

81. FBI reports of investigation, interviews of recipients of calls from Thomas Burnett, Sept. 11, 2001; FBI reports of investigation, interviews of recipients of calls from Marion Britton, Sept. 14, 2001, through Nov. 8, 2001; Lisa Jefferson interview (May 11, 2004); FBI report of investigation, interview of Lisa Jefferson, Sept. 11, 2001; Richard Belme interview (Nov. 21, 2003).

82. See Jere Longman, *Among the Heroes—United Flight 93 and the Passengers and Crew Who Fought Back* (Harper-Collins, 2002), p. 107; Deena Burnett interview (Apr. 26, 2004); FBI reports of investigation, interviews of recipients of calls from Jeremy Glick, Sept. 11, 2001, through Sept. 12, 2001; Lyzbeth Glick interview (Apr. 22, 2004). Experts told us that a gunshot would definitely be audible on the CVR. The FBI found no evidence of a firearm at the crash site of Flight 93. See FBI response to Commission briefing request no. 6, undated (topic 11). The FBI collected 14 knives or portions of knives at the Flight 93 crash site. FBI report, “Knives Found at the UA Flight 93 Crash Site,” undated.

83. FBI response to Commission briefing request no. 6, undated (topic 11); FBI reports of investigation, interviews of recipients of calls from Jeremy Glick, Sept. 11, 2001, through Sept. 12, 2001.

84. See FBI reports of investigation, interviews of recipients of calls from United 93.

85. FBI reports of investigation, interviews of recipients of calls from United 93. For quote, see FBI report of investigation, interview of Philip Bradshaw, Sept. 11, 2001; Philip Bradshaw interview (June 15, 2004); Flight 93 FDR and CVR data. At 9:55:11 Jarrah dialed in the VHF Omni-directional Range (VOR) frequency for the VOR navigational aid at Washington Reagan National Airport, further indicating that the attack was planned for the nation’s capital.

86. Flight 93 FDR and CVR data.

87. *Ibid.*

88. *Ibid.*

89. *Ibid.* The CVR clearly captured the words of the hijackers, including words in Arabic from the microphone in the pilot headset up to the end of the flight. The hijackers’ statements, the clarity of the recording, the position of the microphone in the pilot headset, and the corresponding manipulations of flight controls provide the evidence. The quotes are taken from our listening to the CVR, aided by an Arabic speaker.

90. In 1993, a Lufthansa aircraft was hijacked from its Frankfurt to Cairo route and diverted to JFK Airport in New York. The event lasted for 11 hours and was resolved without incident. Tamara Jones and John J. Goldman, “11-Hour Hijack Ends Without Injury in N.Y.,” *Los Angeles Times*, Feb. 12, 1993, p.A1.

91. The second half of the twentieth century witnessed a tremendous growth of the air transport industry, and the FAA’s corresponding responsibilities grew enormously from the 1960s through 2001. Throughout that time, the FAA focused on setting and maintaining safety and efficiency standards. Since no plane had been hijacked inside the United States since 1991, sabotage was perceived as the most significant threat to civil aviation. For a broader discussion of the perception of the threat, see section 3.3.

92. FAA report, “Administrator’s Fact Book,” July 2001; Benedict Sliney interview (May 21, 2004); John McCartney interview (Dec. 17, 2003).

93. FAA regulations, Air Traffic Control transponder and altitude reporting equipment and use, 14 CFR § 91.215 (2001).

94. DOD radar files, 84th Radar Evaluation Squadron, “9/11 Autoplay,” undated; Charles Thomas interview (May 4, 2004); John Thomas interview (May 4, 2004); Joseph Cooper interview (Sept. 22, 2003); Tim Spence interview (Sept. 30, 2003). For general information on approaching terminals, see FAA report, “Aeronautical Information Manual,” Feb. 19, 2004. Times assigned to audio transmissions were derived by the Commission from files provided by the FAA and the Northeast Air Defense Sector (NEADS) based on audio time stamps contained within the files provided by the sender. FAA tapes are certified accurate to Universal Coordinated Time by quality assurance specialists at FAA air traffic facilities. NEADS files are time-stamped as accurate to the Naval Observatory clock. We also compared audio times to certified transcripts when available.

95. FAA Boston Center site visit (Sept. 22–24, 2003).

96. NORAD’s mission is set forth in a series of renewable agreements between the United States and Canada. According to the agreement in effect on 9/11, the “primary missions” of NORAD were “aerospace warning” and “aerospace control” for North America. *Aerospace warning* was defined as “the monitoring of man-made objects in space and the detection, validation, and warning of attack against North America whether by aircraft, missiles, or space vehicles.” *Aerospace control* was defined as “providing surveillance and control of the airspace of Canada and the United States.” See DOS memo, Exchange of Notes Between Canada and the United States Regarding Extension of the NORAD Agreement, Mar. 28, 1996; see also DOS press release, “Extension of NORAD Agreement,” June 16, 2000 (regarding the extension of the 1996 Agreement unchanged). For NORAD’s defining its job as defending against external attacks, see Ralph Eberhart interview (Mar. 1, 2004).

97. DOD report, “NORAD Strategy Review: Final Report,” July 1992, p. 55.

98. For assumptions of exercise planners, see Paul Goddard and Ken Merchant interview (Mar. 4, 2004). For the authority to shoot down a commercial aircraft prior to 9/11, granted to NORAD but not used against Payne Stewart’s plane in 1999 after the pilot and passengers lost consciousness, see Richard Myers interview (Feb. 17, 2004). A 1998 White House tabletop exercise chaired by Richard Clarke included a scenario in which a terrorist