

**IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT**

United States Court of Appeals
Fifth Circuit

FILED

February 5, 2018

Lyle W. Cayce
Clerk

No. 17-20018

JANA DAVIDSON, Individually and on behalf of their minor children J.C.D. and K.S.D.; THOMAS FARMER; KENNETH DAVIDSON, Individually and on behalf of their minor children J.C.D. and K.S.D.,

Plaintiffs - Appellants

v.

FAIRCHILD CONTROLS CORPORATION,

Defendant - Appellee

Appeal from the United States District Court
for the Southern District of Texas

Before WIENER, ELROD, and SOUTHWICK, Circuit Judges.

LESLIE H. SOUTHWICK, Circuit Judge:

Two of the plaintiffs were injured when oil from an airplane's air cycle machine leaked into the cabin, causing smoke and fumes to fill the cockpit during their flight. The plaintiffs brought suit against several defendants. The district court granted summary judgment to defendant Fairchild Controls Corporation on a design-defect claim due to a lack of adequate expert testimony that a feasible alternate design existed. It also dismissed the failure-to-warn claim because the plaintiffs were knowledgeable users. We AFFIRM.

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FACTUAL AND PROCEDURAL BACKGROUND

On May 31, 2011, two employees of an aerospace and defense technology company embarked on a mission to determine the cause of fumes and smoke in one of the company's airplanes, a Twin Commander 690A. Prior to that flight, another pilot at the company, William O'Connor, complained that fumes and smoke had filled the cockpit when the Twin Commander 690A reached a cruising altitude. The company wanted the two employees, a pilot and a sensor operator, to fly the aircraft to determine if the fumes and smoke problem had been resolved.

This problem with the Twin Commander 690A was already known by the plaintiffs,¹ who were the pilot, Thomas Farmer, and the sensor operator, Kenneth Davidson. Farmer had observed fumes and smoke on 50 prior flights and had repeatedly complained to the company about his concerns. He knew that the problem was because of an old air cycle machine ("ACM"), which was contaminating the air from leakage of oil. Farmer stated in his deposition that he had "recommended that the cause of the smoke and fumes, the air cycle machine unit, be replaced." Farmer was also aware of the negative health effects of the fumes and smoke, which released a chemical neurotoxin known as tricresyl phosphate. Farmer had visited several doctors concerning the damage to his health from experiencing smoke and fumes on prior flights.

The second plaintiff, Davidson, also knew about the fumes and smoke problem in the Twin Commander 690A. He was warned about the risk of smoke and fumes in the cockpit by another pilot, who had experienced the

¹ Kenneth Davidson's wife, Jana Davidson, is also a plaintiff and is suing for loss of consortium, society, and service. Kenneth and Jana Davidson are also suing on behalf of their minor children, J.C.D. and K.S.D., for loss of consortium, society, and service. Jana Davidson, J.C.D, and K.S.D.'s claims are derivative of Kenneth Davidson's claims. See *Hassanein v. Avianca Airlines*, 872 F. Supp. 1183, 1190 (E.D.N.Y. 1995).

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smoke and fumes in the cockpit. Davidson also researched these risks on the Internet and emailed management with his concerns.

Shortly after take-off on the relevant flight, the plaintiffs could smell the fumes and see the smoke, but they continued their mission. By the time they reached an altitude of 28,000 feet, the smoke and fumes from the oil leakage were sufficiently severe that both plaintiffs experienced burning eyes, coughing, and difficulty breathing. They put on oxygen masks, began descending, depressurized the cabin upon reaching a lower altitude, and landed shortly thereafter. From take-off to landing, their flight was between 60 and 90 minutes. An inspection of the airplane after this flight revealed that oil was leaking from the oil bearings in the ACM and then escaping into the aircraft's cabin, creating smoke and fumes in the cockpit.

The ACM in the Twin Commander 690A was made by Fairchild Controls Corporation. Although Fairchild had ceased manufacturing ACMs in the 1980s, it had retrofitted the ACM in the Twin Commander 690A in 2007. The ACM, a part of the aircraft's environmental control system, uses hot air produced by the aircraft's engines and recycles the air into the cabin after a cooling and pressurization process. This process was approved and certified by the Federal Aviation Administration ("FAA") to be used in the Twin Commander 690A.

On May 30, 2014, the plaintiffs filed suit in the United States District Court for the Southern District of New York based on diversity jurisdiction. The initial complaint was filed against many defendants, including Fairchild. By March 2015, all of the defendants were dismissed from the case except Fairchild. The New York district court held that it lacked personal jurisdiction over Fairchild and transferred the case to the United States District Court for the Southern District of Texas instead of dismissing the action. In September

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2016, the Texas district court granted Fairchild's motion for summary judgment.

The district court rejected the design-defect claim because the plaintiffs failed to prove that an alternative design was technologically and economically feasible. The district court found no merit to the failure-to-warn claim because the plaintiffs were knowledgeable users, which barred their recovery on a failure-to-warn theory. The plaintiffs timely appealed. It is uncontested that New York law applies to the resolution of the issues presented on appeal.

DISCUSSION

The standard of review on summary judgment is *de novo*. *United States v. Lawrence*, 276 F.3d 193, 195 (5th Cir. 2001). The court should grant summary judgment when "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).

I. The design-defect claim

To succeed on a design-defect claim, a plaintiff must provide expert testimony that a feasible, alternative design would have prevented the injury. *See Voss v. Black & Decker Mfg. Co.*, 450 N.E.2d 204, 208 (N.Y. 1983). There are two methods for satisfying this requirement: (1) the plaintiff's expert can show through testing and construction of a prototype that an alternative design is technologically and economically feasible; or (2) the plaintiff's expert can identify an alternative design that is already available and being used. *Kosmyinka v. Polaris Indus., Inc.*, 462 F.3d 74, 80 (2d Cir. 2006).

We agree with another court that expert testimony provided by the plaintiff in a complex design case must be competent and non-conclusory.

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Guarascio v. Drake Assocs. Inc., 582 F. Supp. 2d 459, 463 (S.D.N.Y. 2008). Further, the designs offered as alternatives by the plaintiff's expert must be more than theoretically or hypothetically possible. *See Adams v. Genie Indus., Inc.*, 929 N.E.2d 380, 385 (N.Y. 2010). As one court stated, "the history of engineering and science is filled with finely conceived ideas that are unworkable in practice." *Stanczyk v. Black & Decker Inc.*, 836 F. Supp. 565, 567 (N.D. Ill. 1993). We also agree with another court that if the plaintiff fails to present evidence from which a reasonable jury could infer that an alternative design is technologically feasible and commercially practicable, then the district court should grant summary judgment to the defendant on a design-defect claim. *Guarascio*, 582 F. Supp. 2d at 463.

The parties agree that the district court used the correct legal standard but disagree about its application. The plaintiffs argue that their expert, Don Hansen, provided the necessary expert testimony on alternative designs to avoid summary judgment. Throughout the litigation proceedings, however, the plaintiffs have changed the evidence they rely on to support their alternative-design theory. In their opening summary judgment brief, the plaintiffs argued that Hansen's testimony supported that the ACM could have been designed with oil-less bearings, common in the industry, which would have prevented the oil-leakage and subsequent exposure to the smoke and fumes. Later, in a motion for reconsideration of the adverse summary judgment decision, the plaintiffs argued that a viable alternative design existed based on a 1997 article on "foil air/gas bearing technology" cited by Hansen. On appeal, the plaintiffs argue that the foil air theory from the 1997 "article provides examples of the prevalence and economic feasibility of oil-less bearing technology" because at least six companies have used this technology in air cycle machines.

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In response, Fairchild argues that the initial theories for alternative designs identified by Hansen were conclusory and hypothetical designs without proof of actual feasibility. Fairchild argues that the air bearing design mentioned in the 1997 article should be disregarded for two reasons: (1) the plaintiffs waived the argument by not raising it until their motion for reconsideration; and (2) on the merits, the 1997 article and Hansen's testimony fail to show that using air foil technology was technically or economically feasible in the Twin Commander 690A or an airplane similar to it.

The plaintiffs' initial theories were that Fairchild could have used oil-less bearings, fume sensors, filters, and diverters. Yet, in his deposition, Hansen admitted that he had not designed or tested a prototype based on the alternatives he suggested. He also acknowledged that he was not aware of anyone else who had designed or tested a prototype using the alternative design theories he proposed. By not offering any testimony about the use of such alternatives in the industry, the plaintiffs failed to provide expert testimony showing that these alternative designs for a safer ACM were technically or economically feasible.

Perhaps the best argument raised by the plaintiffs is that the foil-air bearing theory mentioned in the 1997 article that Hansen cited satisfies the requirement for adequate expert testimony. The plaintiffs waived this argument, however, because they failed to argue or brief it to the district court. We find a single line in plaintiffs' opposition to the summary judgment motion stating that "competitors have developed, tested, obtained FAA approval, and sold alternative designs which are in flight today." This statement is written at such a high level of generality that it cannot be said to preserve the air-foil bearing theory from the 1997 article. "When evidence exists in the summary judgment record but the nonmovant fails even to refer to it in the response to

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the motion for summary judgment, that evidence is not properly before the district court.” *Malacara v. Garber*, 353 F.3d 393, 405 (5th Cir. 2003).

Furthermore, we generally do “not consider an issue or a new argument raised for the first time in a motion for reconsideration in the district court.” *U.S. Bank Nat. Ass’n v. Verizon Commc’ns, Inc.*, 761 F.3d 409, 425 (5th Cir. 2014), *as revised* (Sept. 2, 2014) (citation omitted). In response, the plaintiffs cite an opinion where we allegedly did consider such a late-made argument, as we stated that “even if we were to consider the evidentiary material designated for the first time in the reply brief, we would still affirm summary judgment[.]” *Forsyth v. Barr*, 19 F.3d 1527, 1537 (5th Cir. 1994). This argument misapprehends *Forsyth*. We will not consider new evidence or arguments raised for the first time in a motion for reconsideration, and by saying in addition such an argument had no merit anyway, we did not change the general rule.

Accordingly, the plaintiffs waived the air-foil bearing theory. As did the *Forsyth* court, we too will add suspenders to the belt we just used. Were we to consider the merits of the argument from the 1997 article, the plaintiffs still failed to provide adequate expert testimony. Hansen himself testified that the technology in the 1997 article would provide a starting point, but he had no opinion on whether it was “feasible economically and technically to refit the Environmental Control System of a 690A aircraft with an air bearing ACM[.]” Further, Hansen testified that he had not evaluated whether the ACM in the Twin Commander 690A could be altered to use an air bearing. He further testified that he had not performed any analysis on the economic feasibility of using an air bearing ACM in the Twin Commander 690A. He did not testify that he was aware of anyone else who had studied the economic feasibility of using an air bearing ACM in an airplane similar to the Twin Commander

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690A. The limited expert testimony about the air-foil bearing technology does not prove that a safer design was feasible.

II. The failure-to-warn claim

There are two defenses under New York law to a failure-to-warn claim: (1) the hazard presented an open and obvious risk; or (2) the plaintiff was a knowledgeable user. *Liriano v. Hobart Corp.*, 700 N.E.2d 303, 308 (N.Y. 1998). In those situations, the lack of warning was not a proximate cause of the plaintiff's injuries, which precludes a finding of liability. *See id.*

The plaintiffs alleged in their complaint that Fairchild was liable for its "failure to warn complainants of unreasonably dangerous condition[s] of the subject engine and/or its components." Yet, as admitted in later depositions, the plaintiffs had actual knowledge of the specific hazard and potential medical consequences resulting from the faulty ACM. The following exchange occurred during plaintiff Farmer's deposition:

Q. Do you know what was causing the fumes on that flight?

A. Yeah. It -- I'd been flying that airplane for almost three years previous to that, and we constantly complained about the smoke and the fumes.

.....

Of course, after high temperature and pressure and -- breaks down -- that oil back down into organophosphates, tricresyl phosphates, which are highly toxic. And that air goes into the air cycle machine, which if it's malfunctioning, further contaminates the air with fumes and smoke.

Plaintiff Davidson testified in his deposition that he had been informed of prior fume events in the Twin Commander 690A and that he had researched the problem on the Internet. In an email to his co-workers and submitted as part of the record, Davidson wrote that "[t]he severity of these fumes was reported by a pilot on [M]ay 26 and then he refused to fly until resolved." As

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the district court wrote, “[b]oth were aware of possible harm, Farmer from personal experience and Davidson from personal research.”

The parties agree that the knowledgeable user defense applies when the plaintiff has actual knowledge of the specific hazard causing the injury but disagree about the degree of knowledge required. *See Liriano*, 700 N.E.2d at 308. The plaintiffs cite an unpublished federal district court opinion to argue that “the user must not only know of the particular risk he or she faces, but must also be aware of the severity of the potential harm.” *Ferracane v. United States*, No. 02-CV-1037 SLT, 2007 WL 316570, at *7 (E.D.N.Y. Jan. 30, 2007). In response, Fairchild cites *Liriano*, which is the leading New York case on defenses to failure-to-warn claims, to argue that a warning is not required when a plaintiff “was fully aware of the hazard through general knowledge, observation or common sense.” 700 N.E.2d at 308.

Based on the *Liriano* standard, New York intermediate appellate courts have affirmed summary judgments for defendants when plaintiffs were aware of the specific hazards that might cause injury. *See, e.g., Heimbuch v. Grumman Corp.*, 858 N.Y.S.2d 378, 380 (N.Y. App. Div. 2008); *Wesp v. Carl Zeiss Inc.*, 783 N.Y.S.2d 439, 442 (N.Y. App. Div. 2004). In *Wesp*, the plaintiff was injured when she tried to move a 600-pound surgical microscope; the trial court granted summary judgment to the defendant because the plaintiff had previously attempted to move the microscope and was aware of the specific hazard involved. 783 N.Y.S.2d at 442. In *Heimbuch*, the plaintiff had knowingly been using a defective product for six months prior to her injury, and the trial court granted summary judgment to the defendant on the failure-to-warn claim because a warning would have been superfluous. 858 N.Y.S.2d at 380. Both of these decisions were affirmed on appeal. *Id.* at 381; *Wesp*, 783 N.Y.S.2d at 442.

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In a decision prior to *Liriano*, a New York intermediate appellate court acknowledged that “[t]he degree of danger is a crucial factor in determining the specificity required in a warning” but reiterated that “there is no necessity to warn a consumer already aware through common knowledge or learning of a specific hazard.” *Lancaster Silo & Block Co. v. N. Propane Gas Co.*, 427 N.Y.S.2d 1009, 1015 (N.Y. App. Div. 1980).

Without deciding if the plaintiff must have specific knowledge about the severity of the potential injury, we conclude that the district court correctly granted summary judgment on the failure-to-warn claim because the undisputed evidence shows that both plaintiffs were aware of the potential injuries that could result from flying the Twin Commander 690A. Further, the plane was taken to a higher altitude even as the plaintiffs experienced discomfort from the smoke and fumes filling the airplane, with neither plaintiff saying either urged the other to end the mission. This supports that the plaintiffs would have flown the mission regardless of whether Fairchild provided a warning.

As Farmer testified, he and Davidson were asked to fly the Twin Commander 690A “to verify th[e] smoke and fumes which they knew the airplane was making. We really didn’t want to do it, but, you know, it’s your -- when it’s your job [A]s soon as you get in the plane, you smell the smoke and fumes, but we went ahead and flew[.]” The plaintiffs were knowledgeable users, and a warning would have been superfluous.

AFFIRMED.