

**UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF OKLAHOMA**

**JAMES RODGERS and SHERYLL  
RODGERS, individually and as Husband  
and Wife; and CHRISTOPHER EVANS and  
JILL EVANS, individually and as Husband  
and Wife,**

**Plaintiffs,**

**v.**

**BEEHCRAFT CORPORATION, f/k/a  
Hawker Beechcraft Corporation, a Kansas  
Corporation; HAWKER BEEHCRAFT  
GLOBAL CUSTOMER SUPPORT, LLC,  
f/k/a Hawker Beechcraft Services, Inc.,  
a Kansas limited liability company,**

**Defendants.**

**Case No. 15-CV-0129-CVE-PJC**

**OPINION AND ORDER**

Now before the Court are Defendants’ Motion for Determination of Law (Dkt. # 89) and Defendants’ Motion for Summary Judgment and Supporting Memorandum (Dkt. # 94). Defendants argue that plaintiffs lack admissible evidence to support their claims of manufacturer’s products liability and negligence. Plaintiffs respond there is evidence supporting an inference that the aircraft manufactured and serviced by defendants had a defective electrical system, alternate landing gear, and instruction manual, and these defects rendered the aircraft unreasonably dangerous as a matter of Oklahoma law.

**I.**

Beechcraft Corporation (Beechcraft) is a Kansas corporation with its principal place of business in Kansas, which designs, manufactures, and sells commercial general aviation aircraft.

Dkt. # 94-4, at 1. Beechcraft designed and manufactured the Beech Premier 390 jet airplane (Premier 390), and the Premier 390 aircraft identified as RB-226 was manufactured in 2008. Dkt. # 129, at 4. The Federal Aviation Administration (FAA) issued a standard airworthiness certificate for RB-226 on March 13, 2008. Dkt. # 94-5, at 4. Hawker Beechcraft Global Customer Support, LLC (HBGCS) is a Kansas limited liability company, which provides general aviation inspection and maintenance services under the trade name Hawker Beechcraft Services. Dkt. # 94-4, at 2. HBGCS performed maintenance on RB-226, but it was not the only company that worked on RB-226. Dkt. # 94-7.

On March 17, 2013, Wesley Caves was the pilot of RB-226, flying the aircraft from Tulsa, Oklahoma to South Bend, Indiana. Dkt. # 129, at 4. James Steven Davis was in the front right passenger seat of the aircraft. Dkt. # 94-6, at 1. Davis had a pilot's license, but he was not rated to fly a jet aircraft or the Premier 390, and his last recorded flight as a pilot was in 2008. Id. at 4. James Rodgers and Christopher Evans were passengers in the rear passenger seats. Dkt. # 129, at 4. The Pilot's Operating Manual (POM) states that:

It is mandatory that you fully understand the contents of this publication and the other operating and maintenance manuals which accompany the airplane; that FAA requirements for ratings, certifications and review be scrupulously complied with and that only persons who are properly licensed and rated, and thoroughly familiar with the contents of the FAA Approved Airplane Flight Manual, Avionics Manual and [POM] be allowed to operate the airplane.

Dkt. # 94-8, at 10. During the flight, Caves told Davis that the landing gear was designed to handle 13,000 pounds of weight, but that Caves personally had no problem flying the aircraft at 13,500 pounds. Dkt. # 94-9, at 12. The transcript of the cockpit voice recorder (CVR) also shows that an overspeed warning sounded twice, which meant the aircraft was flying in excess of the maximum specified air speed. Id. at 15, 25. Caves allowed Davis to operate the controls of the aircraft, and

he directed Davis to pull back on the throttle. Id. at 15-16. Davis told Caves that he was “uncomfortable,” because the “throttle up throttle down” was setting off an alarm. Id. at 16. At about 16:13:16 on the CVR, Caves directed Davis to pull back on the throttle to reduce the aircraft’s speed, and Davis said “just pull down on it?” Id. at 32. The transcript shows that numerous systems began to shut down, and Caves said “uh-oh” and “we are dead stick.” Id. at 33. Davis had pulled the throttle past the stops to “CUTOFF” which shut down both engines. To move the throttle lever into “CUTOFF,” Davis had to pull the throttle lever all the way down and pull up on finger locks that would have prevented the throttle lever from moving into the “CUTOFF” position. Dkt. # 94-8, at 3.

During normal flight conditions, the aircraft uses two engine-driven generators to supply electricity to the aircraft, but the aircraft also has a main battery and a standby battery to provide electrical power in emergency situations. Id. at 6. The generators shut down when the engines are shut off, and the power supply for the aircraft switches from the generators to the main battery. Dkt. # 94-12, at 9. The aircraft has a battery switch that can be set in “ON” or “STANDBY” position. Dkt. # 94-5, at 2. Placing the switch in the “ON” position selects the main battery, and moving the switch to “STANBY” selects the standby battery. Dkt. # 94-12, at 12. The battery switch should be placed in the “ON” position during normal flight operations, because the main battery is not drained when the generators are providing electrical power. Dkt. # 94-8, at 7. The standby battery is used only when there is no other power source, and the POM states that the standby battery will supply 150 watts of power for at least 30 minutes. Id. Electrical power to many components is cut off when the aircraft is operating under battery power, because it is necessary to conserve power to operate components more critical for landing the aircraft. Id.

The CVR cut off approximately two minutes after Davis shut off the engines. Dkt. # 94-9. After the CVR stopped recording, Caves was able to restart the left engine, and the Premier 390 is designed to fly with only one engine. Dkt. # 94-8, at 12. In order to restart the left engine, Caves was required to use engine start and ignition switches powered by the pilot's essential bus, part of the electrical load distribution system. Dkt. # 94-12, at 9. Experts for plaintiffs and defendants also heard a sound on the CVR that has been identified as the starter motor used to restart the engines, and the starter motor receives power from the pilot's essential bus. Dkt. # 94-12, at 9; Dkt. # 94-14, at 12. The starter motor must have been functional, because Caves was able to restart the left engine. Id. There is no dispute that many other components of the aircraft that receive power from the pilot's essential bus were functioning after Davis cut off the engines. Dkt. # 94, at 17-18; Dkt. # 158, at 14. Even though Caves was able to restart the left engine, he did not reset the left electrical generator and the aircraft was operating on battery power. Dkt. # 94-12, at 12. Plaintiffs' expert, Frank Graham, believes that Caves moved the battery switch from "ON" to "STANDBY" based on an eight second interruption in electrical power noted on the CVR transcript. Dkt. # 94-18, at 2. Defendants' expert, Robert Winn, provided four possible reasons for the interruption of electrical power, one of which is moving the battery switch into the "STANDBY" position. Dkt. # 119-7, at 7-8. The instructions for operating the aircraft after a dual engine failure require that the battery switch be kept in the "ON" position when attempting to restart the engines and generators, but the battery switch was found to be in the "STANDBY" position in the aircraft wreckage. Dkt. # 94-6, at Dkt. # 94-10, at 7. Plaintiffs dispute that this evidence necessarily means that Caves placed the battery switch in the "STANDBY" position, because the switch could have moved during the crash. Dkt. # 158-2, at 10.

Caves was able to navigate the aircraft to the South Bend airport and he attempted to land, but air traffic control (ATC) directed Caves to pull up because his main landing gear was not extended. Dkt. # 94-6, at 3. Caves pulled up and attempted a second landing, but he again attempted to land with only the nose landing gear extended. Id. There is no evidence of what actions Caves took between the first and second landing attempts, and it is unknown if Caves took any steps to deploy the main landing gear before attempting to land a second time. During the second landing attempt, the aircraft bounced several times after touching down on the runway, and Caves attempted to take the aircraft back into the air. Id. The aircraft entered a “nose low, rolling descent into a nearby residential community.” Id. Caves and Davis died as a result of blunt-force injuries sustained in the crash, and Rodgers and Evans were injured.

Beechcraft prepared an Airplane Flight Manual (AFM), the POM, and a Maintenance Manual for the Premier 390, and the AFM must be on the aircraft at all times. Dkt. # 94-10, at 2. The AFM has been approved by the FAA and it contains all information required to be provided to a pilot under 14 C.F.R. Part 23. Id. at 1. The AFM contains a checklist for restarting an engine following a shutdown, whether for training purposes or from mechanical difficulty. Id. at 5. The AFM also includes a checklist for a failure of both electrical generators. Id. at 7. Plaintiffs dispute that the “Engine Shutdown or Failure in Flight” was the appropriate checklist that should have been followed by Caves to restart the engines or generators, and plaintiffs argue that the “Air Start” checklist should have been used. Dkt. # 158, at 18. Plaintiffs’ argument is supported only by the expert opinions of their piloting expert, Michael Haider. Based on the accident wreckage, it is not clear that Caves put the generator or engine ignition switches in the correct positions for restarting the engines pursuant to the “Engine Shutdown” or “Dual Generator Failure” checklists. The AFM

also includes instructions for deploying the alternate landing gear in the event that the landing gear cannot be lowered by the electrical system. Dkt. # 94-10, at 18-19.

The POM describes the aircraft's electrical distribution system as follows:

#### DC ELECTRICAL LOAD DISTRIBUTION

The DC distribution system consists of two linked generator bus systems, one essential bus system, one hot battery bus system and a standby battery bus system. The bussing system is cross-tied together with one bus-tie contactor. The power distribution box consists of power relays, bus bars, fuses, current transformers, load meter shunts, and circuit breakers. It receives input power from the external power source, the generators, and the main battery. The power distribution box then distributes the input power to the right main bus, left main bus, essential bus, non-essential bus, standby bus, and the hot battery bus.

Dkt. # 94-8, at 6. The electrical buses supply power to essential components of the aircraft, and the pilot's essential bus and the co-pilot's essential bus provide power to different components. Id. at 8-9. In 2009, Beechcraft issued Service Bulletin 24-3868 (SB 24-3868) to repair the hydraulic shutoff valve installation, and the repair required significant changes to the circuit breaker panel. Dkt. # 94-22; Dkt. # 94-23. The wiring aspect of the repair was accomplished by means of a repair kit assembled by Beechcraft, and the kit was identified as Kit 390-3622-0003. Dkt. # 94-22, at 1; Dkt. # 94-24. HBGCS performed the repairs required by SB 24-3868 on Caves' aircraft, including installation of Kit 390-3622-0003. Dkt. # 94-7, at 12-13. To perform the repair, HBGCS had to remove and reattach a service wire from the circuit breaker on the pilot's essential bus. Dkt. # 94-14, at 3. Plaintiffs' electrical expert, John Bloomfield, opines that a screw connecting the service wire was not properly tightened to the pilot's essential bus. Id. at 2. The Kit instructions require that the screw be tightened to six to nine pounds of torque and that torque seal be applied. Dkt. # 94-24. Before the crash on March 17, 2013, there is evidence of only one incident of any interruption of electrical power to the electrical components of the aircraft. Rick Frie was a

passenger on the subject aircraft about two weeks before the crash while Caves was flying the aircraft from Tulsa to Memphis. Dkt. # 94-28, at 2. They flew through a thunderstorm and several displays blacked out, and Frie believed that Caves' behavior suggested that this had not happened before. Id. Many of the electrical components that blacked out during the flight to Memphis do not receive electricity from the pilot's essential bus. Dkt. # 94-29, at 2. Caves took the aircraft to Christiansen Aviation on March 12, 2013, but he did not report that the aircraft had any electrical problems. Dkt. # 158-13, at 2-3.

The main landing gear of the aircraft will operate when the electrical generators are not functioning, because the main battery will provide enough power to lower the landing gear. Dkt. # 94-10, at 8-9. The aircraft has an alternate landing gear extension system (hereinafter "alternate landing gear") to deploy the landing gear without electrical power. Dkt. # 94-8, at 4-5. The alternate landing gear handle is a red, T-shaped handle, marked "PULL," and it is located under the pilot's yoke. Dkt. # 94-5, at 3. In the accident wreckage, the alternate landing gear handle was found partially pulled out and bent toward the instrument panel. Dkt. # 94-6, at 8. The FAA approved the procedure for lowering the landing gear using the alternate landing gear handle. Dkt. # 94-10, at 18. The aircraft has three green indicator lights that turn on when the landing gear is locked into place, but the green indicator lights do not function if the aircraft is operating only on standby battery power. Dkt. # 94-8, at 4; Dkt. # 94-10, at 10. Beechcraft performed production testing on each Premier 390 aircraft and required that the pull force necessary to pull the alternate landing gear handle was less than 60 pounds. Dkt. # 94-34, at 10. The subject aircraft had a maximum handle pull force of 53.7 pounds when it was inspected by Beechcraft before it was placed in the stream of commerce. Dkt. # 94-35. The Maintenance Manual provides a procedure for testing

the alternate landing gear when the aircraft is inspected following sale by Beechcraft, and the maximum pull force to pass inspection is 64 pounds. Dkt. # 94-21, at 2. The subject aircraft was not due to have the alternate landing gear inspected until it reached 600 flight hours, and it had 457.5 flight hours at the time of the crash. Dkt. # 94-6, at 4; Dkt. # 94-38, at 2.

It is unknown what pull force was used by Caves in his attempt to pull out the alternate landing gear handle, but a report issued by the NTSB found that the handle was pulled out approximately one and a half inches. Dkt. # 158-15, at 27. Plaintiffs' experts tested the pull force needed to pull the alternate landing gear handle on three exemplar aircraft, and the experts opine that the pull force needed could be as much as 120 pounds. Dkt. # 94-25, at 45; Dkt. # 94-40, at 31-32. Plaintiffs claim that this pull force is excessive, but their experts were always able to fully pull out the alternate landing gear handle. Id. Plaintiffs' experts opine that debris in the landing gear bay could add to the pull force, but their reports do not show that they inspected the exemplar aircraft or the wreckage of RB-226 to determine if debris added to the pull force. Id. Beechcraft had not previously received any reports that a pilot was unable to lock the landing gear into place using the alternate landing gear handle. Dkt. # 94-30.

In the event of a dual generator failure, the AFM directs a pilot to initiate an emergency descent and refer to the procedures for operating the aircraft with the essential bus only. Dkt. # 149-1, at 3. Operating the aircraft with the essential bus only requires use of the main battery. Dkt. # 94-10, at 7-9. Plaintiffs' piloting expert, Haider, testified in his deposition that he had experience flying a Premier 390 aircraft, and there were "instances" when simply resetting the generator switch was not sufficient to restart an electrical generator. Dkt. # 149-2, at 3. However, he was able to restart the generator by using a different procedure. Id. Haider testified that the correct procedure



to restart the engines following a dual engine shutdown was the air start checklist, and the dual generator failure checklist should not have been used. Id. Haider acknowledged that the air start checklist would not have directed Caves to turn the generator switch to the “OFF” position. During his deposition, Haider did not offer any opinion that the instructions in air start checklist were incorrect or defective. Id.

On March 16, 2015, Rodgers and Evans filed this case alleging claims of negligence against HBGCS and Beechcraft and a manufacturer’s products liability claim against Beechcraft. Dkt. # 2. Plaintiffs filed an amended complaint alleging the same substantive claims. Dkt. # 28. In the amended complaint, plaintiffs alleged that the aircraft was defective due to “electrical failures and improper design of the alternate landing gear extension system” and that these defects existed from the time the aircraft was manufactured. Id. at 9. On June 20, 2016, defendants filed a motion for summary judgment (Dkt. # 94) and, on the same day, plaintiffs filed a motion (Dkt. # 93) seeking leave to file a second amended complaint. The Court noted the timing of plaintiffs’ motion to amend and found that plaintiffs were seeking to introduce a new theory of product defect, but the Court determined that defendants would not be prejudiced by allowing plaintiffs to file a second amended complaint. Dkt. # 128. In the second amended complaint, plaintiffs added a theory of product defect based on the “deficient and defective abnormal procedures in the [AFM] for Air Start (resetting the generators).” Dkt. # 129, at 13. Defendants were permitted to file a supplement (Dkt. # 149) to their motion for summary judgment to address to plaintiffs’ new theory of product defect. Plaintiffs have filed a response (Dkt. # 158) and defendants have filed a reply (Dkt. # 172), and the motion for summary judgment is fully briefed.

The parties filed numerous motions to limit or exclude expert testimony, and the motions were referred to a magistrate judge for report and recommendation. The magistrate judge held a hearing on the parties' motions and entered reports and recommendations as to the admissibility of expert testimony. Dkt. ## 181, 182, 190, 191, 195, 196. The parties filed objections to the reports and recommendations. The Court entered an opinion and order (Dkt. # 207) limiting the testimony of plaintiffs' experts Bloomfield, Donald Sommer, and Frank Graham, and the Court ordered supplemental briefing as to whether Haider actually prepared his own expert report. The Court entered an opinion and order (Dkt. # 216) excluding Haider's testimony in its entirety due to violations of Fed. R. Civ. P. 26.

## II.

Summary judgment pursuant to Fed. R. Civ. P. 56 is appropriate where there is no genuine dispute as to any material fact and the moving party is entitled to judgment as a matter of law. Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250 (1986); Kendall v. Watkins, 998 F.2d 848, 850 (10th Cir. 1993). The plain language of Rule 56(c) mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial. Celotex, 477 U.S. at 317. "Summary judgment procedure is properly regarded not as a disfavored procedural shortcut, but rather as an integral part of the Federal Rules as a whole, which are designed 'to secure the just, speedy and inexpensive determination of every action.'" Id. at 327.

"When the moving party has carried its burden under Rule 56(c), its opponent must do more than simply show that there is some metaphysical doubt as to the material facts. . . . Where the

record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no ‘genuine issue for trial.’” Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986) (citations omitted). “The mere existence of a scintilla of evidence in support of the plaintiff’s position will be insufficient; there must be evidence on which the [trier of fact] could reasonably find for the plaintiff.” Anderson, 477 U.S. at 252. In essence, the inquiry for the Court is “whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law.” Id. at 250. In its review, the Court construes the record in the light most favorable to the party opposing summary judgment. Garratt v. Walker, 164 F.3d 1249, 1251 (10th Cir. 1998).

### III.

Defendants argue that summary judgment should be entered in their favor on plaintiffs’ claims of negligence and manufacturer’s products liability, because plaintiffs have no evidence showing that any defect in the aircraft caused the accident. Dkt. # 94. Defendants ask the Court to apply Kansas law, because Kansas has the most significant relationship with the parties and the facts giving rise to plaintiffs’ claims. Dkt. # 89. Plaintiffs respond that they have produced evidence that supports an inference that defects in the electrical system, alternate landing gear, and/or AFM instructions caused the airplane to crash, and plaintiffs argue that Oklahoma law applies to their claims. Dkt. # 158.

A.

The Court will initially consider defendants' argument that Kansas law should be applied to plaintiffs' claims. Defendants argue that Oklahoma's choice of law rules require application of Kansas law, because Kansas has the most significant relationship to the parties and the facts giving rise to plaintiffs' claims. Dkt. # 89, at 4-7. Plaintiffs respond that they are residents of Oklahoma and the aircraft was hangared in Oklahoma, and Oklahoma has a strong interest in having its manufacturer's products liability law applied to this case. Dkt. # 110, at 4-6.

A federal court exercising diversity jurisdiction must apply the choice of law rules of the forum state in resolving a choice of law issue. Klaxon Co. v. Stentor Elec. Mfg. Co., 313 U.S. 487, 496 (1941). Oklahoma courts apply the most significant relationship test to determine which state's law is applicable in a tort case, and this test has four factors:

- (1) the place where the injury occurred,
- (2) the place where the conduct causing the injury occurred,
- (3) the domicile, residence, nationality, place of incorporation and place of business of the parties, and
- (4) the place where the relationship, if any, between the parties occurred.

Brickner v. Gooden, 525 P.2d 632 (Okla. 1974). A court deciding a choice of law issue under the most significant relationship test should also "consider the relevant policies and interests each conflicting state law seeks to vindicate." Hambelton v. Canal Ins. Co., 405 F. App'x 335 (10th Cir. Dec. 16, 2010) (citing Beard v. Viene, 826 P.2d 990, 995 n.18 (Okla. 1992)).<sup>1</sup>

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<sup>1</sup> Unpublished decisions are not precedential, but may be cited for their persuasive value. See Fed. R. App. P. 32.1; 10th Cir. R. 32.1.

The parties agree that the place where the injury occurred is fortuitous, because none of the parties is from Indiana and the destination of the flight has no bearing on plaintiffs' claims. Dkt. # 89, at 4; Dkt. # 110, at 4. Defendants argue that the second factor (conduct giving rise to injury) supports the application of Kansas law, because defendants are based in Kansas and the manufacturing and some repair of the aircraft occurred at defendants' facilities in Kansas. The drafting of the AFM also occurred in Kansas. SB 24-3868 was issued in Kansas and any repairs required by SB 24-3868 took place in Kansas. The repairs performed pursuant to SB 24-3868, the AFM, and the design of the alternate landing gear are the basis for plaintiffs' claims, and the facts supporting these claims all occurred in Kansas. As to the third factor (domicile of the parties), the pilot of the aircraft and the passengers were domiciled in Oklahoma, and defendants are incorporated and have their principal places of business in Kansas. The Court will also take into account that the aircraft was hangared in Oklahoma. The parties agree that the fourth Brickner factor (relationship of the parties) has little weight, because the parties had no business or contractual relationship.

The Court has reviewed the four Brickner factors and the factors weigh relatively evenly between the application of Oklahoma and Kansas law. At this time, the Court finds that it is not necessary to resolve the choice of law issue, because the choice of Oklahoma or Kansas law will not affect the Court's ruling on defendants' motion for summary judgment. The Court has compared the manufacturer's products liability and negligence law of Oklahoma and Kansas, and there is no substantial difference between Oklahoma and Kansas law as to the issues raised in the summary judgment briefing. In Kirkland v. General Motors Corp., 521 P.2d 1353 (1974), the Oklahoma Supreme Court determined that Oklahoma would recognize a claim for manufacturer's products liability. A claim of manufacturer's products liability has three elements:

- 1) the product was the cause of the injury;
- 2) the defect existed in the product at the time the product left the manufacturer's possession and control;
- 3) the defect made the product unreasonably dangerous to the plaintiff or the plaintiff's property.

Clark v. Mazda Motor Corp., 68 P.3d 207, 208 (Okla. 2003). To qualify as "unreasonably dangerous," a product "must be dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics." Swift v. Serv. Chem., Inc., 310 P.3d 1227, 1331 (Okla. Civ. App. 2013). The plaintiff has burden to proof that the product defect was the proximate cause of his injuries. Prince v. B.F. Ascher Co., Inc., 90 P.3d 1020, 1027 (Okla. Civ. App. 2004). Proximate cause is defined as "that which in a natural and continuous sequence, unbroken by an independent cause, produces the event and without which the event would not have occurred." Elledge v. Staring, 939 P.2d 1163, 1164 (Okla. Civ. App. 1996). Evidence that a manufacturer complied with federal regulations applicable to the product is admissible, but this evidence is not conclusive proof of that a product is not defective as a matter of Oklahoma law. Edwards v. Basel Pharmaceuticals, 933 P.2d 298, 303 (Okla. 1997).

Kansas also recognizes a claim for manufacturer's products liability. The elements of a manufacturer's products liability claim under Kansas law are: (1) the injury resulted from the condition of the product; (2) the condition was an unreasonably dangerous one; and (3) the condition existed at the time it left the defendant's control. Jenkins v. Amchem Prod., Inc., 886 P.2d 869, 886 (Kan. 1994). The "condition" rendering the product defective may be a manufacturing defect, a warning defect, or a design defect. Id. The defective product must be the proximate cause of the

plaintiff's injury, and "proximate cause" is defined as the "cause which in natural and continuous sequence, unbroken by an efficient intervening cause, produces the injury and without which the injury would not have occurred . . . ." Wilcheck v. Doonan Truck & Equip., Inc., 552 P.2d 938, 942 (Kan. 1976). Under Kansas law, compliance with legislative or regulatory "safety standards" gives rise to a presumption that a product was not defective, but the presumption can be rebutted if the plaintiff can show that a "reasonably prudent seller could and would have taken additional precautions." KAN. STAT. ANN. § 60-3304.

At this time, the Court finds that it is not necessary to resolve the choice of law issue, because the choice of Oklahoma or Kansas law will not affect the Court's ruling on defendants' motion for summary judgment. The causation standard for plaintiffs' claims is essentially the same under Oklahoma or Kansas law, and defendants' motion for summary judgment is based on arguments that plaintiffs cannot establish that a product defect caused their injuries. Defendants' arguments reference FAA regulations, but it is not clear that they are the type of regulations that would qualify as a "safety standard" under Kansas law. The existence of FAA regulations will have no bearing on the Court's ruling on defendants' motion for summary judgment, which depends more upon factual issues, rather than disputed issues of law. Defendants' motion for determination of law is denied for the purposes of this motion only.

## **B.**

Plaintiffs allege that the aircraft was defective due to a loose screw on the pilot's essential bus that caused intermittent electrical supply and voltage spikes that damaged the aircraft's electrical components. Dkt. # 158, at 38-42. Plaintiffs also argue that the instructions in SB 24-3868 for the installation of a repair kit resulted in the disconnection of a service wire from the pilot's essential

bus to the main battery, and the kit instructions are independently a product defect. Id. at 39. Defendants move for summary judgment on the ground that it is undisputed that the loose screw could not have existed at the time the aircraft was manufactured, and plaintiffs' assertion that the aircraft suffered from an intermittent power supply or voltage spikes is purely speculative. Dkt. # 94, at 30-34.

Plaintiffs' electrical expert, Bloomfield, stated in his report that he found a loose screw in the wreckage that connected a service wire to the pilot's essential bus, and he opined that the screw had been loose from the time the aircraft was manufactured. Dkt. # 52-6, at 13, 22. During his deposition, Bloomfield still believed that he had found a loose screw, but he admitted that the service wire would have been removed and re-installed as part of the installation of SB 24-3868. Dkt. # 52-9, at 12-13. According to Bloomfield, the loose screw causes two problems with the electrical systems of the aircraft. First, the loose screw would create an "unreliable electrical power source" and this would cause all electrical systems relying on the pilot's essential bus to experience intermittent failure. Id. at 33. Second, Bloomfield opines that the loose screw would cause "voltage spikes" that result in unreliable performance of the aircraft and that could damage electrical components. Id. at 34-35. Based on Bloomfield's opinions, plaintiffs have offered an "intermittent power theory" that the aircraft experienced a loss of electrical power that manifested itself after Davis shut off the engines and generators, and plaintiffs claim that it was the loose screw, rather than the act of shutting off the electrical generators, that caused a lack of electrical power to the aircraft. Dkt. # 158, at 42. Passenger Evans observed an instrument panel black out and he saw flashing red and yellow lights, and plaintiffs claim that Evans' observations support their theory that the aircraft was experiencing electrical problems. Dkt. # 119-1, at 2; Dkt. # 119-2.



Plaintiffs' "intermittent power theory" has some obvious problems. Plaintiffs' expert, Bloomfield, acknowledges that he erred when he opined that the defect existed at the time the aircraft was manufactured, and this is an essential element of a manufacturer's products liability claim against Beechcraft. K.M. ex rel. v. Steger Lumber Co. of Durant, 296 P.3d 517, 519 (Okla. Civ. App. 2012); Jenkins v. Amchem Prod., Inc., 886 P.2d 869, 886 (Kan. 1994). Plaintiffs do not have a manufacturer's products liability claim against HBGCS, and this means that plaintiffs can rely on their "intermittent power theory" in support of a negligence claim only. Causation is an essential element of a negligence claim against Beechcraft and HBGCS under Oklahoma and Kansas law. Hale v. Brown, 197 P.3d 438, 440 (Kan. 2008) (recognizing that changes in Kansas law have not eliminated proximate cause as an essential element of a negligence claim); Jones v. Mercy Health Ctr., Inc., 155 P.3d 9, 14 (Okla. 2006) (proximate cause is an essential element of a negligence claim under Oklahoma law). Plaintiffs do not argue that the aircraft was experiencing problems from an intermittent electrical supply before Davis shut down the engines and electrical generators, and it is undisputed that Caves was unable to restart an electrical generator. Plaintiffs acknowledge that the generators are the primary source for electrical power on the aircraft, and shutting down the generators caused the aircraft to rely on battery power. Dkt. # 158, at 40. Based on the evidence, there is no dispute that the event triggering the loss of electrical power was Davis shutting down the engines and electrical generators, and there is no evidence of a voltage spike or intermittent power supply before this event. The "intermittent power theory" also depends on the admissibility of Bloomfield's opinions that a loose screw caused intermittent power supply and voltage spikes, because plaintiffs have no other expert evidence that would support such inferences. In a separate opinion and order, the Court found that Bloomfield could testify as to the existence of

a loose screw, but the Court excluded his opinions that the loose screw caused an intermittent power supply or voltage spikes. Dkt. # 207, at 13. Plaintiffs cite a supplemental affidavit from Bloomfield that was submitted with plaintiffs' response to defendants' motion for summary judgment, but the Court has ruled that affidavit inadmissible under Rule 26. Id. at 10-11. Plaintiffs have offered a theory that the electrical problems rendered the aircraft defective, but they have no expert evidence that would be admissible at trial to support their theory.

Plaintiffs cite the deposition testimony of Frie and Evans, and claim that this evidence tends to show that the aircraft had electrical problems that rendered it unreasonably dangerous. Frie testified in his deposition that he flew as a passenger from Tulsa to Memphis, and the aircraft was flying through a heavy thunderstorm. Dkt. # 119-3, at 2. The aircraft experienced electrical issues while it was flying through the storm, and Frie identified different displays or panels that were not functioning during the storm. Dkt. # 94-28, at 2. Defendant has submitted evidence that at least three of the displays identified by Frie did not run on electrical power from the pilot's essential bus, and they argue the loose screw found by Bloomfield could not possibly have caused the electrical problems observed by Frie. Dkt. # 94-29, at 2. Plaintiffs do not dispute defendants' evidence, but they argue that voltage spikes or intermittent electrical supply could have caused aircraft-wide electrical problems. This theory relies on Bloomfield's opinion that voltage spikes or intermittent supply could have occurred because of the loose screw but, as the Court has already noted, Bloomfield's opinions on this issue have been excluded. Evans states that he observed blank display panels and flashing lights after Davis shut down the engines and electrical generators, and he identified a multifunction display that was black. Dkt. # 94-16, at 3. The warning lights that were flashing received electricity from the pilot's essential bus. Dkt. # 94-8, at 8-9. The evidence shows

that the pilot's essential bus continued to supply electrical power to electrical components during the incident described by Frie and before the crash on March 17, 2013. It is undisputed that the aircraft lost electrical power after Davis shut off the engines and electrical generators, but the evidence shows that the loss of electrical power was caused by pilot error and not a loose screw.

The Court finds that plaintiffs have not shown a genuine dispute as to material fact that the aircraft's electrical system was defective or that a loose screw connected to the pilot's essential bus caused any electrical problems that contributed to the accident. Plaintiffs' argument is based primarily on the expert opinions of Bloomfield, but key aspects of testimony have been excluded and may not be used to defeat defendants' motion for summary judgment. Milne v. USA Cycling Inc., 575 F.3d 1120, 1134 (10th Cir. 2009) (inadmissible expert testimony may not be considered in ruling on a motion for summary judgment). The evidence offered by Frie and Evans does not tend to support plaintiffs' theory that the loose screw caused a lack of power to electrical components receiving power from the pilot's essential bus. Even if the Court were to assume that the aircraft had an intermittent power supply, this was not the cause of the crash and this theory could not sustain plaintiff's products liability or negligence claims. Plaintiffs argue that the aircraft could be flown safely with one engine and there is no dispute that Caves was able to navigate the aircraft to the runway of the South Bend airport. Caves could not successfully land the plane because only the nose landing gear had been lowered. Caves was clearly aware of this fact, because he aborted his first landing attempt after being advised by ATC that his main landing gear had not deployed. The lack of electrical power undoubtedly made it more difficult for Caves to fly the aircraft, but alleged electrical defects would not have prevented a landing. Defendants' motion for summary judgment is granted as to plaintiffs' manufacturer's products liability and negligence

claims related to electrical problems allegedly caused by a loose screw connected to the pilot's essential bus.

### C.

Plaintiffs allege that the alternate landing gear was defective, because the pull force necessary to deploy the landing gear using the alternate landing gear handle was excessive and the design did not allow the pilot to know if the landing gear was locked into place. Plaintiffs' response to defendants' motion for summary judgment makes four separate arguments concerning the alternate landing gear: (1) a pilot could not know when the landing gear was locked without electrical power; (2) debris in the landing gear bay could have added to the pull force needed to pull the alternate landing gear handle; (3) the alternate landing gear handle does not tell the pilot how far to pull the handle; and (4) alternate designs of the alternate landing gear system could have been used. Dkt. # 158, at 43-45. Defendants move for summary judgment on the ground that the alternate landing gear was tested before the aircraft was placed in the stream of commerce, and the pull force needed to deploy the landing gear was well within the maximum pull force noted in the Maintenance Manual. Dkt. # 94, at 35-36. Defendants also argue that plaintiffs have no evidence that there was debris in the landing gear bay and, even if the pull force needed to deploy the alternate landing gear exceed 64 pounds, this is not by itself evidence of a product defect. Id. at 36-39.

The landing gear of the Premier 390 aircraft consists of a nose landing gear and two main landing gear in the rear of the aircraft. The landing gear are ordinarily lowered by a hydraulic system. Dkt. # 94-8, at 4-5. The subject aircraft has an alternate landing gear system to deploy the

landing gear in the event of emergency or abnormal flight conditions.<sup>2</sup> Id. To use the alternate landing gear, the pilot must pull a red, T-shaped handle marked “PULL,” which is located under the pilot’s yoke. Dkt. # 94-5, at 3. The AFM includes a checklist for using the alternate landing gear. The pilot is required to place the main landing gear handle in the down position, pull the circuit breaker, and pull the alternate landing gear handle. In the accident wreckage, it was found that the main landing gear handle was in the up position and the circuit breaker had not been pulled. Dkt. # 94-6, at 8; Dkt. # 94-33, at 26. The NTSB found that the alternate landing gear handle had been pulled out about an inch and a half, but the handle needed to be pulled out four inches to lock the landing gear into place. Dkt. # 94-33, at 25, 27. Beechcraft testing standards at the time of production required that the maximum pull force necessary to use the alternate landing gear handle be less than 60 pounds, and the subject aircraft met this standard with a pull force of 53.7 pounds. Dkt. # 94-34, at 10; Dkt. # 94-35. On March 17, 2013, Caves lost electrical power after Davis shut down the engines and electrical generators, and Caves attempted to lower the landing gear using the alternate landing gear handle. However, Caves did not pull the handle out far enough and he lowered only the nose landing gear. Caves became aware of this fact before the aircraft touched on the runway, because ATC advised Caves that the main landing gear was not down and Caves pulled up. Dkt. # 94-6, at 3. Caves made a second landing approach but he still had not deployed the main landing gear of the aircraft. Id. Plaintiffs’ expert Sommer conducted testing on three exemplar aircraft, and he reports that it took from 100 to 120 pounds of pull force to fully deploy the landing

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<sup>2</sup> The Court notes that the hydraulic landing gear system will function for a limited time if the aircraft is powered by the main battery, but the parties dispute whether Caves moved the battery switch into “STANDBY” position at some point before the crash. See Dkt. # 94-10, at 8-9. Caves attempted to use the alternate landing gear mechanism, but it is possible that he could have lowered the landing gear using the landing gear switch.

gear using the alternate landing gear handle. Dkt. # 57-6, at 31-32. Sommer's report also states that he was able to lock the landing gear on each exemplar aircraft using the alternate landing gear handle. Id.

Similar to plaintiffs' argument concerning the loose screw, there is undisputed evidence that the alleged manufacturing defect did not exist when the aircraft left the control of the manufacturer and, thus, plaintiffs cannot proceed with their manufacturer's products liability claim against Beechcraft based on an alleged manufacturing defect in the landing gear. The aircraft was subjected to testing by Beechcraft before it was sold and the pull force needed to pull the alternate landing gear handle was measured, and the maximum pull force was 53.7 pounds. Dkt. # 94-35. This is well within the maximum pull force of 60 contained in the manufacturer's specifications. Although plaintiffs cannot establish a manufacturing defect, the Court will consider whether the evidence could support a manufacturer's products liability claim against Beechcraft based on a design defect. Plaintiffs argue that debris could have accumulated in the landing gear bay and this could have added to the pull force needed to pull the alternate landing gear handle. Dkt. # 158, at 44. This could be an argument that the aircraft was defectively designed if plaintiff can produce evidence tending to show that the design of the landing gear bay was defective. Bloomfield opined in his expert report that debris could have accumulated in the landing gear bay after the aircraft left the manufacturer's control, and the pull force needed to pull the alternate landing gear handle could have increased over time due to the defective design of the landing gear bay. Dkt. # 52-6, at 49-50. However, the Court excluded Bloomfield's testimony as to debris in the landing gear bay because Bloomfield had no experience with aircraft design and he did not examine the wreckage to determine if there was actually debris in the landing gear bay. Dkt. # 207, at 14. Bloomfield's

opinions will not be considered in ruling on defendants' motion for summary judgment. Plaintiffs have no other evidence tending to show that there actually was debris in the landing gear bay of the subject aircraft or the exemplar aircraft. The Court does not find that the possibility that debris could have accumulated in the landing gear bay tends to show that the alternate landing gear was defectively designed, because plaintiffs have no evidence showing that this actually occurred or was even likely to occur.

Plaintiffs argue that the alternate landing gear handle could have been designed in a manner to inform the pilot how far to pull out the handle or that the AFM could have stated how far to pull out the handle. This argument is supported by the opinions of Bloomfield and Sommer. Dkt. # 52-6, at 49; Dkt. # 158, at 35; Dkt. # 158-21, at 2-3. The Court found that neither Bloomfield nor Sommer had the relevant experience in designing alternate landing gear or drafting a flight manual, and their testimony on these issues was excluded. Dkt. # 207, at 14-15, 21. Even if plaintiffs had admissible expert testimony, plaintiffs' argument that a pilot could not have known if the alternate landing gear handle had been pulled out far enough to lock the landing gear into place could be relevant in some cases, but it does not support an argument that subject aircraft was defective in this case. The evidence is undisputed that Caves was advised by ATC on his initial landing attempt that the aircraft's nose landing gear was down but his main landing gear had not deployed. Dkt. # 94-6, at 3. Caves aborted the landing attempt and pulled up, and he made a second landing attempt due to the fact that his main landing gear was not down. The landing gear was in the same position during the second landing attempt. Plaintiffs argue that this supports an inference that Caves believed the landing gear was fully locked before his second landing attempt, because they claim that he would not have attempted to land without believing that the landing gear were down. Dkt.

# 158, at 35. There is no evidence to support the inference suggested by plaintiffs, and they would simply be asking a jury to speculate that Caves had such a belief. Plaintiffs have the burden of proof to establish causation, and they must have at least some evidence tending to show that there is a dispute as to whether Caves made another attempt to pull out the alternate landing gear handle before his second landing attempt. It is just as likely that Caves did nothing with the alternate landing gear handle before his second landing attempt, and a jury would not be permitted to speculate as to what actions Caves took.<sup>3</sup> Plaintiffs' argument that a pilot would not have known the landing gear were down is irrelevant, because the evidence shows that Caves had actual knowledge of this fact and there is no evidence tending to support an inference that Caves took any action to remedy the problem.

Plaintiffs have alleged negligence claims against Beechcraft and HBGCS, and they argue that defendants were negligent in manufacturing an aircraft that required an excessive pull force to deploy the landing gear using the alternate landing gear handle. Dkt. # 158, at 32-33, 44. This argument is based on testing of exemplar aircraft. The Maintenance Manual states that the maximum pull force needed to pull the alternate landing gear handle for an aircraft in use should not exceed 64 pounds. Dkt. # 94-21. Plaintiffs argue that testing of exemplar aircraft showed that anywhere from 100 to 120 pounds of pull force was necessary to pull the alternate landing gear handle and lock the landing gear into place, and the Court has not excluded expert opinions concerning the testing. Dkt. # 207, at 22-23. However, the mere fact that the pull force in plaintiffs'

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<sup>3</sup> The fact that Caves attempted to land after aborting his first landing attempt by itself does not show that Caves believed the landing gear were locked into place. Due to his and Davis' actions, the aircraft was operating with few electronics and only one engine, and he had little choice but to attempt to land a second time.



experts' test results exceeded 64 pounds does not by itself show that the aircraft was defective or that excessive pull force caused the landing gear not to deploy. Bloomfield and Sommer opine the pull force required to pull the alternate landing gear handle is excessive because the pull force found in their testing exceeds the manufacturer's recommendations. Dkt. # 52-6, at 46; Dkt. # 117-9. Plaintiffs have offered no evidence comparing the maximum pull force stated in the maintenance manual for the Premier 390 to other types of aircraft, nor have plaintiffs provided a frame of reference for how difficult it is use the alternate landing gear handle if the pull force exceeds 64 pounds. It is undisputed that plaintiffs' experts were able to pull out the alternate landing gear handle and lock the landing gear into place on each exemplar aircraft and that Beechcraft had received no complaints or reports of problems using the alternate landing gear. The Court also notes that there is no evidence that Caves received any training concerning the use of the alternate landing gear. Sommer opines that pilots are trained in simulators, and the resistance in pulling the alternate landing gear handle in a simulator is less than for a real aircraft. Dkt. # 117-9, at 29. Caves was not trained in a simulator and he conducted all of his training in his own aircraft, and it is undisputed that he would not have attempted to pull out the alternate landing gear handle as part of his training. Dkt. # 71, at 6-7 (plaintiffs' motion in limine to preclude arguments concerning the method of Caves' training). In other words, Caves did not practice using the alternate landing gear, even in a simulator, as part of his pilot training. The Court finds that plaintiffs' evidence concerning the pull force needed to use the alternate landing gear does not independently give rise to genuine dispute that the allegedly excessive pull force caused the accident.

The Court finds that plaintiffs have not met their burden to produce evidence showing that there is a genuine dispute that the alternate landing gear mechanism was defective due to a

manufacturing or design defect. The alternate landing gear handle was tested before the aircraft left Beechcraft's control and the pull force was found to meet the manufacturer's specifications. Plaintiffs have no admissible evidence establishing that the alternate landing gear was defectively designed. Plaintiffs have offered evidence that the pull force needed to deploy the alternate landing gear in exemplar aircraft may have exceeded the manufacturer's specifications but, by itself, this does not show the alternate landing gear mechanism is defective. In addition, the evidence does not show that any problem with the manufacture or design of the alternate landing gear mechanism was the proximate cause of the accident. Defendants' motion for summary judgment should be granted as to plaintiffs' manufacturer's liability and negligence claims concerning the manufacture and design of the alternate landing gear mechanism.

**D.**

Plaintiffs argue that the procedure in the AFM for restarting the electrical generators is incorrect, and Caves could not have restarted the electrical generators using that procedure. Dkt. # 158, at 46. Plaintiffs rely on the expert opinions of Haider to support their argument that Caves should have followed the Air Start checklist to restart the electrical generators, but they claim there is evidence of testing from an exemplar aircraft that this procedure would not have worked. *Id.* at 47.

After Davis shut off both engines and electrical generators, Caves was able to restart the left engine but he could not restart either electrical generator, and plaintiffs claim that Caves was unable to restart an electrical generator due to defective instructions in the AFM.<sup>4</sup> Plaintiffs argue that

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<sup>4</sup> It is undisputed that Caves was able to restart an engine, and plaintiffs' claim concerning defects in the AFM concern only the instructions for restarting an electrical generator.

Caves needed to follow the Air Start checklist to restart the generators, because there was not time to follow any other procedure. Dkt. # 158, at 36. This claim is based on the expert opinions of Haider. Haider has submitted an affidavit stating that the correct checklist was the Air Start checklist, and he disagrees with defendants' expert, Robert Gibson, that the dual engine shutdown checklist should have been followed.<sup>5</sup> Dkt. # 94-11, at 14; Dkt. # 118-3, at 2. However, Haider claims that the Air Start checklist was defective and that Caves could not have restarted a generator by following the Air Start checklist. Dkt. # 118-3, at 2. Haider states that the Air Start checklist directs the pilot to cycle the generator switch from "RESET" to "ON," but that testing has shown that it is necessary to cycle the generator switch "OFF/ON/RESET/ON." Dkt. # 118-3, at 2. Haider testified in his deposition that there were instances when he had flown a Premier 390 aircraft and moving the generator switch from "RESET" to "ON" did not restart the generator. Dkt. # 149-2, at 3. Haider was always able to restart the generator by cycling the generator switch. *Id.* During testing of an exemplar aircraft by defendants, there was one instance in which a generator did not restart when the generator switch was moved from "RESET" to "ON," and the generator started after it was moved "OFF/RESET/ON." Dkt. # 93-5. Gibson prepared an expert report in which he opined that Caves "failed to perform the POST START procedure of the AIR START procedure which would have reset the generator of the operating engine and would have restored normal electrical power to the aircraft." Dkt. # 44-8, at 9. The Post Start checklist is used after a pilot has successfully restarted an engine and Gibson states that the Post Start checklist would have restarted the generator for the operating engine. *Id.* at 6. Defendants also point out that various checklists

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<sup>5</sup> Gibson's report does not actually reference the dual engine shutdown checklist, and he opines that Caves did not follow the Abnormal Air Start procedure. Dkt. # 44-8, at 4.

for abnormal occurrences such as generator and/or engine failure require that the generator switch be placed in the “OFF” position before performing the “RESET/ON” toggle to restart the generator, and Caves would have necessarily had to move the generator switch to the “OFF” position. Dkt. # 94-10, at 5-7.

Plaintiffs’ argument concerning alleged deficiencies with the instructions in the AFM for restarting an electrical generator is based primarily on Haider’s expert opinions, but Haider’s proposed expert testimony has been excluded in its entirety. The Court will evaluate the remaining evidence to determine whether there is a genuine dispute of material fact that a defect in the instructions in the AFM for restarting a generator could have been the proximate cause of the accident. There is evidence that simply moving the generator switch from “RESET” to “ON” will not always be sufficient to restart an electrical generator. Dkt. # 93-5. However, this does not automatically mean that all Premier 390 aircraft are defective, and plaintiffs have provided no evidence supporting an inference that this is a fleet-wide problem. Gibson opines that the Air Start checklist challenged by plaintiffs was correct and, based on his experience, moving the generator switch from “RESET” to “ON” would have restarted a generator after Caves restarted an engine. Dkt. # 44-8, at 5-6; Dkt. # 149-2, at 2. Plaintiffs conducted testing on at least three exemplar aircraft as to the alternate landing gear and they could have tested the procedure for restarting an electrical generator following the shutdown of an engine, but they have not offered any evidence they performed any testing as to the procedure for restarting a generator. Without Haider’s expert opinions, plaintiffs do not have any evidence that the AFM instructions for restarting a generator were defective on a fleet-wide basis. In other words, the Court does not need to reach the parties’ dispute concerning which checklist Caves should have followed, because plaintiffs have not met

their burden to come forward with any admissible evidence that the Air Start checklist in the AFM contained incorrect instructions for restarting an electrical generator following the shutdown of the engines during a flight. This alone is a sufficient basis to grant defendants' motion for summary judgment as to plaintiffs' manufacturer's products liability and negligence claims fail on this basis alone.

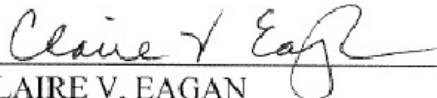
Even if the Court were to consider the parties' dispute concerning the applicable checklist, the Court would not find that there is a genuine dispute as to a material fact regarding which checklist Caves should have followed. Haider's opinions have been excluded and the primary evidence remaining is Gibson's expert report, in which he opines that Caves failed to perform a necessary step of Post Start portion of the Abnormal Air Start checklist. Gibson states that Caves should have followed the Post Start portion of the Abnormal Air Start procedure after restarting one engine, and he opines that correctly following this procedure would have restarted an electrical generator. Dkt. # 44-8, at 6, 9. After carefully reviewing the parties' arguments, it appears that the parties' dispute is more about whether Caves correctly followed the procedures for restarting a generator under the Air Start or Abnormal Air Start checklists, rather than a dispute over which was the correct checklist. The checklists cited by the parties require that the pilot move the generator switch from "RESET" to "ON," and Gibson opines that Caves must not have performed this step or a generator would have been restarted. *Id.* at 5-6 (Gibson's report setting out the checklist procedures); Dkt. # 94-10, at 14 (procedure cited by plaintiffs). Plaintiffs claim that this procedure would not have successfully restarted a generator, but the Court has already concluded that plaintiffs have not produced admissible evidence in support of this theory. Defendants have produced admissible expert testimony that Caves did not correctly follow the checklist procedures to restart

an electrical generator, and Gibson's opinions are not called into question by the video evidence cited by plaintiff. The Court finds that the parties' dispute over which checklist Caves should have followed is a collateral issue that does not need to be resolved, because there is undisputed evidence in the form of Gibson's expert opinions that Caves did not actually move the generator switch from "RESET" to "ON" as required by the checklists cited by both parties. Plaintiffs have not shown that the aircraft was defective due to flawed instructions in the AFM for restarting a generator, and they cannot prevail on a manufacturer's products liability claim against Beechcraft. This also means that plaintiffs cannot rely on this alleged defect to show that Beechcraft or HBCGS were negligent, because they cannot establish that erroneous instructions in the AFM were the proximate cause of plaintiffs' injuries. Plaintiffs have no remaining theories of product defect or negligence against defendants, and the Court finds that defendants' motion for summary judgment should be granted in its entirety.

**IT IS THEREFORE ORDERED** that Defendants' Motion for Summary Judgment and Supporting Memorandum (Dkt. # 94) is **granted**. A separate judgment is entered herewith.

**IT IS FURTHER ORDERED** that Defendants' Motion for Determination of Law (Dkt. # 89) is **denied**.

**DATED** this 29th day of March, 2017.

  
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CLAIRE V. EAGAN  
UNITED STATES DISTRICT JUDGE