries to second-guess the FAA's compliance determinations through the imposition of state tort liability would significantly undermine the exclusivity of the federal regulatory scheme for aviation safety. Contrary to plaintiff's assertion, moreover, the district court's reasoning would not confer blanket immunity from civil liability on aviation manufacturers. Therefore, that holding, like the district court's holding that federal law occupies the field of aviation safety, should be affirmed.

A. The Issuance Of A Type Certificate For An Aircraft Engine Reflects The FAA's Determination That The Engine Complies With Federal Safety Standards

Under the Federal Aviation Act, the FAA may issue a type certificate for an aircraft engine only after finding that the "engine . . . is properly designed and manufactured, performs properly, and meets the [federal safety] regulations and minimum standards." 49 U.S.C. § 44704(a)(1). At the time Lycoming obtained its type certificate for the O-320 engine, part 13 of the CARs established the applicable standards, and eligibility for a type cer-

tificate was contingent on compliance with those standards. *See* CAR §§ 13.0, 13.10 (1964). The district court thus correctly concluded that “the FAA’s issuance of a type certificate for the O-320-D2C in 1966 denotes the Administrator’s finding that the engine met all applicable requirements,” including CAR §§ 13.100, 13.101, 13.104, and 13.110(a)—the federal standards that Lycoming allegedly violated. App. A47.

Although plaintiff concedes that a type certificate reflects the FAA’s determination that a design complies with applicable federal standards, *see* Br. 9-10, she contends that a jury should be permitted to disregard that determination and impose state tort liability on Lycoming for violating those same standards. As explained below, such a result would destroy the exclusivity of the federal regulatory scheme and undermine the Act’s goals of ensuring safety and promoting air commerce.

B. Allowing Juries To Second-Guess The FAA’s Determinations Regarding Compliance With Federal Safety Standards Would Undermine The Exclusivity Of The Federal Regulatory Scheme

As is relevant here, the FAA carries out its exclusive responsibility for aviation safety in two ways: it issues federal design safety standards, and it enforces those standards through certifications. Type, production, and airworthiness certificates add layers of FAA oversight to ensure, to the extent possible, the enforcement of the national safety standards the agency has

promulgated. Those certifications are every bit as much a part of the “uniform and exclusive system of federal regulation” of aviation as the safety standards themselves. *City of Burbank*, 411 U.S. at 639.¹⁷

In *Abdullah*, this Court correctly held that states should not be permitted to interfere with that exclusive and uniform federal regulatory scheme by imposing tort liability based on standards of care other than the federal safety standards promulgated by the FAA. *See* 181 F.3d at 375. But allowing juries to turn around and impose tort liability for violating federal safety standards *when the FAA has already determined that those very same standards were met* would effectively permit States to do exactly that—*i.e.*, impose a standard of care *other than* the federal standard. Such second-guessing would undermine the exclusivity of the federal regulatory scheme in the very same way as applying a common-law standard of care in the first instance.

That common-sense proposition finds support in the Supreme Court’s decision in *Riegel v. Medtronic, Inc.*, 552 U.S. 312 (2008). *Riegel* involved the

¹⁷ Plaintiff contends that the type-certification process does not yield uniform results because it is carried out by FAA field offices rather than a single person. *See* Br. 44. But field offices are under the FAA Administrator’s ultimate authority, allowing the Administrator to remedy any variation as he sees fit. Allowing juries to second-guess the FAA’s safety determinations, on the other hand, would lead to variation that the FAA would be unable to correct.

interpretation of an express preemption clause in the Medical Device Amendments of 1976, which prohibits States from establishing requirements for medical devices that are “different from, or in addition to, any requirement applicable under [federal law].” 21 U.S.C. § 360k(a). The Court held that “common-law claims challenging the safety and effectiveness of a medical device given premarket approval by the Food and Drug Administration (FDA),” *Riegel*, 552 U.S. at 315, which can occur only if FDA finds there is a “reasonable assurance” of the device’s “safety and effectiveness,” 21 U.S.C. § 360e(d), were preempted. In reaching that decision, the Court reasoned that “[s]tate tort law that requires a manufacturer’s [devices] to be safer, but hence less effective, than the model the FDA has approved disrupts the federal scheme no less than state regulatory law to the same effect.” *Riegel*, 552 U.S. at 325. Other courts have explained that such claims are preempted because they constitute a “frontal assault” on the FDA’s safety determination. *In re Medtronic, Inc., Sprint Fidelis Leads Products Liability Litigation*, 623 F.3d 1200, 1207 (8th Cir. 2010); *accord Williams v. Cyberonics, Inc.*, 388 Fed. Appx. 169, 171 (3d Cir. 2010) (holding that breach-of-warranty claims alleging that a device “was unsafe or ineffective despite the [premarket approval] process” were preempted because they would interfere with federal requirements).

In the same way, state tort law requiring an aircraft engine to be different from its FAA-approved design would significantly disrupt the exclusive federal regulatory scheme for aviation safety. Yet plaintiff's claims seek to achieve precisely that result. To succeed, she must convince a jury that the design of the O-320 engine violated federal safety standards, even though the FAA has determined that it satisfied them. The district court properly held that *Abdullah* precludes such second-guessing.

The consequences of allowing juries to override the FAA's safety determinations, moreover, would be deeply troubling for aviation safety and civil aviation more generally. As Congress has recognized, formulating effective safety standards requires the exercise of substantial technical expertise. *See* S. Rep. No. 85-1811, at 11. Determining whether a particular design satisfies those safety standards is no different. The FAA issues a type certificate only after reviewing thousands of pages of detailed plans, drawings, test reports, and analyses—a process that typically takes three to five years. *See O'Donnell v. Bond*, 510 F. Supp. 925, 929 (D.D.C. 1981); General Aviation Manufacturers Association, *FAA Aircraft Certification and Delegation—Questions and Answers* <tinyurl.com/faacertification> (last visited Mar. 6, 2015). The complexity is compounded by the need to apply performance-based standards to evolving technologies. *See* pp. 37-38, *supra*. Congress entrusted those complicated and sensitive safety determinations to the

FAA's technical experts for a reason, and lay juries should not be permitted to second-guess those determinations based on nothing more than a few hours of expert testimony.¹⁸

Plaintiff responds that allowing her claim to proceed would have a “salutary effect” by helping the FAA achieve Congress’s goal of maximum safety. *See* Br. 43-44. But although safety is the FAA’s highest goal, it is not the only one. The FAA is also responsible for “encouraging and developing civil aeronautics,” 49 U.S.C. § 40101(d)(3)—an interest that is sometimes in tension with the pursuit of maximum safety. Rather, to achieve the “delicate balance between safety and efficiency” contemplated by the Act, the FAA must weigh those competing interests and consider the costs as well as the benefits of additional safety measures. *City of Burbank*, 411 U.S. at 638. Juries are not so constrained. Their safety determinations, made in a vacuum, are therefore as likely to undermine as to further Congress’s goals. *See Riegel*, 552 U.S. at 325 (noting that “[a] jury . . . sees only the cost of a more dangerous design, and is not concerned with its benefits”).¹⁹

¹⁸ Plaintiff suggests that asking juries to decide whether a manufacturer has violated the applicable federal safety standards is no different from asking them to decide a medical malpractice, patent, or other complex case. *See* Br. 47. But that misses the point: none of plaintiff’s examples implicates an exclusive federal regulatory scheme akin to that governing aviation safety.

¹⁹ Plaintiff contends that the type-certification process is “failing miserably” because many people have died in general aviation accidents over the

In addition, as the district court recognized, juries would set the standard “case by case and engine by engine, resulting in an elusive and undeterminable standard.” App. A54. Even if it were physically possible to comply with the resulting patchwork of regulation—and there is no guarantee that it would be—the cost of compliance would be enormous. Indeed, in the analogous railroad context, this Court has recognized that allowing each State to determine for itself which safety devices were obligatory for locomotives would have a “paralyzing effect.” *Kurns v. A.W. Chesterton Inc.*, 620 F.3d 392, 398 (3d Cir. 2010) (internal quotation marks omitted), *aff’d*, 132 S. Ct. 1261 (2012); *see also Delaware & Hudson Railway Co. v. Knoedler Manufacturers, Inc.*, Civ. No. 13-3678, 2015 WL 127374, at *6 (3d Cir. Jan. 9, 2015) (explaining that, but for preemption, railroads might have “to change equipment when a train crosses state lines”). Add to that the costs of insuring against uncertain, shifting liabilities, and the “likelihood of multiple, inconsistent rules would be a dagger pointed at the heart of commerce—and the rule applied might come literally to depend on which way the wind was blowing.” *Abdullah*, 181 F.3d at 370 (internal quotation marks omitted).

past half-century. Br. 44. But the vast majority of those deaths were due to pilot error, not defective designs. *See Status of the Industry, supra*, at 47.

C. Contrary To Plaintiff's Contention, Aviation Manufacturers Would Not Be Immune From Civil Liability Under The District Court's Reasoning

Plaintiff contends that, if allowed to stand, the district court's reasoning would immunize type-certificate holders from civil liability. *See* Br. 36-41. That is simply incorrect. For starters, type certification does not preclude liability where a plaintiff alleges a violation of a federal standard that was not implicated in the FAA's determination to issue the type certificate. The order on review is a case in point. It permits plaintiff to proceed on her claim under FAR § 21.3, which alleges that Lycoming failed to report certain defects it discovered *after* issuance of its type certificate.

Nor does type certification preclude a plaintiff from asserting claims that truly parallel the federal safety standards: for example, a claim alleging that a manufacturer failed to conform to the FAA-approved design or failed to comply with a subsequent airworthiness directive. *See Avia Dynamics, Inc. v. FAA*, 641 F.3d 515, 516 (D.C. Cir. 2011) (describing the FAA's issuance of an "Unapproved Parts Notification" against a company for "manufactur[ing] certain aircraft parts without FAA production approval"); *cf. Bass v. Stryker Corp.*, 669 F.3d 501, 512 (5th Cir. 2012) (holding, in the medical-device context, that a plaintiff's claim "will be parallel" to the federal requirements when it alleges that "the FDA-approved processes and procedures were not followed").

Because the FAA's issuance of a type certificate does not afford a manufacturer immunity from state tort liability, plaintiff also is incorrect in asserting that the decision below is somehow inconsistent with GARA. To the extent that Congress presupposed the availability of at least some state tort actions in enacting a statute of repose to limit such actions, the decision below is not to the contrary. Manufacturers remain subject to state tort remedies for actual violations of federal aviation safety standards, as long as those remedies are not otherwise barred by GARA. *See* Br. 40-41. The district court's decision simply recognizes that, where the FAA has already determined that certain federal standards were satisfied, there can be no violation of those standards.²⁰

D. Plaintiff's Remaining Contentions Are Unavailing

Plaintiff's remaining arguments concerning the district court's holding on the preclusive effect of the FAA's issuance of a type certificate lack merit.

²⁰ For the same reason, the decision below is not inconsistent with either the Act's savings clause, 49 U.S.C. § 40120(c), or insurance clause, 49 U.S.C. § 41112(a), insofar as they presuppose the availability of state-law remedies. Nor is it inconsistent with *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984), where the Supreme Court observed that Congress would not, "without comment, remove all means of judicial recourse for those injured by *illegal* conduct." *Id.* at 251 (emphasis added). The district court's decision simply implies that, where the FAA has found there to be no illegal conduct, a jury cannot deviate from that determination. In *Silkwood*, unlike here, there had been no prior finding of compliance by the federal agency.

Plaintiff contends that “the district court’s type certification holding is foreclosed by this Court’s precedents.” Br. 37. In *Abdullah*, however, this Court held only that state tort remedies remain available for *violations* of federal safety standards. *See* 181 F.3d at 375. The FAA’s issuance of a type certificate establishes that no such violation occurred here. Nor does *Elassaad* support plaintiff’s contention. In stating that “Congress did not intend to give airlines free rein to commit negligent acts subject only to the supervision of the Department of Transportation,” this Court was merely explaining its “conservative approach” to determining whether the common-law tort claims in that case were preempted. 613 F.3d at 127 (internal quotation marks omitted). The Court had already determined that those claims did not implicate aviation safety and therefore were not subject to field preemption under *Abdullah*. *Id.* Here, by contrast, the claims at issue fall squarely within the preempted field of aviation safety. And if the FAA’s supervision of manufacturers proves to be inadequate, affected parties may, in appropriate circumstances, seek judicial review of its actions. *See* 5 U.S.C. § 702; 49 U.S.C. § 46110(a); *Hudson v. FAA*, 192 F.3d 1031 (D.C. Cir. 1999) (challenge under the Administrative Procedure Act to the FAA’s issuance of a type certificate for the Boeing 777-300).

Plaintiff’s reliance on *Robinson v. Hartzell Propeller, Inc.*, 454 F.3d 163 (3d Cir. 2006), is even farther off course. There, this Court held only that

the district court's denial of a motion to dismiss based on GARA was not a collateral order that would permit an interlocutory appeal. *See id.* at 173-174. Because the Court lacked jurisdiction, it had no authority to reach the issue of the preclusive effect of the FAA's issuance of a type certificate—an issue that the manufacturer in any event had not raised.

Finally on this point, plaintiff contends that the district court's reasoning conflicts with “literally every state and federal case imposing liability on a general aircraft manufacturer for a type certificated design.” Br. 37. In only one of the cases plaintiff cites, however, did the court actually hold that field preemption applies to aircraft design and manufacture and squarely consider whether the issuance of a type certificate precluded liability. *See Pease v. Lycoming Engines*, Civ. No. 10-843, 2011 WL 6339833, at *14 (M.D. Pa. Dec. 19, 2011).²¹ In the other cases, the court had no occasion to consider whether the issuance of a type certificate precluded liability, either because the court erroneously concluded that field preemption does not apply to air-

²¹ In *Pease*, the district court attempted to reconcile its decision with *Abdullah* by positing that *Abdullah* “stands only for the proposition that the FAA has sole authority to promulgate regulations relating to the field of in-air safety.” 2011 WL 6339833, at *13 (emphasis added). That is incorrect. *Abdullah* held that “Congress intended the Administrator . . . to exercise sole discretion in regulating air safety.” 181 F.3d at 369 (emphasis added). The regulation of air safety includes not only the promulgation of regulations, but also their application and enforcement through certification and other oversight measures.

craft design and manufacture or because the significance of type certification was not raised or otherwise at issue. There is therefore little affirmative authority for the proposition that manufacturers can be held liable for purported defects in a type-certified design. The district court correctly held that the FAA's issuance of a type certificate for the O-320 engine conclusively established Lycoming's compliance with the federal safety standards for aircraft engine design and, as a matter of law, precluded plaintiff from proving a violation of those standards.

III. IN THE ALTERNATIVE, LYCOMING IS ENTITLED TO SUMMARY JUDGMENT BECAUSE PLAINTIFF'S CLAIMS FAIL AS A MATTER OF PENNSYLVANIA LAW

Lycoming also is entitled to summary judgment on the alternative ground that plaintiff's claims fail as a matter of Pennsylvania law because Lycoming had no duty to plaintiff in the first place.²² Under Pennsylvania

²² Although the order certified for interlocutory review did not address the validity of plaintiff's claims under Pennsylvania law, this Court has jurisdiction to consider that issue because it is plainly "material to" the certified order, *In re Cinematronics, Inc.*, 916 F.2d 1444, 1449 (9th Cir. 1990) (emphasis omitted), and "subsumed by" that order, *Mathews v. Kidder, Peabody & Co.*, 161 F.3d 156, 157 n.1 (3d Cir. 1998). The district court's earlier rulings that Lycoming could be found negligent or strictly liable under Pennsylvania law as a "de facto manufacturer," App. A388, or "non-manufacturing designer," App. A426, of the replacement carburetor were a necessary predicate for its ruling about type certification. If no duty were even owed, then it would have been unnecessary to consider what the precise duty was under *Abdullah*. Moreover, this Court is permitted to affirm the district court's grant of summary judgment on any grounds supported by the record. *See, e.g., Azur*, 601 F.3d at 216.

product-liability law, which applies the Second Restatement of Torts, “those who engage in the business of selling a product are subject to both a duty of care in manufacturing and selling the product and a duty to sell a product free from a ‘defective condition.’” *Tincher v. Omega Flex, Inc.*, 104 A.3d 328, 383 (Pa. 2014).²³ While those duties apply not only to “sellers” in the strict sense of that term, but also to manufacturers and other “suppliers in the chain of distribution to the ultimate consumer,” they do not extend beyond the supplier-consumer relationship. *Id.*

Here, plaintiff’s claims fail as a matter of law because the record evidence clearly establishes that Lycoming did not manufacture, and was not part of the chain of distribution for, the replacement carburetor, and therefore had no duty with respect to it under Pennsylvania law. The replacement carburetor was “completely rebuilt or overhauled” by Kelly in 2004. App. A182 (¶ 9). Kelly was not one of Lycoming’s suppliers of new parts, nor did Kelly have a license agreement with Lycoming. *See* Dkt. 234-6, at 9. Lycoming simply had no control over whether Kelly put the replacement carburetor in the stream of commerce.

²³ This Court previously stated that the Pennsylvania Supreme Court would apply the Third Restatement of Torts, *see Sikkelee v. Precision Airmotive Corp.*, Civ. No. 12-8081, 2012 WL 5077571 (3d Cir. Oct 17, 2012), but the Pennsylvania Supreme Court has since declined to adopt the Third Restatement for strict-liability claims, *see Tincher*, 104 A.3d at 389.

In holding that Lycoming could be liable as a “de facto manufacturer” of the carburetor, Judge Jones failed to consider the absence of any relationship between Lycoming and Kelly. App. A388. Moreover, as Judge Brann later acknowledged, “no court applying Pennsylvania law . . . ha[d] ever before this case imposed products liability” based on a “*de facto* manufacturer” theory. App. A425. Judge Brann’s conclusion that Lycoming nevertheless could be liable as the “non-manufacturing designer” of the carburetor, *id.*, is deeply flawed. Even assuming, *arguendo*, that Lycoming’s decision to include the MA-4SPA carburetor in the type design for the O-320 engine made Lycoming a “designer” of the carburetor, Judge Brann failed to cite a single Pennsylvania case, much less a decision of the Pennsylvania Supreme Court, holding or even suggesting that a defendant that merely designs a product is a “seller” for purposes of Pennsylvania product-liability law. In fact, another federal district court concluded just the opposite, holding that merely permitting the use of one’s design does not render one a “seller” within the meaning of section 402A of the Second Restatement. *See Macauley v. Harris Corp.*, Civ. No. 89-6271, 1991 WL 53655, at *3 (E.D. Pa. Apr. 4, 1991).

To the extent Judge Brann relied on out-of-jurisdiction cases, moreover, those cases are readily distinguishable. *See Denekamp v. Hetronic USA, Inc.*, Civ. No. 06-5025, 2008 WL 4646954, at *4 (D.S.D. Oct. 17, 2008) (denying summary judgment where the manufacturer of original crane “par-

ticipated in the redesign and remanufacture of the crane” that allegedly caused the injuries); *Taylor v. General Motors, Inc.*, 537 F. Supp. 949, 951 (E.D. Ky. 1982) (upholding liability against the designer of a fan blade where the manufacturer of the blade “could not make the part until [the designer] gave its complete approval”); *Alm v. Aluminum Co. of America*, 717 S.W.2d 588, 589 (Tex. 1986) (upholding liability against the designer and patent holder of a soft-drink capping system where the caps at issue were manufactured under a licensing agreement with the designer). To the extent courts have imposed duties on non-manufacturing designers, they generally have done so only with respect to licensors, and only when the “licensor exercised substantial control over the design, production, marketing, or distribution of the product.” David G. Owen, *Products Liability Law* § 15.4, at 968 (3d ed. 2008).

Courts, by contrast, have consistently refused to impose duties on non-manufacturing designers where, as here, they did not license or otherwise authorize the manufacture of the allegedly defective product. In *Goldsmith v. Olon Andrews, Inc.*, 941 F.2d 423 (1991), for example, the Sixth Circuit held that Bell Helicopter could not be held strictly liable under Ohio law for alleged defects in a helicopter that Bell had designed but that another party, Olympic, had assembled. *Id.* at 427. Although Olympic had used new and used Bell parts, as well as Bell’s manuals and service bulletins, in assembling

the helicopter, the Sixth Circuit concluded that Bell was not a “seller” for purposes of section 402A of the Second Restatement because Bell “never licensed, sanctioned, or approved Olympic’s use of Bell’s design to manufacture the helicopter.” *Id.*²⁴ So too here. Lycoming never licensed, sanctioned, or approved Kelly’s manufacture of the MA-4SPA carburetor. As a PMA holder, Kelly was free to manufacture the carburetor with or without Lycoming’s blessing. Indeed, PMA holders such as Kelly compete with Lycoming’s suppliers or licensees in the “aftermarket” for replacement products such as carburetors. Ernie Stephens, *PMA vs. OEM: The Business of Getting (and Keeping) Customers*, *Aviation Today* (Jan. 1, 2008), <tinyurl.com/PMAvsOEM>.

²⁴ Other courts have reached similar conclusions. *See, e.g., Piscitello v. Hobart Corp.*, 799 F. Supp. 224, 226 (D. Mass. 1992) (refusing to impose liability on non-manufacturing designer because “[i]t would be unfair to impose such an expansive view of tort liability on those whose original design is mimicked without the designer’s permission”); *Harmon v. National Automotive Parts Ass’n*, 720 F. Supp. 79, 81 (N.D. Miss. 1989) (stating that “this court is not aware of any case where liability has been extended to a trademark licensor who neither engaged in the manufacture or distribution of products nor received any sort of financial benefit from the licensing of the trademark”); *Mechanical Rubber & Supply Co. v. Caterpillar Tractor Co.*, 399 N.E.2d 722, 723 (Ill. App. Ct. 1980) (noting that, “[w]here a party merely designs a product for someone else there is no sale or equivalent transaction between the parties which subjects the designer to liability as part of the distributive system”).

The policy considerations the Pennsylvania Supreme Court has considered in determining how to define “sellers” counsel against expanding that definition to the circumstances presented here. *See Musser v. Vilsmeier Auction Co.*, 562 A.2d 279, 282 (Pa. 1989) (listing considerations for strict liability); *Berrier v. Simplicity Manufacturing, Inc.*, 563 F.3d 38, 61 (3d Cir. 2009) (listing considerations for imposing a duty of care). Lycoming’s connection to the allegedly defective replacement carburetor was attenuated at best, and, as plaintiff’s complaint demonstrates, there are numerous other defendants from whom plaintiff may recover. Indeed, plaintiff has already settled with Kelly for \$2 million, Dkt. 146, and with Precision for a confidential amount, Dkt. 454. Moreover, as the Sixth Circuit recognized in *Goldsmith*, because Lycoming does not actually control the production of replacement carburetors such as the one at issue here, it “could not assure conformance with its improved designs” and “was in no position to treat the risks of producing the [carburetor] as costs of production, or obtain liability insurance.” 941 F.2d at 427.

In sum, because the Pennsylvania Supreme Court has not expanded the definition of “seller” to include a non-manufacturing designer and has given no indication that it would do so, plaintiff should not be permitted to proceed under that theory. *See City of Philadelphia v. Lead Industries Ass’n*, 994 F.2d 112, 115 (3d Cir. 1993). Plaintiffs’ claims fail as a matter of

Pennsylvania law, and Lycoming is entitled to summary judgment on that alternative basis.²⁵

CONCLUSION

The district court's order should be affirmed to the extent it granted Lycoming's motion for summary judgment, and reversed to the extent it denied it.

Respectfully submitted,

s/ Kannon K. Shanmugam

KANNON K. SHANMUGAM
SARAH K. CAMPBELL
DANIEL J. FEITH
WILLIAMS & CONNOLLY LLP
725 Twelfth Street, N.W.
Washington, DC 20005
(202) 434-5000

CATHERINE SLAVIN
SARA ANDERSON FREY
GORDON REES SCULLY
MANSUKHANI LLP
2005 Market Street, Suite 2900
Philadelphia, PA 19103
(215) 717-4006

CHRISTOPHER CARLSEN
CLYDE & Co US LLP

²⁵ Because Lycoming owed no duty with respect to the replacement carburetor, plaintiff's claim based on 14 C.F.R. § 21.3, alleging a failure to report defects in the carburetor, also fails as a matter of Pennsylvania law. Because this Court has jurisdiction over "the entire certified order . . . , including any portions that were decided in [plaintiff's] favor," *Tristani*, 652 F.3d at 366, and because permitting that claim to proceed would simply waste judicial resources, the Court should reverse the district court's denial of summary judgment with respect to that claim. As Lycoming argued below, that claim fails for the additional reason that plaintiff failed to proffer any evidence, much less sufficient evidence, that Lycoming violated section 21.3 or that any violation proximately caused the accident. *See* Dkt. 484, at 17-21; Dkt. 490, at 8-9.

The Chrysler Building
405 Lexington Avenue
New York, NY 10174
(212) 710-3900

MARCH 11, 2015

STATEMENT REGARDING ORAL ARGUMENT

Appellee AVCO Corporation respectfully submits that oral argument would be helpful to the disposition of this appeal given the complexity of the issues presented. Appellee requests 15 minutes of argument time.

CERTIFICATE OF BAR MEMBERSHIP

I, Kannon K. Shanmugam, counsel for appellee AVCO Corporation, hereby certify pursuant to Third Circuit Rule 28.3(d) that I am a member in good standing of the Bar of the United States Court of Appeals for the Third Circuit.

s/ Kannon K. Shanmugam
KANNON K. SHANMUGAM

MARCH 11, 2015

CERTIFICATE OF COMPLIANCE WITH WORD LIMITS

I hereby certify that:

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because it contains 13,991 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii);

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word 2007 in 14-point font;

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s/ Kannon K. Shanmugam
KANNON K. SHANMUGAM

CERTIFICATE OF SERVICE

I, Kannon K. Shanmugam, counsel for appellee AVCO Corporation and a member of the Bar of this Court, certify that, on March 11, 2015, a copy of the foregoing brief was filed with the Clerk through the Court's electronic filing system. I further certify that, on March 11, 2015, hard copies of the foregoing brief were sent, by third-party commercial carrier for delivery overnight, to the Clerk and the following counsel:

John D. McClune, Esq.
Katzman, Lampert & McClune
100 West Big Beaver Road, Suite 130
Troy, MI 48084

Clifford A. Rieders, Esq.
Rieders, Travis, Humphrey, Waters & Dohrmann
161 West Third Street
Williamsport, PA 17701

Tejinder Singh, Esq.
Goldstein & Russell, P.C.
7475 Wisconsin Avenue, Suite 850
Bethesda, MD 20814

William J. Conroy, Esq.
Campbell Campbell Edwards & Conroy, P.C.
1205 Westlakes Drive, Suite 330
Berwyn, PA 19312

Jeffrey R. White, Esq.
Center for Constitutional Litigation, P.C.
777 6th Street, N.W., Suite 520
Washington, DC 20001

I further certify that all parties required to be served have been served.

s/ Kannon K. Shanmugam
KANNON K. SHANMUGAM