

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ILLINOIS**

**CUNNINGHAM CHARTER
CORPORATION,**

Plaintiff,

v.

No. 07-cv-233-DRH-DGW

LEARJET, INC.,

Defendant.

MEMORANDUM & ORDER

HERNDON, Chief Judge:

I. INTRODUCTION

Pending before the Court is defendant Learjet, Inc.'s, motion to strike the opinions of Stanley J. Dapkunas (Dapkunas) (Doc. 148). Defendant believes Dapkunas' purported opinions fail to meet the requirements for admissibility under FED. R. EVID. 702 and *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993). Generally, defendant argues Dapkunas does not possess the requisite expert knowledge to opine as to Learjet 45 windshield design or safety, as he did not inspect the alleged failed windshields installed on plaintiff's aircraft, nor does he design or fly aircrafts. Plaintiff responded to defendant's motion, arguing, as Dapkunas' opinion is not specific to plaintiff's aircraft, and Dapkunas has ample, relevant experience and bases his opinions on reliable methods, he is qualified to opine in the disputed manner (Doc. 157). For the following reasons, the Court **DENIES in part and GRANTS in part** defendant's motion.

I. BACKGROUND

The instant litigation arises from plaintiff's purchase of the Learjet 45-075 (Learjet 45) which defendant delivered in April 2000. The Learjet 45 contains windshields that Sierracin Corporation designed and defendant installed. The crux of plaintiff's allegations arises from the allegedly defective nature of the Learjet 45's windshields.¹ Plaintiff alleges defendant's awareness of the disputed defects prior to the warranty's expiration. Thus, plaintiff states defendant unlawfully profited from plaintiff's required replacement of the allegedly defective windshields. Accordingly, plaintiff contends defendant committed numerous breaches of contract. Namely, plaintiff alleges defendant breached its warranty obligations, committed a total failure of consideration, fraudulently concealed warranty coverage terms, and failed to act with good faith and deal fairly. Additionally, plaintiff alleges defendant committed fraud by silence (*See* Doc. 128).²

The instant motion seeks exclusion of the opinions of plaintiff's expert Dapkunas. Defendant maintains plaintiff's windshields were not defective or unsafe, and that it lacked knowledge concerning any alleged defects. Thus, plaintiff retained Dapkunas to opine as to the overall safety and adequacy of the subject windshields. Summarily, Dapkunas opines that the Learjet 45's

¹ The term "Learjet 45 windshields" denotes Sierracin windshields of the type installed on plaintiff's aircraft.

² The Court notes plaintiff previously alleged a products liability claim (Doc. 128, Count II). However, the Court's July 5, 2011 Order awarded judgment as a matter of law to defendant on this claim, as it was barred under Kansas law (*See* Doc. 142).

windshields are the product of a flawed manufacturing process. Further, Dapkunas states the windshields are unsafe, as the manufacturing process results in reduced or lost visibility and an inability to heat. Moreover, Dapkunas contends defendant was aware of these conditions prior to plaintiff's purchase of the Learjet 45, as prior alleged windshield failures evidence. Finally, Dapkunas similarly opines defendant was aware of these conditions at the time of its delivery of the Aircraft to plaintiff, as defendant's internal documents allegedly demonstrate (See Doc. 148-1). Thus, plaintiff argues Dapkunas' opinion that the Learjet 45 windshields are the product of a flawed manufacturing process and unsafe in total, and that previous alleged failures demonstrate defendant's general awareness of these conditions, supports plaintiff's claims of fraud and breach of warranty.

Fundamentally, defendant requests exclusion of Dapkunas' opinions, as it states he does not have the requisite level of first-hand experience evaluating Learjet 45 windshields. Specifically, defendant argues as Dapkunas has not physically examined the exact windshields installed on plaintiff's Learjet 45, he is unqualified to testify as to his purported opinion. Additionally, defendant argues Dapkunas is unqualified to opine as to the windshields design or safety, as he does not design windshields nor is he a pilot. Further, defendant argues Dapkunas' methodology is "virtually nonexistent," as he bases his opinions on five photographs and did not perform any physical inspections, analysis, or tests.

Thus, defendant argues Dapkunas is not qualified to render testimony in the form of expert opinions regarding the disputed warranty issues.

In response to defendant's general assertions, plaintiff states defendant incorrectly believes that plaintiff should have had the foresight between 2000 and 2008 to save the exact windshields at issue for Dapkunas' inspection in 2011. Plaintiff argues Dapkunas' inspection of the specific windshields installed on plaintiff's Learjet 45 is unnecessary, as his opinion is not plaintiff-specific. Plaintiff argues that Dapkunas relied on his forty years' experience working in materials; specifically, the last ten years spent analyzing failed windshields, in his analysis and interpretation of documents defendant produced discussing technical issues concerning Learjet 45 windshields. Thus, his opinions are the product of reliable principles and methods. Accordingly, plaintiff contends Dapkunas is qualified to opine as to the overall manufacturing process and allegedly unsafe nature of Learjet 45 windshields, and as to defendant's awareness of these conditions prior to plaintiff's purchase.

The crux of defendant's argument is that Dapkunas' opinions are inadmissible, in total, as he did not inspect plaintiff's failed windshields. Plaintiff responds that Dapkunas' opinions are entirely general in nature. Thus, both parties fail to recognize that Dapkunas offers various opinions of differing scope, grounded in distinct facts and data. Thus, the Court must separately analyze Dapkunas' opinions to determine their individual admissibility.

II. LEGAL STANDARD

FEDERAL RULE OF EVIDENCE 702, and in particular *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), govern the admissibility of expert testimony. The *Daubert* standard applies to all expert testimony, whether based on scientific competence or other specialized or technical expertise. *Smith v. Ford Motor Co.*, 215 F.3d 713, 719 (7th Cir. 2000) (citing *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S.137, 141 (1999)). Rule 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. *Daubert* clarified that Rule 702 charges the district court with the task of ensuring expert testimony is both relevant and reliable. *Daubert*, 509 U.S. at 589. “The proponent of the expert bears the burden of demonstrating that the expert’s testimony would satisfy the *Daubert* standard,” by a preponderance of the evidence. *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009).

Courts in the Seventh Circuit conduct a three-step analysis under *Daubert*. *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007).³ First, the

³ The Court notes the Seventh Circuit has also described the *Daubert* analysis as a two-step process. *See Chapman v. Maytag Corp.*, 297 F.3d 682, 686 (7th Cir. 2002). However, as *Chapman* simply combines the first two steps described in *Ervin* as a single test of reliability, whether the analysis is described as a three-step or two-step process does not substantively change the Court’s analysis.

district court must determine whether the person whose testimony is offered is in fact an expert, as codified in Rule 702 through “knowledge, skill, experience, training, or education.” *Id.* (citing Fed. R. Evid. 702). Notably, although “extensive academic and practical expertise” sufficiently qualify a potential witness as an expert, *Bryant v. City of Chicago*, 200 F.3d 1092, 1098 (7th Cir. 2000), “Rule 702 specifically contemplates the admission of testimony by experts whose knowledge is based on experience,” *Walker v. Soo Line R.R. Co.*, 208 F.3d 581, 591 (7th Cir. 2000). *Smith*, 215 F.3d at 718 (citing *Kumho*, 526 U.S. at 156 (“[N]o one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience.”)).

Secondly, the district court must determine the expert’s reasoning or methodology is reliable. *Ervin*, 492 F.3d at 904; see *Mihailovich v. Laatsch*, 359 F.3d 892, 918 (7th Cir. 2004) (citing *Kumho*, 526 U.S. at 147). Specifically, the testimony must have a reliable basis in the knowledge and experience of the relevant discipline, *Kumho*, 526 U.S. at 149 (internal quotations removed), consisting in more than subjective belief or unsupported speculation. *Chapman v. Maytag Corp.*, 297 F.3d 682, 687 (7th Cir. 2002); *Daubert*, 509 U.S. at 590. Thus, as an expert must explain the methodologies and principles that support his or her opinion, he or she cannot simply assert a “bottom line” or *ipse dixit* conclusion. *Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748, 761 (7th Cir. 2010) (quoting *Minix v. Canarecci*, 597 F.3d 824, 835 (7th Cir. 2010)).

Further, as to reliability, *Daubert* provided the following non-exhaustive list of relevant factors: “(1) whether the scientific theory can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether the theory has been generally accepted in the scientific community.” *Ervin*, 492 F.3d 901 at 904 (citing *Daubert*, 509 U.S. at 593-94). However, there is no requirement that courts rely on each factor, as the gatekeeping inquiry is flexible and must be “tied to the facts” of the particular case. *Kumho*, 526 U.S. at 150 (quoting *Daubert*, 509 U.S. at 591); *see also Chapman*, 297 F.3d at 687. Thus, “the role of the court is to determine whether the expert is qualified in the relevant field and to examine the methodology the expert has used in reaching his [or her] conclusions.” *Smith*, 215 F.3d at 718 (citing *Kumho*, 526 U.S. at 153). Accordingly, “Rule 702 is designed to ensure that, when expert witnesses testify in court, they adhere to the same standards of intellectual rigor that are demanded in their professional work. This objective can be accomplished in a number of different ways, including through the review of experimental, statistical, or other scientific data generated by others in the field.” *Cummins v. Lyle Indus.*, 93 F.3d 362, 369 (7th Cir. 1996) (citations omitted).

The district court possesses “great latitude in determining not only *how* to measure the reliability of the proposed expert testimony but also whether the testimony is, in fact, reliable.” *United States v. Pansier*, 576 F.3d 726, 737 (7th Cir. 2009) (citing *Jenkins v. Bartlett*, 487 F.3d 482, 489 (7th Cir. 2007)). Resolution of an expert’s credibility or the correctness of his or her theories is left

to the jury's determination after opposing counsel has cross-examined the expert at issue. *Smith*, 215 F.3d at 718 (citing *Walker*, 208 F.3d at 589-90). Thus, "[i]t is not the trial court's role to decide whether an expert's opinion is correct. The trial court is limited to determining whether expert testimony is pertinent to an issue in the case and whether the methodology underlying that testimony is sound." *Id.* (citing *Kumho*, 526 U.S. at 159 (Scalia, J., concurring) (stating that the trial court's function under *Daubert* is to exercise its discretion "to choose among reasonable means of excluding expertise that is *fausse* and science that is junky"))).

Lastly, the district court must consider whether the proposed testimony will assist the trier of fact in its analysis of any issue relevant to the dispute. See *Smith*, 215 F.3d at 718; *Chapman*, 297 F.3d at 687; *Daubert*, 509 U.S. at 592. It is crucial that the expert "testify to something more than what is 'obvious to the layperson' in order to be of any particular assistance to the jury." *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 871 (7th Cir. 2001) (quoting *Ancho v. Pentek Corp.*, 157 F.3d 512, 519 (7th Cir. 1998)). However, the expert need not have an opinion as to the ultimate issue requiring resolution to satisfy this condition. *Smith*, 215 F.3d at 718 (citing *Walker*, 208 F.3d at 587).

III. ARGUMENT AND ANALYSIS

a. General Qualifications

Preliminarily, the Court relates Dapkunas' educational and professional qualifications, as they are relevant to the entirety of his purported expert opinion.

Dapkunas received a Bachelor of Science in metallurgical engineering from the Virginia Polytechnic Institute in 1968. He went on to receive a Master of Science from the George Washington University in 1977. He is a registered professional engineer in Maryland and Alabama. Dapkunas has worked in laboratories for both the United States Navy and the Department of Energy. At the United States Navy, Dapkunas researched the evaluation of high temperature ceramics and glasses. Dapkunas similarly developed his knowledge of materials at the Department of Energy, where he managed programs which developed and evaluated materials for use in fossil energy systems. Further, from 1986 to 2002, Dapkunas served as the deputy chief of the ceramics division at the National Institute of Standards and Technology, where he developed tests and methods for analyzing advanced ceramics and glasses (*See Doc. 148-1, pp. 2-3*).

Most relevant to the instant controversy, since 2002, Dapkunas has worked for Trident Engineering Associates, Inc. (Trident), where he is responsible for materials aspects of forensic investigations. Namely, Dapkunas relates that, “[a]bout half of [his] work at Trident has involved the investigation of windshield failures occurring on general aviation airplanes” (*Doc. 148-1, p. 3*). Dapkunas states Trident has conducted over 1500 windshield failures analyses, over 350 of which he has authored or co-authored. Dapkunas has conducted analyses of two Learjet 45 windshields, independent of this litigation. Relevantly, Dapkunas has stated his extensive experience with materials helps inform his analysis of

windshield failures, as this analysis centers on the behavior of materials (Doc. 148-2, p. 141: 10-18).

As to Dapkunas' qualification as an expert, defendant concedes his status as an educated and accomplished scientist. However, defendant argues, "he has no more qualifications to evaluate the design of the Learjet 45 windshield than any lay person who reads the materials" plaintiff presented Dapkunas (Doc. 148, p. 17). As the basis for this contention, defendant states Dapkunas does not have knowledge concerning the failure of the exact windshields at issue. Defendant states the windshield of a general aircraft can fail for numerous reasons; for example, a scratch, the impact of a rock, or extreme heat. Thus, as Dapkunas did not evaluate the exact windshields at issue, he is as qualified as a lay person to opine as to their failure.

In response, plaintiff cites to Dapkunas' forty years of general experience studying the behavior of materials. Specifically, plaintiff cites to Dapkunas' ten years' experience analyzing and assessing windshields. Thus, plaintiff contends Dapkunas is undoubtedly qualified to opine in the contested manner. Further, plaintiff argues any criticisms regarding Dapkunas' qualifications go to the weight of his testimony, not its admissibility.

Dapkunas' "knowledge, skill, experience, training, or education," qualifies him as an engineering expert in the area of materials behavior. FED. R. EVID. 702. Summarily, Dapkunas opines as to the Learjet 45's manufacturing process and safety concerns associated with this manufacturing process. Additionally, in

reliance on documents pre-dating plaintiff's purchase, Dapkunas opines as to defendant's prior awareness of these issues. Inherently, defendant argues Dapkunas requires the expertise of a windshield designer and manufacturer for the Court to deem him qualified to testify as to these conditions. However, "[t]he notion that *Daubert* requires particular credentials for an expert witness is radically unsound . . . Anyone with relevant expertise enabling him to offer responsible opinion testimony helpful to judge or jury may qualify as an expert witness." *Tuf Racing Prods., Inc. v. Am. Suzuki Motor Corp.*, 223 F.3d 585, 591 (7th Cir. 2000).

The Court considers Dapkunas' "full range of practical experience as well as academic or technical training," to determine his status as an expert qualified to opine in the given manner. *Tr. of Chi. Painters & Decorators Pension v. Royal Int'l Drywall & Decorating, Inc.*, 493 F.3d 782, 788 (7th Cir. 2007) (citing *Smith*, 215 F.3d at 718). As the Court has explained, Dapkunas has over forty years' experience studying materials and their behavior. For the past ten years, he has investigated windshield failures occurring on general aviation airplanes. Thus, he is an expert in the behavior of materials; specifically, glass.

However, the determination that Dapkunas is an expert in the behavior of materials does not end the relevant inquiry, as a witness' qualification as an expert, "can only be determined by comparing the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness's testimony." *Gayton v. McCoy*, 593 F.3d 610, 616 (7th Cir. 2010)

(quoting *Carroll v. Otis Elevator Co.*, 896 F.2d 210, 212 (7th Cir. 1990)). Instantly, plaintiff offers Dapkunas to testify as to the effectiveness and safety of the Learjet 45's windshield manufacturing process, in addition to defendant's awareness of these conditions prior to plaintiff's purchase. Thus, as these purported opinions encompass various subject matters, the Court must individually assess whether Dapkunas' engineering expertise in the area of materials behavior is relevant to his proffered opinions.

i. Flawed Manufacturing Process Opinions

Dapkunas generally opines that Learjet 45 windshields are the product of a flawed manufacturing process. Additionally, he opines as to the specific causes of certain Learjet 45 windshield failures.

1. Qualifications

Dapkunas' first summary opinion indicates his belief that the Learjet 45 windshields are "defective." Dapkunas concludes the windshields are "defective," as defined in the Webster's New Collegiate Dictionary and Kansas products liability law (Doc. 148-1, p. 13). The Court finds Dapkunas is qualified to opine based on the commonly accepted definition of defective, as stated in the Webster's dictionary. However, Dapkunas' expertise as an engineer does not qualify him to render opinions based on legal definitions of a word. Thus, the Court will look to the substance of Dapkunas' opinions, and not the labels he attaches to them.

As to the substance of Dapkunas' manufacturing process opinions, the evaluation of the behavior of glass in windshield failures forms the core of

Dapkunas' current professional responsibilities. When evaluating a failed windshield, the specific manufacturing process and/or design of the windshield undoubtedly inform Dapkunas' opinion as to its failure. Thus, due to Dapkunas' forty years' of academic and professional engineering experience studying the behavior of materials; specifically, the last ten years spent analyzing failed windshields, he is qualified to opine in the disputed manner. Accordingly, defendant's arguments concern the reliability and relevance of Dapkunas' proposed manufacturing process testimony, not his status as an engineering expert in materials behavior.

2. Reliability

Defendant contends Dapkunas' opinion that the Learjet 45 windshields are the product of a flawed manufacturing process is purely speculative, as he did not perform an analysis of plaintiff's windshields, interview any of plaintiff's pilots or maintenance personnel, and did not look into the circumstances of plaintiff's specific failures. Defendant states Dapkunas, "merely looked at pictures of some cracked windshields, read about other Learjet 45 windshields that failed in service (from causes unknown to him) and concluded that [p]laintiff's windshields were defective" (Doc. 148, p. 10).

Plaintiff responds that defendant mischaracterizes the scope of Dapkunas' purported opinion, as plaintiff offers him to testify concerning Learjet 45 windshields, "in total" (Doc. 157, p. 9). In forming his opinion as to the defective nature of all windshields installed on Learjet 45s, plaintiff states Dapkunas relied

on documents defendant utilized in forming its own opinions as to Learjet windshields; specifically, a report on an assessment of the Learjet 45 windshield that the Aerospace Mechanics Division of the University of Dayton Research Institute conducted (Dayton Report) (Doc. 157-9). Additionally, plaintiff cites to Dapkunas' deposition testimony as he stated that he,

[R]eviewed all the information provided. It amounts to a collection of facts working with the data that was generated both by Sierracin and [defendant]. It included Sierracin data, their measurements, their failure analysis early on. [He] looked at the data developed for Sierracin by James Varner in upper New York. And that data was both impact and indentation related damage and looking at the change in strength of the glass, different kinds of glass to support Sierracin's proposed change in the way of . . . toughening the glass.

(Doc. 157, p. 10) (citing Doc. 157-2, p. 66:8-20). Finally, plaintiff additionally cites to Dapkunas' reliance on his ten years' experience analyzing windshield failures, and his forty years working with ceramics and other materials. Accordingly, in opposition to defendant's assertion, plaintiff contends Dapkunas bases his opinions concerning the defective nature of the windshields on much more than five photographs, as he utilized his forty years as a materials engineer in analyzing and interpreting defendant's documents. Thus, plaintiff argues Dapkunas' opinions are reliable.

a. Opinions as to Causes of Failures Unreliable

Throughout plaintiff's response, it infers that Dapkunas does not opine as to the failure of plaintiff's specific windshields. Thus, plaintiff construes the entirety of Dapkunas' expert report as general in nature. However, Dapkunas

specifically opines as to the cause of plaintiff's windshield failures, in addition to the causes of numerous other windshield failures.

As to the causes of plaintiff's specific failures, Dapkunas' expert report states, "Seven windshields failed in [plaintiff's Learjet 45] from August, 2000 through September, 2008 . . . The range of causes for removal included delaminations between plies in the windshield, shattering of the outer glass ply, and heating system failures" (Doc. 148-1, p. 15). Further, concerning non-plaintiff specific windshields, Dapkunas states, "[a] careful review of certain of the reported failures and color photographs of those failures demonstrate consistencies that evidence a defective design" (Doc. 148-1, p. 6). Further, Dapkunas opines, "[f]rom the photographs and sketches of failed windshields, it is apparent that delaminations occurred at the same place in many of the windshields" (Doc. 148-1, p. 6). Thus, "[i]n the absence of evidence of particulate impact, in light of the consistency of the locations of the crack origins and delaminations, it is likely that defects in the windshields' design and/or manufacturing processes caused the failures" (Doc. 148-1, p. 7).

First, the Court must generally relate the process Dapkunas undertakes in his current position at Trident when hypothesizing as to the cause of a windshield failure, to determine whether his opinions, "adhere to the same standards of intellectual rigor that are demanded in [his] professional work." *Cummins*, 93 F.3d at 369. At Dapkunas' deposition, he related that before determining the cause of a windshield failure, he photographs the windshield, takes

measurements of the resistance of the heating form and sensors, and then analyzes those numbers in light of data in similar windshields. When a windshield has a crack in it, he traces the crack back to its origin based on the pattern of the crack. He stated that once the origin of the crack is determined, he can then analyze the cause of the crack; for example, he can determine the impact of foreign object damage on the crack. Further, he generally consults the client, the pilot, or maintenance personnel to gather additional information (*See* Doc. 148-2, pp. 31-34). Importantly, Dapkunas noted, “[y]ou can’t just look at a windshield and guess at it. When you have the opportunity to examine in detail, you examine in detail. Very often, I would say ninety percent of the time, we use a microscope for that purpose” (Doc. 148-2, p. 35: 17-20).

Dapkunas’ opinions as to the causes of specific windshield failures are not sufficiently reliable. As to the cause of plaintiff’s failures, Dapkunas admits that he relies entirely on five photographs (Doc. 148-2, p. 59: 15-21). At his deposition, Dapkunas related that in forming his opinion, he was not able to determine the impact of foreign object damage on the failures at issue, as the photographs did not adequately demonstrate the origin point of the cracks (*See* Doc. 148-2, pp. 57-58). Moreover, his expert report does not adequately explain the reasoning behind his opinion, as he summarily states that “defects” in the form of delaminations, shattering of the outer glass ply, and heating system failures caused plaintiff’s failures without reference to the documents or data on which his opinion relies (Doc. 148-1, p. 15).

Further, as to Dapkunas' non-plaintiff specific opinion concerning the causes of certain Learjet 45 windshield failures, Dapkunas similarly relates he bases his opinion on, "[a] careful review of certain of the reported failures and color photographs of those failures" (Doc. 148-1, pp. 5-6). His opinion cites reliance on certain documents attached to defendant's response to plaintiff's second set of requests for production of documents, in addition to photographs (See Doc. 148-1, p. 5 n. 1). However, neither his report nor plaintiff's response attaches the specific documents to which Dapkunas refers. A review of the entirety of the docket further demonstrates the referenced documents' absence. Thus, the Court cannot determine the basis of his opinion. Further, Dapkunas seemingly relies entirely on his analysis of, "photographs and sketches of failed windshields" (Doc. 148-1, p. 6).

Based on the record before it, the Court finds Dapkunas' opinions concerning the causes of specific failures of Learjet 45 windshields are not sufficiently reliable as his methods fall far below the standards employed in his usual analysis of failed windshields.⁴ Additionally, the non-exhaustive *Daubert* factors of "(1) whether the scientific theory can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether the theory has been generally accepted in the scientific community," demonstrate the unreliability of the instant opinions. *Ervin*, 492 F.3d 901, 904 (7th Cir. 2007)

⁴ In contrast to Dapkunas' plaintiff-specific opinion that defects caused the failures of plaintiff's Learjet 45 windshields, the Court notes Dapkunas' non-plaintiff opinion cites to the origin points of certain cracks. However, as Dapkunas seemingly relies entirely on photographs, and he relates, "[a]nalysis of the crack origins, including documentation of crush pits from [foreign object damage] has not been provided by [defendant]," the Court finds Dapkunas' non-plaintiff specific opinions that defects caused certain windshield failures are similarly unreliable (Doc. 148-1, p. 7).

(citing *Daubert*, 509 U.S. at 593-94). Although not all purported expert opinions require hands-on testing, the instant opinions lend themselves to testing and analysis, as Dapkunas generally performs a detailed analysis of failed windshields before hypothesizing as to a specific cause. As Dapkunas' summarily stated opinions demonstrate, he has not performed the analysis necessary of such specific opinions.

As the Court previously noted, "Rule 702 is designed to ensure [expert witnesses] adhere to the same standards of intellectual rigor that are demanded in their professional work." *Cummins*, 93 F.3d at 369. While this can be achieved, "through the review of experimental, statistical, or other scientific data generated by others in the field," the Court finds the review of photographs does not provide a reliable basis for Dapkunas' opinion. Accordingly, Dapkunas' opinions discussing the causes of specific Learjet 45 windshield failures are not sufficiently reliable; thus, the above mentioned opinions are inadmissible under Rule 702 and *Daubert*.

b. Other Defect Opinions Reliable

In contrast to Dapkunas' opinions discussing the causes of specific windshield failures, Dapkunas also offers general opinions as to the Learjet 45's manufacturing process. Dapkunas generally opines that Learjet 45 windshields are of a complex and flawed design. He specifically cites to the dimensions, materials, and challenges associated with the manufacturing process of Learjet 45 windshields. Further, he discusses their reject rates and service life. Thus, in

reliance on data and reports defendant generated and endorsed, Dapkunas concludes the Learjet 45 windshields are of a “complex and large design which involved complex manufacturing processes for several different materials of construction.” Further, he states, “[p]roduction had many difficult hurdles, quality control issues, and few positive evaluations by Learjet or Sierracin” (Doc. 148-1, p. 11).

The Court finds Dapkunas bases his opinion concerning the general manufacturing process of Learjet 45 windshields on sufficient facts and data, in addition to his relevant experience analyzing the behavior of glass. Dapkunas’ methodology consists of utilizing his engineering experience and education to interpret and analyze defendant’s reports and data to come to a conclusion as to perceived flaws in the manufacturing process of Learjet 45 windshields.

The Court notes neither party directly addresses the relevant *Daubert* factors, except to the extent defendant repeatedly suggests that the entirety of Dapkunas’ opinion is unreliable as he did not perform independent testing. However, “whether *Daubert*’s specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine.” *Kumho*, 526 U.S. at 152. Instantly, as opposed to Dapkunas’ specific opinions concerning the causes of certain failures, Dapkunas’ general opinions concerning the manufacturing process of Learjet 45 windshields do not readily lend themselves to testing and analysis, as he does not present a specific hypothesis, such as an alternative design.

Moreover, while the documents Dapkunas relies upon are not “peer reviewed” per se, as most are internal, confidential documents of defendant, defendant does not argue the relied upon data and documents are unreliable, as they consist of studies and analysis defendant generated and endorsed discussing the materials and manufacturing processes of the Learjet 45 windshields. Further, the Dayton Report, on which Dapkunas’ opinion heavily relies, similarly concludes that the Learjet 45 windshields suffered from manufacturing flaws (Doc. 157-9, p. 5) (stating, “[t]his assessment focused on the following major issues related to problems to date: design, manufacturing, and environment (durability)”). Accordingly, Dapkunas’ opinion is to some extent accepted in the relevant scientific community. Further, at his deposition, Dapkunas also related that through his work at Trident he has performed a detailed analysis on a Learjet 45 windshield, concluding the cause of the failure as delamination (Doc. 148-2, pp. 44-46). Thus, Dapkunas has analyzed and tested the specific materials instantly at issue, which also undoubtedly informs his general opinion as to the Learjet 45’s manufacturing process.

Admittedly, Dapkunas’ conclusions are briefly stated. However, “[d]eterminations on admissibility should not supplant the adversarial process; ‘shaky’ expert testimony may be admissible, assailable by its opponents through cross-examination.” *Gayton*, 593 F.3d at 616. Given Dapkunas’ extensive relevant experience, and his reliance on the data and analysis of defendant, the

Court finds Dapkunas' general opinions concerning alleged flaws in the manufacturing process of the Learjet 45 windshields are sufficiently reliable.

3. Assistance to Trier of Fact

As stated previously, plaintiff's amended complaint alleges, in part, that defendant's sale and delivery of plaintiff's Learjet 45 resulted in breach of contract and fraud by silence, as it did not first disclose the allegedly defective and unsafe nature of the Learjet 45 windshields. Thus, Dapkunas' opinion that Learjet 45 windshields are the product of a flawed manufacturing process is relevant to the instant controversy. Moreover, as Dapkunas' purported testimony consists of his expert interpretation and analysis of engineering-related data and reports, he testifies to, "something more than what is 'obvious to the layperson.'" *Dhillon*, 269 F.3d at 871. Accordingly, although Dapkunas' specific opinions as to the causes of certain failures are not sufficiently reliable, his general opinions discussing the allegedly flawed manufacturing process of the Learjet 45 windshields are admissible under Rule 702 and *Daubert*.

ii. Safety Opinions

Dapkunas next contends that Learjet 45 windshields are unsafe. Dapkunas cites to his review of certain documented windshield failures. He opines that these failures led to the following safety issues:

- 1.** Engine ingestion of pieces of windshield glass or ice causing engine damage or loss of power;
- 2.** Loss of vision through the windshield due to delamination, bubble formation, or outer ply cracking;

3. Loss of vision through the windshield due to loss of de-icing or de-fogging functions

(Doc. 148-1, pp. 15-16).

Concerning Dapkunas' opinion that a potential loss of visibility is unsafe, defendant states Dapkunas has no basis for this opinion, as he is not a pilot, and is thus unaware that pilots allegedly frequently operate the Learjet 45 in zero visibility. Additionally, defendant disputes the basis for Dapkunas' contention that an outer glass break may cause the engine to ingest glass. Defendant states this contention is purely speculative, as Dapkunas has no evidence that glass actually departs the aircraft windshield after an outer glass fracture.

As to Dapkunas' opinion concerning loss of vision and its impact on safety, plaintiff responds that he relied upon his own experience gained through analyzing hundreds of windshield failures to conclude that Learjet 45 windshields have a "high risk of shattering because of their low damage tolerance and high stress level" (Doc. 157, p. 12). Further, plaintiff states Dapkunas reviewed photographs taken from inside a Learjet 45 with a shattered window that illustrated, "the impaired visibility from the cockpit" (Doc. 157, p. 12) (citing Doc. 157-1, p. 15). Additionally, plaintiff states Dapkunas bases his opinion on his own "personal experience" looking through shattered windshields, including a shattered Learjet 45 window, during his ten years at Trident. Moreover, as to Dapkunas' opinion concerning engine ingestion of glass, plaintiff states Dapkunas relied upon data defendant produced opining as to this specific safety concern.

Further, plaintiff states Dapkunas has similarly addressed damage that particle ingestion causes to compressor blades through his work at Trident.

1. Qualifications

The Court finds Dapkunas is not qualified to opine as to a windshield failure's impact on the safety of aircraft flight, as his extensive experience analyzing the cause of windshield failures is not adequately relevant to his opinions concerning their resulting safety effects. As to Dapkunas' opinion concerning loss of vision, at his deposition, he cited the bases of his opinion as photographs of failed windshields, in addition to his experience looking through failed windshields after their removal from aircrafts (Doc. 148-2, pp. 26-27: 11-22, 1-21).

Further, as to his opinion concerning engine ingestion of glass, at Dapkunas' deposition, defendant inquired, "[d]o you have any knowledge, education, background or experience that would allow you to render an opinion as to whether the departure of [a glass shard twenty thousands of an inch in size] would impact safety in any way on an airplane?" (Doc. 148-2, p. 92: 3-6). Dapkunas, replied, "well, just as a general sort, not unique to my experience, but if you recall when the volcano in Iceland erupted . . . and the flights were grounded . . . hard, sharp pieces, much like glass shards and probably of a similar size, and flights were grounded . . . because engines ingest those things. It is not good for engines" (Doc. 148-2, p. 91: 10-21).

Moreover, Dapkunas stated that he had managed a program on pressurized combustion of coal, in which he tested engine ingestion of coal ash (Doc. 148-2, p. 26: 4-14). However, while engine ingestion of coal is arguably similar to engine ingestion of glass, Dapkunas went on to state that he did not address and did not know whether a glass shard released from the center of a windshield would flow through the engine, as he is not an expert in aerodynamics (Doc. 148-2, pp. 95-96: 7-22, 1-9).

Additionally, when asked, based on a reasonable engineering probability, whether any glass departing the windshield would enter the engine, Dapkunas replied, "I think it is probable that it would happen but I don't have evidence to support it. It is my opinion" (Doc. 148-2, p. 96: 3-5).

Thus, although Dapkunas is an expert as to the cause of a failed windshield, this experience is not relevant to opinions concerning the results of such failures on the safety of flight. Dapkunas and plaintiff cite to Dapkunas' personal and common sense experience, not his expertise as an engineer. Accordingly, Dapkunas is not qualified to render the disputed opinions as to the safety of Learjet 45 windshields.

2. Reliability

Although the Court has determined Dapkunas is not qualified to opine as to the resulting safety effects of windshields failures, it is also necessary to cite briefly the reliability of Dapkunas' safety opinions, as reliability and qualifications of an expert are so intricately related. Dapkunas' methodology in forming his

safety opinions is virtually non-existent, and clearly not the result of any scientific method. As to loss of vision, Dapkunas summarily states, “loss of vision is a serious safety concern. If pilots and co-pilots cannot see what is ahead of them, they are obviously operating unsafely” (Doc. 148-1, p. 16). In support, Dapkunas cites to photographs of failed windshields. He additionally quotes extensively from defendant’s reports discussing a pilot’s field of vision in relation to windshield failures.

Plaintiff argues that Dapkunas’ opinions as to loss of vision may appear “commonsensical,” but are necessary as defendant denies the impact a windshield failure has on a pilot’s loss of vision and flight safety (Doc. 157, p. 11). However, due to Dapkunas’ common sense approach of noting his first-hand experience looking through cracks on windshields removed from aircrafts, and quoting verbatim from reports of defendant, the Court finds these opinions are not scientifically reliable. While Dapkunas has experience looking through failed windshields, he does not have experience or knowledge as to the impact such cracks have on a pilot’s field of vision or the safety of flight.

As to Dapkunas’ other safety opinions, he makes broad statements concerning the effect of particle ingestion on engines, without citing to the sources or methodology used in forming these opinions. Further, similarly to his generic loss of vision opinions, he similarly quotes from incident reports of defendant generally discussing engine ingestion of ice and heating issues. While Dapkunas can rely on data and statistics of others in forming his opinions, he cannot justify

his opinions solely through a recital of portions of defendant's incident reports. Further, as related above, Dapkunas admits he has no evidence that a windshield failure will cause engine ingestion of glass. Thus, as Dapkunas does not perform any scientific methodology in forming his safety opinions, nor does he possess specialized knowledge as to the safety effects of windshield failures, Dapkunas' purported safety opinions are not sufficiently reliable.

3. Assistance to Trier of Fact

Finally, as to assistance to the trier of fact, the Court merely reiterates the lack of scientific methodology Dapkunas utilized in forming his safety opinions. As the gist of Dapkunas' safety opinions consists of quotes from incident reports of defendant, he does not testify to "something more than what is 'obvious to the layperson.'" *Dhillon*, 269 F.3d at 871. Accordingly, as Dapkunas is not qualified to opine as to the effect of failed windshields on flight safety, his opinions are not the product of a reliable methodology, and they will not assist the trier of fact, Dapkunas' safety opinions are inadmissible pursuant to Rule 702 and *Daubert*.

iii. Defendant's Awareness Opinions

Finally, Dapkunas opines, based on the dates of certain data and reports of defendant, that defendant, "was aware of windshield problems early in the production of the [Learjet 45] and prior to January 1999" (Doc. 148-1, p. 20). Thus, Dapkunas similarly opines, "[defendant] was aware at the time it delivered [p]laintiff his aircraft in April 2000 that its windshields were defective" (Doc. 148, p. 21).

Defendant argues Dapkunas' opinions are inadmissible as he, "has no more experience in what a manufacturer should disclose to a customer than he does in windshield design" (Doc. 148, p. 9). Thus, generally, defendant argues Dapkunas is not qualified to opine as to defendant's obligation to warn potential customers of alleged defects. Accordingly, defendant argues Dapkunas' opinion is speculative and improper.

Plaintiff responds that defendant again mischaracterizes the intended testimony of its proffered expert, Dapkunas. Plaintiff states Dapkunas' purported testimony as to defendant's awareness is not relevant to its previously dismissed failure to warn theory, but to its fraud claims. Further, plaintiff states these opinions are not speculative, as Dapkunas bases his opinions on data relating to analyses defendant undertook in 1999 and 2000, in addition to his professional experience.

Although plaintiff correctly notes that defendant mischaracterizes the intended testimony of Dapkunas, as he does not opine as to whether defendant should have disclosed the alleged defects to plaintiff, both parties fail to recognize the fundamental flaw of Dapkunas' testimony. Dapkunas merely highlights the dates of certain reports in relation to the date defendant delivered plaintiff's Learjet 45. Dapkunas' mere recital of dates does not require an engineering background. Thus, he does not testify to "something more than what is 'obvious to the layperson.'" *Dhillon*, 269 F.3d at 871. Thus, his opinions as to defendant's awareness are inadmissible under Rule 702 and *Daubert*.

IV. CONCLUSION

For the reasons stated above, defendant's motion to strike the opinions of Stanley J. Dapkunas is **DENIED in part and GRANTED in part** (Doc. 148). Dapkunas' general opinions concerning the Learjet 45 windshields' manufacturing process are admissible. However, Dapkunas' opinions concerning the specific causes of certain windshield failures, the safety of Learjet 45 windshields, and defendant's awareness of alleged defects are inadmissible.

IT IS SO ORDERED.

Signed this 2nd day of May, 2012.

David R. Herndon



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David R. Herndon
Date: 2012.05.02
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**Chief Judge
United States District Court**