

No. 17-3006

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

JILL SIKKELEE, Individually and as Personal Representative
of the Estate of David Sikkelee, Deceased,

Plaintiff-Appellant,

v.

PRECISION AIRMOTIVE CORPORATION; PRECISION AIRMOTIVE LLC; BURNS
INTERNATIONAL SERVICES CORPORATION; TEXTRON LYCOMING RECIPROCATING
ENGINE DIV.; AVCO CORPORATION; KELLY AEROSPACE, INC.; KELLY AEROSPACE

Defendants-Appellees.

On Appeal from the United States District Court
for the Middle District of Pennsylvania
(D.C. No. 4:07-cv-00886)
District Judge: Honorable Matthew W. Brann

**BRIEF OF THE
AMERICAN ASSOCIATION FOR JUSTICE AS *AMICUS CURIAE*
IN SUPPORT OF PLAINTIFF-APPELLANT AND REVERSAL**

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1, Amicus Curiae hereby provides the following disclosure statement:

The American Association for Justice (“AAJ”) is a non-profit voluntary national bar association. There is no parent corporation or publicly owned corporation that owns ten percent or more of this entity’s stock.

Respectfully submitted this 1st day of February, 2018.

/s/ Jeffrey White

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<i>Sikkelee v. AVCO Corp.</i> , 268 F. Supp. 3d 660, 664 (M.D. Pa. 2017).	passim
<i>Sikkelee v. Precision Airmotive Corp.</i> , 822 F.3d 680 (3d Cir. 2016).	6, 15
<i>Silkwood v. Kerr-McGee Corp.</i> , 464 U.S. 238 (1984).	5, 11

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 49 U.S.C. App. § 40120(c).10

Other Authorities

\$43.6 Million Awarded in Silk Air Crash Cases,
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 Airworthiness Directive 2002-20-07R123
Boeing Company Type Certificate Data Sheet No. A20WE, available at
<http://www.boeing.com/assets/pdf/commercial/airports/misc/A20WE.pdf>.....28
 Canadian Transportation Safety Board, *Accident Report*,
 No. A98H0003 (2003), available at <http://bit.ly/2hUsKtA> 24, 25
 FAA, *Lessons Learned, Swissair MD-11 at Peggy’s Cove, Nova Scotia*,
Accident Overview, available at <http://bit.ly/2i5r3wX>.....24
 FAA, *Lessons Learned, Swissair MD-11 at Peggy’s Cove, Nova Scotia*,
Airworthiness Directives (ADs) Issued, available at <http://bit.ly/2jq7s7h>25
 FAA, *Lessons Learned – USAir 737 in Pennsylvania – Airworthiness*
Directives (ADs) Issued, available at
http://lessonslearned.faa.gov/ll_main.cfm?TabID=3&LLID=1&LLTypeID=1
[1](#).....23
 Green, Michael D., *Safety as an Element of Pharmaceutical Quality: The*
Respective Roles of Regulation and Tort Law,
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Kesselheim, Aaron S. & Jerry Avorn,
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Kessler, David A. & David C. Vladeck, *A Critical Examination of the FDA’s Efforts to Preempt Failure-to-Warn Claims*, 96 Geo. L.J. 461 (2007-2008).....7

Nader, Ralph & Joseph Page, *Automobile–Design Liability and Compliance with Federal Standards*, 64 Geo. Wash. L. Rev. 415 (1996).6

NTSB AIRCRAFT ACCIDENT REPORT – IN-FLIGHT BREAKUP OVER THE ATLANTIC OCEAN – TRANS WORLD AIRLINES FLIGHT 800, AAR-00/03 (August 23, 2000) 26, 27

NTSB, AIRCRAFT ACCIDENT REPORT – SILKAIR FLIGHT MI 185 (2000),
available at
<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20001208X05950&AKey=1&RType=Final&IType=IA>21

NTSB, AIRCRAFT ACCIDENT REPORT – UNCONTROLLED DESCENT AND COLLISION WITH TERRAIN – UNITED AIRLINES FLIGHT 585 (2001) *available at*
<https://www.nts.gov/investigations/AccidentReports/Reports/AAR0101.pdf>..19

NTSB, AIRCRAFT ACCIDENT REPORT – UNCONTROLLED DESCENT AND COLLISION WITH TERRAIN – USAIR FLIGHT 427 (1999), *available at*
<https://www.nts.gov/investigations/AccidentReports/Reports/AAR9901.pdf>
..... 18, 20, 22, 23

NTSB, AVIATION INCIDENT FINAL REPORT –
INCIDENT NUMBER DCA96IA061, RICHMOND, VA (2007).20

Ove, Torsten, *Trial Opens in '94 Crash of US Airways Flight 427*, PITTSBURGH POST-GAZETTE (June 4, 2002),
<http://old.postgazette.com/nation/20020604crashnation1p1.asp>.....19

S. REP. NO. 101–303, 101st Cong., 2d Sess.1990.....12

Wigington, Jeff, *The Best-Selling Defect in America*,
39 Trial 62, 64 (July 2003).6

IDENTITY AND INTEREST OF AMICUS CURIAE

The American Association for Justice (“AAJ”) is a national voluntary bar association founded in 1946 to safeguard the right of all Americans to seek legal recourse for wrongful injury. AAJ is concerned that the decision by the district court in this case, if affirmed, will grant unprecedented immunity to manufacturers of aircraft and aircraft components. That lack of accountability for unreasonably dangerous aircraft will deny compensation to aircraft accident victims and will undermine an important financial incentive for manufacturers to exercise due care in aircraft design and improve flawed designs for the safety of all who fly.¹

SUMMARY OF ARGUMENT

1. The ruling below would immunize aircraft and aviation component part manufacturers from liability for their defective product designs in a manner wholly inconsistent with the Federal Aviation Act (“Act”) and its goal of fostering aviation safety. Major aviation design defects have been eliminated due to the prospect of liability. Immunity will improperly deny legal remedy to aviation disaster victims and will permit manufacturers to ignore design risks.

¹ All parties have consented to the filing of this brief. No party or party’s counsel authored this brief in whole or in part. No person, other than amicus curiae, its members, and its counsel, contributed money that was intended to fund the preparation or submission of this brief.

2. Conflict preemption, properly applied, precludes only state standards of care that actually and directly conflict with a federal standard of care. The district court's holding that mere certification of an airplane or component provides immunity to manufacturers is without precedent.

3. The district court's holding undermines the Act's purpose of fostering aviation safety. Congress expressly authorized the Federal Aviation Administration ("FAA") to promulgate "minimum" standards and preserved the legal remedies of aviation victims. Amendments to the Act confirm that Congress did not understand that it provided immunity to manufacturers based on FAA certification.

4. Amicus suggests that the district court's analysis was swayed by the fact that plaintiff had received \$2 million in a settlement with co-defendant Kelly Aerospace Power Systems. Not only is the settlement not relevant to whether Lycoming could be held accountable for the carburetor malfunction, but the district court's announced implied conflict preemption rule is so broad that Kelly would have been immunized as well. Under that rule, future plaintiffs would have no remedy against any manufacturer of a defective component covered by an FAA type certificate.

5. The unworkable broad rule of preemption announced by the court below would have resulted in the dismissal of major aviation product liability claims that, instead, resulted in safety improvements.

a. The 1994 crash of USAir Flight 427 was caused by the defective design of the Boeing 737's rudder control system. Although the FAA had certificated the design, the defendant settled claims by the victims' families. Similarly, after the crash in 1991 of United Airlines Flight 585, also caused by the dangerous design of the Boeing 737 rudder control system, manufacturers were held accountable for the claims of the victims' families. Although a similar crash occurred in 1996, the FAA did not modify its regulatory requirements. Only after the crash of Silk Air Flight 185 in 1997, and years of litigation in state court relating to the deaths caused, did the FAA alter its certification and require a safer design for rudder systems installed in every Boeing 737 aircraft. If the lower court's conflict preemption rule had been controlling law, these manufacturers would have been shielded by the aircraft's certification that it complied with outdated FAA regulations. Families of the 250 people killed in the three accidents would have been deprived of compensation, the investigations spurred by the litigation would not have placed their findings in the hands of federal regulators, and manufacturers would have had less incentive to improve their designs.

b. Another example concerns the 1998 crash of Swissair Flight 111 due to an in-flight fire caused by dangerous insulation and wiring and absence of adequate fire safety devices, all in compliance with FAA certification. Boeing settled the lawsuits brought by passengers' estates. Because of the crash, the FAA banned flammable insulation, tightened certification standards, and initiated other improvements in its procedures to ensure safe design. If the lower court's preemption rule had been controlling law, the families of the 229 people who died in this preventable crash would have been denied any legal redress.

c. Likewise, the crash of TWA Flight 800 in 1996 was caused by a defectively designed and located fuel tank. Families of the 225 victims sued the manufacturer, Boeing, even though the FAA had approved and certified the design. Under the district court's preemption rule plaintiffs' claims would have been dismissed, depriving the victims of a remedy and endangering the public by eliminating a major incentive for design improvement. Congress could not have intended that result.

ARGUMENT

I. INTRODUCTION.

If allowed to stand, the district court's latest *Sikkelee*² ruling would immunize aircraft and aviation component part manufacturers from liability for

²*Sikkelee v. AVCO Corp.*, 268 F.Supp.3d 660, 664 (M.D. Pa. 2017).

their defective product designs in a manner wholly inconsistent with the Act and its goal of fostering aviation safety. Had that ruling been controlling law in the past, major aviation design defects that were eliminated only following litigation would have gone uncorrected, leading to countless deaths and denying families of aviation disasters legal remedy for the losses of their loved ones.

There is no basis for the district court’s presumption that certification by the FAA of an aircraft or an aviation component precludes state product liability claims. Contrarily, as the Supreme Court has repeatedly noted, Congress has often decided “to stand by both” – state tort litigation and federal regulation – “and to tolerate whatever tension there [is] between them.” *Wyeth v. Levine*, 555 U.S. 555, 575 (2009) (quoting *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 166-67 (1989)); *see also Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 255 (1984). There is no support for the district court’s conflict preemption decision because “there is no general, inherent conflict between federal preemption” of warning requirements “and the continued vitality of state common-law damages actions.” *Cipollone v. Liggett Grp., Inc.*, 505 U.S. 504, 518 (1992). Instead, “negligence liability could just as easily complement” federal safety regulations. *CSX Transp., Inc. v. Easterwood*, 507 U.S. 658, 668 (1993).

Amicus submits that the district court erred in holding that state product liability claims cannot as a matter of law coexist with federal regulation in the area

of aviation design. Courts have long harmonized state law-based product liability lawsuits with federal regulatory standards where the federal requirements serve as “the *floor* of safe conduct” and not “a *ceiling* on the ability of states to protect their citizens.” *Ferebee v. Chevron Chem. Co.*, 736 F.2d 1529, 1542-43 (D.C. Cir. 1984) (emphasis original); *Dorsey v. Honda Motor Co.*, 655 F.2d 650, 656 (5th Cir. 1981); *Raymond v. Riegel Textile Corp.*, 484 F.2d 1025 (1st Cir. 1973). This Court adhered to that principle previously in this case, characterizing the federal certification regime as a statutory “baseline requirement” that manufacturers meet certain “minimum standards.” *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 694 (3d Cir. 2016), citing 49 U.S.C. § 44701 (authorizing the FAA to promulgate “minimum standards in the interest of safety.”).

Federal regulators are not infallible; there is a “laundry list of defective products that also met federal standards yet are known to kill people.” Jeff Wigington, *The Best-Selling Defect in America*, 39 *Trial* 62, 64 (July 2003). As Justice Stevens once wryly noted, “the *Titanic* ‘complied with British governmental regulations setting minimum requirements for lifeboats when it left port on its final, fateful voyage.’” *Geier v. American Honda Motor Co.*, 529 U.S. 861, 903 n.19 (2000) (Stevens, J., dissenting) (quoting Ralph Nader & Joseph Page, *Automobile–Design Liability and Compliance with Federal Standards*, 64 *Geo. Wash. L. Rev.* 415, 459 (1996)). One way tort liability complements

administrative regulation, as the Supreme Court has pointed out, lies in the ability of tort litigation to shine a spotlight on dangers that regulators overlooked or undervalued, prompting the federal agency to revise its regulations “in light of the new information that has been brought to its attention through common law suits.” *Bates v. Dow Agrosciences LLC*, 544 U.S. 431, 451 (2005).

The complementary role that tort litigation plays alongside federal regulatory regimes is also evident in non-aviation fields. For example, regarding prescription drugs and medical devices, former Food and Drug Administration (“FDA”) Commissioner David Kessler observed that “tort law often informs regulatory decisions, and the FDA has often acted in response to information that has come to light in state damages litigation.” David A. Kessler & David C. Vladeck, *A Critical Examination of the FDA’s Efforts to Preempt Failure-to-Warn Claims*, 96 *Geo. L.J.* 461, 477 (2007-2008); *see also* Aaron S. Kesselheim & Jerry Avorn, *The Role of Litigation in Defining Drug Risks*, 297 *JAMA* 308, 308 (2007) (“[L]awsuits have helped uncover important and previously unavailable data about major adverse events.”). Most failure-to-warn prescription drug cases involve “risks that emerged after the drugs were approved by the FDA and were available to the public.” Michael D. Green, *Safety as an Element of Pharmaceutical Quality: The Respective Roles of Regulation and Tort Law*, 42 *St. Louis U. L.J.* 163, 169 (1998).

The district court's ruling below is an unjustified departure from established law and public policy. The Third Circuit's doctrine of implied field preemption over aviation safety preempts only state law standards of care, and permits plaintiffs to establish liability against an aviation defendant by demonstrating that it violated a federal aviation regulation or other standard. *See Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 371-72 (3d Cir. 1999) (only state law negligence standards of care are preempted by federal regulation that contained an express standard of care within its text). A properly formulated and applied conflict preemption doctrine would likewise only preempt state standards of care that conflict with applicable federal standards. *See, e.g., Geier*, 529 U.S. at 874 (common law claim that "actually conflicts" with motor vehicle regulation is preempted). A proper conflict preemption rule would permit an aviation victim to pursue a case if the state standard of care did not actually and directly conflict with a federal standard of care.

The district court's decision in *Sikkelee*, however, is different from prior aviation preemption decisions. It creates a conflict preemption rule that requires a court to dismiss the plaintiff's entire suit if the defective aircraft or component was certified and fixing that defect would have required the manufacturer to get FAA approval. *See Sikkelee*, 268 F.Supp.3d at 717. This unprecedented expansion of preemption jurisprudence is unsupported by the legislative text, history, and prior

interpretation of the Act. It is also contrary to Supreme Court precedent. *See Wyeth*, 555 U.S. at 571-72 (“[A]bsent clear evidence that the FDA would not have approved a change to Phenergan’s label, we will not conclude that it was impossible for Wyeth to comply with both federal and state requirements.”).

As one district court has concluded, “product liability, negligence and breach of warranty claims for aircraft design or manufacture will only help, not harm, Congress in obtaining its goal of maximum safety.” *Lewis v. Lycoming*, 957 F.Supp.2d 552, 559 (E.D. Pa. 2013). In the nearly six decades since Congress passed the Act (until the district court’s decision in this case) no court has held that an aviation product liability claim is precluded simply because the airplane or its component part was certified by the FAA. The lower court’s decision turns prior aviation case law and the Act on their heads, removing an important safeguard in the Act’s efforts to improve aviation safety and denying injured plaintiffs a remedy for losses caused by a design defect.

Several well-known examples of product liability cases that followed major aviation disasters, addressed below, dramatically illustrate this crucial point.

II. FEDERAL AVIATION REGULATION IN PRACTICE.

The Act authorized the FAA to issue “minimum standards” in order to foster safety in the design, manufacture and inspection of aircraft and their component parts. 49 U.S.C. App. § 1301, *et seq.* Congress did not include an express

preemption clause in the Act; rather, it included a savings clause stating that the legislation's provisions are "in *addition to* any other remedies provided by law," such as a common-law negligence claim for injured plaintiffs. 49 U.S.C. App. § 40120(c) (emphasis added); *see also Martin v. Midwest Exp. Holdings, Inc.*, 555 F.3d 806 (9th Cir. 2009) (aircraft certification did not preempt state law claims); *Morris v. Cessna Aircraft Co.*, 833 F.Supp.2d 622 (N.D. Tex. 2011) (the Act did not preempt common law standards regarding product liability claims); *Monroe v. Cessna Aircraft Co.*, 417 F.Supp.2d 824 (E.D. Tex. 2006) (state law negligence and product liability claims against aircraft manufacturer not preempted); *Lucia v. Teledyne Continental Motors*, 173 F.Supp.2d 1253 (S.D. Ala. 2001) (state law product liability claim not preempted); *Er v. Boeing Co.*, No. 2009 L 013791 (Cir. Ct. Cook Cnty., Aug. 19, 2010) (design defect claims not preempted).

It is true, as the district court discussed, that the FAA has issued numerous regulations with respect to aircraft design. *See Sikkelee*, 268 F.Supp.3d at 693. But the FAA's certification process does not create a pervasive regulatory scheme demonstrating an intent by Congress to preempt either the field of aviation safety or state defective design claims. *Monroe v. Cessna Aircraft Co.*, 417 F.Supp.2d 824, 833 (E.D. Tex. 2006).

Even extensive federal regulation does not, alone, establish a conflict with state law-based suits for harms caused by the regulated entity. For example,

although the federal government extensively regulates nuclear power plants, Congress did not believe that it was inconsistent to vest the Nuclear Regulatory Commission with *exclusive* regulatory authority over the safety aspects of nuclear development while at the same time allowing plaintiffs to recover for injuries caused by nuclear hazards. *See Silkwood*, 464 U.S. at 258. Justice Blackmun agreed with the majority on this point:

Congress intended to rely solely on federal expertise in setting safety standards, and to rely on States and juries to remedy whatever injury takes place under the exclusive federal regulatory scheme. Compensatory damages therefore complement the federal regulatory standards, and are an implicit part of the federal regulatory scheme.

Id. at 264.

The district court opined that Congress intended to preempt state product liability claims when it passed the Act. But that finding is clearly contradicted by the language of the Act itself, which contains no preemption clause, express or otherwise, speaks only in terms of “minimum standards,” and preserves state law remedies. The finding is also disproven by later actions of Congress, including two subsequent amendments with express preemption clauses containing limited restrictions on lawsuits against airlines and manufacturers, which would have been unnecessary (and redundant) had the Act already preempted tort claims.

In 1978, Congress amended the Act when it passed the Airline Deregulation Act, which included an express preemption clause that precludes states from

adopting standards relating to “a rate, route or service” of an air carrier. 49 U.S.C. § 41713(b). The inclusion of the limited express preemption clause demonstrates that Congress did not understand that the Act already preempted state laws relating to aviation.

In 1990, Congress rejected as unsound the “General Aviation Accident Liability Standards Act” that included an exclusive federal cause of action in general aviation product liability cases, uniform federal liability standards, and an express preemption clause barring all State law product liability suits. S. REP. No. 101–303, 101st Cong., 2d Sess.1990. If the district court were correct and FAA certification provided immunity to manufacturers, it would make no sense that Congress would consider a law that would establish federal standards and a federal cause of action for product liability.

In 1994, Congress enacted the General Aviation Revitalization Act (GARA), which contains an eighteen-year statute of repose precluding product liability actions against manufacturers of aircraft carrying fewer than twenty people and not engaged in passenger carrying operations at the time of the accident. 49 U.S.C. § 40101, note § 2(a)(1). In this way, GARA expressly preempts State law product liability in a limited category of cases. *See* 49 U.S.C. § 40101, note § 2(d).

GARA's legislative history shows that Congress did not understand that the Act preempted state law or that certification by the FAA provides manufacturers with immunity:

The liability of general aviation aircraft manufacturers is governed by tort law. As part of our civil justice system, tort law has evolved over the centuries to reflect societal values and needs....

While the specific contours have ebbed and flowed, the public's right to sue for damages is ultimately grounded in the experiences of the legal system and values of the citizens of a particular State.

It has also been noted that attempts to preempt State tort law can create procedural and jurisdictional confusion...

For all the foregoing reasons Congress has chosen to tread very carefully when considering proposals such as S. 1458 [GARA] that would preempt State liability law....

Based on the hearing records, the Committee voted to permit, in this exceptional instance, a very limited Federal preemption of State law....

As reported, the legislation may be viewed as a narrow and considered response to the "perceived" liability crisis in the general aviation industry. Rather than seeking to revise substantially a number of substantive and procedural matters relating to State tort law, as earlier legislative efforts would have done, S. 1458 is limited to creating a statute of repose.

Given the conjunction of all these exceptional considerations, the Committee was willing to take the unusual step to [sic] preempting State law in this one extremely limited instance...

Under the legislation, victims would also continue to be free to bring suit against pilots, mechanics, base operators, and other responsible parties where their negligence or other misconduct is a proximate cause of the accident. And in cases where the statute of repose has not expired, State law will continue to govern fully, unfettered by Federal interference.

H.R. Rep. No. 103-525(II), at 6-7 (1994), *reprinted in* 1994 U.S.C.C.A.N. 1644, 1648.

The enactment of GARA was an express congressional recognition of the continued validity of State-law product liability claims against manufacturers of all types of aircraft that fall outside of GARA's preemptive reach. *See Cipollone*, 505 U.S. at 517; *Sprietsma v. Mercury Marine*, 537 U.S. 51, 69 (2002). State-law based product liability claims and standards serve as an “additional, and important, layer of [aircraft passenger] protection that complements [FAA] regulation.” *Wyeth v. Levine*, 129 S.Ct. at 1202. Just as state law tort actions considered in *Wyeth* uncover unknown drug hazards not detected during the FDA's drug approval process and provide manufacturers with incentive to produce safe drugs, *id.*, aviation tort actions uncover aircraft defects not detected or undetectable during the FAA certification process. *See Lucia*, 173 F.Supp.2d at 1268-1269 (citing the Congressional record, GARA leaves all non-preempted claims unfettered by federal interference and must be read as “clarifying the scope and strengthening the role of state tort law applicability to aviation product liability actions”); *Monroe*,

417 F.Supp.2d at 830. (“GARA’s statute of repose implies Congress’s recognition of the continuing viability of state law tort claims against aircraft manufacturers”).

GARA’s legislative history demonstrates that Congress was quite aware that courts were applying state law standards to determine whether aviation products were unsafe. H.R. Rep. No. 103-525(II), at 6-7 (1994), *reprinted in* 1994 U.S.C.C.A.N. 1644, 1648; *see also Monroe*, 417 F.Supp.2d at 832. (“GARA’s legislative history demonstrates that Congress did not intend to preempt the entire field of aviation safety.”). If Congress intended the FAA to have an overarching preemptive effect, GARA’s limited preemption of a narrow category of State law claims would have been superfluous. The fact that Congress needed to expressly bar product liability claims in a limited manner establishes that, prior to GARA, Congress never intended to preempt *any* product liability claims, but rather concluded that such claims and the standards underlying those claims constitutionally coexisted with the FAA’s regulatory authority. *See Sheesley v. Cessna Aircraft Co.*, 2006 WL 1084103, *22 (D.S.D. Apr. 20, 2006) (enactment of GARA to preempt State tort law in a narrow set of circumstances would have been unnecessary if Congress had already preempted all State tort actions affecting aviation safety when it enacted the Act).

III. THE SIKKELEE DISTRICT COURT DECISION AND THE KELLY SETTLEMENT.

In *Sikkelee*, the district court went beyond what was necessary to resolve the

summary judgment motion – which should have ended when the district court concluded that Lycoming was too attenuated from the production history to render the company liable to suit.

The court wrongly permitted the plaintiff’s settlement with prior defendant Kelly Aerospace Power Systems (“Kelly”) to influence its analysis. The court mentions the settlement several times and the decision’s conclusion focuses entirely on the settlement:

At this point in conflict preemption opinions, the court typically laments “the unfortunate hand that federal [] regulation has dealt” the plaintiff. . . . As her \$2 million settlement evidences, such sympathy for unrealized pecuniary losses is not in order for the Plaintiff here. As Ms. Slavin [(defense counsel)] expressed at oral argument, “Kelly’s hands placed the carburetor into the stream of commerce, and Mrs. Sikkelee . . . recovered \$2 million. So everything that *Tincher* says should happen did happen as to the actual seller or supplier.” . . . I agree.

Sikkelee, 268 F.Supp.3d at 717.

The plaintiff’s settlement with Kelly is irrelevant to whether the carburetor was defective and whether Lycoming should be liable for that defect. Moreover, under the district court’s conflict preemption rule, Kelly would have been just as immune as Lycoming and the plaintiff would have had no remedy.

Kelly manufactured the carburetor under the FAA’s parts manufacturer approval (“PMA”) process. Under the PMA process, third-party manufacturers, like Kelly, receive approval from the FAA that their products are being produced

in accordance with the type certificate. Under the district court's preemption theory, design defect claims against PMA manufacturers would be barred. Indeed, the court concedes that "Kelly may have a conflict preemption defense based on either the type certificate or the PMA here." *Id.* at 717. Accordingly, despite stressing that no tears should be shed for Mrs. Sikkelee because she had recovered from Kelly, the district court's claim preemption rule would have precluded any claim against Kelly and would have left Mrs. Sikkelee without a remedy.

If adopted, the district court's conflict preemption rule would drastically restrict product liability claims following aviation disasters, leaving victims without legal remedy for their injuries. Moreover, other potential defendants, such as airlines, would be left with liability for all damages under joint and several liability laws even if a defective aircraft component had been the primary cause of the accident.

IV. THE CRITICAL ROLE OF DESIGN DEFECT CASES IN IMPROVING AVIATION SAFETY AND REDRESSING INJURIES.

Major aviation product liability claims prosecuted under state law demonstrate the critical role litigation has played in revealing dangerous conditions in aircraft, resulting in major safety improvements and awarding fair compensation to aviation disaster victims and their families. None of these cases would have survived a motion to dismiss if the district court's conflict preemption decision had been the applicable law.

A. The Boeing 737 Rudder Defects.

Product liability lawsuits arising out of a series of commercial aircraft disasters in the 1990s revealed dangerous defects in a critical component of the Boeing 737 aircraft, leading to design improvements that eliminated the defect.

1. USAir Flight 427.

On September 8, 1994, USAir Flight 427 crashed on approach to Pittsburgh International Airport, killing all 132 passengers and crew on board. The Boeing 737-3B7 aircraft utilized a rudder control system with a power control unit manufactured by Parker Hannifin Corporation. As Flight 427 came in for landing, the airplane suddenly banked and rolled to the left, entered an uncontrolled descent, and impacted terrain. Though the airplane's design had been FAA certificated, the National Transportation Safety Board ("NTSB") determined that the plane's rudder "most likely deflected in a direction opposite to that commanded by the pilots as a result of a jam of the main rudder power control unit[.]" NTSB, AIRCRAFT ACCIDENT REPORT – UNCONTROLLED DESCENT AND COLLISION WITH TERRAIN – USAIR FLIGHT 427, p. 295 (1999), *available at* <https://www.nts.gov/investigations/AccidentReports/Reports/AAR9901.pdf> [hereinafter "USAir 427 Report"]. That is, a design flaw in the FAA certified airplane caused the crash. *See id.*

The families of the victims sued the airline, the airplane's manufacturer, and

the manufacturer of the rudder's power control unit. Despite the FAA's certification of the rudder design, evidence of defects in the 737 rudder control system – including prior incident reports that the system was prone to jamming – proved so strong that every Flight 427 family's claim was settled prior to trial. *See* Torsten Ove, *Trial Opens in '94 Crash of US Airways Flight 427*, PITTSBURGH POST-GAZETTE (June 4, 2002),

<http://old.postgazette.com/nation/20020604crashnation1p1.asp>.³

2. United Airlines Flight 585.

The USAir Flight 427 disaster was not the first Boeing 737 rudder system problem. Several years earlier, United Airlines Flight 585, another Boeing 737 with a rudder control system containing the same power control unit, experienced a rudder malfunction while approaching Colorado Springs Municipal Airport. *See* NTSB, AIRCRAFT ACCIDENT REPORT – UNCONTROLLED DESCENT AND COLLISION WITH TERRAIN – UNITED AIRLINES FLIGHT 585, p. 1-4 (2001), *available at*

<https://www.nts.gov/investigations/AccidentReports/Reports/AAR0101.pdf> . As

happened later with Flight 427, the pilots could not regain control of the aircraft as

³ At trial the manufacturer of the rudder's control unit was found liable for 75% of the damages incurred in Flight 427 and settled with airline post-verdict. *See* Torsten Ove, *Trial Opens in '94 Crash of US Airways Flight 427*, PITTSBURGH POST-GAZETTE (June 4, 2002), <http://old.postgazette.com/nation/20020604crashnation1p1.asp>. Under *Sikkelee*, manufacturers would have been immune from suit for the design defects that caused the crash.

it rolled and pitched, and the airplane hit the ground at over 200 miles per hour with 25 people on board. *Id.* The families of Flight 585 victims were initially rebuffed in their attempts to resolve their claims, but once the problem with Flight 427's rudder system was identified as the common link in the cause of both crashes, the defendants settled with the families.

3. Eastwind Airlines Flight 517.

Problems with the Boeing 737 rudder control system persisted after the crashes of Flights 427 and 585. On June 9, 1996, five years after the Flight 585 crash and two years after the Flight 427 crash – but before Boeing had resolved the lawsuits arising out of either case – a near-fatal crash occurred following another Boeing 737 rudder malfunction. While landing at Richmond International Airport, the pilots of Eastwind Airlines Flight 517 overcame two reverse rudder events – the exact malfunctions that killed the passengers and crew of Flight 427 and Flight 585 – and landed the aircraft safely. *See* USAir 427 Report at 51-54, 263-71, 293-94; *see also* NTSB, AVIATION INCIDENT FINAL REPORT – INCIDENT NUMBER DCA96IA061, RICHMOND, VA (2007). Yet, the FAA did not change its regulatory requirements concerning the clearly defective rudder control system until after a third fatal crash, and after the investigations prompted by the lawsuits initiated by the victims' family members.

4. Silk Air Flight 185.

Three years after the crash of Flight 427, a third fatal accident involving the 737 rudder occurred when Silk Air Flight 185 from Jakarta, Indonesia, to Singapore crashed in 1997. After reaching cruising altitude, the aircraft suddenly plummeted to earth at such an extreme speed that it broke up before hitting the ground. *See* NTSB, AIRCRAFT ACCIDENT REPORT – SILKAIR FLIGHT MI 185, p. 1-2 (2000), *available at* <https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20001208X05950&AKey=1&RType=Final&IType=IA>. The crash killed all 104 people on board. *Id.*

The cause of the SilkAir Flight 185 disaster was initially difficult to determine. The Indonesian National Transportation Safety Committee that investigated the crash was unable to identify the cause, while the American NTSB⁴ postulated that a pilot must have intentionally crashed the airplane. *See id.* at 46-47 and Appendix N. Only after the families of the crash victims retained counsel to investigate the crash was the cause of the crash traced back to the defective rudder design.

The case against the manufacturers of the rudder control system, however,

⁴ NTSB participated in the investigation in an advisory capacity since the manufacturer of the aircraft, the Boeing Company, fell within its jurisdiction.

went to trial in Los Angeles Superior Court. The jury found the manufacturer liable for the crash, awarding the plaintiffs substantial compensatory damages. *See \$43.6 Million Awarded in Silk Air Crash Cases*, 22 Andrews Aviation Lit. Rep., No. 13, 2004, at 2.

5. Federal Agency Investigations and the Identification of Design Flaws.

After identifying the rudder defect in the course of its Flight 427 investigation and reviewing the service history for the 737 aircraft, the NTSB discovered seventy-one reported yaw/roll events involving the aircraft's rudder system. *See USAir 427 Report* at 151. The significant number of anomalies and fatal accidents involving the 737-300 series rudder system was perhaps unsurprising because the 737 was "the only twin wing-mounted engine, large transport-category airplane designed with a single rudder panel and a single rudder actuator." *Id.* at 23. Every other large transport airplane in this category, including those from McDonnell Douglas, Airbus, Lockheed Martin, and other Boeing models, utilized rudder designs with multiple panels, hydraulics, and actuators. *See id.* Nonetheless, the 737's rudder control system was included in the aircraft's type certificate in 1967 and approved by the FAA as compliant with 14 C.F.R. Parts 21 and 25. Even though USAir 427 was a newer 737-300 series aircraft, added to the type certificate in 1984 and manufactured in 1987, Boeing was still only required to meet the older, less demanding design standards from the original '60s-type

certificate and continued to use the same deficient single rudder panel and actuator design. *See id.* at 167-69.

After the conclusion of its Flight 427 investigation in 1999, the NTSB issued an urgent recommendation to the FAA that the 737's rudder system be redesigned and upgraded. *See id.* at 296. The NTSB chastised the FAA for approving the designs in the first place and recommended that the FAA's certification processes be significantly overhauled, providing another reminder that FAA certification does not ensure a safe aircraft. *See id.* at 296-97. But it took the FAA another three years to act on that criticism. In 2002 the FAA finally mandated that a new rudder system with multiple power control units be installed in every Boeing 737 aircraft by 2008 – nearly two decades after the NTSB identified the aircraft's rudder control system as the probable cause of a fatal commercial aviation disaster. *See* Airworthiness Directive 2002-20-07R1; *see also* FAA, Lessons Learned – USAir 737 in Pennsylvania – Airworthiness Directives (ADs) Issued, *available at* http://lessonslearned.faa.gov/ll_main.cfm?TabID=3&LLID=1&LLTypeID=11.

The change was so overdue that the FAA mandated a redundant system be installed before the new design was even finished and certificated. *See id.*

6. The Impact of Sikkelee on the Boeing 737-300 Rudder Control System Cases.

In these cases, the only incentive that defendant manufacturers had to resolve the lawsuits brought by family members of the passengers and crew

members killed in Flights 427, 585, and 185 was the risk of tort liability they faced for fatal flaws in the systems they designed. Had the district court's decision been governing law when the families sued the aircraft and rudder system manufacturers, the result would have been dismissal of the plaintiff's complaint, because these features were part of the aircraft's type design.

B. Inadequate Fire Prevention Components and Suppression.

On September 2, 1998, Swissair Flight 111, a McDonnell Douglas MD-11 operating between New York and Geneva, crashed after an in-flight fire broke out and became uncontrollable. All 229 persons on board were killed. The fire started in the ceiling of the aircraft where McDonnell Douglas had, in compliance with the airplane's certification, installed highly flammable metallized polyethylene terephthalate (MPET) insulation blankets and polyimide electrical wiring, which is dangerously prone to degradation and electrical arcing. Canadian Transportation Safety Board, *Accident Report, No. A98H0003* (2003), §134, available at <http://bit.ly/2hUsKtA> [hereinafter "Swiss 111 Report"]. Investigators concluded that this wiring was likely connected to the aircraft's In-Flight Entertainment (IFEN) system. See FAA, *Lessons Learned, Swissair MD-11 at Peggy's Cove, Nova Scotia, Accident Overview*, available at <http://bit.ly/2i5r3wX>. Although the FAA had certified the IFEN system, it prevented the flight crew from cutting off its electrical power during the fire. Swiss 111 Report, at 227. The aircraft also lacked

fire detection and suppression devices where the fire started and spread. *Id.* at 213-14. Despite these dangerous conditions, the incident aircraft was FAA-compliant and deemed legally “airworthy” on the date of the crash.

The Swiss Air 111 tragedy shows that FAA certification does not mean that an airplane is free from design defects. Although the flammable MPET insulation blankets that fueled the on-board fire passed all mandated FAA testing, those prescribed tests were found to be not sufficiently stringent. *Id.* at 106-08. After the crash, the FAA created stricter certification standards for insulated materials on airplanes and banned the use of MPET insulation blankets in Boeing airplanes. *See* FAA, Lessons Learned, Swissair MD-11 at Peggy’s Cove, Nova Scotia, Airworthiness Directives (ADs) Issued, *available* at <http://bit.ly/2jq7s7h> [hereinafter “Lessons Learned - Swissair”]. The crash also revealed numerous failures in the supplemental type certificate process. For instance, investigators discovered that the FAA Designated Alteration Station (DAS), a private enterprise with delegated FAA authority, relied on inadequate technical procedures, information and engineering drawings during the IFEN installation. Swissair 111 Report, at 227-28. FAA audits failed to ensure that these defects were remedied. *Id.*

Boeing ultimately settled “all outstanding lawsuits brought by the estates of the Flight 111 victims.” *In re Air Crash Near Peggy’s Cove, Nova Scotia on*

September 2, 1998, 2004 WL 2486263 (E.D. Pa. Nov. 2, 2004). Today, under the district court's decision below, Boeing would be completely immune from liability because the airplane's FAA certification would have preempted the Flight 111 plaintiffs' claims. Abandoning inadequate fire propagation testing, addressing the problems with the IFEN system, and installing appropriate fire detection or suppression system would all require FAA approval. Accordingly, had the district court's decision been governing law in 1998, the families of the 229 victims killed in a preventable crash would not have been able to seek any remedy from Boeing.

C. Boeing 747 Center Fuel Tank Design.

Easily avoidable design flaws in the Boeing 747-131 fuel tank were responsible for the deaths of 230 people in the July 17, 1996 Trans World Airlines, Inc. ("TWA") 800 crash. Approximately twelve minutes after departing New York's JFK Airport, TWA 800 exploded and crashed into the Atlantic Ocean. *NTSB Aircraft Accident Report – In-Flight Breakup Over the Atlantic Ocean – Trans World Airlines Flight 800*, AAR-00/03, at xvi (August 23, 2000). The NTSB determined that the aircraft's fuel tank design permitted heat generated by the air conditioning units to vaporize fuel in the tank, thus forming an explosive mixture. *Id.* This critical flaw in the FAA-certificated airplane positioned the center wing fuel tank immediately above the plane's air conditioning packs. *Id.* at 308. It just took one spark to ignite the explosive fuel vapor mixture and cause the

explosion that blew out the bottom of the aircraft and severed the entire front section of the plane. *Id.* at 308.

The families of the 225 victims sued TWA and Boeing. Their lawsuit focused on the defects in the aircraft design. The NTSB also immediately began a post-crash investigation, ultimately finding that a contributing cause of the crash was the FAA certification of the aircraft's defective design. *Id.* at 1.

The FAA originally certified the design of the accident aircraft in 1971, finding that all components and parts of the aircraft met all the minimum requirements of 14 CFR Part 25. *Id.* at 6. The FAA specifically accepted the design that permitted the potential for an explosive fuel/air mixture to form in the center fuel tank, and only required manufacturers to show that they had eliminated all known potential ignition sources. *Id.* at 218, 295, 298. The NTSB found that the FAA's certification process for the accident aircraft was insufficient because "a fuel tank design and certification philosophy that relies solely on the elimination of all ignition sources, while accepting the existence of fuel tank flammability, is fundamentally flawed because experience has demonstrated that all possible ignition sources cannot be predicted and reliably eliminated." *Id.* at 307.

Shockingly, the very problem that brought down TWA Flight 800 had been known to the aircraft manufacturer and FAA seven years earlier. In 1989 and again in 1990, Boeing aircraft with similar center fuel tank designs experienced non-fatal

fuel/air mixture explosions like the one that took down Flight 800, but neither the company nor the FAA took corrective action. *Id.*

While Boeing was on notice of the design defect in the center fuel tank prior to 1996, to remedy the defect Boeing would have needed FAA approval because the modification would have constituted a major design alteration under federal aviation regulations.⁵ Consequently, under the district court's claim preemption rule, the TWA 800 plaintiffs would not have been allowed to maintain product liability suits against Boeing. *See Sikkelee*, 268 F.Supp.3d at 717.

A "type design" certification broadly includes all "specifications necessary to define the configuration and the design features of the [aviation] product" *Id.* at 670. The district court's claim preemption rule would foreclose product liability claims against aviation manufacturers for certified aircraft and components and eliminate all remedies of victims for defective aviation products in contravention of the Act's savings clause and its purpose of fostering aviation safety.

The district court's unprecedented, unsupported, and unsupportable claim preemption rule will have the effect of diminishing the safety of air travel while simultaneously depriving victims of aviation disasters the opportunity to establish

⁵ *See The Boeing Company Type Certificate Data Sheet No. A20WE*, available at <http://www.boeing.com/assets/pdf/commercial/airports/misc/A20WE.pdf>.

in court that a design defect was responsible for a crash.

CONCLUSION

For the foregoing reasons, Amicus, AAJ, respectfully urges this Court to reverse the decision by the district court below.

Dated: February 1, 2018

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CERTIFICATE OF BAR MEMBERSHIP

I hereby certify that I am a member of the Bar of the United States Court of Appeals for the Third Circuit and remain a member in good standing of the Bar of this Court.

Date: February 1, 2018

/s/ Jeffrey White
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CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY that this brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 29(a)(5) because this brief contains 6,495 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f). I further certify that this brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2016 in 14-point Times New Roman type style.

I further certify pursuant to L.A.R.31.1(c) that the electronic copy of this brief filed with the Court is identical in all respects to the hard copy filed with the Court,

and that a virus check was performed on the electronic version using Malwarebytes Anti-Malware. No computer virus was detected.

Date: February 1, 2018

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on February 1, 2018, I electronically filed the foregoing document with the Clerk of Court for the United States Court of Appeals for the Third Circuit by using the appellate CM/ECF system. I also certify that the foregoing document is being served on this day on all counsel of record via transmission of the Notice of Electronic Filing generated by CM/ECF. All participants in this case are registered CM/ECF users.

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