

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF KANSAS**

<b>IN RE: CESSNA 208 SERIES AIRCRAFT</b>	)	
<b>PRODUCTS LIABILITY LITIGATION</b>	)	<b>MDL No: 1721</b>
	)	
	)	<b>Case No: 05-md-1721-KHV</b>
<b>(This Document Relates To All Cases)</b>	)	
_____	)	

**MEMORANDUM AND ORDER**

Plaintiffs have filed suit against Cessna Aircraft Company and Goodrich Corporation seeking damages for personal injuries and wrongful death arising from various air disasters involving the Cessna 208 Series (“C208”) aircraft. The Judicial Panel on Multidistrict Litigation (“MDL Panel”) transferred the various actions to this Court for consolidated pretrial proceedings. This matter is before the Court on Cessna Aircraft Company’s Motion In Limine To Exclude Testimony Of William D. Waldock (Doc. #661) filed December 23, 2008. For reasons stated below, the Court overrules Cessna’s motion.

**Legal Standards**

Under Fed. R. Evid. 702, the trial court must act as a gatekeeper and determine at the outset, pursuant to Fed. R. Evid. 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 592 (1993). This entails a preliminary assessment whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology properly can be applied to the facts in issue. Id.

The Court has broad discretion in deciding whether to admit expert testimony. See Kieffer v. Weston Lands, Inc., 90 F.3d 1496, 1499 (10th Cir. 1996). Rule 702, Fed. R. Evid., provides that an expert may testify as to scientific, technical, or other specialized knowledge 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. The touchstone of Rule 702 is the helpfulness of expert testimony, a condition that goes primarily to relevance. See BioCore, Inc. v. Khosrowshahi, 183 F.R.D. 695, 699 (D. Kan. 1998) (quoting Miller v. Heaven, 922 F. Supp. 495, 501 (D. Kan. 1996)). Any doubts should be resolved in favor of admissibility. See id. The purpose of the Daubert inquiry is always “to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152 (1999).

#### **Factual And Procedural Background**

Plaintiffs allege that ice accumulation on the Cessna 208 Caravan aircraft was a factor in various crashes. Plaintiffs allege that (1) the Caravan left Cessna’s control in an unreasonably dangerous condition; (2) Cessna negligently designed, manufactured and assembled the Caravan; (3) Cessna breached express and implied warranties; and (4) Cessna fraudulently disclosed data about the aircraft certification. Plaintiffs also assert claims for strict liability, negligence and breach of warranty against Goodrich, regarding the Caravan’s pneumatic de-icing boots.

William D. Waldock, one of plaintiffs’ designated experts, is a professor of Aeronautical Science at Embry-Riddle Aeronautical University. See Waldock Revised Report, attached as Exhibit A-1 to Cessna Aircraft Company’s Memorandum In Support Of Its Motion In Limine To Exclude The Expert Testimony Of William D. Waldock (Doc. #662) filed December 23, 2008. He teaches graduate and undergraduate classes in accident investigation, flight safety, air crash management and aircraft accident analysis. See id. He is a retired U.S. Coast Guard officer and

pilot. See id. He has conducted approximately 175 aircraft accident investigations in some 30 years.

See id.

In his revised report, Waldock opines as follows:

1. During the period 1987 to 2007, the Cessna 208 Caravan has an accident history in which “airframe icing” is involved in 19.3% of the total accidents for the aircraft.
2. The C-208B model accounts for 29 (90.5%) of the 32 accidents [involving airframe icing].
3. Similar aircraft from different manufacturers experience a much lower incidence of icing accidents within their total accident populations. The Caravan had a comparative rate of 2 to 10 times the numbers of icing-related accidents as a number of the total accident population.
4. The Cessna Aircraft Company failed to recognize the incidence or significance of icing-related accidents, even though each accident was investigated by Cessna investigators and those involving icing were clearly identified as a factor in the individual reports.
5. The Cessna Aircraft Company failed to conduct a survey, special investigation, or statistical analysis of icing-related accidents/incidents until at least 2005, even though the data regarding such was available and obtainable. The NTSB had become concerned as early as 2003 and conducted their own review, resulting in their concern that the aircraft had problems in icing conditions. Such analyses would have clearly revealed the problems the aircraft has when operated in known icing conditions.

Waldock Revised Expert Report at 4.

Cessna seeks to exclude Waldock’s testimony under Daubert and Rules 402, 403 and 702 of the Federal Rules of Evidence.<sup>1</sup>

---

<sup>1</sup> Plaintiffs again argue that the Court should defer ruling on this motion so that each transferor court can determine whether Waldock’s testimony should be admitted. As explained in prior orders, part of this Court’s duty to get cases “trial-ready” includes evidentiary rulings on common issues. Pretrial rulings often may save time at trial, as well as save the parties time, effort and cost in preparing their cases. See United States v. Cline, 188 F. Supp.2d 1287, 1291 (D. Kan.

(continued...)

### Analysis

Cessna argues that Waldock's analysis is not reliable. In determining whether an opinion or particular scientific theory is reliable, the Court may consider several nondispositive factors: (1) whether the proffered theory can and has been tested; (2) whether the theory has been subject to peer review; (3) the known or potential rate of error; and (4) the general acceptance of a methodology in the relevant scientific community. Daubert, 509 U.S. at 593-94. The Supreme Court has emphasized, however, that while a trial court may consider one or more of these factors, the test of reliability is flexible and the Daubert factors do not necessarily or exclusively apply to all experts or every case. Kumho Tire, 526 U.S. at 141. Therefore, while a trial court should consider the specific factors identified in Daubert where they are reasonable measures of the reliability of expert testimony, id., the law does not require an expert to back his opinion with independent tests that unequivocally support his or her conclusions. See Bonner v. ISP Techs. Inc., 259 F.3d 924, 929 (8th Cir. 2001); Heller v. Shaw Indus., Inc., 167 F.3d 146, 155 (3d Cir. 1999).

As part of the pretrial evaluation, the trial court must also determine whether the expert opinion is based on facts that enable the expert to express a reasonably accurate conclusion as opposed to conjecture or speculation. Kieffer, 90 F.3d at 1499 (quoting Jones v. Otis Elevator Co., 861 F.2d 655, 662 (11th Cir. 1988)). The proponent of expert testimony must show a grounding in the methods and procedures of science which must be based on actual knowledge and not subjective belief or unaccounted speculation. Mitchell v. Gencorp, Inc., 165 F.3d 778, 780 (10th Cir. 1999).

Cessna argues that Waldock's opinions are based on an unreliable methodology in selecting

---

<sup>1</sup>(...continued)  
2002). In an effort to provide guidance before trial, the Court makes the following findings and rulings.

so-called “icing accidents.” In his report, Waldock definitely states that airframe ice was “involved” in 19.3 per cent of C208 accidents. Waldock does not define “involved,” but in other sections of his report, he states that airframe ice was a “cause or factor” in various accidents involving the C208 aircraft. See Waldock Report at 2. In his deposition, however, Waldock admits that he included accidents where in-flight icing was only a possibility and that pilot error and other causes and factors could have contributed to some of the accidents.<sup>2</sup> In light of his deposition testimony, the Court construes Waldock’s first opinion that airframe icing was “involved” in the accidents as stating that icing conditions were known or suspected at the time of the accidents.

With the limitation that Waldock has included icing accidents which involved either known or suspected icing conditions, Cessna has not shown that he used an unreliable methodology. Plaintiffs note that the FAA and others in the aviation industry have used a similar methodology. Cessna argues that the FAA and others used such a method for different purposes than Waldock and did not suggest that such a methodology would be a valid method to compare accident rates or the relative safety of various aircraft.<sup>3</sup> Even so, Cessna acknowledges that the FAA properly relied on

---

<sup>2</sup> See Waldock Depo. at 350 (looked at accidents where icing was a cause, factor or possibility); id. at 358-59 (mere possibility of encountering ice sufficient for inclusion on accident list); see also id. at 169-70 (all accidents could equally be termed human error events when icing present); id. at 273 (icing could be factor); id. at 321 (included accidents where icing clearly identified as factor, icing clearly present or conditions for icing present); id. at 190 (mere fact that ice accumulated on aircraft sufficient to find factor in accident).

<sup>3</sup> In issuing Airworthiness Directive (“AD”) 2005-07-01, the FAA included an Icing Accident Chart which was intended to demonstrate that “icing accidents” for the months of March and April are just as prevalent as for the months of November, December and January. The chart, however, does not compare the total number of C208 accidents or the accident rate of the C208 to that of all other aircraft. Indeed, the author of the chart notes that the chart includes all accidents in which icing *may* have been a factor based upon meteorological data in NTSB accident reports. Declaration of Paul Pellicano ¶ 6.

accident data to show that accidents where icing conditions are known or suspected occur most often in the winter and early spring months. Waldock uses the data in a similar fashion to conclude that accidents where icing conditions are known are suspected to occur two to ten times more often in the C208 than comparable aircraft. The Court therefore finds that Waldock's methodology is sufficiently reliable to pass muster under Daubert.<sup>4</sup>

Cessna next argues that Waldock's discussion of prior accidents should be excluded because plaintiffs have not shown that the accidents are substantially similar to the particular accidents in these cases. Plaintiffs argue that Waldock's discussion of other accidents is admissible to show "notice" to Cessna of a potential problem in icing conditions which Cessna ignored or overlooked. See Plaintiffs' Response In Opposition To Defendant Cessna Aircraft Company's Motion In Limine To Exclude The Expert Testimony Of William D. Waldock (Doc. #738) filed February 4, 2009 at 4 (essentially Waldock's only opinion is that Caravan accident/incident record was sufficient to call attention to idea that something was going on that needed addressing and Cessna did not take action despite having access to that information); id. at 14 (evidence of other accidents shows "overall problem [in icing conditions] with the Caravan which Defendant Cessna either ignored or overlooked"). Cessna correctly notes that the general danger of flying in icing conditions is obvious and that notice of such a fact does not relate to a specific defect. Waldock, however, opines that the danger of flying in icing conditions was relatively higher in the C208 as compared to other aircraft.

---

<sup>4</sup> Cessna also argues that Waldock only looked at the total number of accidents for each aircraft and did not normalize the data using factual information such as hours flown, aircraft in service and number of operations. Plaintiffs do not assert that Waldock's comparative accident rate is statistically sound. Instead, they claim that the relative number of accidents in known or suspected icing conditions was sufficient to alert Cessna to investigate further. See Waldock Depo. at 139 (analysis only calls "attention that there might be a problem with the Caravan").

Waldock's opinion goes beyond stating that Cessna had notice of the general danger of icing. The Court therefore overrules Cessna's argument that Waldock's opinions should be excluded because he has not shown that the prior accidents were substantially similar to the accidents in this case.<sup>5</sup>

Cessna also argues that Waldock's discussion of prior accidents should be excluded because his opinions are not helpful to the trier of fact and that discussion of prior accidents would be unfairly prejudicial and require undue trial time on collateral issues. At this stage and absent evidence of each aircraft accident and the specific defect which plaintiffs allege in each case, the Court cannot adequately address the relevance of Waldock's testimony and how helpful it would be for the jury. The Court does have concerns that Waldock's discussion of prior accidents may open up a host of collateral issues related to the cause of prior accidents and unnecessarily prolong the trial, but those issues are better addressed by the transferor courts subject to other evidence presented at trial. Accordingly, the Court overrules without prejudice Cessna's argument on this ground.<sup>6</sup>

**IT IS THEREFORE ORDERED** that Cessna Aircraft Company's Motion In Limine To Exclude Testimony Of William D. Waldock (Doc. #661) filed December 23, 2008 be and hereby is **OVERRULED**.

---

<sup>5</sup> Cessna's argument that Waldock has not shown notice of a particular defect primarily relates to the relevance of the testimony, an issue which the Court declines to decide at this stage. Likewise, Cessna argues that some of the accidents relied on by Waldock occurred after particular accidents in this case or they are so remote in time that they are not admissible. Based on the date of a particular accident, the various trial courts can determine whether the accidents which Waldock refers to are admissible as notice to Cessna.

<sup>6</sup> Cessna also argues that Waldock is not qualified to analyze the range of causal factors associated with the prior accidents. As explained above, Waldock does not opine as to the cause of prior accidents, only as to the number of accidents in known or suspected icing conditions in the C208 compared to other aircraft.

Dated this 30th day of September, 2009 at Kansas City, Kansas.

s/ Kathryn H. Vratil  
KATHRYN H. VRATIL  
United States District Judge