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VIA CM/ECF

Marcia M. Waldron, Clerk of Court  
United States Court of Appeals for the Third Circuit  
21400 U.S. Courthouse  
601 Market Street  
Philadelphia, PA 19106-1790

RE: *Sikkelee v. Precision Airmotive Corporation*, No. 14-4193 (3d Cir.)  
Oral Argument Held on June 24, 2015

Dear Ms. Waldron:

Pursuant to the Court's order of June 17, 2015, the Department of Transportation (DOT) and the Federal Aviation Administration (FAA) respectfully submit this letter brief in response to the Court's questions:

- 1) What is the scope of field preemption under the Federal Aviation Act? Specifically, does the preempted field include tort claims based on alleged defective design or manufacturing? Is the FAA's position on this issue consistent with its amicus submission in *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438 (10th Cir. 1993) (No. 91-2065), or has it changed based on factors such as the enactment of the General Aviation Revitalization Act of 1994, the increased delegation of type certificate testing, and the continued litigation of aviation products liability cases under traditional state law standards?
- 2) If such tort claims fall within the preempted field, may they nonetheless proceed using a federal standard of care? If so, what is that standard and where is it found within the statute or regulations?

- 3) What weight, if any, should be accorded to the issuance of a type certificate in determining if the relevant standard of care has been met?

As explained below, the government adheres to the position it took in its amicus filing in the *Cleveland* case. As the government there explained, the Federal Aviation Act of 1958 impliedly preempts the field of aviation safety with respect to substantive standards of safety. The Act requires the Department of Transportation, through the FAA Administrator, to impose uniform national standards for every facet of aviation safety, including the design of aircraft and aircraft parts. For every new aircraft, aircraft engine, or propeller, the FAA makes a determination that it meets federal standards at the time of the product's design by issuing a type certificate. Thus, while the Act, by virtue of the clause saving common law remedies, does not preempt state tort suits, it is federal standards that govern state tort suits based on design defects in aviation manufacturing.

Because the type certificate embodies the FAA's determination that an aircraft, aircraft engine, or propeller design complies with federal standards, it can play an important role in determining whether the manufacturer in fact breached a duty owed to the plaintiff. The type certificate does not, however, create a *per se* bar to suit; whether a plaintiff's claim is preempted by a type certificate, the accompanying operating limitations, or the underlying type certification data sheet (or other FAA approvals incorporated into those materials) is governed by ordinary conflict preemption principles as applied to the particular design defect claim. *See Freightliner*

*Corp. v. Myrick*, 514 U.S. 280, 287 (1995). Where the FAA has expressly approved the specific design aspect that a plaintiff challenges, any claim that the design should have been different would conflict with the FAA’s application of the federal standard and therefore be preempted. On the other hand, where the FAA has left a particular design choice to a manufacturer’s discretion, and no other conflict exists, the type certificate does not preempt a design defect claim applying federal standards.

**Regulatory Background.** The Federal Aviation Act of 1958 directs the FAA Administrator to promote the safety and development of air commerce by establishing “minimum standards governing the design, materials, workmanship, construction, and performance of aircraft, aircraft engines, and propellers.” 49 U.S.C. § 44701 (as recodified by Pub. L. No. 103-272, 108 Stat. 745 (1994)). The FAA has accordingly established a comprehensive set of regulatory standards governing such matters as flight performance, structural characteristics, design, and construction. As relevant here, part 33 of 14 C.F.R. provides standards for aircraft engine design. For example, FAA regulations provide that “the suitability and durability of materials used in the engine must . . . [b]e established on the basis of experience or tests; and . . . [c]onform to approved specifications.” 14 C.F.R. § 33.15. In addition, “[t]he fuel system of the engine must be designed and constructed to supply an appropriate mixture of fuel to the cylinders throughout complete operating range of the engine under all flight and atmospheric conditions.” 14 C.F.R. § 33.35(a).

The Act provides a three-stage certification process to ensure that manufacturers comply with FAA design standards. First, a manufacturer wishing to introduce a new aircraft, aircraft engine, or propeller must obtain a type certificate from the FAA. 49 U.S.C. § 44704(a). The type certificate reflects the FAA’s determination that the product “is properly designed and manufactured, performs properly, and meets the regulations and minimum standards prescribed under section 44701(a).” *Id.*; 14 C.F.R. § 21.21. The type certificate remains in effect until it is surrendered, suspended, or revoked. *Id.* § 21.51. The type certificate is supported by a “type certificate data sheet” that provides more detailed specifications for the product. The type certificate may also specify, or incorporate by reference, aircraft systems or components that are themselves covered by a separate type certificate or other form of FAA approval, such as a Parts Manufacturer Approval. *See* 14 C.F.R. pt. 21, subpt. K; 14 C.F.R. § 21.41 (“Each type certificate is considered to include the type design, the operating limitations, the certificate data sheet, the applicable regulations of this subchapter with which the FAA records compliance, and any other conditions or limitations prescribed for the product in this subchapter.”). The level of detail contained in the data sheet and other components of the type certificate varies at the FAA’s discretion and is dependent upon the nature and complexity of the product.

The FAA classifies changes to a type design as “major” or “minor.” 14 C.F.R. § 21.93. For major changes, the FAA issues an amended or supplemental type certificate, allowing for modification of the design. 49 U.S.C. § 44704(b); *see* 14 C.F.R.

pt. 21, subpt D. Certain “minor” changes, defined by regulation, may not require an amended or supplemental type certificate, but are still subject to approval by the FAA. 14 C.F.R. § 21.95.

Second, to duplicate or mass produce aircraft conforming to an approved type design, a manufacturer must obtain a “production certificate.” 49 U.S.C. § 44704(c). Finally, before an individual aircraft may be placed in service, the owner must obtain from the FAA an “airworthiness” certificate, which indicates that the aircraft conforms to its type certificate and, after inspection, is in a safe condition to operate. *Id.* § 44704(d); 14 C.F.R. § 21.183.

Aircraft manufacturers have an ongoing duty to report problems or defects to the FAA. *See* 14 C.F.R. § 21.3 (the holder of a type certificate “must report any failure, malfunction, or defect in any product or article manufactured by it that it determines has resulted in” an “occurrence,” which includes, for example, engine damage or propeller failure). The FAA may address such problems by issuing airworthiness directives, which are “legally enforceable rules” that “specify inspections you must carry out, conditions and limitations you must comply with, and any actions you must take to resolve an unsafe condition.” *Id.* §§ 39.3, 39.11; *see also id.* § 39.5 (providing that the FAA may issue an airworthiness directive when “[a]n unsafe condition exists in the product[] and [t]he condition is likely to exist or develop in other products of the same type design”). The party to whom the airworthiness directive is directed is in violation of federal law “each time” the aircraft is operated without complying with

the airworthiness directive. *Id.* § 39.9. Manufacturers may also respond to problems that emerge following type certification by issuing service bulletins to notify customers of maintenance necessary to address the problem. *See Herndon v. Seven Bar Flying Serv., Inc.*, 716 F.2d 1322 (10th Cir. 1983).

**Discussion.** 1. The Federal Aviation Act of 1958 has preemptive effect in the field of aircraft safety, and state law standards of care, whether derived from common law or positive enactment, are therefore preempted.

a. Under the Supremacy Clause, state laws that “interfere with, or are contrary to,” federal law are invalid and preempted. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 211 (1824). Federal law may preempt state law expressly, or preempt it implicitly when the state law conflicts with the federal law or when Congress intends the federal law to “occup[y] the field.” *Crosby v. National Foreign Trade Council*, 530 U.S. 363, 372 (2000). Under field preemption, state law is preempted “where it regulates conduct in a field that Congress intended the Federal Government to occupy exclusively.” *English v. General Elec. Co.*, 496 U.S. 72, 79 (1990). Field preemption may be found when a “scheme of federal regulation [is] so pervasive as to make reasonable the inference that Congress left no room . . . to supplement it,” or when “the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject.” *Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm’n*, 461 U.S. 190, 204 (1983); *Arizona v. U.S.*, 132 S. Ct. 2492, 2502 (2012).

It cannot be disputed that the federal government's presence in the field of aircraft safety is pervasive. As early as 1944, Justice Jackson observed that “[a]ir as an element in which to navigate is even more inevitably federalized by the commerce clause than is navigable water. Local exactions and barriers to free transit in the air would neutralize its indifference to space and its conquest of time.” *Northwest Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring).

The structure of the Federal Aviation Act confirms the federal government's occupation of the field of substantive safety standards by establishing an all-encompassing federal regulatory framework and directing the Secretary to issue regulations setting safety standards for every facet of air safety and aircraft design. Compare *Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 165 (1978), and *United States v. Locke*, 529 U.S. 89, 110-11 (2000), with *Sprietsma v. Mercury Marine*, 537 U.S. 50, 69 (2002) (explaining that the Federal Boat Safety Act does not require the Coast Guard to promulgate comprehensive regulations). The Federal Aviation Act requires manufacturers to obtain from the FAA a certificate for every aircraft and aircraft component specified by statute before it is used in flight. 49 U.S.C. §§ 44704; 44711(a)(1). The Act further empowers the federal government to investigate aviation accidents. 49 U.S.C. § 1131. The field preempted by the Federal Aviation Act thus extends broadly to all aspects of aviation safety and includes product liability claims based on allegedly defective aircraft and aircraft parts by preempting state standards of care.

b. That the Federal Aviation Act impliedly preempts the field of aircraft safety is supported by decisions from this Court and other courts of appeals. In *Abdullah v. American Airlines*, 181 F.3d 363 (3d Cir. 1999), this Court considered on interlocutory appeal the question: “Does federal law preempt the standards for air safety, but preserve State and Territorial damages remedies”? The Court answered “yes.” *Id.* at 364. The Court found “implied federal preemption of the entire field of aviation safety” based on its conclusion that “the FAA and relevant federal regulations establish complete and thorough safety standards for interstate and international air transportation and that these standards are not subject to supplementation by, or variation among, jurisdictions.” *Id.* at 365.

A broad preemptive field is also consistent with decisions of other courts of appeals. The Ninth Circuit has explained that the FAA “occup[ies] exclusively the entire field of aviation safety . . . to carry out Congress’ intent to preempt all state law in this field.” *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007) (holding preempted state law failure to warn claim regarding risk of blood clot). The Tenth Circuit has similarly held that “[b]ased on the FAA’s purpose to centralize aviation safety regulation and the comprehensive regulatory scheme promulgated pursuant to the [Act], we conclude that federal regulation occupies the field of aviation safety to the exclusion of state regulations.” *US Airways v. O’Donnell*, 627 F.3d 1318, 1326 (10th Cir. 2010); *see also French v. Pan Am. Express, Inc.*, 869 F.2d 1, 6-7 (1st Cir. 1989) (holding drug testing of pilots preempted); *Greene v. B.F. Goodrich Avionics Systems, Inc.*,

409 F.3d 784, 795 (6th Cir. 2005) (“[F]ederal law establishes the standards of care in the field of aviation safety and thus preempts the field from state regulation.”) (preempting failure to warn of defects in a vertical gyroscope).<sup>1</sup>

c. The FAA’s views regarding preemption are entitled to significant weight. The agency has specialized expertise in the regulation of aircraft safety, and the agency is uniquely qualified to assess the impact of state law tort suits on aircraft manufacturers and the efficacy of federal regulations. The agency has carefully considered the question of the preemptive scope of the statute and federal regulations, and the agency’s views are consistent with the position the government took over twenty years ago in *Cleveland*. Under these circumstances, the agency’s views on the preemptive scope of the Federal Aviation Act are entitled to substantial weight in this Court’s analysis. See, e.g., *Geier v. American Honda Motor Co., Inc.*, 529 U.S. 861, 883 (2000) (explaining that agency’s expertise should be accorded weight); *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 495-96 (1996).

2. As explained in the government’s brief in *Cleveland*, the conclusion that Congress has preempted states from imposing their own substantive standards of care upon aircraft manufacturers does not necessarily mean that a state tort suit based on

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<sup>1</sup> Although *Public Health Trust of Dade County, Florida v. Lake Aircraft, Inc.*, 992 F.2d 291, 295 (11th Cir. 1993), and *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1443-44 (10th Cir. 1993), did not find field preemption, those decisions relied in substantial part on the mistaken belief that an express preemption provision applicable to rates and routes indicated that there could be no implied field preemption with respect to aircraft safety.

those federal standards is preempted. Congress took care in the Federal Aviation Act to preserve state remedies, stating that “[a] remedy under this part is in addition to any other remedies provided by law.” 49 U.S.C. § 40120(c). Thus, under certain circumstances described in more detail below, plaintiffs may seek to recover in a state-law tort suit against aircraft manufacturers alleged to have violated federal standards, as found in the statute and implementing regulations.

Defendants in this case assert that the FAA’s issuance of a type certificate is dispositive of the question whether the manufacturer complied with federal standards and therefore preempts plaintiffs’ design defect claims. But the question of the effect a type certificate has in a given case is governed by conflict preemption principles. It is thus only where compliance with both the type certificate and the claims made in the state tort suit “is a physical impossibility,” *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142-143 (1963); or where the claim “stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress,” *Geier*, 529 U.S. at 873, that the type certificate will serve to preempt a state tort suit.

Thus, to the extent that a plaintiff challenges an aspect of an aircraft’s design that was expressly approved by the FAA as shown on the type certificate, accompanying operating limitations, underlying type certificate data sheet, or other form of FAA approval incorporated by reference into those materials, a plaintiff’s state tort suit arguing for an alternative design would be preempted under conflict preemption principles. That is because a manufacturer is bound to manufacture its

aircraft or aircraft part in compliance with the type certificate. However, to the extent that the FAA has not made an affirmative determination with respect to the challenged design aspect, and the agency has left that design aspect to the manufacturer's discretion, the claim would not be preempted. In that instance, the claim would be adjudicated on the merits by reference to the federal standards of care found in the Federal Aviation Act and its implementing regulations. In addition to the terms of the type certificate and accompanying materials, other agency pronouncements, including FAA orders and guidance materials, may bear substantially upon the merits of a state tort design defect claim.

Applying a conflict preemption analysis to the type certificate and its accompanying materials is consistent with the basic proposition underlying the certification process: "the duty to ensure that an aircraft conforms to FAA safety regulations lies with the manufacturer and operator, while the FAA retains the responsibility for policing compliance." *United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797, 816 (1984); *see also* Brief of the United States, *United States v. Varig Airlines*, at 37. It is also consistent with this Court's decision in *Abdullah*, which allowed a state tort suit to proceed using a federal standard of care as defined both by specific regulations and the more general standard that "[n]o person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another." *See* 181 F.3d at 370-72.

Although allowing a defendant to be held liable for a design defect in an engine that has received a type certificate from the FAA is in some tension with Congress's interest in national uniformity in safety standards with oversight by a single federal agency, Congress struck a balance between protecting these interests in uniformity and permitting States to compensate accident victims. *See Silkwood v. Kerr-McGee Corp.* 464 U.S. 238, 256 (1984) (acknowledging the “tension between the conclusion that safety regulation is the exclusive concern of the federal law and the conclusion that a state may nevertheless award damages based on its own law of liability,” but holding that “Congress intended to stand by both concepts and to tolerate whatever tension there was between them.”). This balance is embodied in the Act's savings clause, 49 U.S.C. 40120, and reflected in Congress's decision to engage in only limited preemption of state statutes of limitations in the General Aviation Revitalization Act of 1994 (GARA), § 2, Pub. L. No. 103-298, 108 Stat. 1552 (1994). Congress accorded discretion to the FAA regarding the specificity of the standards it adopts in regulations and type certificates (and accompanying materials) to allow flexibility for manufacturers while nonetheless holding manufacturers accountable for compliance.<sup>2</sup>

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<sup>2</sup> There are, in addition, many state tort suits in which the type certificate will have little or no bearing. For example, a type certificate would be irrelevant to a suit premised upon allegedly negligent actions taken on the part of the manufacturer that post-date the issuance of the type certificate. Moreover, a type certificate could not preclude lawsuits based on negligence with respect to maintenance of an aircraft or negligence with respect to a service bulletin issued to correct an issue that has come to the manufacturer's attention. Nor would plaintiffs be barred from bringing a suit

*Continued on next page.*

3. The Court has inquired whether the agency's view on the preemptive effect of the Federal Aviation Act has changed "based on . . . the enactment of GARA, the increased delegation of type certificate testing, and the continued litigation of aviation products liability cases under traditional state law standards." Order. It has not.

In 1994, Congress enacted GARA, which, in relevant part, provides for time limitations on "civil actions against aircraft manufacturers." Pub. L. No. 103-298, 108 Stat. 1552. The statute provides that "no civil action for damages for death or injury to persons or damage to property arising out of an accident involving a general aviation aircraft may be brought against the manufacturer of the aircraft or the manufacturer of any new component, system, subassembly, or other part of the aircraft, in its capacity as a manufacturer if the accident occurred" a specified time period after "the date of delivery of the aircraft to its first purchaser." *Id.* § 2(a).

GARA thus has a quite limited effect: it preempts state limitations periods that exceed the period in the federal statute of repose. Such a statute of repose does not conflict with the government's understanding of preemption under the Federal Aviation Act. Although the Federal Aviation Act preempts state standards of care, as explained, state tort suits may proceed based on federal standards of care.

The nature of the type certification process should also not alter this Court's analysis. As the Supreme Court has recognized, much of the FAA's regulatory work

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regarding a manufacturing defect or other negligence in the manufacturing process that fails to conform to the type certificate.

depends on data supplied by manufacturers and owners. *See Varig Airlines*, 467 U.S. at 815. This does not mean, however, that the issuance of a type certificate is a perfunctory matter for the FAA: it involves the analysis of vast amounts of information, including data, drawings, and other details about the aircraft or part for which an applicant seeks approval. The type certification process is an exhaustive, iterative process that proceeds through multiple stages, from conceptual design to compliance planning. *See* FAA Order 8110.4C, Type Certification, at 18 (Mar. 28, 2007) (chart of the type certificate process), *available at* [http://www.faa.gov/regulations\\_policies/orders\\_notices/index.cfm/go/document.information/documentID/15172](http://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/15172). A manufacturer of a commercial aircraft seeking a new type certificate for a wide-body aircraft might submit upward of 300,000 drawings and 2,000 engineering reports, apart from ground tests and flight tests. *See* 467 U.S. at 806 n.7.

In light of its limited resources, the FAA may designate certain organizations, which may include manufacturers, to “perform specified functions on behalf of the Administrator related to engineering, manufacturing, operations, airworthiness, or maintenance.” 14 C.F.R. § 183.41(a). The organization must demonstrate that it has the facilities, resources, and experience necessary to carry out the functions delegated by the Administrator. *Id.* § 183.47. The Administrator must approve the organization’s procedures manual and the organization is subject to inspection by the Administrator “at any time and for any reason.” §§ 183.53, 183.59.

But no matter what role a manufacturer plays in the type-certification process, the decision to approve the type design ultimately rests with the FAA. This is true even for “minor” type design changes, 14 C.F.R. § 21.93(a), which are approved under a method acceptable to the FAA, and a manufacturer seeking to make a major design change must “[p]rovide substantiating data and necessary descriptive data for inclusion in the type design”; “[s]how that the change and areas affected by the change comply with the applicable requirements of” the federal regulations; and “provide the FAA the means by which such compliance has been shown.” 14 C.F.R. § 21.97(a). If a type certificate is obtained through fraud, criminal liability may attach under 18 U.S.C. § 38; a certificate may be revoked under 49 U.S.C. § 44726(b); or a party may be barred from the grant of a certificate under 49 U.S.C. § 44726(a). And the FAA may investigate aircraft for safety defects and issue civil penalties. *See* 49 U.S.C. § 46301 (civil penalty provisions); 14 C.F.R. § 13.16 (same).

There is thus nothing about the type certification process that undermines the field preemptive scope of the Federal Aviation Act, as described above. And, moreover, the thoroughness of the type certification process demonstrates that where a type certificate or type certificate data sheet, or other form of FAA approval incorporated by reference, reflects that the FAA has determined that a particular aspect of the aircraft’s design complies with the federal standard, that determination may have preemptive effect under conflict preemption principles.

Respectfully submitted,

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SEPTEMBER 2015

**CERTIFICATE OF SERVICE**

I hereby certify that on September 21, 2015, I electronically filed the foregoing supplemental letter brief with the Clerk of the Court by using the appellate CM/ECF system. The participants in the case are registered CM/ECF users and service will be accomplished by the appellate CM/ECF system.

s/ Abby C. Wright  
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