



NTSB National Transportation Safety Board

Office of Aviation Safety

Midair Collision Over Hudson River

Investigator-in-Charge
presentation

History of Flight

- August 8, 2009
- 1153:14 eastern daylight time
- Piper PA-32R-300, N71MC
- Eurocopter AS350BA, N401LH, operated by Liberty Helicopters
- Piper operated under Part 91; Eurocopter operated under Parts 135 and 136
- Nine fatalities
- Visual meteorological conditions



History of Flight - Airplane

- Airplane departed Wings Field, Philadelphia, Pennsylvania
- Destination of Ocean City, New Jersey
- Stopover at Teterboro Airport (TEB), Teterboro, New Jersey



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History of Flight - Airplane

- Routing over Hudson River
- Airplane to be operated below class B airspace until transfer to Newark Airport (EWR) tower
- Electronic radar handoff of flight to EWR
- No transfer of radio communications at that time
- Airplane leveled off at 1,100 feet about 2 minutes before collision



History of Flight - Helicopter

- Helicopter departed West 30th Street Heliport for planned 12-minute sightseeing flight
- Operating in Hudson River class B exclusion area
- No air traffic control services
- Common traffic advisory frequency
- Climbed through 1,000 feet



History of Flight

- TEB local controller involved in 2.5-minute personal telephone call
- Controller divided attention between telephone conversation and air traffic control duties
- Pilot read back incorrect frequency
- Collision occurred 4 seconds after personal call ended

Animation



Investigation

- Pilots and aircraft properly certificated
- Review of pilots' 72-hour history
- No evidence of any preimpact structural, engine, or systems failures
- Accident not survivable
- Both aircraft had electronic traffic advisory systems installed

Initial Safety Recommendations

- Air traffic control procedures
- Controller performance
- Special flight rules area for Hudson River and nearby airspace
- Vertical separation of aircraft



Additional Safety Issues

- Recent changes to Hudson River airspace
- Vertical separation of aircraft operating in Hudson River airspace
- Helicopter traffic advisory systems
- Existing guidance on see-and-avoid concept does not describe current challenges pilots encounter



Parties and Other Participants

- Federal Aviation Administration
- Liberty Helicopters
- Piper Aircraft
- Bureau d'Enquêtes et d'Analyses pour la Sécurité de l'Aviation Civile
 - American Eurocopter
 - Turbomeca USA



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