# IN THE UNITED STATES DISTRICT COURT

#### FOR THE WESTERN DISTRICT OF WISCONSIN

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J. MICHAEL MALONEY and LINDA R. MALONEY,

OPINION and ORDER

Plaintiffs,

05-C-546-C

v.

CENTRAL AVIATION, INC. and S&S AVIATION, INC, d/b/a RICE LAKE AIR CENTER,

Defendants.

On September 16, 2002, plaintiff Michael Maloney's Mooney M20J airplane crashed, injuring him severely. He and his wife, plaintiff Linda Maloney, contend that the crash occurred because defendants Central Aviation, Inc. and S&S Aviation, Inc., d/b/a Rice Lake Air Center, performed maintenance work on the aircraft negligently in 1999 and 2001. Jurisdiction is present under 28 U.S.C. § 1332.

Now before the court is the "motion for summary judgment" of defendant S&S Aviation, Inc., d/b/a Rice Lake Air Center. Although the motion is framed as a motion for summary judgment, the parties' briefs focus on the admissibility of the testimony of

plaintiffs' proposed expert witnesses, Erik Rigler and Jeffrey Boshart. The parties appear to agree that without the testimony of one or both of the experts, plaintiffs could not prevail on their negligence claim against defendant Rice Lake. The real question to be answered, therefore, is whether Rigler and Boshart may testify at trial. If so, the case may proceed to trial. If not, plaintiffs will have no evidence to support their negligence claim and summary judgment may be granted in defendant's favor. Because I conclude that both Rigler and Boshart are qualified to testify to the opinions disclosed in their expert reports, defendant S & S Aviation's motion will be denied.

From the parties' proposed findings of fact, I find the following facts to be material and undisputed.

#### UNDISPUTED FACTS

#### A. Parties

Plaintiffs J. Michael Maloney and Linda Maloney are citizens of Illinois. They are husband and wife.

Defendant Central Aviation, Inc. is a Wisconsin corporation with its principal place of business in Watertown, Wisconsin.

Defendant S&S Aviation, Inc., d/b/a Rice Lake Air Center is a Wisconsin corporation with its principal place of business in Cameron, Wisconsin.

## B. The Mooney M20J

In August 2000, plaintiff Michael Maloney bought a used Mooney M20J airplane. Before making his purchase, plaintiff investigated the plane's maintenance record and asked a licensed Airframe and Powerplant mechanic to review the plane's logs. After reviewing the records, the mechanic reported to plaintiff that the logs and work orders completed by the Rice Lake Air Center was extensive and "above average."

In January 1986, long before plaintiff purchased his plane, the Federal Aviation Administration issued Airworthiness Directive 85-24-03, warning that water could become trapped behind ribs in the wing sections of the Mooney M20J. (This was a problem, because if the water mixed with fuel, the plane's engine could fail.) According to the directive, within 100 hours of in-service time or the plane's next scheduled annual inspection, whichever occurred first, aircraft mechanics were to visually inspect the plane for evidence of the problem. Repair records indicate that plaintiff's plane was inspected on November 8, 1986.

Also in 1986, the manufacturer of the Mooney M20J issued a service bulletin. According to reports, when the plane's tank was sealed, drainage holes ("weep holes") could become blocked. The blocked holes prevented proper drainage, which led to fuel and water becoming trapped between the ribs of the plane. According to maintenance log for plaintiff's plane, mechanics took all measures recommended in the service bulletin. (What these were,

or when they were taken, the parties do not say.)

In November 1999, defendant Rice Lake Air Center serviced plaintiff's plane, changing the oil and the filter and sealing the left and right fuel tanks. After sealing the tank, defendant's employees fan dried the plane and checked it for leaks. No work was performed on plaintiff's fuel tank by defendant or anyone else after November 1999.

Between 2000 and 2002, plaintiff flew his plane to Georgia and Minnesota without incident.

## C. The Accident

On September 14, 2004, plaintiff and a friend, David Monroe, flew from Illinois to Vermont to retrieve a new aircraft Monroe had purchased. On September 15, Monroe and plaintiff departed from the Vermont airport in separate planes, intending to fly tandem back to Illinois. During that flight, plaintiff and Monroe used "Visual Flight Rules," a set of safety procedures that required the pilots to fly by sight, rather than by relying on flight instruments. However, soon after takeoff, weather conditions deteriorated rapidly, limiting visibility and making it impossible for the pilots to fly safely. Consequently, plaintiff and Monroe were forced to land in Canandaigua, New York.

Once on the ground, the men refueled their aircraft at a self-service gas pump. When it became clear that the weather would not clear quickly, the men decided to remain in

Canandaigua overnight. They secured their planes before leaving to spend the night at a local hotel.

The next morning, both men returned to the airport and prepared their planes for take-off. They performed various preflight procedures before departing down the runway. Almost immediately after plaintiff's plane lifted off the ground, his engine lost power. Plaintiff landed near the end of the runway, with the gears of his plane facing upward. Plaintiff was seriously injured.

At the time of his accident in September 2002, plaintiff was an experienced pilot. He was a licensed commercial pilot trained in aerobatic competition and a certified flight instructor.

## D. Expert Testimony

#### 1. Erik Rigler

Erik Rigler has worked in the field of aviation for more than 40 years. He has received specialized aviation accident investigation and safety training from the Federal Aviation Administration, National Transportation Safety Board, Southern California Safety Institute and the University of Southern California School of Engineering.

Rigler began his aviation career in 1965. He was trained as a United States Navy pilot and served as a naval flight instructor. In 1968, Rigler was appointed to serve on the

Navy's Safety Panel. In that role, he was responsible for investigating plane accidents and responding to them by updating maintenance and training programs for Navy mechanics and pilots.

In 1971, Rigler joined the Federal Bureau of Investigation. From 1974-1994, Rigler served as one of six members of the Federal Bureau of Investigation's aviation safety board. At the time Rigler began his work with the FBI, the National Transportation Safety Board did not investigate accidents involving government-owned aircraft. Therefore, the FBI's aviation safety board was responsible for investigating all accidents involving government-owned aircraft.

From 1993-2001, Rigler worked as an Aeronautical Sciences Instructor at Embry-Riddle Aeronautical University, teaching undergraduate and graduate students, many of whom were maintenance personnel for the United States Air Forces or civilian contractors for the United States military. Rigler instructed his students on methods and procedures for analyzing aircraft accident reports; accident reconstruction; aviation safety; and investigation of faulty-maintenance procedures, among other topics.

From 1998 through the present, Rigler has worked as a private aviation accident investigator and as a safety and security consultant. He has served as an expert witness in ,more than 20 aviation cases. In addition, Rigler has conducted safety and security audits for Federal Aviation Administration certified aircraft repair stations. These audits have

required him to advise the repair stations on proper procedures and standards with which they must comply in order to meet Federal Aviation Administration operating standards.

Rigler is not certified by the Federal Aviation Administration as an inspector or as an Airframe and Powerplant mechanic.

On March 17, 2006, Rigler examined the wreckage of plaintiff's aircraft. After inspecting the plane and reviewing its maintenance records, Rigler concluded that defendant S & S Aviation had not resealed the engine and inspected its work in a "good and workmanlike manner." Rigler summarized his findings and conclusions in an expert report dated May 19, 2006.

### 2. Jeffrey Boshart

Jeffrey Boshart has worked in the field of aviation maintenance for more than 35 years. He is a certified as an aviation mechanic by the Federal Aviation Administration, with "airframe and power plant ratings and inspection authorization." Boshart is president of Boshart Enterprises and Aircraft Services, Inc., which has been a Federal Aviation Administration certified repair station since 1993. Boshart is responsible for managing the repair shop, which employs 11 mechanics.

On three occasions between November 24, 2003, and March 17, 2006, Boshart inspected the fuel tanks on the wreckage of plaintiff's aircraft. On each occasion, he

observed that the drainage holes in the aircraft were blocked with sealant. Boshart noted also that the fuel cap O-rings and filler neck contained bits of white paint. Boshart reviewed the accident reports, maintenance logbooks and the applicable service bulletins and airworthiness directive. In addition, Boshart performed experiments on the fuel tank. From his research, Boshart concluded that (1) at the time of the accident "the drain holes under the ribs and in the stringers running through the fuel tanks were blocked by sealant, therefore creating a situation that would trap any water entering the tanks above the ribs"; (2) "there was water contamination in the aircraft fuel system prior to the accident"; and (3) "the paint accumulations on the O-rings should have been replaced after the painting and the overspray mating area should have been cleaned and removed in order for the O-ring to properly seal and prevent water infiltration." Dkt. #40, Exh. F, at 2. Boshart summarized his findings and conclusions in an expert report dated May 19, 2006.

Boshart was deposed on June 27, 2006. At that time, the following exchange took place between Boshart and Bill Katt, counsel for defendant Rice Lake Air Center:

Katt: [I]s that your role in the case, examining the fuel tanks?

Boshart: I believe so, yes.

Katt: Other than examining the fuel tanks and providing your perspective on what those tanks show, in other words, what you saw, do you have any other involvement or understanding of any other involvement you are to have in this case?

Boshart: No.

Katt: . . . . Have you been retained in this case to render opinions as to whether Rice Lake Air Center properly did maintenance on the aircraft?

Boshart: I've been asked about [the] condition of the fuel tank, my opinion, and maintenance performed, yes.

\* \* \* \*

Katt: Okay and is it your intent in this case to give an opinion as to whether or not the work done by Rice Lake in the time in and around November 24, 1999 was reasonable?

Boshart: No, I don't believe it is.

\* \* \* \*

Katt: And I want to make sure what you are and are not going to be testifying on. Is is also fair to say that you will not be rendering any opinions in this case as to whether or not Rice Lake Air complied or failed to comply with airworthiness directives or service bulletins?

Boshart: My opinion is that service bulletins were not complied with. I'm not here to state that — whether Rice Lake did or did not comply with them.

Katt: Okay. You're saying that service bulletins in general were not complied with but whether that was Rice Lake who did that or someone before or after them, you have no opinion, correct?

Boshart: Correct.

Dkt. #33, at 14-16, 18-19.

#### **OPINION**

In this lawsuit, plaintiffs contend that defendant S & S Aviation negligently sealed and inspected plaintiff Michael Maloney's airplane's fuel tank in November 1999. (All further references to "defendant" will be to defendant S & S Aviation.) As evidence of defendant's negligence, plaintiffs rely on the reports, deposition testimony and affidavits of Erik Rigler and Jeffrey Boshart. Defendant contends that Rigler's testimony is inadmissible under Fed. R. Evid. 702 because Rigler is not a licensed as an aviation mechanic by the Federal Aviation Administration. In addition, defendant asserts that the court should strike Boshart's testimony because it is not "expert" and strike his most recent affidavit because it contains statements that contradict his deposition testimony.

## A. <u>Erik Rigler</u>

Although defendant concedes that Rigler is an expert in many other areas of aeronautics, it contends that he is not a qualified expert in the field of airplane engine repair. Plaintiff's argument rests on the requirement of federal law that no one may fly a plane unless it has been serviced by a mechanic licensed by the Federal Aviation Administration. 14 C.F.R. § 91.407; see also 14 C.F.R. § 43.7 (describing licensing requirements). According to defendant, if Rigler is not "qualified" under federal law to service an aircraft himself, then he is not qualified to render an opinion whether defendant properly serviced plaintiff's

aircraft in November 1999.

In a diversity case such as this one, state law governs substantive claims, while federal law governs all procedural and evidentiary issues, including the admissibility of expert testimony. Klonowski v. International Armament Corp., 17 F.3d 992, 995 (7th Cir. 1994). The question, then, is whether Rigler's testimony meets the requirements of Fed. R. Evid. 702, which governs the admissibility of expert opinions in federal court. Rule 702 states:

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.

Before a proposed expert will be permitted to testify, it must be clear that he is a true "expert" within the meaning of Rule 702. In making this determination, the court must determine whether the expert is proposing to testify to scientific knowledge that will assist the trier of fact to understand or determine a fact in issue. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-593 (1993). "This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Id.

Daubert requires the court to assess the qualifications of a proposed expert and the

methods he proposes to use in formulating his opinions. However, neither <u>Daubert</u> nor Rule 704 imposes a rigid set of qualifications an expert must possess in order to qualify as a witness. The rule provides specifically that an expert may be qualified as a result of his "knowledge, skill, experience, training, *or* education." Fed. R. Civ. P. 704 (emphasis added.) In this case, there is no question that Rigler's experience, knowledge, skills and training qualify him to testify regarding the reasons for the plane crash and the manner in which the aircraft was and ought to have been maintained.

Although Rigler is not licensed as a mechanic by the Federal Aviation Administration, he has worked in the field of aviation for more than 40 years, serving as an accident investigator for the United States Navy and the Federal Bureau of Investigation. He has developed maintenance and training programs for Navy mechanics and pilots and instructed undergraduate and graduate students in accident reconstruction, aviation safety and investigation of faulty maintenance procedures. Perhaps most relevant is the fact that Rigler has conducted safety and security audits for Federal Aviation Administration certified aircraft repair stations, during which he has advised the repair stations and their certified mechanics on compliance with Federal Aviation Administration's operating standards.

Although defendant's challenges to Rigler's qualifications may be fodder for cross-examination at trial, they do not demonstrate that Rigler's opinions fail to meet the requirements of Fed. R. Evid. 702. Because Rigler's testimony is competent and could assist

a jury in understanding the ways in which defendant allegedly failed to maintain plaintiff's aircraft, it is admissible under Fed. R. Evid. 702 and will not be stricken.

## B. Jeffrey Boshart

Defendant's challenge to Boshart's testimony and plaintiff's response to it are bewildering. In support of its motion for summary judgment, defendant alleged that Boshart's testimony "f[a]ll[s] short of Rule 702" because Boshart did "not offer an opinion criticizing Rice Lake, but instead confine[d] his testimony to a recitation of what he saw upon inspecting the downed aircraft." Dkt. #22, at 10. According to defendant, Boshart's testimony is neither helpful nor expert because it is "a factual recounting without any technical or scientific analysis as to who may be at fault for that condition." Id. at 15. Defendant urges the court to discount Boshart's testimony entirely because, from defendant's perspective, Boshart is "more in the nature of a fact witness" than an expert. Id. at 2. This line of argument betrays a fundamental misunderstanding of the difference between lay and expert testimony.

As discussed above, expert testimony is any testimony given by a person with "scientific, technical, or other specialized knowledge" for the purpose of helping the jury "understand the evidence or . . . determine a fact in issue." Fed. R. Civ. P. 702. Expert testimony in the form of opinions and facts is permitted when the testimony is based upon

sufficient facts or data, is the product of reliable principles and methods and when the applicable principles and methods have been applied reliably to the facts of the case. <u>Id.</u> Lay or fact testimony, on the other hand, requires no special training or knowledge on the part of the witness. A fact witness (often called an eyewitness) is someone who has participated directly in the events about which he is testifying. (For example, in this case, plaintiffs are fact witnesses.)

Boshart's testimony is expert. His opinions and observations about the engine of plaintiff's Mooney M20J are observations and opinions a person untrained in the specialized field of aviation technology would not have made or rendered. It is clear from Boshart's report and deposition testimony that it is his opinion that the presence of sealant in the fuel tank's drainage holes meant that "service bulletins were not complied with." That is an opinion formed from his expert knowledge of aircraft maintenance.

Defendant objects to Boshart's testimony because although "[h]e testifies to the condition of the drainage holes in the fuel tank when he saw them, [he] does not attribute any disrepair or blockage to Defendant Rice Lake." Dkt. #22, at 2. Under Fed. Rule of Evid. 704, an expert may offer opinions on issues of ultimate significance in a case, such as whether a particular defendant was negligent. But the fact that an expert *may* testify to an ultimate issue does not mean that he *must* do so in order for his testimony to be "expert." In fact, although Rule 704 permits an expert witness to give expert testimony that embraces

an ultimate issue to be decided by the trier of fact, expert witnesses are prohibited from rendering legal opinions. <u>Berckeley Inv. Group, Ltd. v. Colkitt</u>, 455 F.3d 195, 217 (3d Cir. 2006).

It has been said that "[a]n opinion has a significance proportioned to the sources that sustain it." Minasian v. Standard Chartered Bank, PLC, 109 F.3d 1212, 1216 (7th Cir. 1997) (citing Petrogradsky Mejdunarodny Kommerchesky Bank v. National City Bank, 253 N.Y. 23, 25 (1930) (Cardozo, J.)). Courts do not countenance "naked conclusion[s] about . . . ultimate issue[s]," and require expert witness to defend their "conclusion[s] with reason[s]." American Intern. Adjustment Co. v. Galvin, 86 F.3d 1455, 1464-65 (7th Cir. 1996). Although neither side appears to appreciate it, the opinions Boshart has rendered are exactly the sort an expert ought to render: ones uniquely within his area of expertise and outside the common sense and experience of most jurors. In his expert report and at his first deposition, Boshart testified about the condition of the plane's engine at the time of the accident: where the sealant was located; how the sealant may have prevented water from draining from the engine; and how the water may have gone undetected despite plaintiff's pre-flight inspection of the fuel tank. It is of no consequence that Boshart did not "connect the dots" by rendering an opinion on the ultimate question of defendant's negligence.

Although it is true that plaintiff must adduce evidence at trial from which a jury could conclude that defendant failed to comply with service bulletins or otherwise acted negligently

in the manner in which it sealed and inspected plaintiff's fuel tank in November 1999, Boshart's testimony is not the only evidence from which the jury may draw. It is undisputed that in 1986, both the Federal Aviation Administration and the manufacturer of the Mooney M20J warned that sealant could block drainage holes and create a risk of water contamination in the fuel line of the M20J. Also, it is undisputed that defendant was the last service provider to seal the tank of plaintiff's plane and inspect it before the plane crashed. From those facts and from the facts contained in Boshart's expert report regarding the manner in which the drainage holes in plaintiff's plane were blocked at the time of the accident, a reasonable jury could infer that defendant was negligent in servicing plaintiff's aircraft in November 1999. They do not need Boshart to draw the inference for them.

That brings us to Boshart's affidavit. After defendant filed its motion for summary judgment, plaintiffs responded by submitting an affidavit from Boshart, in which Boshart avers that it is his opinion that defendant was negligent. According to Boshart, he misunderstood his role in the lawsuit and did not realize that at his deposition he was permitted to render opinions on ultimate issues, such as negligence. (This is the first case in which Boshart has served as an expert witness.) Defendant contends that the affidavit should be stricken under the sham affidavit rule.

Under the sham affidavit rule, a court may strike an affidavit that "contradict[s] prior sworn testimony" if the affidavit has been presented to the court for the purpose of defeating

Seventy Dollars, 403 F.3d 448, 466 (7th Cir. 2005); see also Cowan v. Prudential Ins. Co. of America, 141 F.3d 751, 756 (7th Cir. 1998). However, the sham affidavit rule applies only when "a subsequent statement so squarely contradicts an earlier one as to create only a sham issue of fact." Bank of Illinois v. Allied Signal Safety Restraint, 75 F.3d 1162, 1170 (7th Cir. 1996) (invalidating later testimony that child was wearing seatbelt because of earlier unequivocal testimony that he was not).

In this case, plaintiff is not changing his *facts*, he is changing his *opinions*. Therefore, the sham affidavit rule is inapplicable. However, that does not mean Boshart's untimely disclosed opinions are admissible. The deadline for disclosing expert opinions has long since passed. Boshart will not be permitted to offer the opinion at trial and his affidavit will be stricken.

Nevertheless, as I discussed above, the opinion is superfluous. Even without it, a reasonable jury could conclude from the evidence that defendant negligently serviced plaintiff's aircraft in November 1999. Consequently, defendant's motion will be denied.

#### ORDER

IT IS ORDERED that the motion for summary judgment of defendant S&S Aviation,

d/b/a Rice Lake Air Center, is DENIED.

Entered this 19th day of September, 2006.

BY THE COURT: /s/ BARBARA B. CRABB District Judge