UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT

No. 14-3834

JOSEPH N. TURTURRO, ADMINISTRATOR OF THE ESTATE OF ADAM B. BRADDOCK, DECEASED; CHARLES ANGELINA, INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE OF THE ESTATE OF CHARLES ANTHONY ANGELINA, DECEASED; VIRGINIA ANGELINA, INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE OF THE ESTATE OF CHARLES ANTHONY ANGELINA, DECEASED,

Appellants

v.

UNITED STATES OF AMERICA, FEDERAL AVIATION ADMINISTRATION; AGUSTA AEROSPACE CORPORATION

On Appeal from the United States District Court for the Eastern District of Pennsylvania (D.C. Civ. No. 2-10-cv-02460) Honorable R. Barclay Surrick, District Judge

Submitted under Third Circuit LAR 34.1(a) October 6, 2015

BEFORE: SHWARTZ, KRAUSE, and GREENBERG, Circuit Judges

(Filed: October 9, 2015)

OPINION*

GREENBERG, Circuit Judge.

I. INTRODUCTION

These consolidated cases arise out of a tragic airplane crash at Northeast Philadelphia ("the airport") Airport that resulted in the death of flight student Charles Angelina and his instructor Adam Braddock. The crash occurred when Angelina's and Braddock's Grumman AA-1C airplane (the "Grumman") stalled while making a right turn during departure. Decedents' estates brought suit for negligence against both the United States of America as air traffic controller ("ATC") and Agusta Aerospace Corporation ("Agusta"), which owned an Agusta 139 helicopter that was departing from the airport at the same time as the Grumman. Plaintiffs claim that ATC breached its duty of care by clearing the Agusta helicopter for a westerly departure in the direction of the Grumman's operation and then suddenly and urgently instructing the Grumman to turn right, placing it on a potentially conflicting path with the Agusta; they claim that the Agusta pilots breached their duties of care by making the westerly departure and inadequately communicating their intentions. Although the Grumman and the Agusta did not come close to colliding, plaintiffs claim that defendants' conduct caused Angelina to

*This disposition is not an opinion of the full court and pursuant to I.O.P. 5.7 does not constitute binding precedent.

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experience an involuntary startle reaction when he saw the Agusta, leading him to lose control of the Grumman. Defendants each moved for summary judgment, and the District Court granted the motions on August 22, 2014. Because plaintiffs did not produce sufficient evidence that the Agusta pilots breached any duty of care or that Angelina actually experienced the alleged startle reaction, we conclude that plaintiffs, now appellants, cannot support their claims against either defendant and therefore we will affirm the order for summary judgment.

II. FACTUAL AND PROCEDURAL BACKGROUND

The crash occurred at approximately 11:58:05 A.M. on May 22, 2008, at the airport. The airport houses several flight training schools and has two intersecting runways: Runway 33 which runs to the northwest at 330 degrees, and Runway 24 which runs to the southwest at 240 degrees. Agusta's facility and the Federal Aviation Administration ("FAA") Air Traffic Control Tower are both located around midfield, to the east of the intersection of the two runways.

The Grumman AA-1C is a small, two-seat airplane, and the Agusta 139 is a much larger, fifteen-seat helicopter. Angelina was operating the Grumman from the left seat, while Braddock was in the right seat. They were practicing touch-and-go takeoffs and landings on Runway 33. At that time Agusta company pilot Steven Farr and his customer trainee pilot Alan Baldwin were in the Agusta, preparing to depart on a training flight to Lancaster, Pennsylvania, to the west of the airport.

Local controller Jennifer Richburg at the airport took over responsibility for active runways about five minutes before the crash, at 11:53:04 A.M., facing a "light to moderate" air traffic load. J.A. 798. She almost immediately began having trouble. The Air Traffic Control Manual ("ATCM") provides that when communicating with aircraft, ATC should use an identification prefix such as the aircraft's type, model, or manufacturer's name, followed by the last three digits or letters of the aircraft's registration number. ATCM §§ 2-4-9.a., 2-4-20.a.1. J.A. 814-15. For example, the Grumman, which had registration number N9555U, would be referred to as "Grumman 55U." Plaintiffs' ATC expert, Richard P. Burgess, explained that the purpose of these ATCM provisions "is to avoid confusion caused by just using only numbers and also to identify the type aircraft for other traffic in the pattern or airport traffic area." J.A. 973. Throughout the period leading up to the crash, however, Richburg referred to aircraft based on identification prefix or its registration number.

There was an additional problem because Richburg gave instructions to the wrong aircraft and then misidentified another aircraft. First, after the Grumman pilots requested a left downwind touch-and-go, she directed, "55U altitude and speed permitting make right traffic runway 33." J.A. 1441. After the Grumman pilots pointed out the error in this instruction, Richburg corrected herself: "55U disregard that call[;] correction 76M make right traffic runway 33." J.A. 1441. Richburg made a further error because she incorrectly identified an aircraft called a Caravan as a Cheyenne, a different aircraft.

At 11:56:06 A.M., the Agusta pilots requested a "westerly departure." J.A. 1443. The wind at the time was blowing at eight knots from a northwest direction of 330

degrees, a significant fact because aircraft should take off into the wind. Indeed, one of the plaintiffs' experts, Vernon Albert, testified that "aircraft are supposed to take off and land into the wind," J.A. 1685, and that "as far as wind direction, [the Agusta pilots' requested takeoff] was probably appropriate." J.A. at 1687. After the Agusta pilots requested the westerly departure, Richburg momentarily held them due to the Grumman's intended departure on Runway 33 and asked the Agusta pilots if they had "that Grumman" in sight. J.A. 1444. When the Agusta pilots confirmed that they did, Richburg informed them that "that Grumman will be in a left downwind departure" and cleared the Agusta to "proceed on course" with its departure. J.A. 1444.

The Agusta took off and began moving to the northwest while the Grumman began its climb for its "left downwind departure" on Runway 33. Suddenly, Richburg directed, "55U make right traffic." J.A. 1444. Unlike in an earlier instruction, she did not use the phrase "altitude and speed permitting" at this time. Burgess testified that the timing of the instruction and the sound of Richburg's voice conveyed a sense of urgency. J.A. 1029-30. As a result, Angelina immediately commenced a right-hand turn, a move that surprised the Agusta pilots as they had not heard Richburg change her directions to the Grumman. Albert noted that this missed transmission by the Agusta pilots may have indicated that they were not aware of the situation, although he acknowledged that a single missed call generally does not reflect such a loss of situational awareness. Another of plaintiffs' experts, Carlos Diaz, a medical doctor, testified that a pilot reasonably might not hear a communication between ATC and another aircraft due to other factors requiring the pilot's attention, including operation of the pilot's own aircraft as well as

the pilot's own communications with ATC. Burgess added that other pilots could have missed this particular transmission because by referring to "55U" without using the prefix "Grumman," "it's questionable . . . whether the other pilots would know exactly what airplane [Richburg was] talking about." J.A. 1029.

Upon seeing the Grumman begin its right-hand turn, Baldwin uttered "what the F," J.A. 1385, and the Agusta pilots immediately executed a maneuver called a "quick stop" to prevent the two aircraft from "converging on each other" if they each continued on their respective paths. J.A. 745, 838. The Grumman, however, banked too far to the right, stalled, and crashed into the ground, killing both Angelina and Braddock.

At the time of the accident, Agusta and the airport were developing a Letter of Agreement ("LOA") to facilitate Agusta helicopter departures to the east and south, away from the two active runways. The LOA provided that Agusta pilots would request such departures "[u]nless otherwise coordinated" by the pilot and ATC. J.A. 1367. Although the LOA was not yet in effect at the time of the crash, on request Agusta helicopters at that time could utilize similar eastern and southern routes. Furthermore, the helicopters could turn and depart in such directions even if the wind required them to take off to the north or west.

Different witnesses offered different meanings of the Agusta pilots' request for a "westerly" departure, ranging from within five degrees of due west (270 degrees) to anywhere up to due north (360 degrees). Plaintiffs' ATC experts opined, however, that the Agusta's northwest departure complied with the clearance that it received: Burgess testified that from an ATC perspective, the Agusta pilots did nothing wrong based on

"the clearance that they received and how they responded," J.A. 1700, and another plaintiffs' expert, Joseph Gramlich, testified: "Based on an air traffic control perspective, no, I did not see anything wrong from the Agusta pilots." J.A. 471. Plaintiffs' accident reconstruction expert, Douglas Stimpson, likewise testified that the Agusta pilots' northwest departure was "within their ATC instructions." J.A. 446. Finally, plaintiffs' pilot expert, John L. Suchocki, testified that the Agusta pilots complied with their duties under the Federal Aviation Regulations ("FARs") and that they did not do anything wrong on the day of the accident. J.A. 455. In addition, Richburg testified that she saw no problem with the Agusta pilots' request for a westerly departure or their taking off to the northwest after receiving clearance.

When Baldwin took off he intended to turn the Agusta even further to the right and fly parallel with Runway 33 to give the Grumman space for its touch and go on Runway 33. Plaintiffs' pilot and accident reconstruction expert, Donald E. Sommer, noted in his report that the Grumman pilots "would have been aware that a westerly departure from the location of the Agusta could well have included an initial turn to the north around the departure end of runway 33," consistent with normal operations at the airport. J.A. 1510. Baldwin ultimately did not make the additional turn north as the crash occurred before the Agusta was "near close enough to get going." J.A. 1387.

Sommer estimated that the Agusta was 2,678 feet from the Grumman when Richburg gave the direction to "make right traffic" and 2,627 feet from the Grumman when it stalled. J.A. 1747. Based on Sommer's reconstruction, the Agusta had not yet reached Runway 24. Although he testified that the Agusta could have collided with the

Grumman if the two aircraft had continued on their paths, Sommer conceded that "there [was] no collision hazard with the Grumman" provided the Agusta stopped, which it did.

J.A. 1744. Albert opined that the Agusta was closer to 1,000 feet from the Grumman based on the ability of the Agusta pilots to describe the angles at which the Grumman banked, but he later acknowledged that he might have been underestimating the distance and would acquiesce to the Agusta pilots on that point. Furthermore, Albert testified that even a distance of 1,000 feet between the aircraft would not have created an emergency.

Nevertheless, plaintiffs contend that the cause of the crash was Angelina's involuntary startle reaction when he saw the Agusta. They contend that this reaction caused him to pull back on the yoke and stall the aircraft. Plaintiffs relied on expert testimony from Diaz, who described the "startle response" as an unreasoned, involuntary brainstem reflex that often results in a "jerking, rapid movement of the voluntary muscles, such as rapid flexion of the arms or clenching of the hands." J.A. 1117. Diaz explained that any stimulus perceived as a threat, no matter how small or unlikely the threat may seem upon conscious reflection, may cause a startle response which is an unreasoned reflex. J.A. 1144. Diaz ultimately opined that the Grumman stalled because Angelina experienced a startle reaction. Nevertheless, he acknowledged that pilot error could have caused the stall. J.A. 1145.

Plaintiffs filed suit in the District Court asserting claims of negligence against the United States under the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b), 2671-80 ("FTCA"), based on federal employees' performance as ATC and against Agusta under Pennsylvania law based on the Agusta pilots' operation of the helicopter. They also

claimed that the Agusta pilots' operation of the helicopter breached a provision of Agusta's lease agreement with the City of Philadelphia requiring it to "observe and comply with all requirements of the constituted public authorities and with all federal, state, or local statutes, ordinances, regulations and standards applicable to [Agusta] or its use of the Premises," including the FARs. <u>See J.A. 1638.</u>¹

Defendants each moved for summary judgment, which the District Court granted on August 22, 2014, in an exceptionally detailed and thoughtful opinion. <u>Turturro v. United States</u>, 43 F. Supp. 3d 434 (E.D. Pa. 2014). The Court reasoned in part that plaintiffs could not show that the Agusta pilots breached any duty of care and that, even if ATC did commit a breach of a duty of care, plaintiffs' startle theory of causation rested on insufficient speculation to support a cause of action. <u>See id.</u> at 452, 458-59. Plaintiffs appealed to this Court.

III. STATEMENT OF JURISDICTION AND STANDARD OF REVIEW

The District Court had jurisdiction over plaintiffs' FTCA claims against the United States pursuant to 28 U.S.C. § 1346(b)(1). It had supplemental jurisdiction over their state law claims against Agusta pursuant to 28 U.S.C. § 1367. We have appellate jurisdiction pursuant to 28 U.S.C. § 1291.

We exercise plenary review over a district court's grant of summary judgment, employing the same standard that applied in the district court. <u>Blunt v. Lower Merion</u>

¹ Plaintiffs also brought a claim against the United States based on spoliation of evidence, obstruction of justice, and violation of due process of law. The District Court rejected this claim and plaintiffs do not challenge that ruling on this appeal.

Sch. Dist., 767 F.3d 247, 265 (3d Cir. 2014), cert. denied, 135 S.Ct. 1738 (2015). Under this standard, "[t]he court shall grant summary judgment if the movant shows that 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). There is a genuine dispute if the evidence is sufficient for a reasonable factfinder to return a verdict for the nonmoving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248, 106 S.Ct. 2505, 2510 (1986). If, however, the moving party can demonstrate that its opponent has "fail[ed] 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," then the court should award the moving party summary judgment. Celotex Corp. v. Catrett, 477 U.S. 317, 322, 106 S.Ct. 2548, 2552 (1986). In addressing this question a court must view the evidence and all reasonable inferences that can be drawn from the evidence in the light most favorable to the nonmoving party. Reedy v. Evanson, 615 F.3d 197, 210 (3d Cir. 2010). But a mere "scintilla of evidence" in the nonmovant's favor does not create a genuine issue of fact. Anderson, 477 U.S. at 252, 106 S.Ct. at 2512. Nor may the nonmovant rest on speculation or conjecture. Jackson v. Danberg, 594 F.3d 210, 226-28 (3d Cir. 2010).

IV. DISCUSSION

Plaintiffs assert claims of negligence against both ATC and Agusta. The FTCA holds the United States liable in tort for damages "caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person,

would be liable to the claimant in accordance with the law of the place where the act or omission occurred." 28 U.S.C. § 1346(b)(1). Inasmuch as all the events in this case transpired in Pennsylvania, to the extent that this case implicates state law we are applying Pennsylvania law.

"In Pennsylvania, the general rules of negligence apply to negligence actions involving airplane crashes." Remo v. U.S. F.A.A., 852 F. Supp. 357, 365 (E.D. Pa. 1994); see Himmler v. United States, 474 F. Supp. 914, 929 (E.D. Pa. 1979). To establish negligence under Pennsylvania law, a plaintiff must show that "(1) the defendant had a duty to conform to a certain standard of conduct; (2) the defendant breached that duty; (3) such breach caused the injury in question; and (4) the plaintiff incurred actual loss or damage." Pyeritz v. Commonwealth, 32 A.3d 687, 692 (Pa. 2011). In aviation accident cases, federal law preempts state law on the first of these elements, as federal law provides the standard of care applicable to air safety. Abdullah v. Am. Airlines, Inc., 181 F.3d 363, 367-68 (3d Cir. 1999). But state law governs with respect to the other elements of breach, causation, and damages to establish a negligence claim. See Elassaad v. Indep. Air, Inc., 613 F.3d 119, 125 (3d Cir. 2010).

Plaintiffs have no trouble establishing the first and fourth elements needed to establish a cause of action for negligence: the existence of a duty to conform to a standard of care and their ultimate damages. Pilots and air traffic controllers owe concurrent duties of care over aircraft safety. Rodriquez v. United States, 823 F.2d 735, 746 (3d Cir. 1987); Redhead v. United States, 686 F.2d 178, 182 (3d Cir. 1982). Thus, the dispute focuses on the second and third elements of a negligence claim: whether defendants

breached their duties of care and, if so, whether the breach was the but-for and proximate cause of plaintiffs' damages. A plaintiff carries the burden of proof on each of these elements. Rice v. Shuman, 519 A.2d 391, 395 (Pa. 1986). Although the issues of breach and causation ordinarily present questions of fact, a court may decide them as a matter of law where reasonable minds could not differ as to their resolution. Summers v. Certainteed Corp., 997 A.2d 1152, 1163 (Pa. 2010) (citation omitted); Emerich v. Phila. Ctr. for Human Dev., Inc., 720 A.2d 1032, 1044 (Pa. 1998).

We address plaintiffs' claims against Agusta and ATC in turn. We agree with the District Court, that the Agusta pilots did not breach their duties and that even if ATC breached its duties, such breach did not proximately cause plaintiffs' damages.

A. Claim Against Agusta

Aircraft pilots must comply with the duties set forth in the FARs, which have "the force and effect of law." Rodriquez, 823 F.2d at 739. Plaintiffs primarily assert that the Agusta pilots breached their duties under two FAR provisions: 14 C.F.R. §§ 91.13(a) and 91.111(a). Section 91.13(a) provides generally that "[n]o person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another." 14 C.F.R. § 91.13(a); accord Abdullah, 181 F.3d at 365 (describing this provision as creating "an overarching general standard of care"). Section 91.111(a) provides that "[n]o person may operate an aircraft so close to another aircraft as to create a collision hazard." 14 C.F.R. § 91.111(a). Plaintiffs also assert that the Agusta pilots violated parts of the Aeronautical Information Manual ("AIM") and other FAA publications. The FARs

require pilots to know and use relevant portions of the AIM and FAA advisory circulars. 14 C.F.R. § 61.105(b)(3); see Rodriquez, 823 F.2d at 739.

In arguing that the Agusta pilots breached their safety duties, plaintiffs point to three categories of conduct: (1) the Agusta pilots' request for a "westerly" departure, in the direction of two active runways; (2) their failure to clarify that they planned to go further to the northwest; and (3) their failure to hear Richburg's direction to the Grumman to "make right traffic." We address each of these acts or omissions below and conclude that, whether considered individually or collectively, they cannot support a finding that Agusta breached its duties.

First, plaintiffs contend that the Agusta pilots should have requested a departure to the east or south, which would have directed them away from the active runways and the flow of fixed-wing traffic. Although the LOA had not yet been implemented at the time of the crash, plaintiffs emphasize that Agusta helicopters already could seek departures to the east and south. Plaintiffs, however, have not provided adequate evidence to show that the Agusta pilots breached their duties by not requesting such a departure.

The undisputed evidence establishes that the Agusta pilots acted properly in seeking to take off to the west. At the time of takeoff, the wind was blowing from the northwest at a speed of eight knots, and the record demonstrates that helicopters should take off into the wind. Section 9-5 of the FAA Rotorcraft Flying Handbook directs pilots on takeoff to "head the helicopter into the wind, if possible." J.A. 1750. Several witnesses echoed this sentiment. Indeed, plaintiffs' expert Albert testified that "aircraft

are supposed to take off and land into the wind," J.A. 1685, and that "as far as wind direction, [the Agusta pilots' requested takeoff] was probably appropriate." J.A. at 1687.

Plaintiffs concede the foregoing but argue that after taking off to the west, the Agusta pilots should have turned the helicopter in a different direction. Although plaintiffs presented evidence that the Agusta pilots could have executed such a maneuver, they have not shown that the pilots were required to do so in the circumstances here. Plaintiffs point to language in AIM § 4-3-17.a.2. that "[i]nsofar as possible, helicopter operations will be instructed to avoid the flow of fixed-wing aircraft." J.A. 1484. But the remainder of that sentence clarifies that the provision's purpose is "to minimize overall delays" and that "there will be many situations where faster/larger helicopters may be integrated with fixed-wing aircraft for the benefit of all concerned." AIM § 4-3-17. a.2., J.A. 1484. Thus, section 9-18 of the FAA Rotorcraft Flying Handbook informs pilots that "[w]hen a control tower is in operation, you can request the type of departure you desire. In most cases, helicopter departures are made into the wind unless obstacles or traffic dictate otherwise." J.A. 1751.

The Agusta pilots desired to depart to the west in the direction of both the wind and their destination, Lancaster, Pennsylvania, and traffic did not "dictate" against such a departure because it was "light to moderate" at the time. J.A. 798. Indeed, even after the LOA took effect, helicopters could depart in directions besides east and south if, as here, the pilot and ATC so coordinated. Furthermore, according to plaintiffs' expert Sommer's reconstruction of the accident, the Agusta pilots had not reached Runway 24, let alone Runway 33, by the time the Grumman lost control and crashed. The mere showing that

the Agusta pilots could have sought a departure away from these runways does not create a genuine issue of fact as to whether they breached their duties by requesting a different departure; if it did, such an issue as to breach would arise in each of the "many situations" where helicopters integrate in the flow of fixed-wing traffic. AIM § 4-3-17.a.2., J.A. 1484.

Second, plaintiffs argue that the Agusta pilots should have clarified that they planned to go northwest rather than due west after ATC cleared them for a "westerly" departure. In support of this argument, plaintiffs emphasize that "[t]he single, most important thought in pilot-controller communications is understanding." AIM § 4-2-1.b., J.A. 1481. They further note that pilots should "[r]equest[] clarification or amendment, as appropriate, any time clearance is not fully understood." AIM § 5-5-2.a.3., J.A. 1486. In addition, plaintiffs suggest that the Agusta pilots' unexpressed intention to turn right and fly further north to parallel Runway 33 violated the AIM provision dealing with "Unexpected Maneuvers in the Airport Traffic Pattern": "Should a pilot decide to make maneuvering turns to maintain spacing behind a preceding aircraft, the pilot should always advise the controller if at all possible." AIM § 4-3-5., J.A. 1483.

We realize that according to Sommer's report, the Grumman pilots "would have been aware that a westerly departure from the location of the Agusta could well have included an initial turn to the north around the departure end of runway 33," consistent with normal operations at PNE. J.A. 1510. But the Agusta pilots never made the referenced right turn because the crash occurred before they were anywhere "near close enough to get going." J.A. 1387. We do not see how the Agusta pilots could have

violated any communication responsibilities by failing to warn of a maneuver that they did not make.

Plaintiffs' other accusations regarding the Agusta pilots' alleged failure to clarify their intentions led to different witnesses expressing somewhat varying views on the meaning of the term "westerly." But plaintiffs' own experts opined that the Agusta pilots responded appropriately to their clearance. Burgess testified that from an ATC perspective, the Agusta pilots did nothing wrong based on "the clearance that they received and how they responded." J.A. 1700. Gramlich testified that "[b]ased on an air traffic control perspective, no, I did not see anything wrong from the Agusta pilots." J.A. 471. Stimson likewise testified that the Agusta pilots' departure to the northwest was "within their ATC instructions." J.A. 446. Finally, Richburg, the very individual to whom plaintiffs suggest that the Agusta pilots should have clarified their intentions, similarly did not express any problem with the Agusta pilots' request for a westerly departure or their taking off to the northwest after receiving clearance. Given these views of both plaintiffs' ATC experts and the controller involved, plaintiffs cannot demonstrate that there was a defect in how the Agusta pilots communicated with ATC.

Third, plaintiffs fault the Agusta pilots for not hearing Richburg's direction, "55U make right traffic." They contend that this missed communication by the Agusta pilots violated a portion of AIM § 4-2-1.b. which provides that "[p]ilots are to maintain vigilance in monitoring air traffic control radio communications frequencies for potential traffic conflicts with their aircraft especially when operating on an active runway." J.A. 1481.

But the evidence that plaintiffs produced belies the conclusion that this single missed transmission shows that the Agusta pilots lacked diligence. Cf. Transco Leasing Corp. v. United States, 896 F.2d 1435, 1447 (5th Cir. 1990) (holding that duty "to exercise vigilance so as to see and avoid other aircraft" did not create "absolute duty to see and avoid"), amended on reh'g on other grounds, 905 F.2d 61 (5th Cir. 1990); In re Greenwood Air Crash, 924 F. Supp. 1518, 1535 (S.D. Ind. 1995) (same). Albert testified that the mere fact that a pilot missed a single call generally does not reflect the pilot's loss of situational awareness. J.A. 1689. Diaz added that a pilot reasonably might not hear a communication between ATC and another aircraft due to other factors requiring the pilot's focus, including operation of the pilot's own aircraft as well as the pilot's own communications with ATC. J.A. 1146. Moreover, after referring to "that Grumman," without registration numbers, in notifying the Agusta pilots of the Grumman's initial left downwind departure plan, Richburg used the registration numbers alone in redirecting the Grumman to the right. J.A. 1444. As Burgess explained, such a discrepancy could justify other pilots in missing the transmission as in the absence of the prefix "Grumman," "it's questionable . . . whether the other pilots would know exactly what airplane [Richburg was] talking about." J.A. 1029. Notwithstanding their missing of the single transmission, the Agusta pilots kept the Grumman in sight and stopped as soon as the Grumman began to turn right. In these circumstances, plaintiffs cannot demonstrate that the Agusta pilots lacked vigilance or situational awareness.

Plaintiffs finally argue that the Agusta pilots' collective conduct violated 14 C.F.R. §§ 91.13(a) and 91.111(a) by bringing them too close to the Grumman. Certainly

pilots violate § 91.13(a) if they engage in careless or reckless conduct that causes potential, even if not actual, danger. See GoJet Airlines, LLC v. F.A.A., 743 F.3d 1168, 1172 (8th Cir. 2014); Cooper v. Hinson, 109 F.3d 997, 1001 (4th Cir. 1997); Roach v. Nat'l Transp. Safety Bd., 804 F.2d 1147, 1157 (10th Cir. 1986). Moreover, pilots violate § 91.111(a) if they fly so close to another aircraft as to create a collision hazard even if there is not a collision. See Bennett v. Nat'l Transp. Safety Bd., 66 F.3d 1130, 1135-36, 1138 n.11 (10th Cir. 1995).

Nevertheless, Sommer conceded that "there [was] no collision hazard with the Grumman" given that the Agusta pilots executed the quick stop. J.A. 1744. Based on Sommer's reconstruction of the accident, the Agusta pilots were more than half a mile from the Grumman and flying slowly when the Grumman received the instruction to "make right traffic," and the Agusta traveled only 50 feet closer to the Grumman before the Grumman pilots lost control. J.A. 1747. Even if we accepted Albert's speculative estimate that the Agusta pilots were only about 1,000 feet from the Grumman when they turned, he acknowledged that even this distance was not so close as to create an emergency. J.A. 1100. The Agusta pilots' precautionary decision to execute the quick stop no more demonstrates that they came so close as to breach their duties under the FARs than it demonstrates that the Grumman pilots breached these same duties by making the right turn that more immediately put the two aircraft on potentially conflicting paths. Cf. Transco, 896 F.2d at 1447 ("Without more, the fact that two airplanes collide in mid-air in visual meteorological conditions is not evidence of negligence on the part of both pilots or of negligence on the part of one, but not the other, pilot."). Finally, plaintiffs' own pilot expert, Suchocki, testified that the Agusta pilots complied with their duties under the FARs and did nothing wrong on the day of the accident. J.A. 455. Plaintiffs therefore have failed to raise a genuine issue of fact as to whether the Agusta pilots breached their duty of care.²

B. Claim Against the United States

ATC's duties mainly derive from the ATCM, FAA Order 7110.65. See Rodriquez, 823 F.2d at 740; Remo, 852 F. Supp. at 368. As set forth in the ATCM, "[t]he primary purpose of the ATC system is to prevent a collision between aircraft operating in the system and to organize and expedite the flow of traffic." ATCM § 2-1-1., J.A. 811. ATC must also provide other services if "permitted by higher priority duties and other circumstances." ATCM, § 2-1-1., J.A. 811. In addition, having assumed the responsibility of safely organizing the flow of air traffic, ATC owes a duty beyond those provided for in the ATCM to exercise reasonable care in performing that service. See, e.g., Zabala Clemente v. United States, 567 F.2d 1140, 1147-48 (1st Cir. 1977); Yates v.

In addition to their

² In addition to their negligence claim, plaintiffs assert a contract claim against Agusta based on Agusta's lease agreement with the City of Philadelphia. Specifically, plaintiffs contend that Agusta breached the provision of the lease requiring it to "observe and comply with all requirements of the constituted public authorities and with all federal, state, or local statutes, ordinances, regulations and standards applicable to [Agusta] or its use of the Premises," including the FARs. See J.A. 1638. This claim, however, merely repackages plaintiffs' negligence claim under a contract heading and therefore falls under Pennsylvania's "gist of the action" doctrine that is designed to prevent such duplicative claims from arising under both tort and contract law. See Craig v. Amateur Softball Ass'n of Am., 951 A.2d 372, 377 (Pa. Super. Ct. 2008) (citing Reardon v. Allegheny Coll., 926 A.2d 477, 486-87 (Pa. Super. Ct. 2007)); Padalino v. Standard Fire Ins. Co., 616 F. Supp. 2d 538, 549-50 (E.D. Pa. 2008). In any event, plaintiffs cannot demonstrate that Agusta breached the lease agreement for the same reasons that they cannot show that Agusta violated any duty of care.

United States, 497 F.2d 878, 883-84 (10th Cir. 1974); Hartz v. United States, 387 F.2d 870, 873-74 (5th Cir. 1968); cf. Indian Towing Co. v. United States, 350 U.S. 61, 69, 76 S.Ct. 122, 126-27 (1955) ("[O]nce [the Coast Guard] exercised its discretion to operate a light on Chandeleur Island and engendered reliance on the guidance afforded by the light, it was obligated to use due care to make certain that the light was kept in good working order; and, if the light did become extinguished, then the Coast Guard was further obligated to use due care to discover this fact and to repair the light or give warning that it was not functioning."). ATC breaches its duty of care if it gives a pilot deficient instructions upon which the pilot relies. See Rodriquez, 823 F.2d at 740; Yates, 497 F.2d at 883; Himmler, 474 F. Supp. at 928 ("Where, as here, a pilot places himself in the hands of the controller and thereafter follows the controller's suggestions or instructions, the pilot is entitled to rely upon such information and directions and is not free or expected to disregard same.").

We will assume for purposes of this opinion that Richburg breached her duties as an air traffic controller by suddenly and urgently directing the Grumman to "make right traffic" after clearing the Agusta to depart in a potentially conflicting direction and without warning the Grumman pilots of the Agusta's location. Nevertheless, "an admittedly negligent act does not necessarily entail liability; rather even when it is established that the defendant breached some duty of care owed the plaintiff, it is incumbent on a plaintiff to establish a causal connection between defendant's conduct and the plaintiff's injury." Hamil v. Bashline, 392 A.2d 1280, 1284 (Pa. 1978); see Redhead, 686 F.2d at 182. In Pennsylvania, establishing such a causal connection

requires demonstrating both but-for causation and proximate cause. Reott v. Asia Trend, Inc., 55 A.2d 1088, 1103 (Pa. 2012). We conclude that plaintiffs have not established a genuine question of fact on the issue of proximate causation.

To prove proximate causation, a plaintiff must show that the defendant's breach was a substantial factor in bringing about the plaintiff's harm. See Powell v. Drumheller, 653 A.2d 619, 622 (Pa. 1995). The plaintiff may rest on circumstantial evidence of such proximate causation. See Harvilla v. Delcamp, 555 A.2d 763, 764 (Pa. 1989) (opinion announcing the judgment of the court); Hamil, 392 A.2d at 1285. But the plaintiff may not rely on speculation and conjecture. See Young v. Commonwealth Dep't of Transp., 744 A.2d 1276, 1277 (Pa. 2000); Hamil, 392 A.2d at 1288 n.9 ("A mere possibility of . . . causation is not enough; and when the matter remains one of pure speculation and conjecture, or the probabilities are at best evenly balanced, it becomes the duty of the court to direct a verdict for the defendant." (quoting Restatement (Second) of Torts § 433B cmt. a (1965)) (internal quotation marks omitted)).

Plaintiffs' theory of causation is that upon heeding Richburg's instruction and turning the Grumman to the right, the sight of the Agusta startled Angelina and caused him to pull back reflexively on the yoke leading to the aircraft stalling. Plaintiffs point to Marks v. Mobil Oil Corp., 562 F. Supp. 759, 765-66 (E.D. Pa. 1983) aff'd, 727 F.2d 1100 (3d Cir. 1984), and Rich v. Finley, 89 N.E.2d 213, 215 (Mass. 1949), as showing that a defendant may be liable for causing another individual's involuntary startle reaction that results in harm to the plaintiff. Unlike the plaintiffs in those cases, however, plaintiffs here did not provide reliable evidence that there actually was a startle reaction. Plaintiffs

reason that the Agusta pilots' surprise at seeing the Grumman turn right and their execution of a quick stop indicates that Angelina may have experienced a "similar response" upon seeing the Agusta. Appellants' br. at 62. But the Agusta pilots' conscious decision to execute a controlled deceleration maneuver offers inadequate support to find that Angelina experienced an unreasoned brain stem reflex that led him to yank back on the yoke and stall his aircraft. In these circumstances, plaintiffs only can surmise that Angelina had an involuntary startle response upon seeing the Agusta decelerating from an already slow speed, half a mile away. Even plaintiffs' accident reconstruction expert Stimpson stated that "[t]here's absolutely no way [he] could" say that the Gruman pilots even observed the Agusta while making the right turn to "a reasonable degree of certainty." J.A. 1817. Such speculation regarding the cause of the crash is an insufficient basis for plaintiffs to avoid summary judgment.

V. CONCLUSION

For the foregoing reasons, we will affirm the District Court's grant of summary judgment, entered on August 25, 2014.