IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

JILL SIKKELEE, individually and as personal representative of the estate of DAVID SIKKELEE, deceased,	:	Case No. 4:07-cv-00886
Plaintiff	:	(Judge Brann)
v.	:	
PRECISION AIRMOTIVE CORPORATION, PRECISION AIRMOTIVE LLC, PRECISION AEROSPACE CORPORATION, PRECISION AEROSPACE SERVICES LLC, PRECISION AVIATION PRODUCTS CORPORATION, PRECISION PRODUCTS LLC, ZENITH FUEL SYSTEMS LLC, BURNS INTERNATIONAL SERVICES CORPORATION, FORMER FUEL SYSTEMS, INC., MARK IV INDUSTRIES, INC., TEXTRON LYCOMING RECIPROCATING ENGINE DIVISION, TEXTRON, INC., AVCO CORPORATION, KELLY AEROSPACE, INC., KELLY AEROSPACE POWER SYSTEMS, INC., ELECTROSYSTEMS, INC., CONSOLIDATED FUEL SYSTEMS, INC.,	:	
Defendants.	:	

MEMORANDUM

September 10, 2014

For the following reasons, the motion for summary judgment of AVCO Corporation, on behalf of its Lycoming Engines Division (hereinafter, "Lycoming"), is granted in part and denied in part.

I. Background

Before turning to Lycoming's pending motion for summary judgment, the Court should review the relatively long history of this products liability case. Commenced in May 2007 by way of a 103-page Complaint, the case was originally assigned to the Honorable John E. Jones III, and was reassigned to the undersigned almost six years later on January 17, 2013.

Plaintiff is Jill Sikkelee (hereinafter, "Sikkelee"), individually and as personal representative of the estate of David Sikkelee (hereinafter, "David"); David was Jill's husband when he died piloting an airplane in 2005. Sikkelee's Complaint asserts that David's "aircraft lost power as a result of an engine fuel delivery system [i.e., carburetor] malfunction/defect [that, in turn, caused] the aircraft and its pilot [i.e., David] to lose control and crash" shortly after takeoff from Transylvania County Airport in Brevard, North Carolina. (Complaint, May 16, 2007, ECF No. 1 ¶ 11). The Complaint asserts claims against seventeen

defendants associated with the alleged "malfunction/defect" that supposedly caused David's crash and death. Sikkelee predicated her claims on state law theories of strict liability, breach of warranty, negligence, misrepresentation, and concert of action.

Sikkelee's claims against five defendants were dismissed by stipulation on Dec. 22, 2008 (ECF No. 102); two more defendants were dismissed by stipulation on April 14, 2010 (ECF No. 140); and settlement with four more defendants was approved on July 13, 2010. (ECF No. 146).

On August 13, 2010, more than three years after the Complaint was filed, Judge Jones dismissed Sikkelee's claims against the remaining defendants. A decade before, in Abdullah v. Am. Airlines, 181 F.3d 363 (3d Cir. 1999), the United States Court of Appeals for the Third Circuit 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," though "traditional state and territorial law remedies continue to exist for violation of those [federal] standards."[1] Id. at 367, 375. Ten years later, Judge Jones concluded

[1]Which is to say, the Circuit Court "did not conclude in Abdullah that the [plaintiffs's] common law negligence claims themselves were preempted; instead, [the Circuit Court] determined only that the standard of care used in adjudicating those claims was preempted. Local law still governed the other negligence elements (breach, causation, and damages), as well as the choice and availability of

that Abdullah compelled dismissal of Sikkelee's Complaint: "[B]ased upon the state of the controlling law, this action is indeed controlled by Abdullah." Sikkelee v. Precision Airmotive Corp., 731 F. Supp. 2d 429, 438-39 (M.D. Pa. 2010) (hereinafter, "Sikkelee I"). Therefore, continued Judge Jones, "any claims that Plaintiff asserts under a state-law standard of care" – i.e., all of Sikkelee's claims in the Complaint – "must necessarily be dismissed." Sikkelee I, 731 F. Supp. 2d at 438-439.

Although she had opposed the extension of Abdullah to her claims partly on the ground that "there is no specific federal regulation pertaining to the actual design, construction, inspecting, and testing [of the] carburetor/engine fuel system at issue [in this case. . . ., i.e.,] [t]here is a gap, unlike the facts in Abdullah" (Pl. Br., May 6, 2009, ECF No. 117 at 20), Judge Jones nevertheless granted Sikkelee "leave to amend the Complaint and assert claims under federal standards of care." Sikkelee I, 731 F. Supp. 2d at 439. On August 31, 2010, Sikkelee filed a 155-page Amended Complaint. (ECF No. 160).

As the case neared its fourth anniversary, Judge Jones granted Lycoming's motion to dismiss Sikkelee's claims for breach of warranty, misrepresentation, and concert of action. 2011 WL 1344635, at *4 (M.D. Pa. Apr. 8, 2011). Sikkelee

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remedies." Elassaad v. Independence Air, Inc., 613 F.3d 119, 125 (3d Cir. 2010).

followed with a Second Amended Complaint (137 pages, for those keeping track) on April 18, 2011 (ECF No. 205), and by the time Judge Jones decided on March 13, 2012, that "Pennsylvania law will apply to the liability issues remaining in th[is] case,"[2] the termination of additional parties left Lycoming as the only defendant in the case. (ECF No. 288 at 1-2).

Just past the wooden anniversary, with the matter pared down to Sikkelee's claims asserting Lycoming's negligence and strict liability, Judge Jones decided two Lycoming motions for summary judgment on July 3, 2012 in an opinion reported at 876 F. Supp. 2d 479 (2012) (hereinafter, "Sikkelee II"). Upon consideration of the parties's briefs, which "focus[ed] primarily on the issue of whether or not Lycoming is a manufacturer" subject to potential liability under Pennsylvania products liability law, Judge Jones denied Lycoming's motions in part, holding that "genuine issues of material fact remain with regard to whether Lycoming is a manufacture [sic] relative to the defective carburetor and overhaul of the engine in 2004, whether a defect existed, and whether said defect proximately caused the Plaintiff's injuries." Sikkelee II, 876 F. Supp. 2d at 493, 495. He also, however, "grant[ed] summary judgment to the limited extent that

[2]Given Judge Jones's previous determination that Abdullah applies and that, accordingly, federal law supplies the standard of care in this case, Pennsylvania law is preempted insofar as it imposes a standard of care on Lycoming.

Plaintiff's claims may be construed to allege a defect in the engine in 1969," reasoning that "Plaintiff has offered no evidence . . . demonstrating that the engine was defective when it left the Lycoming's Williamsport manufacturing plant in 1969 or that a defect existing at that time caused the 2005 aircraft accident." Id. at 486. Judge Jones ordered that "[t]he case shall proceed on the negligence and strict liability design defect theories asserted by the Plaintiff as they relate to the 2004 engine overhaul." Id. at 495.

On July 26, 2012, at Lycoming's urging, Judge Jones amended the Order that accompanied Sikkelee II to include a statement under 28 U.S.C. § 1292(b) encouraging the Third Circuit to hear an interlocutory appeal on the issue of "whether the Pennsylvania Supreme Court would adopt the RESTATEMENT (THIRD) OF TORTS or continue in its application of the RESTATEMENT (SECOND) OF TORTS." (ECF No. 306). Judge Jones had predicted in Sikkelee II that the Pennsylvania Supreme Court would be guided by the Restatement (Second) of Torts, and denied Lycoming's motions for summary judgment based on his application of the Restatement (Second). Deeming the Restatement (Second) versus Restatement (Third) issue "a controlling question of law" (ECF No. 306), Judge Jones suspended briefing on Lycoming's then-pending motion for reconsideration in order to give the parties the benefit of the Third Circuit's

expected disposition of Lycoming's interlocutory appeal (July 26, 2012, ECF No. 307).

On September 14, 2012, a panel of the Third Circuit denied Lycoming's Petition for Permission to Appeal Judge Jones's July 3, 2012 Order. 2012 WL 4953074 (3d Cir. Sept. 14, 2012). Lycoming petitioned for rehearing en banc and panel rehearing. The Third Circuit likewise rejected these petitions on October 17, 2012, but its Order decidedly instructed that "federal courts sitting in diversity and applying Pennsylvania law to products liability cases should look to sections 1 and 2 of the Restatement (Third) of Torts." 2012 WL 5077571 (3d Cir. Oct. 17, 2012) (emphasis added). The same day, Judge Jones denied as moot Lycoming's pending motion for reconsideration of Sikkelee II and provided that "[t]he parties MAY, at their election, file new motions for reconsideration, guided by the Circuit's direction that the RESTATEMENT (THIRD) is applicable to this action." (ECF No. 324). On October 31, 2012, Lycoming filed a motion for reconsideration of Sikkelee II to the extent it denied Lycoming's motion for summary judgment. (ECF No. 332). That motion for reconsideration was pending at the time this case was reassigned to the undersigned in January 2013.

On June 3, 2013, applying against Lycoming the demanding standard that

confronts a motion for reconsideration,[3] this Court held that neither an intervening change in law nor supposed clear error warranted reversal of Sikkelee II, 2013 WL 2393005 (M.D. Pa. June 3, 2013), a determination the Court reinforced and elaborated upon in an Order dated July 9, 2013, 2013 WL 3456953 (M.D. Pa. July 9, 2013)), at oral argument on November 13, 2013 (Tr., Nov. 25, 2013, ECF No. 459 at 199-204), and in a Memorandum dated November 20, 2013 (ECF No. 456 at 4 n.2). Trial was then scheduled for December 2, 2013.

Some months before trial, however, it became clear that Sikkelee had hurdled the fence of the Restatement (Third) only to be confronted by the menacing hound that is Abdullah lurking on the other side. On October 24, 2013, Sikkelee proposed jury instructions incorporating some eighteen federal regulations and pronouncements of the Federal Aviation Administration (hereinafter, the "FAA") and Civil Aeronautics Board, the FAA's predecessor.

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[3] See page *2 of the Court's Memorandum:

> The Court may amend its prior ruling "if the party seeking reconsideration shows at least one of the following grounds: (1) an intervening change in the controlling law; (2) the availability of new evidence that was not available when the court granted the motion for summary judgment; or (3) the need to correct a clear error of law or fact or to prevent manifest injustice." Howard Hess Dental Lab. Inc. v. Dentsply Int'l, Inc., 602 F.3d 237, 251 (3d Cir.2010) (quoting Max's Seafood Cafe v. Quinteros, 176 F.3d 669, 677 (3d Cir.1999)).

(ECF No. 409-7).The Court reviewed the proposed charge with a raised eyebrow, puzzled by Sikkelee's derivation of a standard of care from certain regulations, and unable to grasp the causal relevance of the alleged breach of others.

At a November 13, 2013 hearing, the Court expressed doubt concerning the validity of Sikkelee's proposed instructions and heard her counsel's attempts to justify them. By way of a November 20, 2013 Memorandum, the Court – after explaining the difficulty that courts have had fashioning jury instructions consistent with Abdullah generally[4] – recounted the hearing as follows:

> [P]laintiff's counsel was all but completely unable to assist the Court in, to use Chief Judge Conner's phrase, "formulating an intelligible statement of applicable law." The Court's confidence in the capacity of plaintiff's proposed instructions to guide the Court steadily diminished throughout the argument, and was lost completely when plaintiff's counsel made the incredible suggestion that the Court could fulfill its duty to instruct the jury by delivering Pennsylvania pattern instructions on negligence. See Abdullah, 181 F.3d at 376 (remanding case to district

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[4]At pages 2-3, the Court wrote,

> As Chief Judge Conner has explained, "FAA regulations relating to the design and manufacture of airplanes and airplane component parts were never intended to create federal standards of care." [Pease v. Lycoming Engines, 2011 WL 6339833, at *22 (M.D. Pa. Dec. 19, 2011)]. This makes construing the regulations as standards of care, which Abdullah requires, "arduous and impractical." Pease, 2011 WL 6339833, at *23. Chief Judge Conner found under similar circumstances that "[t]he court's obligation to instruct the jury with these obscure regulations will be severely challenged, and there is no jurisprudential guidance to assist the court in formulating an intelligible statement of applicable law." Id.

> court to "evaluate whether the evidence on standards of care and the instructions given to the jury conformed to the federal aviation safety standards as we have described them").

(ECF No. 456 at 5-6).

With trial approaching, the Court found itself "without sufficient guidance from either precedent or the parties as to the law that will govern not only the jury's deliberations, but also the Court's rulings on the relevance of evidence, motions pursuant to Fed. R. Civ. P. 50, and other questions." (Id. at 6). The Court postponed trial to March 10, 2014 and ordered Sikkelee to submit a brief showing why the regulations she cited constitute the standard of care applicable to Lycoming; Lycoming was given the opportunity to respond. (Nov. 20, 2013, ECF No. 457).

Upon review of the parties's papers, the Court determined that the issues raised would profit from examination in the posture of summary judgment. Not incidentally, an order resolving a motion for summary judgment would, in the Court's view, be conducive of interlocutory consideration by the Third Circuit under 28 U.S.C. § 1292(b), consideration which this Court resolved to encourage in light of the vexation these issues have caused this Court and others. Compare Lewis v. Lycoming, 957 F. Supp. 2d 552 (E.D. Pa. 2013), with Pease v. Lycoming

Engines, 2011 WL 6339833, at *22 (M.D. Pa. Dec. 19, 2011).[5] On February10, 2014, the Court ordered summary judgment briefing limited to Lycoming's contention that, in view of the parties's evidence, no reasonable jury could conclude that Lycoming's allegedly tortious conduct breached a federal standard of care and caused David's crash thereby. Trial was postponed. (ECF No. 478). In accordance with the Court's Order, Lycoming moved for summary judgment on March 19, 2014. (ECF No. 482).

II. Summary Judgment Standard

Summary judgment is appropriate where "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). A fact is "material" where it "might affect the outcome of the suit under the governing law." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A dispute is "genuine" where "the evidence is such that a reasonable jury," giving credence to the evidence favoring the nonmovant and making all reasonable inferences in the nonmovant's favor, "could return a verdict for the nonmoving party." Id.

[5]The Third Circuit has permitted appeals of analogous issues in the past. See In re TMI, 67 F.3d 1105, 1106 (3d Cir. 1995) (certified question involving whether specified federal regulations constituted standard of care in case involving claims arising from the Three Mile Island nuclear meltdown).

For movants and nonmovants alike, the assertion "that a fact cannot be or is genuinely disputed must" be supported by "citing to particular parts of materials in the record," or by "showing that the materials cited [by an adverse party] do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1). "If a party fails to properly support an assertion of fact or fails to properly address another party's assertion of fact as required by Rule 56(c), the court may . . . consider the fact undisputed for purposes of the motion." Fed. R. Civ. P. 56(e)(2).

Thus, where the moving party's motion is properly supported and his evidence, if not controverted, would entitle him to judgment as a matter of law, the nonmoving party, to avoid summary judgment in his opponent's favor, must answer by setting forth "genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." Anderson, 477 U.S. at 250. In the face of the moving party's evidence, the nonmoving party's mere allegations, general denials or vague statements will not create a genuine factual dispute. See Bixler v. Cent. Pennsylvania Teamsters Health & Welfare Fund, 12 F.3d 1292, 1302 (3d Cir. 1993). Only citation to specific facts is sufficient. Anderson, 477 U.S. at 250.

Where the nonmoving party has had adequate time for discovery and will

bear the burden of proof at trial, "a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial," and summary judgment is warranted. Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986).

III. Facts[6]

Sikkelee claims that Lycoming is liable for alleged defects in the "engine, . . . carburetor, . . . [and] fuel delivery system" (as well as various "manuals and instructions" related to these components) installed in the aircraft (a Cessna 172N) that David was piloting when he crashed fatally in 2005 (hereinafter, the "accident aircraft"). (2d Am. Compl., Apr. 18, 2011, ECF No. 205 ¶¶ 141, 144, 162). The nature of Lycoming's association with the components at issue is important to the Court's analysis and will be set forth in some detail.

In 1969, Lycoming manufactured the engine – a model O-320-DC2 bearing the serial number L-6590-39A (hereinafter, the "subject engine") – that was installed in the accident aircraft at the time of David's crash. (Def. Facts, Mar. 19, 2014, ECF No. 483 ¶¶ 6, 8 (hereinafter, "Def. Facts I")). Most of the subject

[6]Where the parties's accounts differ, the Court views the facts and draws reasonable inferences therefrom in Sikkelee's favor. See Montone v. City of Jersey City, 709 F.3d 181, 189 (3d Cir. 2013) (facts and reasonable inferences drawn therefrom must be favorable to party opposing motion for summary judgment).

engine's 35-plus years were spent in storage: Lycoming shipped the engine to Beagle Aircraft, Inc., in September of 1969, and it was not until 1998 that the engine was installed "factory new" on the accident aircraft. (Def. Facts I ¶ 7; Pl. Facts, Apr. 28, 2014, ECF No. 488 ¶ 7 (hereinafter "Pl. Facts")).

When the subject engine left Lycoming's control in 1969, it shipped with a carburetor[7] – setting 10-3678-32, serial number A-25-15850 (hereinafter, the "original carburetor") – but the carburetor installed in the subject engine when the accident aircraft crashed in 2005 was not the original carburetor. (Def. Facts I ¶¶ 7, 9, 11; Pl. Facts ¶ 9). When the engine came out of storage in 1998, an overhauled Marvel-Schebler/Precision Airmotive Corp. (hereinafter, "Precision") model MA-4SPA carburetor bearing serial number CK 6 11739 was installed in accordance with the O-320-DC2's type-certificated design (more on FAA "type certification" shortly), which calls for installation of the MA-4SPA. (Pl. Ex., ECF No. 234-1; Pl. Ex., ECF No. 234-6 at 8).

Then, just under a year before David's accident, Kelly Aerospace, Inc. (hereinfater, "Kelly"), an FAA certified repair station, overhauled another MA-4SPA carburetor – this one bearing serial number CK 6 10964 and originally

[7]A "carburetor" is defined at Merriam-Webster.com as "the part of an engine in which gasoline is mixed with air so it will burn and provide the engine with power."

manufactured by Precision in 1978 (hereinafter, the "replacement carburetor") – and installed it on the subject engine, again in accordance with Lycoming's type-certificated design. (Pl. Facts ¶ 10; Pl. Ex., ECF No. 234-6 at 8; Pl. Ex., ECF No. 54 ¶ 101; Pl. Ex., ECF No. 207 ¶ 22). In performing the overhaul, Kelly was required to "use the methods, techniques and practices prescribed in [Lycoming's] maintenance manual or Instructions for Continued Airworthiness," 14 C.F.R. § 43.13(a) (2004), and did so (Pl. Ex., ECF No. 234-6 at 9-10). As part of the overhaul, Kelly removed parts from the replacement carburetor and replaced them with parts[8] that Kelly had manufactured under its FAA-issued Parts Manufacturer Approval (hereinafter, "PMA") (more on PMA shortly). (Def. Facts I ¶ 10). The Kelly-overhauled replacement carburetor was powering the subject engine when David was piloting the accident aircraft in 2005.

Those are the basics. To better understand Lycoming's association with – and duties with regard to – the allegedly defective components, however, it is necessary to specify where Lycoming is situated in the context of the Civil Air Regulations (hereinafter, the "CARs") and the Federal Aviation Regulations

[8]These parts include the "pump plunger assembly," the "valve and seat assembly," the "single piece venturi," the "throttle shaft," and the "carburetor float," the last of which was actually manufactured by a vendor to Kelly. (Def. Facts I ¶¶ 12-13).

(hereinafter, the "FARs"). General background for the CARs and the FARs is provided in the margin.[9]

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[9]The Kreindler Treatise provides a helpful guide through the statutory and regulatory evolution generally relevant to the case at bar:

> As early as 1938, . . . Congress . . . enacted the Civil Aeronautics Act of 1938 (CAA), the predecessor to the Federal Aviation Act.
>
> Originally, under the CAA, the Civil Aeronautics Board (CAB), an agency within the Department of Commerce, was the agency responsible for the regulatory aspects of aviation safety, including promulgating safety rules [and] inspecting and certifying aircraft, ...
>
> In 1958, the Federal Aviation Act (the Act) was passed and continues to be the basic law of the land concerning aviation. With the enactment of the Federal Aviation Act of 1958, the regulatory functions of the CAB were transferred to a newly created Federal Aviation Agency. Subsequently, Congress enacted the Department of Transportation Act of 1966, which transferred the duties of the Federal Aviation Agency, in their entirety, to the newly created Department of Transportation (DOT) and its Secretary of Transportation. The Department of Transportation Act did not change the substance of the Federal Administration Act, but rather only reorganized the administrative hierarchy.
>
> The Federal Aviation Agency, renamed as the Federal Aviation Administration (FAA), remains as an agency within the DOT and acts for the Secretary of Transportation in the safety rule-making, air-traffic controlling, and certification processes. The CAB was stripped of its safety and investigatory functions . . . .
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> . . . .
>
> The Federal Aviation Regulations (FARs) are promulgated pursuant to the Federal Aviation Act and have the full force and effect of law. The FARs are a voluminous body of ever-changing rules and regulations

IV. Regulatory Structure

Lycoming is the holder of a "type certificate" for the Lycoming O-320-D2C model engine. (Def. Facts I ¶ 2). To obtain this status, which it did in 1966, Lycoming demonstrated the O-320-D2C's compliance with certain "airworthiness" standards, see CAR § 13.10 (1964),[10] and type certification denotes that, in the view of the Federal Aviation Administrator (the head of the FAA, hereinafter, the "Administrator"), the engine "is of proper design, material specification, construction, and performance for safe operation, and meets the minimum standards, rules, and regulations" prescribed by the FAA. 49 U.S.C. § 1423(a)

> governing the qualifications, certification, and operation of aircraft, pilots, instructors, air carriers, and air traffic controllers. . . . In large part, they constitute a broad recodification of the former Civil Air Regulations, which were originally issued by the Secretary of Commerce, then by the Civil Aeronautics Board (CAB), then by the Federal Aviation Agency, and finally by the Federal Aviation Administration (FAA). They are codified in Title 14 of the Code of Federal Regulations.

2 Kreindler, Aviation Accident Law § 9.01(1)-(2) (Matthew Bender).

[10]When discussing type certification of the O-320-D2C, the Court refers to the CARs and relevant provisions of the Federal Aviation Act as they stood in 1964 because, in the Court's understanding, the 1964 regulations and statute governed Lycoming's 1966 application for type certification. Otherwise, the Court refers to the FARs and Federal Aviation Act as they stood in 2004, doing so on the understanding that the 2004 regulations and statute governed at the time of David's accident.

(1964). The MA-4SPA carburetor, which is actually manufactured by Precision (or, in the past, Precision's predecessors), is a component of the O-320-D2C's type-certificated design.[11] (Pl. Ex., ECF No. 234-9).

By virtue of its status as a type certificate holder, Lycoming has the privilege of "obtain[ing] a production certificate" for the O-320-D2C. 14 C.F.R. § 21.45 (2004). A production certificate holder is permitted to produce duplicates of the certificated product, 49 U.S.C. § 44704(c) (2004), and Lycoming obtained such a certificate (although when it did so is not clear from the record) for the O-320-D2C (Pl. Ex., ECF No. 234-5 at 12) by demonstrating that it maintains a quality control system adequate to ensure that "each [O-320-D2C produced] will meet the design provisions of the [O-320-D2C] type certificate," 14 C.F.R. § 21.139 (2004), and that it has developed "procedures necessary to ensure that each article produced conforms to the type design and is in a condition for safe operation," 14 C.F.R. § 21.143(a) (2004). The FARs take account of the fact that a type certificated product (e.g., an engine) is often an assemblage of smaller components (e.g., a carburetor) purchased from outside suppliers (e.g., Precision), making clear that a production certificate holder must establish procedures for ensuring the quality and

[11]Since at least the 1970s, it appears, Lycoming has licensed its design of the MA-4SPA to Precision or Precision's predecessors in interest. (Pl. Opp'n Br., Apr. 28, 2014, ECF No. 487 at 12; Pl. Ex., ECF No. 152-4 at 9; Pl. Ex., ECF No. 234-13).

conformity of all components integrated in the certificated product. 14 C.F.R. § 21.143(a)(2) (2004). Once a production certificate is obtained, the holder is responsible for maintaining its quality control system and for "[d]etermin[ing] that each part and each completed product . . . submitted for airworthiness certification or approval conforms to the approved design and is in a condition for safe operation." 14 C.F.R. § 21.165 (2004). The subject engine is one of many O-320-D2Cs produced under Lycoming's production certificate.

Like all machines, aircraft engines must be maintained to ensure proper functioning, and the FAA would prefer that you not rely on your handy uncle to do the job. Accordingly, only persons designated qualified by the FARs are permitted to "maintain, rebuild, alter, or perform preventative maintenance on an . . . aircraft engine," a designation which includes agents of "[t]he holder of a repair station certificate." 14 C.F.R. §43.3(a) & (e) (2004). Kelly held such a certificate when it overhauled the replacement carburetor. Under federal regulations, type certificate holders are required to "prepare and make available an approved manual containing instructions for the installation, operation, servicing, maintenance, repair, and overhaul of the engine," CAR § 13.21 (1964), and as noted above, Kelly was required to follow Lycoming-prepared manuals and instructions in performing the overhaul. 14 C.F.R. § 43.13(a) (2004).

Finally, sometimes parts of aircraft engines should be replaced to ensure proper functioning. Rather than give the holder of a production certificate or his supplier a monopoly on replacements, however, the FARs permit others to "produce a modification or replacement part for sale for installation on a type certificated product . . . pursuant to a Parts Manufacturer Approval issued" by the Administrator. 14 C.F.R. § 21.303(a) (2004). An applicant obtains a PMA once the "Administrator finds, upon examination of the design and after completing all tests and inspections, that the design meets the airworthiness requirements of the Federal Aviation Regulations applicable to the product on which the part is to be installed" – unless "the design of the part is identical to the design of the part that is covered under a type certificate," in which case no such showing is necessary – and the applicant "submits a statement certifying that he has established" a system for "ensur[ing] that each completed part conforms to its design data and is safe for installation on applicable type certificated products." 14 C.F.R. § 21.303(d) & (g) (2004). Once a manufacturer has obtained a PMA, he is responsible for "determin[ing] that each completed part conforms to the design data and is safe for installation on type certificated products." 14 C.F.R. § 21.303(k) (2004). A number of the parts that Kelly installed on the replacement carburetor were manufactured under a "Parts Manufacturer Approval." (Pl. Facts ¶ 10).

In sum, the regulatory framework attempts to ensure – by way of issuing various certificates/authorizations and imposing responsibilities on their holders – that the design of an aircraft engine is safe (type certification), that duplicate engines manufactured for the public conform to the approved design (production certification), that engine maintenance and repairs are performed in accordance with manuals and instructions prepared by the manufacturer, 14 C.F.R. § 43.13 (2004), and that any replacement parts for the engine are either identical to the original parts described in the type certificate or otherwise airworthy (PMA). But in recognition of the fact that the Administrator's authorization of an engine's design and manufacture is an imperfect predictor of the engine's future performance in the field, holders of type certificates and PMAs are required to "report any failure, malfunction, or defect in any product, part, process, or article" that they have manufactured when they determine that the item "has resulted in any of [various] occurrences," including "engine failure." 14 C.F.R. § 21.3(a) (2004). If the item left the holder's quality control system, the holder must report any defect "that it determines could result in any of [various] occurrences," again including "engine failure."14 C.F.R. § 21.3(b) (2004). Such reports are "made to the Aircraft Certification Office in the region in which the person required to make the report is located." 14 C.F.R. § 21.3(e) (2004).

When the Administrator determines that an "unsafe condition exists" in an engine and that the "condition is likely to exist or develop in other [engines] of the same type design" and, further, that "design changes are necessary to correct the unsafe condition," the type certificate holder must change the design and, upon the Administrator's approval of the design, "make available the descriptive data covering the changes to all operators of [engines] previously certificated under the type certficate." 14 C.F.R. §§ 21.99 & 39.5 (2004). Absent an unsafe condition, if the Administrator or the type certificate holder finds "through service experience that changes in type design will contribute to the safety of the [engine], the holder of the type certificate may submit appropriate design changes for approval." 14 C.F.R. § 21.99(b) (2004). Upon approval, "the manufacturer shall make information on the design changes available to all operators of the same type of product." Id.

Sikkelee asserts that David's crash was caused by Lycoming's violation of various federal regulations that govern type certification and breaches of the duties of type certificate and production certificate holders. In particular, Sikkelee argues that Lycoming's design of the O-320-D2C engine (and its MA-4SPA carburetor) violated a number of design-related requirements that an engine must satisfy for type certification and that Lycoming failed to provide an adequate instruction

manual (CARs §§ 13.21, 13.100(a), 13.101, 13.104 & 13.110(a) (1964)); that Lycoming breached the duty of a production certificate holder to ensure that "each part and each completed product . . . submitted for . . . approval [by the certificate holder] conforms to the approved design and is in a condition for safe operation" (14 C.F.R. § 21.165 (2004)); and that Lycoming breached the duty of a type certificate holder to report engine defects to the Administrator and to suggest design changes in order to make the O-320-D2C safer (14 C.F.R. §§ 21.3 & 21.99 (2004)).

V. Discussion

Lycoming calls for summary judgment in its favor on various grounds: (1) Sikkelee fails to set forth federal regulations establishing a standard of care applicable to Lycoming's allegedly tortious conduct; (2) assuming arguendo that the regulations cited by Sikkelee establish an applicable standard of care, Sikkelee adduces no evidence from which a reasonable jury could infer that Lycoming violated the regulations; and (3) assuming arguendo that Lycoming violated regulations that establish an applicable standard of care, Sikkelee proffers no evidence from which a reasonable jury could infer that the violation caused David's crash. (Def. Supp. Br., Mar. 19, 2014, ECF No. 484 at 8 (hereinafter, "Def. Supp. Br.")). In particular, Lycoming argues that (4) FAA type certification

of the O-320-D2C (including its carburetor, the MA-4SPA) "conclusively establishes" that the engine met any design-related standard of care established by federal regulations. (Def. Supp. Br. at 9).

Sikkelee retorts with her own battery of arguments: (1) Judge Jones "held that [Sikkelee] presented genuine issues of material fact as to whether Lycoming breached federal standards of care," and the law of the case doctrine dictates that the Court should adhere to this ruling (Pl. Opp'n Br., Apr. 28, 2014, ECF No. 487 at 6, 8, 48 (hereinafter, "Pl. Opp'n Br.")); (2) Lycoming has previously admitted that certain federal regulations apply in this litigation (Pl. Opp'n Br. at 7); and (3) by their terms, various federal regulations govern Lycoming's allegedly tortious conduct, namely 14 C.F.R. §§ 21.3, 21.99 & 21.165 (2004), and CAR §§ 13.21, 13.100, 13.101, 13.104 & 13.110 (1964). Sikkelee also argues that (4) Judge Jones's determination that federal law preempts the field of aviation safety and supplies the standard of care for this case dictates per force that federal regulations reach Lycoming's allegedly tortious conduct because "[t]here can be no pervasive regulation [of the field of aviation safety, thus preempting the field from state regulation,] if there are no regulations applicable to [Lycoming's] aircraft engine design." (Pl. Opp'n Br. at 43). Further, (5) Sikkelee extrapolates from the "premise" of Abdullah that, where no specific federal regulation governs

Lycoming's conduct, the Court must recognize a federally supplied "overall concept" of appropriate behavior requiring reasonably careful conduct from aircraft designers, and corresponding liability for carelessness or recklessness that causes injury. (Id. at 45-46). Finally, (6) Sikkelee argues that the FAA's issuance of a type certificate for the O-320-D2C does not preclude a jury from finding that Lycoming's design fell short of the standards set by federal regulation.

As a mode of proceeding, the Court will first address briefly Sikkelee's arguments (1) and (2), holding that neither the law of the case doctrine nor the doctrine of judicial estoppel defeat Lycoming's motion for summary judgment. The Court will then skip to Sikkelee's arguments (4) - (6), rejecting each and explaining why Lycoming is therefore entitled to summary judgment in relation to Sikkelee's claims alleging violations of design-related regulations. After granting Lycoming summary judgment in relation to two additional regulatory bases for Sikkelee's claims, the Court will then discuss briefly the single basis on which Sikkelee may proceed to trial.

(a) The "law of the case" doctrine should not bar the Court from considering Lycoming's Motion for Summary Judgment.

Denying (in part) Lycoming's previous motion for summary judgment, Judge Jones held that Sikkelee "has created a genuine issue of material fact for the

jury with respect to whether Lycoming breached the applicable federal standards of care by negligently designing a defective product that proximately caused" David's crash. Sikkelee II, 876 F. Supp. 2d at 495. Based on this ruling, Sikkelee now asserts that "[t]he law of the case mandates that material questions of fact abound as to Lycoming's breach of the cited federal regulations." (Pl. Opp'n Br. at 8).

The Court disagrees. Courts tend not to revisit issues already decided, a tendency named the "law of the case" doctrine. See Williams v. Runyon, 130 F.3d 568, 573 (3d Cir. 1997). The doctrine "does not limit the power of trial judges to reconsider their prior decisions," but the Third Circuit "has identified two prudential considerations that limit a court's authority to do so. First, the court must explain on the record the reasoning behind its decision to reconsider the prior ruling. Second, the court must take appropriate steps so that the parties are not prejudiced by reliance on the prior ruling." Id.

The law of the case doctrine should not bar the Court from considering Lycoming's pending Motion for Summary Judgment. For one thing, the law of the case doctrine does not apply to Judge Jones's denial of Lycoming's previous summary judgment motion:

> A denial of a motion for summary judgment cannot determine the law of a case because it is an interlocutory order subject to reconsideration at

> any time before final judgment in the case. It does not conclusively resolve any legal issue or find any fact . . . and has no claim- or issue-preclusive effect. Therefore, the law of the case doctrine does not apply to a denial of a summary judgment motion.

11 Moore's Federal Practice, § 56.121(1)(c) (Matthew Bender 3d ed.).

Moreover, assuming arguendo that the doctrine does apply, there is good reason to reconsider Judge Jones's holding. As Judge Jones noted at the time of his decision in 2012, "the parties' briefs focus primarily on the issue of whether or not Lycoming is a manufacturer" for purposes of Pennsylvania law, not on the issue of whether Lycoming breached federal standards, and Judge Jones reached his holding on the latter issue "after briefly engag[ing] in a largely independent analysis." Sikkelee II, 876 F. Supp. 2d at 493-94. This is not the foundation upon which highly reliable holdings are built. In addition, Sikkelee has presented no evidence showing prejudice to her resulting from reliance on Judge Jones's prior ruling and the Court perceives none. Thus, "prudential considerations" do not counsel against reconsideration of Judge Jones's holding.

(b) Lycoming's previous statements should not bar it from asserting that it is not liable for violating various CARs and FARs.

Without using the phrase (or citing any relevant caselaw), Sikkelee opposes Lycoming's summary judgment motion on the ground that the doctrine of judicial estoppel applies. Because "Lycoming . . . [previously] admitted in this case that

federal regulations apply" (Pl. Opp'n Br. at 7), Lycoming should now be barred from asserting that it cannot be found liable under various FARs and CARs, Sikkelee argues.

The Court disagrees. "Under the doctrine of judicial estoppel, a court can defend the integrity of the judicial process by barring a party from taking contradictory positions during the course of litigation." G-I Holdings, Inc. v. Reliance Ins. Co., 586 F.3d 247, 261 (3d Cir. 2009). "Though there is no rigid test for judicial estoppel, three factors inform a federal court's decision whether to apply it: there must be (1) irreconcilably inconsistent positions; (2) adopted in bad faith; and (3) a showing that estoppel addresses the harm and no lesser sanction [is] sufficient." Id. at 262 (internal quotation marks and alterations omitted).

Either ignoring or not recognizing the existence of these factors, Sikkelee does not argue all of them, focusing all but exclusively on the first. But her argument fails even here. Most of the statements Sikkelee attributes to Lycoming were actually mouthed by other defendants (since dismissed from this case) in support of a motion joined by Lycoming. (See Pl. Opp'n Br. at 28-29). But by joining other defendants in the motion (see Def. Supp. Br., Apr. 6, 2009, ECF No. 111 at 2), Lycoming did not adopt the statements made in the other parties's briefs – indeed it could not. See L.R. 7.8(a) ("No brief may incorporate by reference all

or any portion of any other brief"). Thus, the statements that Sikkelee pulls from other parties's briefs are not Lycoming's admissions. Moreover, the statements that Sikkelee attributes to Lycoming are not irreconcilably inconsistent with Lycoming's current position that it is not liable for violating various FARs and CARs. For these reasons, judicial estoppel doctrine should not bar Lycoming from summary judgment.

(c) Federal preemption of the field of aviation safety does not necessarily imply that there must be a regulation "at hand" for Lycoming to have violated, and neither principles of field preemption nor Abdullah require this Court to fill in the gaps of the FARs and CARs with an "overall concept" of due care for engine designers; accordingly, Sikkelee's arguments (4) and (5) are rejected.

Although she does not stress the point at this stage of the game, it is worth remembering that Sikkelee's original position in this litigation – a position she no doubt maintains today – was that Abdullah does not control design defect claims against aircraft engine manufacturers. Judge Jones conceded that he perceived the "wisdom" of this position – as does this Court[12] – but thought his hands were tied

[12]See also Pease v. Lycoming Engines, 2011 WL 6339833, at *22 (M.D. Pa. Dec. 19, 2011) (Conner, C.J.) ("The undersigned concludes that Abdullah fails in its application to aviation products liability cases, and for the followings reasons, it would be far more facile to employ the applicable state standards of care in

by "the state of the law as articulated by the Third Circuit," and held that federal law must supply the standard of care in this case because state standards are preempted. Sikkelee I, 731 F. Supp. 2d at 438. Since Judge Jones's decision was issued in 2010, Judge Harvey Bartle III has reasoned that the pronouncements of the Third Circuit that Judge Jones viewed as "controlling" in Sikkelee I, id., were actually "dicta, not the holding of Abdullah," Lewis v. Lycoming, 957 F. Supp. 2d 552, 558 (E.D. Pa. 2013), a view this Court also finds compelling.[13]

Nevertheless, the Court will not revisit Judge Jones's determination to apply Abdullah, a determination reached after a careful effort to be faithful to the Third Circuit's precedents in this jumbled area of the law.[14] (Cf. section V.(a) supra (deciding to revisit issue previously addressed by Judge Jones where briefs

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aviation products liability cases.").

[13] Judge Bartle would subject defendants like Lycoming to the standards of "state products liability, negligence, or breach of warranty law." Id. at 599.

[14]Examining the relevant precedents, Judge Jones noted that the Third Circuit in Elassaad v. Independence Air, Inc., 613 F.3d 119 (3d Cir. 2010), "reaffirmed that 'Abdullah's primary holding was that federal law preempted the entire field of aviation safety,'" and "strongly, and perhaps explicitly, suggest[ed] that the manufacture of aircraft parts is . . . contained in this field and, thus, subject solely to federal standards of care." Sikkelee I, 731 F. Supp. 2d at 437-38 (quoting Elassaad, 613 F.3d at 126). See also Pease v. Lycoming Engines, 2011 WL 6339833, at *21-*22 (M.D. Pa. Dec. 19, 2011) (Conner, C.J.) (collecting evidence for the proposition that "the Third Circuit's definition of 'air safety' litigation encapsulates aviation product liability cases").

submitted to Judge Jones at that time focused primarily on a different issue and Judge Jones reached his holding based on largely independent analysis)). Therefore, Abdullah applies.

Her prime position defeated, Sikkelee now offers second-best arguments purporting to show that the impact of Abdullah on her claims is limited. In particular, she argues that if her claim is subject to field preemption, then there must be a federal regulation "at hand" for Lycoming to have violated because "[t]here can be no pervasive regulation [of the field of aviation safety, thus preempting the field from state regulation,] if there are no regulations applicable to [Lycoming's] aircraft engine design." (Pl. Opp'n Br. at 43). Relatedly, Sikkelee argues that Abdullah implies the general principle that aircraft engine designers should not act carelessly or recklessly, even where no specific federal regulation governs their conduct, and that if the Court finds that "no general or specific regulation" reaches Lycoming's allegedly tortious conduct, then "Lycoming is not immune . . . [–] there would simply be no preemption." (Id. at 46).

The Court rejects both arguments. First, Abdullah does not compel the conclusion that the CARs and FARs imply a general standard of care for aircraft engine designers. At issue in Abdullah was plaintiffs's suit for damages sustained while passengers on the severely turbulent American Airlines Flight 1473. 181

F.3d at 365. The plaintiffs brought suit "against defendant American Airlines, Inc., alleging negligence on the part of the pilot and flight crew in failing to take reasonable precautions to avoid the turbulent conditions known to them and in failing to give warnings reasonably calculated to permit plaintiffs to take steps to protect themselves." Id. Judge Roth held that the plaintiffs could recover only if the conduct of the airline's personnel fell below federal aviation safety standards.

In reaching this conclusion, Judge Roth analyzed the 1958 Federal Aviation Act (hereinafter, the "Aviation Act") and federal regulations concerning aviation and "f[ound] implied federal preemption of the entire field of aviation safety."181 F.3d at 365. "[T]he [Aviation Act] and relevant federal regulations establish complete and thorough safety standards for interstate and international air transportation and . . . these standards are not subject to supplementation by, or variation among, jurisdictions." Id. "[F]ederal law establishes the applicable standards of care in the field of air safety." Id. at 367.

Examining federal law in order to identify the relevant standard of care, Judge Roth held that, in addition to any specific applicable regulations, "there is an overarching general standard of care under the [Aviation Act] and its regulations[,] . . . [arising] in particular from 14 C.F.R. § 91.13(a)." Abdullah, 181 F.3d at 365. Section 91.13(a) of the FARs provides with respect to "aircraft operations for the

purpose of air navigation" that "[n]o person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another." 14 C.F.R. § 91.13(a) (2004). Judge Roth instructed that § 91.13(a) should form an aspect of the standard of care applicable to the aircraft operations at issue in Abdullah on remand. Abdullah, 181 F.3d at 365.

The case at bar, however, is not an aircraft "operations" case. See 14 C.F.R. § 1.1 (2004) ("Aircraft means a device that is used or intended to be used for flight in the air." "Operate, with respect to aircraft, means use, cause to use or authorize to use aircraft, for the purpose . . . of air navigation including the piloting of aircraft, with or without the right of legal control (as owner, lessee, or otherwise).") (emphasis in original). No party argues that this is an "operations" case, and the Court sees no reasonable argument to be made, see Elassaad v. Independence Air, Inc., 613 F.3d 119, 129-30 (3d Cir. 2010) (analyzing application of § 91.13 at length); therefore, § 91.13(a) does not readily supply a general standard of care to fill gaps left by the relevant FARs and CARs. Accordingly, Abdullah does not compel the conclusion that aircraft designers are governed by a general standard of care.

That much is clear, but how the Court should adapt Abdullah to apply in the context of the case at bar is anything but. See Pease v. Lycoming Engines, 2011

WL 6339833, at *23 (M.D. Pa. Dec. 19, 2011) (Conner, C.J.) ("[C]onstruing and applying FAA safety regulations as federal standards of care in [aircraft product liability cases] will be arduous and impractical").[15] A major source of the difficulty is that Judge Roth's identification of § 91.13(a) (which bears a definite resemblance to a common law negligence standard) as an aspect of the standard of care applicable to the aircraft operations at issue in Abdullah seems to have provided critical support for her decision to find the field of aviation safety preempted.[16] Abdullah,81 F.3d at 365, 376. It is tempting, if for no reason other

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[15]Deciding how federal regulations should translate into a standard of care has proven a bedeviling task in other contexts as well. See, e.g., In re TMI, 67 F.3d 1103, 1107 (3d Cir. 1995) ("Although it is clear that federal law governs the standard of care for tort claims arising from nuclear accidents, it is more difficult to discern the precise contours of that federal duty").

[16]The existence of a "general standard" backstopping the "specific standards" set forth in the relevant federal regulations seems to have been an important aspect of Abdullah. Faulting the trial judge for the "narrow nature of the federal standard" applied below, Abdullah, 181 F.3d at 365, Judge Roth reasoned that, "[i]n a case . . . where there is no specific provision or regulation governing air safety, § 91.13(a) provides a general description of the standard required for the safe operation of aircraft," id. at 371:

> Thus, in determining the standards of care in an aviation negligence action, a court must refer not only to specific regulations but also to the overall concept that aircraft may not be operated in a careless or reckless manner. The applicable standard of care is not limited to a particular regulation of a specific area; it expands to encompass the issue of whether the overall operation or conduct in question was careless or reckless.

than an appreciation of symmetry, to conclude that because Judge Roth found the field of aviation safety federally preempted at least partly because she derived a general standard of care from the federal regulations applicable in Abdullah, that placing the facts of this case within the preempted field (as Judge Jones did) implies the existence of a general standard of care.

The Court is faced with an uncomfortable choice: (1) read an "overall concept" of careful conduct into the federal regulations, dissociated from any anchor in the text, or (2) apply only the standards specifically enunciated in the relevant federal regulations, leaving gaps unfilled by any overall concept of care, thus taking a sledgehammer to one of the pillars (load-bearing or ornamental?) that underlaid Judge Roth's finding of preemption in Abdullah.[17]

Id. And faulting the Tenth Circuit's decision in Cleveland v. Piper Aircraft Corp., 985 F.2d 1438 (10th Cir. 1993), abrogated by U.S. Airways, Inc. v. O'Donnell, 627 F.3d 1318 (10th Cir. 2010), for concluding that, because state common law duties do not conflict with duties imposed by the federal aviation safety regulations, federal law therefore does not preempt the common law, Judge Roth wrote that "there is no gap in the federal standards to fill with a state common law standard [because] [t]he § 91.13(a) prohibition of 'careless or reckless' operation of an aircraft occupies the apparent void." Abdullah, 181 F.3d at 374. "[B]ecause the Administrator [of the FAA] has provided both general and specific standards, there is no need to look to state or territorial law to provide standards beyond those established by the Administrator." Id.

[17]A third option that would normally be available – to fill the gaps with state common law not inconsistent with any specific federal regulation – is unavailable as a consequence of Judge Jones's decision that this case is within the field of

aviation safety governed by Abdullah: "If Congress has preempted a field – whether it be expressly or by implication – state laws attempting to regulate within that field will be invalidated no matter how well they comport with substantive federal policies." Abdullah, 181 F.3d at 374 (internal quotation marks omitted). See also Arizona v. United States, 132 S. Ct. 2492, 2502 (2012) ("Field preemption reflects a congressional decision to foreclose any state regulation in the area, even if it is parallel to federal standards.").

A fourth option is Judge Bartle's approach – to hold that aircraft design defect cases are not within the field governed by Abdullah – but Judge Jones's previous ruling likewise precludes taking this option. See also Martin v. Midwest Express Holdings, Inc., 555 F.3d 806, 811 (9th Cir. 2009) ("[W]hen the agency issues 'pervasive regulations' in an area, like passenger warnings, the FAA preempts all state law claims in that area. In areas without pervasive regulations or other grounds for preemption, the state standard of care remains applicable.").

There may be yet a fifth option, though it seems to have been eliminated by the Third Circuit's decision in In re TMI, 67 F.3d 1103 (3d Cir. 1995), a case that set the groundwork for the Circuit Court's approach in Abdullah, 181 F.3d at 367. Four years prior to the 1995 TMI decision, Judge Scirica concurred in an earlier Judge Mansmann opinion in the same case, 940 F.2d 832 (3d Cir. 1991), but doubted Judge Mansmann's holding that, because the federal government occupied the field of nuclear safety, "plaintiffs' rights [in nuclear safety torts actions] will necessarily be determined, in part, by reference to federal law, namely the federal statutes and regulations governing the safety and operation of nuclear facilities." TMI, 940 F.2d at 860. Judge Scirica wrote,

> [I]t is not clear to me that Congress has precluded state law tort suits predicated on standards of care that do not conform to federal regulation. As the majority notes, in Pacific Gas & Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190, 103 S.Ct. 1713, 75 L.Ed.2d 752 (1983), the Court held that the Atomic Energy Act pre-empts all state regulation of nuclear safety. But in Silkwood v. Kerr–McGee Corp., 464 U.S. 238, 104 S.Ct. 615, 78 L.Ed.2d 443 (1984), the Court considered the holding of Pacific Gas in the context of private tort law. In Silkwood, the Court held that Congress did not intend to pre-empt punitive damages awards under state tort law.

Sikkelee would have the Court pick option (1), but the Court thinks option

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The Court relied on the legislative history of the Price–Anderson Act, which indicated that Congress intended to retain all state tort law remedies. The Court noted that "Congress assumed that traditional principles of state tort law would apply with full force unless they were expressly supplanted," and that the defendant has the burden of demonstrating pre-emption. Id. at 255, 104 S.Ct. at 625. It also indicated that a state may impose strict liability for nuclear accidents. Id. at 254, 256, 104 S.Ct. at 625. See also Goodyear Atomic Corp. v. Miller, 486 U.S. 174, 186, 108 S.Ct. 1704, 1712–13, 100 L.Ed.2d 158 (1988) (Characterizing Silkwood as finding that "Congress was willing to accept regulatory consequences of application of state tort law to radiation hazards even though direct state regulation of safety aspects of nuclear energy was pre-empted.").

If state tort law may hold a nuclear plant operator strictly liable, or establish some other standard of care that does not conform to federal regulation, the federal law quotient in public liability actions would be decreased. As noted in the majority opinion, notwithstanding Silkwood, at least two district courts have found that the Price–Anderson Act pre-empts state tort suits that do not adopt federal regulations as the standard of care. See Hennessy v. Commonwealth Edison Co., 764 F.Supp. 495 (N.D.Ill.1991); O'Conner v. Commonwealth Edison Co., 748 F.Supp. 672 (C.D.Ill.1990). In Hennessy, however, the court left open the issue of whether state law may impose strict liability for nuclear incidents.

Unlike the majority, I would not decide these issues here.

TMI, 940 F.2d at 870 (Scirica, J., concurring). Four years later, however, Judge Scirica held that Judge Mansmann's ruling "controls, and federal law determines the standard of care and preempts state tort law" in the field of nuclear safety. TMI, 67 F.3d at 1107.

(2) is the better choice. By what principle could the Court choose option (1)? To do so would undermine an unambiguously crafted – and therefore, the Court presumes, deliberate – regulatory scheme. The relevant regulations prohibit careless or reckless aircraft operation generally. Makers of aircraft engines and components, in contrast, are subject only to specific regulations devised to ensure engine safety; Sikkelee points to no regulation imposing a generally applicable standard of care functioning as a catchall; once the engine or component-maker has complied with the specific regulations, he has met any standard of care the federal regulations can be said to constitute. Moreover, since this is an area in which this Court has no "authority to formulate federal common law . . . absent some congressional authorization to formulate substantive rules of decision," Texas Indus., Inc. v. Radcliff Materials, Inc., 451 U.S. 630 640-41 (1981), and "neither . . . Abdullah, nor any language in the FAA contemplates such [rules]," Martin v. Midwest Express Airlines, Inc., 555 F.3d 806, 811 (9th Cir. 2009) ("The [Aviation Act] itself makes no mention of federal courts developing a federal common law standard of care for airplane personal injury actions . . . ."), the Court does not view the creation of federal common law as an option. Ultimately, Sikkelee's argument for a general standard of care represents a mere policy disagreement with the regulations as written, and for the Court to follow Sikkelee's approach would

be the functional equivalent of filling in the gaps left by the FARs and CARs with state common law, which is anathema to the very notion that the field is preempted. The Court will not travel this road.

Of course, option (2) is not without its drawbacks, which have been foreshadowed supra. Not recognizing a general prohibition on careless or reckless conduct leaves gaps in the regulatory scheme governing makers of aircraft engines and components. These gaps are problematic in the sense that they give one pause before concluding that the case at bar is within the field of preemption identified in Abdullah. See Abdullah, 181 F.3d at 367 ("[I]mplied federal preemption may be found where federal regulation of a field is pervasive . . . or where state regulation of the field would interfere with Congressional objectives.") (internal citations omitted).

Gaps are, however, not terribly problematic once it has been determined – and it has been, by Judge Jones – that this case is within a preempted field, and this is so even if Sikkelee is left remediless because she cannot identify any relevant federal regulation that Lycoming has violated.

In other words, Sikkelee is incorrect when she suggests that "[t]here can be no pervasive regulation [of the field of aviation safety, thus preempting the field from state regulation,] if there are no regulations applicable to [Lycoming's]

aircraft engine design." (Pl. Opp'n Br. at 43). So long as its intent is clearly expressed, Congress's decision to leave an area unregulated by both the federal and state governments preempts the field as effectively as its decision to have federal law regulate so comprehensively that state law supplementation is undesirable. See Puerto Rico Dept. Of Consumer Affairs v. Isla Petroleum Corp., 485 U.S. 495, 503 (1988). Moreover, where Congress determines that common law tort claims should play no role in a regulatory scheme, preemption may leave an injured person remediless. See, e.g., Kurns v. R.R. Friction Prods. Corp., 132 S. Ct. 1261 (2012) (Locomotive Inspection Act preempted defective design/warning claims of railroad locomotive repairman exposed to asbestos, leaving repairman remediless).[18] Stated conversely, the absence of federal regulation that reaches Lycoming's allegedly tortious conduct does not necessarily imply that "there [is] simply . . . no preemption."[19]

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[18]This result obtained even though relevant federal regulations did not address hazards arising from locomotive repair. Indeed, the agency to which Congress delegated regulatory authority had never regulated locomotive repair and disclaimed the power to do so. Kurns, 132 S. Ct. at 1274 (Sotomayor, J., concurring in part and dissenting in part). Despite the consequent regulatory gap, the Supreme Court's field preemption holding "[left] petitioners without a remedy for what they allege was fatal exposure to asbestos in repair facilities." Id. at 1275.

[19]Of course, Abdullah held neither that Congress desired to leave the field of aviation safety unregulated, nor that Congress envisioned no regulatory role for state common law remedies to play. As the Third Circuit has clarified,

Thus, in accordance with Judge Jones determination that Abduallah controls and Sikkelee's failure to provide persuasive reasons for undergirding the relevant specific federal regulations with a general standard of care, the Court will choose option (2) supra. The Court will measure Lycoming's allegedly tortious conduct against the specific federal regulations that Sikkelee asserts are applicable; if there is no genuine issue as to whether Lycoming violated the specific regulations, then summary judgment in Lycoming's favor is warranted.

(d) Type certification of the O-320-D2C entitles Lycoming to summary judgment on the design-related regulatory grounds asserted by Sikkelee.

Lycoming argues that type certification of the O-320-D2C renders a number of Sikkelee's claims – namely those alleging failure to comply with regulations

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> We did not conclude in Abdullah that the passengers' common law negligence claims themselves were preempted; instead, we determined only that the standard of care used in adjudicating those claims was preempted. Local law still governed the other negligence elements (breach, causation, and damages), as well as the choice and availability of remedies.

Elassaad, 613 F.3d at 125. The Court mentions the extreme case of Congress leaving an area totally unregulated simply to illustrate that, contrary to Sikkelee's contention, the federal government's pervasive regulation of the field of aviation safety does not imply that there must there be a federal regulation "at hand" for Lycoming to have violated.

governing the design of aircraft engines – a dead letter:

> The FAA alone establishes the regulations governing the design requirements for aircraft engines, and the FAA alone, through the type certification process, decides whether the standards of care it has created by those regulations have been met. . . . [T]he question of whether any standards in those regulations were met cannot exist separately from the issuance of the type certificate. Under field preemption, the standards can only be what the FAA defines them to be, and the FAA alone decides if they have been met.

(Def. Supp. Br. at 34).

Sikkelee disagrees, arguing that Lycoming's position is contrary to the United States Supreme Court's decision in United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines), 467 U.S. 797 (1984), and contrary to Chief Judge Conner's decision in Pease, 2011 WL 6339833, at *13-*14 (M.D. Pa. Dec. 19, 2011).

To evaluate the significance of the O-320-D2C's type certificate for Sikkelee's claims, the Court must examine the regulatory basis for Sikkelee's assertion that Lycoming breached "federal standards related to design and continued airworthiness." (Pl. Opp'n Br. at 30). Sikkelee cites to four regulations that she supposes comprise a federal standard of care for aircraft engine design: CAR § 13.100, CAR § 13.101, CAR § 13.104, and CAR § 13.110(a) (1964). Each of these provisions is taken from the CARs's Part 13, which says of the

"[a]pplicability of this part" that it "establishes standards with which compliance shall be demonstrated for the issuance of and changes to type certificates for engines used on aircraft." CAR § 13.0 (1964)). Part 13 further provides that

> [a]n engine shall be eligible for type certification under the provisions of this part if it complies with the airworthiness provisions hereinafter established or if the Administrator[20] finds that the provision or provisions not complied with are compensated for by factors which provide an equivalent level of safety: Provided, That the Administrator finds no feature or characteristic of the engine which renders it unsafe for use on aircraft.

CAR § 13.10. At CAR § 13.13(a), it is further provided, in relevant part, that "[a]n applicant shall be issued a type certificate when he demonstrates the eligibility of the engine by complying with the requirements of this part."

An applicant for type certification "demonstrates the eligibility" of his engine by "submit[ting] to the Administrator . . . descriptive data, test reports, and computations." CAR § 13.14(a). The descriptive data is

> known as the type design and shall consist of such drawings and specifications as are necessary to disclose the configuration of the engine and all the design features covered in the requirements of this part, such information on dimensions, materials, and processes as is necessary to define the structural strength of the engine, and such other data as are necessary to permit by comparison the determination of the airworthiness of subsequent engines of the same type.

CAR § 13.14(b).

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[20]Defined as the then-existing Administrator of Civil Aeronautics.

Finally, under the heading of "[d]esign and [c]onstruction," there are the provisions that Sikkelee asserts Lycoming violated. Part 13 provides that reciprocating engines (like the O-320-D2C) should, as a general matter, "not incorporate design features or details which experience has shown to be hazardous or unreliable." CAR § 13.100(a). The sections that follow, CARS §§ 13.101-13.115 (hereinafter, along with CAR § 13.100(a), the "design and construction regulations"), set forth specific standards for design devised by regulators to ensure safety when an engine is "installed, operated, . . . maintained in accordance with the instruction manual . . . and . . . fitted with an appropriate propeller." CAR § 13.100(b). Sikkelee asserts that there is a genuine issue of material fact concerning whether Lycoming violated three of these:

> CAR § 13.101 – The suitability and durability of all materials used in the engine shall be established on a basis of experience or tests. All materials used in the engine shall conform to approved specifications which will insure their having the strength and other properties assumed in the design data.
>
> CAR § 13.104 – All parts of the engine shall be designed and constructed to minimize the development of an unsafe condition of the engine between overhaul periods.
>
> CAR § 13.110(a) – The fuel system of the engine shall be designed and constructed to supply an appropriate mixture of fuel to the cylinders throughout the complete operating range of the engine under all flight and atmospheric conditions.

In tension with Sikkelee's assertion that Lycoming has violated these provisions, 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. See CAR § 13.13(a) ("An applicant shall be issued a type certificate when he demonstrates the eligibility of the engine by complying with the requirements of this part."). Lycoming argues that the FAA's determination is conclusive.

The Court holds that Lycoming is entitled to summary judgment on Sikkelee's claims asserting violations of CAR §§ 13.100(a), 13.101, 13.104, and 13.110. As set forth supra, each of the cited regulations establishes a requirement that applicants must satisfy in order to obtain a type certificate, and it is the Administrator alone who decides whether a certificate should be issued. To hold as Sikkelee proposes, the Court would be required to take two questionable steps away from the apparent regulatory scheme. First, the design and construction regulations would have to be read as freestanding mandates possessing a meaning independent of that given them by the Administrator's application, not as mere prerequisites for type certification, an interpretation without apparent basis in the regulation. Cf. Martin, 555 F.3d at 814 (Bea, J., concurring) ("[I]n the field of aircraft design regulation, the FAA directs only the conditions under which the government may grant an aircraft design a 'certificate' that permits production; the

FAA does not prescribe general standards the manufacturer must follow to exercise reasonable care in designing a safe aircraft."). Second, the Administrator would be dethroned as the arbiter of whether the requirements set forth in the design and construction regulations have been met. How else – after the Administrator's decision to type certify the O-320-D2C in 1966 – could the Court allow a jury to reconsider Lycoming's compliance with the design and construction regulations? The Court concludes that the natural interpretation of the regulatory scheme commands that, under the circumstances, Sikkelee is precluded from proving that Lycoming violated CAR §§ 13.100(a), 13.101, 13.104, and 13.110 as a matter of law.[21]

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[21]In Pease, Chief Judge Conner concluded that "[t]here is simply no textual support in either the Abdullah decision or the Aviation Act that Congress intended the FAA to act as the sole arbiter of whether manufacturers have complied with its own regulations." This Court disagrees, at least with respect to the design and construction regulations.

The issue is complicated. In the Aviation Act, Congress gave the Administrator the "duty to promote safety of flight of civil aircraft in air commerce by prescribing and revising from time to time . . . [s]uch minimum standards governing the design, materials, workmanship, construction, and performance of . . . aircraft engines . . . as may be required in the interest of safety." 49 U.S.C. § 1421 (1964). Here, the language suggests that the minimum standards are to be prescribed by the Administrator, but that (at least theoretically) anyone might evaluate compliance with them. At 49 U.S.C. § 1423(a) (1964), however, the "Administrator is empowered to issue type certificates for . . . aircraft engines," and it is commanded that "he shall issue a type certificate" once he finds – after "investigation[s]," "hearings," and "tests" for his consideration – "that such . . . aircraft engine . . . is of proper design, material, specification, construction, and

Varig Airlines is not to the contrary. Even Sikkelee does not argue that the holding of the case – i.e., that tort claims against the FAA for alleged negligence in certificating aircraft for use in commercial aviation are barred by the discretionary function exception of the Federal Tort Claims Act – controls here. Rather, Sikkelee posits that Chief Justice Burger's description of the FAA's role in type certification mandates that a jury should be permitted to revisit Lycoming's compliance with the design and construction regulations. (See Pl. Opp'n Br. at 44).

In Varig Airlines, Chief Justice Burger explained that the FAA had "implement[ed] [a] 'spot-check' system of compliance review" for determining

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performance for safe operation, and meets the minimum standards, rules, and regulations prescribed by the Administrator." Congress's creation of this apparatus suggests an intention to give the Administrator sole responsibility for not only prescribing minimum standards, but also for interpreting and applying them in the process of deciding whether an engine is sufficiently safe for the use of pilots and passengers.

As discussed supra, the regulations promulgated by the Administrator in accordance with Congress's mandates show that he viewed "minimum standards governing design" merely as a framework for determining an applicant's entitlement to a type certificate, see CAR § 13.0 ("This part establishes standards with which compliance shall be demonstrated for the issuance of and changes to type certificates for engines used on aircraft."), and viewed himself as the arbiter of compliance with the standards. The Court should defer to the Administrator's interpretation. See Chevron, U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 843-45 (1984). Moreover, as discussed infra, the design and construction regulations are sufficiently vague that, unless the Administrator is given sole responsibility for their interpretation and application, it is difficult to see how Congress's intention that "the Administrator . . . exercise sole discretion in regulating air safety," Abdullah, 181 F.3d at 369, can be accomplished.

whether an applicant meets the type certification prerequisites:

> The FAA certification process is founded upon a relatively simple notion: 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. Thus, the manufacturer is required to develop the plans and specifications and perform the inspections and tests necessary to establish that an aircraft design comports with the applicable regulations; the FAA then reviews the data for conformity purposes by conducting a "spot check" of the manufacturer's work.

467 U.S. at 816-17, 819. In Sikkelee's view, the FAA's approach to determining compliance with the design and construction regulations is too hands-off and would benefit from a jury's assistance. Therefore, argues Sikkelee, a jury's reconsideration of Lycoming's compliance with the regulations must be permitted.

Sikkelee's argument is lent some credence by Chief Judge Conner's acceptance of its essentials in Pease, where the Chief Judge wrote that jury reconsideration of a manufacturer's compliance with the design and construction regulations "pragmatically recognizes the limitations of FAA certification." 2011 WL 6339833, at *14. "Moreover," in the Chief Judge's view,

> there is a salutary effect of opening the courthouse door: "An inquiry ... into whether the manufacturer in fact complied with the regulations ... would assist the FAA in policing a manufacturer's compliance rather than hampering the agency in this regard." [Elsworth v. Beech Aircraft Corp., 691 P.2d 630, 636 (Cal. 1984)]. In the case sub judice, the [plaintiffs's] products liability claims regarding the airworthiness of [an] engine serve the public interest of ensuring that [the defendant-

> manufacturer] complied with all applicable FAA regulations. The [plaintiffs's] claims will not disrupt the "uniform system of regulation" desired by Congress because the FAA still has sole authority to promulgate regulations. See Abdullah, 181 F.3d at 368.

Pease, 2011 WL 6339833, at *14.

To this Court, the Chief Judge's reasoning is incomplete. A jury trial will have the "salutary effect" of "ensuring . . . compli[ance] with all applicable FAA regulations" only if one makes the assumption that a jury will interpret and apply the FAA regulations as would the Administrator himself. But there is no reason to think this assumption will hold in reality. The jury might also interpret and apply the regulations in a more demanding fashion than the Administrator, in which case a trial will have the unsalutary effect of invading the federally preempted field of aviation safety.

In this Court's view, that the jury's interpretation and application of the CARs will vary from the Administrator's is more than likely. As Chief Judge Conner himself wrote in Pease, "The applicable FAA regulations are acutely technical and often incurably vague." 2011 WL 6339833, at *23. Indeed, when the regulations provide that an "engine shall not incorporate design features or details which experience has shown to be hazardous or unreliable," CAR § 13.100(a), how much experience is contemplated? What are the relevant hazards? If the "suitability

and durability of all materials used in the engine shall be established on the basis of experience or tests," CAR § 13.101, how much experience or testing is required? If "[a]ll parts of the engine shall be designed and constructed to minimize the development of an unsafe condition of the engine between overhaul periods," CAR § 13.104, how small should the probability of the development of an unsafe condition be? If the "fuel system of the engine shall be designed and constructed to supply an appropriate mixture of fuel to the cylinders throughout the complete operating range of the engine under all flight and atmospheric conditions," CAR § 13.110(a), does this contemplate a negligence or strict standard of liability or, more likely, is it merely a way of expressing that the system should prove its fitness through the "[i]nspections and tests . . . found necessary by the Administrator," CAR § 13.15? What should be made of CAR 13.10, which provides that, even if the engine does not satisfy the design and construction regulations, the engine may still be considered safe when the "provisions not complied with are compensated for by factors which provide an equivalent level of safety"?

Faced with these imponderables, the parties, the Court and the jury will likely resort to more familiar negligence standards, a problematic outcome in this federally preempted field. In this regard, Judge Scirica's decision in In re TMI is instructive. 67 F.3d 1103 (3d Cir. 1995). In TMI, plaintiffs sought to recover in tort

for injuries allegedly caused by the Three Mile Island nuclear meltdown. As in Abdullah, the Third Circuit held that, in light of federal preemption of the field of nuclear safety, "federal law determines the standard of care." Id. at 1107. The Third Circuit then endeavored to "discern the precise contours of that federal duty" and rejected plaintiffs's attempt to fashion a standard of care out of a regulation requiring applicants for "a permit to construct a nuclear power reactor[] [to] identify the design objectives, and the means to be employed, for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable."[22] Id. at 1107, 1109 (quoting 10 C.F.R § 50.34a(a)). Agreeing with the trial judge that the "as low as is reasonably achievable" requirement – deemed the "ALARA" standard – resulted "essentially, in a negligence standard," Judge Scirica reasoned that "[a]dopting ALARA as part of the standard of care would put juries in charge of deciding the permissible levels of radiation exposure and, more generally, the adequacy of safety procedures at nuclear plants – issues that have explicitly been reserved to the federal government in general and the [Nuclear

[22]The regulations defined "'as low as reasonably achievable'" to mean "'as low as is reasonably achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest.'" TMI, 67 F.3d at 1109 (quoting 10 C.F.R § 50.34a(a)).

Regulatory Commission] specifically." TMI, 67 F.3d at 1115. He continued,

> Adoption of a standard as vague as ALARA would give no real guidance to operators and would allow juries to fix the standard case by case and plant by plant. An operator acting in the utmost good faith and diligence could still find itself liable for failing to meet such an elusive and undeterminable standard. Our holding protects the public and provides owners and operators of nuclear power plants with a definitive standard by which their conduct will be measured.

Id.

Jury interpretation and application of the design and construction standards in the case at bar will poke at the same hornets's nest identified by Judge Scirica. No less than if jurors were permitted to subject manufacturers to state common law duties, jury interpretation and application of the design and construction regulations would put jurors in charge of deciding permissible safety levels and engine designs – issues left to the Administrator. Jurors would fix the standard case by case and engine by engine, resulting in an elusive and undeterminable standard, as opposed to the "one, consistent means of regulating aviation safety" that Congress intended. Abdullah, 181 F.3d at 372.

Therefore, the Court cannot conclude that the supposed inadequacies[23] in the

[23]That it relies heavily on manufacturers is not an unambiguously flawed aspect of the type certification process. Granted, agents of the manufacturers are burdened by a conflict of interest that could make them prone to cut corners in the manufacturer's favor. On the other hand, they likely "possess detailed knowledge of an aircraft[] [or engine's] design based upon their day-to-day involvement in its

type certification process imply that the jury should be employed to "ensur[e] that Lycoming complied with all applicable FAA regulations." Pease, 2011 WL 6339833, at *14. Rather than ensure such compliance, jury reconsideration of the design and construction requirements (in this case and others) promises to "disrupt the 'uniform system of regulation' desired by Congress" and achieved by putting responsibility for type certification with the Administrator. Id.

Accordingly, this Court holds that the Administrator's issuance of a type certificate for the O-320-D2C is conclusive of the engine's compliance with the design and construction regulations. Lycoming's motion for summary judgment on Sikkelee's claims predicated on the violation of these regulations should be granted.

(e) Sikkelee's claims may move forward on the theory that Lycoming violated its duty to report engine defects to the FAA.

The Court holds that Lycoming is entitled to summary judgment in relation to additional FARs,[24] primarily because these FARs are meant to ensure that

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development," Varig Airlines, 467 U.S. at 807, knowledge that could make their work more accurate and efficient than that of FAA officials.

[24]Sikkelee has asserted in previous filings that Lycoming violated additional FARs, but the Court assumes that, by not addressing these regulations in her brief, she has abandoned any claims based on them.

products conform to a type design found safe by the Administrator.[25] Sikkelee does not claim or proffer evidence showing that the replacement carburetor did not conform to its type design (see Pl. Opp'n Br. at 30 ("There is no claim here of defective manufacture.")); she claims, rather, that the replacement carburetor conformed to a defective type design. Fundamentally, Sikkelee's claims and her evidence in support of them are mismatched with these regulations.

Sikkelee asserts that Lycoming, as holder of a production certificate for the O-320-D2C, violated its responsibility to "[d]etermine that each part and completed product . . . submitted for airworthiness certification or approval conforms to the approved design and is in a condition for safe operation." (Pl. Opp'n Br. at 32 (citing14 C.F.R. § 21.165(b) (2004)).

The Court disagrees. Sikkelee proffers no evidence showing that the allegedly defective replacement carburetor did not conform to its "approved design"; she states the opposite multiple times. (Pl. Facts ¶¶ 10, 12, 13). She also does not proffer evidence showing that David's crash was caused by Lycoming's alleged failure to determine that the carburetor was in a "condition for safe

[25]Sikkelee's briefs are as exacting as a shock and awe bombing campaign; as a result, the Court sometimes strains to understand how, in her view, a given regulation is relevant. The discussion infra represents the Court's best effort to make sense of Sikkelee's arguments.

operation." For one thing, Lycoming's § 21.165 duty applied (if at all) in 1978 – i.e., when the replacement carburetor was hot off the assembly line and initially submitted for airworthiness certification – not in 2004 when Kelly overhauled the replacement carburetor. Sikkelee directs the Court to no evidence showing that Lycoming breached its § 21.165 duty in 1978 or that such breach contributed to the 2005 accident. And there is another hurdle: assuming arguendo that Lycoming's § 21.165 duties extended to Kelly's submission of the replacement carburetor for airworthiness certification in 2004, Sikkelee directs the Court to no evidence showing that Kelly's submission was not in a "condition for safe operation."

According to the FAA, an "engine is in a condition for safe operation when the condition of the engine considering such factors such as wear, damage, and deterioration does not prevent the engine from demonstrating compliance with those requirements of [the airworthiness standards for type certificate issuance] that relate to the safe operation of the engine, and does not result in an unsafe condition to the aircraft." (Pl. Opp'n Br. at 37 (citing FAA AC 33.4-1, Instructions for Continued Airworthiness (Aug. 27, 1999)). Sikkelee blames David's crash on the O-320-D2C's carburetor, specifically the MA-4SPA's "throttle body to float bowl screws [coming] loose due to the faulty design of the lock tab washers as well

as gasket set." (Pl. Facts ¶ 16).[26] But during its 2004 overhaul, Kelly installed "new throttle body to bowl screws and lock tab washers as an attachment system," and the engine was adorned with an airworthiness approval tag. (Pl. Facts ¶¶ 12, 14).[27] Sikkelee proffers no evidence that "the condition of the engine considering factors such as wear, damage, and deterioration" was a factor in the crash; the "condition" of the engine allowed it to function with the same potential for failure as a new engine that conformed to Lycoming's (allegedly defective) type design.[28] Since there is neither evidence showing that the replacement carburetor did not conform to the approved design, nor evidence showing that the replacement carburetor was not in a condition for safe operation, Lycoming is entitled to summary judgment to

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[26](See also Pl. Opp'n Br. at 15 ("Plaintiff's expert found that loose throttle body to bowl screws caused a loss of engine power, which was a causal factor in the crash at issue.")).

[27](See also Pl. Facts ¶ 13 ("Lycoming instructed carburetor overhaulers to follow Precision's manual, which Kelly did, requiring new throttle body to bowl screws and lock tab washers as an attachment system. This defective method of throttle body to bowl attachment for the O-320 series engines was part of the O-320 engine type design, and approved by Lycoming.")

[28]Presumably, then, the subject engine was also no less likely than a new engine to "demonstrat[e] compliance with those requirements of [the airworthiness standards for type certificate issuance] that relate to the safe operation of the engine . . . [and to not] result in an unsafe condition to the aircraft." To the extent the subject engine would not have demonstrated such compliance or did compromise safety, the design – not the "condition" – of the engine was the problem.

the extent Sikkelee's claims are based on the violation of 14 C.F.R. § 21.165.

For much the same reason, Sikkelee fails in her assertion that Lycoming violated regulations requiring it to provide "Instructions for Continued Airworthiness." (Pl. Opp'n Br. at 40-43). First, the relevant CAR – CAR § 13.21 (1964) – actually calls for the type certificate applicant to prepare "an approved manual containing instructions for the installation, operation, servicing, maintenance, repair, and overhaul of the engine"; the requirement of "Instructions for Continued Airworthiness" came later, as did most of the supposed "standards" to which Sikkelee cites. CAR § 13.21 does not supply a "standard." In any case, the concept of "airworthiness" simply denotes that an engine "conforms to its type certificate" and "is in a condition for safe operation." (Pl. Opp'n Br. at 36 (citing FAA AC 33.4-1, Instructions for Continued Airworthiness (Aug. 27, 1999)). As discussed supra, Sikkelee does not claim that the supposedly defective carburetor failed to conform to Lycoming's type design, and the part of the carburetor that allegedly caused David's crash was in a condition for safe operation as defined by the FAA.

Moreover, Sikkelee does not really allege or proffer evidence in support of the claim that Lycoming did not comply with the applicable regulations requiring Instructions for Continued Airworthiness. Her position, rather, is that "Lycoming

was required to use reasonable care in the design of its continued airworthiness instructions" and failed to do so. (Pl. Opp'n Br. at 41). But there is nothing in the regulations themselves that imposes a reasonable care standard on Lycoming in this regard; Sikkelee has overlaid that common law standard on top of Lycoming's duty to comply with the federal regulations. Contrary to Sikkelee's view that "[t]his is a negligence case where Lycoming is held to the standard of reasonable care in complying with the minimum federal regulations" (Pl. Opp'n Br. at 27), it is the minimum regulations themselves that constitute the standard of care. Accordingly, Lycoming is entitled to summary judgment to the extent Sikkelee's claims are based on a violation of CAR § 13.21.

That leaves Sikkelee's claims based on Lycoming's alleged violation of 14 C.F.R. §§ 21.3 and 21.99 (2004). With respect to § 21.99(b), which provides that "the holder of [a] type certificate [who] finds through service experience that changes in type design will contribute to the safety of the product . . . may submit appropriate design changes for approval [of the Administrator]," Lycoming should be granted summary judgment. Section 21.99(b) is permissive; it does not create a duty. Sikkelee's argument to the contrary – that "[i]t is for a jury to determine whether Lycoming should have issued a design change pursuant to § 21.99(b) [because] [t]his is a negligence case where Lycoming is held to the standard of

reasonable care in complying with the minimum federal regulations" (Pl. Opp'n Br. at 27) – has already been rejected by this Court. It is the minimum regulations themselves that constitute the standard of care, and since § 21.99(b) does not impose a standard of care on Lycoming, it cannot serve as the basis for Sikkelee's claims.

So Sikkelee is left with 14 C.F.R. § 21.3, the regulation to which she devotes by far the most attention in her brief (Pl. Opp'n Br. at 8-26), and (relatedly) § 21.99(a). Under § 21.3(a), holders of type certificates are required to "report any failure, malfunction, or defect in any product, part, process, or article" that they manufactured, if the holder determines that the item "has resulted in any of [various] occurrences," including "engine failure." 14 C.F.R. § 21.3(a). If the item left the holder's quality control system, then under § 21.3(b) the holder must report any defect "that it determines could result in any of [various] occurrences," again including "engine failure." Sikkelee proffers a variety of evidence tending to show that Lycoming knew of a defect in the O-320-D2C (namely the MA-4SPA carburetor), but hid the defect from the FAA, arguably preventing the Administrator from ordering "design changes . . . to correct the unsafe condition" under § 21.99(a). (Pl. Opp'n Br. at 15-27; Pl. Facts ¶¶ 16-34).

Lycoming raises four defenses: (1) §21.3 "does not apply to Lycoming

because [Lycoming] did not manufacture the [replacement] carburetor, and the carburetor did not pass through Lycoming's quality control system; (2) "[n]o evidence exists that Lycoming ever determined that a failure, defect, or malfunction in the subject carburetor could or did result in any of the enumerated safety risks"; (3) Lycoming's reporting obligation was lifted by the previous reports of others (citing 14 C.F.R. § 21.3(d) (reporting is not necessary when the type certificate holder "knows" that the failure, malfunction, or defect was already reported to the FAA by another person)); and (4) "[n]o evidence exists in this case that [a report from Lycoming to the FAA] would have caused the FAA to issue an Airworthiness Directive[29] or otherwise mandate a design change." (Def. Supp. Br. at 24-27).

The Court rejects Lycoming's first argument because it mischaracterizes Sikkelee's theory of liability. In the Court's understanding, Sikkelee posits that had Lycoming complied with its § 21.3 reporting responsibilities in relation to the O-320-D2C engines (incorporating MA-4SPA carburetors) that were manufactured by Lycoming or did go through its quality control system, then a type design

[29]Airworthiness Directives are issued by the FAA when the agency "finds that . . . [a]n unsafe condition exists in [a] product." 14 C.F.R. § 39.5 (2004). The Directive "specif[ies] inspections you [i.e., the operator of a given aviation product] must carry out, conditions and limitations you must comply with, and any actions you must take to resolve an unsafe condition." 14 C.F.R. § 39.11 (2004)

change would have been mandated by the Administrator, which would have changed the design of even those carburetors that were not manufactured by Lycoming. Since the identity of the manufacturer of the replacement carburetor is irrelevant under Sikkelee's theory of liability, Lycoming's defense on the basis that it did not manufacture the carburetor fails.

The Court rejects Lycoming's second arguments because Sikkelee adduces enough evidence to create a genuine issue of material fact as to whether Lycoming determined that a defect in the MA-4SPA created safety risks. It is possible that Lycoming never made such a determination, in which case its reporting responsibility was never triggered. But viewing the facts in Sikkelee's favor, it is also possible that Lycoming made the determination, but hid the relevant information from the FAA.

The Court rejects Lycoming's third argument for similar reasons. Sikkelee has adduced enough evidence to allow the jury to compare the "failure, malfunction, or defect" reports of others to the reports that Lycoming allegedly should have made and decide whether Lycoming's reporting duty was rendered unnecessary under § 21.3(d).

Finally, Lycoming is correct that Sikkelee's claim based on § 21.3 is a difficult one because Sikkelee must prove not only that the allegedly defective

replacement carburetor caused David's crash, but also that the FAA would have responded to Lycoming's § 21.3 reports – had Lycoming not breached its duty to make them – by ordering changes to the carburetor's design or otherwise taking action that would have prevented David's accident. In other words, Sikkelee must prove that the carburetor's defective design caused the crash and that the carburetor's design was defective on the date of David's accident because Lycoming failed to make § 21.3 reports to the FAA. Proving the second element requires establishing that the FAA would have responded meaningfully to the reports.

The circumstances are similar to those in Stanton v. Astra Pharm. Prod., Inc., 718 F.2d 553 (3d Cir. 1983), which involved a claim against the manufacturer of an anesthetic for negligence that caused the plaintiff severe injury. The alleged negligence was the manufacturer's failure to submit certain adverse-reaction reports to the Food and Drug Administration. On proving causation, Judge Becker wrote that the manufacturer's negligence "in failing to file the reports is not in itself sufficient to sustain the finding that [the manufacturer] was liable. The negligence must also have been a proximate cause of the [plaintiff's] injury." Stanton, 718 F.2d at 565. The plaintiff relied on four experts "to establish causation by introducing evidence tending to show that the information withheld

from the FDA was of great importance and that the agency could not properly perform its regulatory and supervisory roles without access to the unreported data, and that the FDA would have taken action had it been aware of [the anesthetic's] propensity to cause adverse reactions despite low dosage." Id. at 568. Calling the issue "an extremely close one," Judge Becker held that the such evidence was sufficient to support the jury's verdict in the plaintiff's favor. Id. at 568-69.

In the case at bar, Sikkelee's evidence is similar to that of the plaintiff in Stanton. For example, one of Sikkelee's experts opines that, "As a former FAA certification engineer, this reportable failure, malfunction, or defect information associated with the Lycoming O-320 series engines and the Model MA-4SPA carburetor, is something that I would want to have and use to determine if an Airworthiness Directive should be issued to correct the un-airworthy carburetor . . . ." (Pl. Ex., ECF No. 234-5 at 24). Since Sikkelee may be able to make a case for causation on par with the plaintiff in Stanton, summary judgment should be denied as to her claims based on Lycoming's violation of 14 C.F.R. § 21.3.

VI. Conclusion

The watchword in Abdullah was Congressional intent. Yet having endeavored to reconcile Abdullah with the federal regulatory scheme that governs aviation design and manufacturing, this Court – either by way of its own error or

that of the precedents it has followed – has reached holdings that it imagines have little to do with Congressional intent. Fortunately, whether this Court has been pushed to pier's end by precedent or has stumbled to the edge itself, the Circuit Court has the authority to pull it back to safety. See 28 U.S.C. § 1291.

For the foregoing reasons, Lycoming's motion for summary judgment is granted in part and denied in part.

BY THE COURT:

s/Matthew W. Brann
Matthew W. Brann
United States District Judge