



Aviation Investigation Final Report

Location:	Mastic Beach, New York	Accident Number:	ERA09LA233
Date & Time:	April 5, 2009, 13:25 Local	Registration:	N740RB
Aircraft:	Curtiss Wright P-40N	Aircraft Damage:	Destroyed
Defining Event:	Aerodynamic stall/spin	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot's son said that he and his father were an airshow "team," that the purpose of the flight was to practice aerobatics in their World War Two-era fighter, and that he would act as a "safety guide" from the beach with a handheld radio. The pilot's son stated that all communications with the accident airplane were "normal." The airplane entered a "half Cuban eight" maneuver at an estimated 250 to 260 mph and when the airplane was "in the middle of the Cuban eight it went into a spin." The pilot's son estimated that the airplane had slowed to 100 to 120 mph--which was, according to him, "too slow"--when the airplane entered the spin and lacked the altitude to recover before crashing into the sea. A former Army fighter pilot witness described a similar sequence of events and stated that he thought the pilot was attempting an "Immelman" turn and added, "I knew he was in trouble when he didn't complete the Immelman turn and went off on one wing. The plane made 4 to 5 revolutions and augured into the ocean." The witness stated that no parts departed the airplane at anytime during the flight or accident sequence. A third and fourth witness provided similar accounts. The wreckage was not recovered from the ocean.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed while performing aerobatics at low altitude.

Findings

Aircraft	Airspeed - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Maneuvering-aerobatics	Aerodynamic stall/spin (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On April 5, 2009, at 1325 eastern daylight time, an experimental Curtiss Wright P-40N, N740RB, collided with the Atlantic Ocean 1/4 mile off the shore of Mastic Beach, New York. The certificated commercial pilot was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight that departed Brookhaven Airport, (HWV), Shirley, New York, at 1309. The aerobatic flight was conducted under the provisions of 14 Code of Federal Regulations Part 91.

In a written statement, the pilot's son said that he and his father were an airshow "team" and that the purpose of the flight was to practice aerobatics, and that he would act as a "safety guide" from the beach with a handheld radio. The pilot's son stated that all communications with the accident airplane were "normal."

The airplane entered a "half Cuban eight" maneuver at an estimated 250 to 260 mph and when the airplane was "in the middle of the Cuban eight it went into a spin." The pilot's son estimated the airplane had slowed to 100 to 120 mph, which was "too slow," when the airplane entered the spin, and lacked the altitude to recover before crashing into the sea.

In a written statement, a former Army fighter pilot witness described a similar sequence of events, and stated that he thought the pilot was attempting an "Immelman" turn and added, "I knew he was in trouble when he didn't complete the Immelman turn and went off on one wing. The plane made 4 to 5 revolutions and augured into the ocean." The witness stated that no parts departed the airplane at anytime during the flight or accident sequence.

A third witness stated that he and his friends watched the airplane from the beach as it performed "tight turns and then a flip." He said, "The airplane flew upward, then turned down and started to spiral toward the water."

A fourth witness stated, "It appeared that the aircraft was performing a loop. At the apex of the loop, the aircraft dropped straight down nose first."

PERSONNEL INFORMATION

A review of Federal Aviation Administration (FAA) records revealed the pilot held a commercial

pilot certificate with ratings for airplane single-engine land, multiengine land, and instrument airplane. The pilot was issued a second-class medical certificate on January 14, 2009. The pilot reported 2,300 hours on that date.

AIRCRAFT INFORMATION

According to FAA records, the airplane was manufactured in 1944. Its most recent annual inspection was completed March 20, 2009, at 1,469 total aircraft hours.

METEOROLOGICAL INFORMATION

At 1256, the weather reported at HWV, 5 miles north of the accident site, included clear skies, 10 miles visibility, and wind from 310 degrees at 13 knots, gusting to 26 knots. The temperature was 13 degrees Celsius (C), and the dew point was -1 degrees C.

WRECKAGE AND IMPACT INFORMATION

The wreckage was observed by an FAA inspector from a boat, as it remained submerged. The wreckage had not yet been recovered, and was not examined.

MEDICAL AND PATHOLOGICAL INFORMATION

The Office the Chief Medical Examiner for Suffolk County, New York, performed the autopsy on the pilot. The autopsy report indicated that the pilot died as a result of "blunt force trauma."

The FAA's Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, performed toxicological testing of the pilot. Amlodipine was detected in the muscle and tissue.

The pilot's most recent application for second-class airman medical certificate, dated 1/14/2009, noted that the pilot had "high blood pressure well controlled on Lotrel [amlodipine/benazepril]."

ADDITIONAL INFORMATION

The pilot was issued an FAA Certificate of Waiver or Authorization (FAA Form 711-1) to perform aerobatics in a "box" of defined dimensions off the coast of Mastic Beach, on April 3, 2009.

In a written statement, the FAA inspector stated that the pilot failed to file a Notice to Airman (NOTAM), and did not notify the controlling air traffic facility to activate the box prior to beginning aerobatic activity, as required by the Certificate of Waiver.

Pilot Information

Certificate:	Commercial; Private	Age:	61, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 14, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2300 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Curtiss Wright	Registration:	N740RB
Model/Series:	P-40N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	44-7368
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 20, 2009 Annual	Certified Max Gross Wt.:	8850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1469 Hrs as of last inspection	Engine Manufacturer:	Allison
ELT:		Engine Model/Series:	V 1710
Registered Owner:	LEESTOWN AVIATION WARHAWK INC	Rated Power:	1460 Horsepower
Operator:	LEESTOWN AVIATION WARHAWK INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HWV,81 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 26 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.73 inches Hg	Temperature/Dew Point:	13°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Shirley, NY (HWV)	Type of Flight Plan Filed:	None
Destination:	Shirley, NY (HWV)	Type of Clearance:	None
Departure Time:	13:09 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	40.707221,-72.851387(est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Anthony Mauro; FAA/FSDO; Farmingdale, NY
Original Publish Date:	April 22, 2010
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=73601

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).