UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

MELANIE BAILEY, et al., Plaintiff(s), vs. UNITED STATES OF AMERICA, DEPARTMENT OF TRANSPORTATION (FEDERAL AVIATION ADMINISTRATION), Defendant(s).	2:06-CV-1191-FMC-VBKx FINDINGS OF FACT AND CONCLUSIONS OF LAW

The matter came on for trial before the Court, sitting without a jury, on April 22, 23, 24, 25, 29, 30, and May 1, 2008. At the conclusion of the presentation of evidence and arguments, the matter was taken under submission. The Court agrees with all of the plaintiffs' attorneys who expressed, during their closing arguments, that the central piece of evidence in this case, from which everything else flows, is the statement of Air Traffic Controller (ATC) Weber to plaintiff, Gavin Heyworth, "Six Tango Victor, you're gonna cross midfield as soon as I get a chance." But for that unfortunate communication, the accident never would have occurred.

The Court makes the following findings of fact and reaches the following conclusions of law in support of its verdict in favor of plaintiffs and against defendant in this action.

Findings of Fact

1. On November 6, 2003, at approximately 3:30 pm, two helicopters crashed mid-air in FAA-controlled airspace almost directly in front of the Control Tower at Torrance Municipal Airport.

2. The crash involved a Robinson R-44 helicopter (also known as Two Romeo Hotel or 2RH), occupied by Robert Bailey and Brett Boyd. It also involved a Robinson R-22 (Six Tango Victor or 6TV) piloted by Gavin Heyworth.

3. As a result of the crash, Bailey and Boyd died, and Heyworth survived with severe injuries.

4. In September of 2003, Heyworth had begun flight training with PCH Helicopters, a fixed-base operator on the southwest side of Torrance Airport.

5. The Federal Aviation Administration (FAA) operates and controls air traffic at Torrance Airport.

6. At the time of the crash and during the moments leading up to the crash, both helicopters were being controlled by FAA ATC on duty.

7. The primary purposes of the ATC System are to prevent collisions between aircraft operating in the system and to organize and expedite the flow of traffic.

8. Torrance Airport has an operable Control Tower (Tower) from which the FAA ATC operate and control aircraft in Class D airspace (the airspace from the ground to 2500 feet above the ground, and for a radius of three miles.)

9. ATC in the Tower are the FAA employees authorized and responsible for the safe, orderly, and expeditious flow of air traffic in and out of Torrance Airport.

10. On the day of the crash, the Tower was staffed by ATCs Edward Weber, Cynthia Issa, and Timothy Abels. Controller staffing was below normal that day, because one controller was not at work.

11. All three controllers were properly trained, qualified, and certified to work all of the tower positions on the day of the accident.

12. The Tower sits in the middle of the field, adjacent to the two runways.

13. The Airport operates two parallel runways identified as 29R and 29L, which correspond to compass headings.

14. Runway 29R, on the north side of the field, measures 5000 feet long and 150 feet wide.

15. Runway 29L, on the south side of the field, is 3000 feet long and 75 feet wide.

16. The runways are approximately 330 feet apart.

17. Aircraft arriving and departing at airports, particularly general-aviation airports such as Torrance, generally follow a prescribed traffic flow known as a "traffic pattern."

18. Traffic patterns are comprised of five legs integrating the runway with which they are associated: an "upwind" or "departure" leg, which parallels the direction ot takeoff; a "crosswind" leg, which is perpendicular to the runway off of the upwind end; the "downwind" leg, which is parallel to the direction of landing and flowing in the opposite direction; the "base" leg, also perpendicular to the runway and located at the approach end; and the "final," which runs in the direction of landing along the extended centerline of the runway.

19. Additionally, traffic patterns typically flow to one side of the runway or another, known as "left traffic" or "right traffic," depending on which way the turns are being made.

20. The ATCs are situated in the top of the Tower in the Tower Cab, which is a glass enclosure permitting observation in all directions with an unimpeded view of the runways.

21. Torrance Airport is the home of Robinson Helicopter, the largest manufacturer of helicopters in the United States.

22. Torrance Airport is also the home of other helicopter operation/training schools, in addition to numerous regular aircraft operations.

23. The FAA ATCs in Torrance are, of course, aware of the relatively large

number of helicopter training flights that take place there on a regular basis.

24. On the day of the crash, the positions in the Tower were Controller in Charge (CIC), Ground Control (GC), Local Control 1 (LC1) and Local Control 2 (LC2).

25. The CIC position was responsible for controlling staffing and position relief, and maintaining operational continuity through position transfers.

26. The LC1 position was responsible for runway 29R and all of the Class D airspace extending north of the airport from the midpolint between 29R and 29L.

27. The LC2 position was responsible for runway 29L and all of the Class D airspace extending south of the airport from the midpoint between 29R and 29L.

28. In the time period leading up to the crash, Abels was CIC and was working the GC position as well.

29. Some time prior to the crash, Issa went on break, leaving the cab, and Weber was working all of the aircraft assigned to the jurisdiction of LC1 and LC2.

30. Upon arrival at the airport, Heyworth met with his instructor and preflighted the helicopter. At that time, he observed his instructor call the Tower to advise them his student would be conducting a solo flight.

31. Heyworth (in 6TV) obtained instructions and directions from the ATC to perform training exercises at the North Pad.

32. Heyworth had been approved and authorized by a certified flight instructor to operate six Tango Victor in solo flight as the pilot in command of the aircraft. In order to obtain such approval, he had demonstrated proficiency at operating the aircraft in, among other things, airport traffic patterns, descents with and without turns, flight at various speeds, approaches to landing areas, hovering turns, and go-arounds from landing hover and from final approach.

33. Upon completing his training exercises, Heyworth contacted the Tower and requested "6TV North Pad take off and landing PCH parking."

34. LC1 responded: "6TV hold."

35. Heyworth responded: "6TV holding."

36. LC1 later advised: "Helicopter 6TV, when you observe the Cessna passing off your left, you can proceed right traffic for the North Pad."

37. Weber (at LC1) had obviously forgotten that Heyworth had requested to return to PCH parking. 6TV responded: "6TV North Pad take off and landing PCH parking."

38. LC1 told Heyworth to fly westbound. Heyworth was then told to make a right turn to the downwind.

39. At approximately this time, Abels observed that traffic was getting quite heavy. Weber had been talking fast. Abels called Issa back from break early to help Weber with the traffic.

40. Issa was called back to the Tower, and she went back to the LC2 position. She placed her headset on, so that she could get situational awareness of the aircraft around the airport.

41. Weber and Issa conducted an incomplete position-relief briefing. They failed to record the briefing.

42. Weber failed to tell Issa about 6TV.

43. Issa then began transmitting to aircraft from the LC2 position.

44. At approximately this time, 2RH was on the downwind (headed eastbound) on a right-hand pattern for a landing on 29R.

45. Weber cleared 2RH to land on 29R, and then changed the runway for the landing to 29L. Weber gave 2RH clearance for the option on 29L, which required 2RH to cross the approach end of 29R, an active runway.

46. The last communication with 2RH was "Helicopter 2RH, 29L cleared for the option." This was approximately 1 minute and 40 seconds prior to impact.

47. Shortly thereafter, with 2RH headed for runway 29L (Issa's jurisdiction), Weber transmitted to 6TV: "November six tango victor... mmm..you're gonna cross midfield as soon as I get a chance."

48. This transmission was unconditional, and it provided Heyworth with Weber's plan for a midfield crossing.

49. Based on that communicated plan, Heyworth was prepared to execute a midfield crossing.

50. The midfield crossing pattern was a procedure used at Torrance Airport for aircraft returning from the North Pad to PCH parking.

51. The midfield crossing is a pattern which takes aircraft in a right-hand pattern north of the runways, turning right at midfield across 29R and 29L southbound, turning left into a left-hand pattern south of the field for a landing on any runway designated by the ATCs: 29R, 29L, or Taxiway Alpha.

52. After receiving the "You're gonna cross midfield" transmission, it was reasonable for Heyworth to believe that he was going to return to PCH parking via a midfield crossing.

53. Heyworth recognized this midfield crossing pattern as one he had been taught and that he had flown on numerous occasions at Torrance when returning from the North Pad to PCH parking.

54. Heyworth expected that he would be crossing at midfield to enter the left-hand pattern, and he waited for instructions.

55. Although Issa was on LC2, Weber did not coordinate with Issa for this midfield crossing.

56. FAA Order 7110.65 and Standard Operating Procedures require coordination between LC1 and LC2 for any crossover operations.

57. The midfield crossing pattern, described in Finding #51 would provide Heyworth with an opportunity to descend and slow down from his position (500 feet) and speed (65 knots) and be able to land on one of the runways.

58. While Heyworth was flying downwind, Weber issued the following

Control Instruction to him at 2327:22: "Helicopter Six Tango Victor, Turn Right."[1]

59. That instruction turned Mr. Heyworth right at approximately midfield.

60. That instruction was consistent with the previous "you're gonna cross midfield" transmission, and it set up a midfield crossing pattern.

61. Heyworth flew southbound toward midfield, and flew toward midfield for approximately 28 seconds, reasonably expecting and believing that he would be crossing midfield to return to PCH parking.

62. The "turn right" instruction, combined with the "you're gonna cross midfield" transmission, constituted a clearance for 6TV to cross midfield.

63. Had Heyworth not received another instruction, he could have crossed both runways and continued southbound.

64. When Weber instructed Heyworth to turn right off of the downwind, Weber had changed his plan in his mind and decided to land Heyworth on 29R without crossing midfield, but he did not communicate that change in plan to Heyworth.

65. After his right turn toward midfield, Heyworth was not on a base leg, the leg of a traffic pattern which precedes a final approach and gives a pilot time to descend and slow down from traffic-pattern speed and altitude.

66. Heyworth complied with the "turn right" instruction off of the downwind and 2327:22, by turning right and heading southbound toward midfield at approximately 500 feet and 65 knots, consistent with a midfield crossing.

67. The next anticipated instruction from ATC for a pilot on a midfield crossing would have been a clearance as to where the pilot should land.

68. That instruction could have been given by the ATC to the pilot at any time

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[1]All time references are to Universal Time Coordinated, also sometimes known as Greenwich Mean Time or Zulu time. On the day of the accident, UTC time was seven hours ahead of Pacific Standard Time. The accident occurred at approximately 3:28 pm local time.

before, over, or after crossing 29R and 29L.

69. Weber transmitted to 6TV: "Helicopter Six Tango Victor, Runway 29R, cleared to land."

70. This clearance did not tell Heyworth when or how to land on 29R.

71. Weber never rescinded or advised of a change to the previous clearance to cross midfield that Heyworth was executing.

72. Heyworth reasonably interpreted that clearance to land in conjunction with the prior plan to cross midfield, and he reasonably believed he was supposed to continue with his midfield crossing.

73. Heyworth acknowledged the transmission.

74. Heyworth continued southbound on the midfield crossing at pattern altitude and pattern speed.

75. Weber did not issue any traffic information to 6TV or 2RH.

76. Weber did not issue any limiting instructions to 6TV to not cross over 29R or encroach into the airspace over 29L.

77. When Weber did not see a change in direction, he urgently transmitted: "Turn **right** Helicopter Six Tango Victor, Runway Two Niner Right Cleared to land."

78. This second clearance to land, which was given two seconds after the first, was made with emphasis.

79. Weber had visual contact with Heyworth when he gave the second clearance to land and saw Heyworth begin his right turn across runway 29R.

80. Heyworth was south of Skypark Drive at the inception of the second clearance to land.

81. It took 3.3 seconds for Weber to issue that second clearance to land.

82. Perception-reaction time is 2 to 3 seconds.

83. At 65 knots, traveling approximately 110 feet per second, Heyworth would have traveled an additional 583 to 693 feet southbound before he would have

reasonably been able to perceive and react to the second clearance to land.

84. By that time, he would have been at or about the north edge of runway 29R.

85. At the point where Heyworth would have been able to perceive and react to the second clearance to land, he was traveling at 65 knots and at 500 feet altitude.

86. He could not have landed on 29R without traveling over 29L.

87. Weber was expected to take into account Heyworth's speed and altitude, as well as a general awareness of the capabilities of the helicopter, at the time he issued the second clearance to land.

88. Heyworth complied with the second clearance to land by turning right.

89. Neither Issa nor Weber issued any instructions to any aircraft during the last 16 seconds prior to impact.

90. During those last 16 seconds, Weber was not looking at the runways.

91. Issa never saw 6TV until just prior to impact.

92. As 6TV and 2RH were complying with their clearances from Weber, the crash occurred.

93. At the time of impact, Weber transmitted to 2RH: "Robinson Two Romeo Hotel, Caution for the heli..."

94. During the 16 seconds leading up to the crash, Weber's primary responsibility was to watch the two accident aircraft.

95. At the time of impact, Heyworth was in a right banked turn, heading back to 29R.

96. Based upon the manner in which the helicopters collided, the pilots could not have seen each other.

97. Heyworth properly relied upon and complied with the control instructions he was given by Weber.

98. Robert Bailey and Brett Boyd properly relied upon and complied with the control instructions they were given by Weber.

Conclusions of Law

1. The Court has jurisdiction over this matter pursuant to the Federal Tort Claims Act (FTCA), 28 U.S.C. §1346(b), §§2671-80. Venue is proper in the Central District of California, because the acts or omissions complained of occurred in this District. 28 U.S.C. §1402(b).

2. Under the FTCA, the United States is liable for the negligent acts or omissions of its employees "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). The Court determines what substantive law controls the rights and liabilities of the parties by applying the choice-of-law rules of the jurisdiction where the government acts or omissions occurred. *Richards v. United States,* 369 U.S. 1, 11-12 (1962). Because the alleged government acts or omissions occurred within this district, California law will apply.

3. To succeed on a claim of negligence under California law, a plaintiff must prove these common elements: (a) a legal duty to use due care; (b) a breach of such legal duty; and (c) the breach as the substantial factor of the resulting injury. *Management Activities, Inc. v. United States,* 21 F.Supp.2d. 1157, 1174 (C.D. Cal. 1998).

4. The ATC's duties are set forth in FAA Order 7110.65N (the Order).

5. The primary purpose of the air traffic control system is "to prevent a collision between aircraft operating in the system."

6. ATC Weber violated Section 2-1-2 of the Order by failing to properly separate the two accident aircraft.

7. ATC Weber violated Section 3-8-1 of the Order by failing to properly sequence and space the two accident aircraft.

8. ATCs Weber and Issa failed to properly coordinate and thus violated Section 2-1-14 of the Order.

9. ATCs Weber, Issa, and Abels violated Section 1-6 of the Standard Operating Procedures (Order 7220.11C) by failing to record the position- relief briefing.

10. ATCs Weber, Issa, and Abels did not perform a proper position-relief briefing in accordance with Appendix D of the Order.

11. ATCs Weber and Issa violated Section 2-1-6 of the Order by failing to issue a safety alert to either accident aircraft.

12. ATCs Weber and Issa violated Section 3-1-12 of the Order by failing to scan the runways to the maximum extent possible.

13. ATCs Weber and Issa negligently and carelessly failed to maintain adequate vigilance and positional/situational awareness of the air traffic at and around Torrance Airport.

14. ATC Weber negligently and carelessly failed to issue clear and concise instructions to 6TV.

15. Heyworth did not violate any rules or regulations in the path he took in complying with the second clearance to land.

16. The United States, through the conduct of its ATC, is liable for the negligence of its ATC on duty at Torrance Airport on November 6, 2003.

17. Defendant United States, acting by and through the conduct of its ATC, their supervisors and the FAA, caused serious injuries to Gavin Heyworth, and caused the death of the husbands and fathers of Melanie Bailey, Serra Bailey, Cheri Paroulek, Robert Bailey, Jr., and Skyler and Kaylee Boyd.

18. As a proximate result of said negligence, plaintiffs have been damaged.

Dated this 5th day of May 2008.

Florence-Marie Cooper

FLORENCE-MARIE COOPER
United States District Court Judge