

National Transportation Safety Board Aviation Accident Final Report

| Location: | WESTHAMPTON, NY | Accident Number: | NYC94FA052 |
|-------------------------|-----------------------------|------------------|------------|
| Date & Time: | 03/03/1994, 1916 EST | Registration: | N512SK |
| Aircraft: | CESSNA 340 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 Fatal |
| Flight Conducted Under: | Part 91: General Aviation - | | |

Analysis

AIR TRAFFIC CONTROL HAD CLEARED THE AIRPLANE FOR THE ILS APPROACH TO RUNWAY 24, CIRCLE TO LAND ON RUNWAY 06. THE AIRPLANE BROKE OFF THE APPROACH TO RUNWAY 24, AND WAS OBSERVED BY A WITNESS AT A LOW ALTITUDE, ON A LEFT DOWNWIND FOR RUNWAY 06, FLYING IN AND OUT OF CLOUDS. ON THE BASE LEG, THE AIRPLANE TURNED TO THE LEFT, AND A WITNESS SAW THE LEFT WING MAKE CONTACT WITH THE GROUND. ONE WITNESS SAID THAT BEFORE THE CRASH, THE ENGINE SOUNDED 'LIKE THEY WERE AT FULL RPM. SEVERAL PILOTS FROM THE AIR NATIONAL GUARD (ANG) AT THE AIRPORT WENT TO THE CRASH SITE MINUTES AFTER THE CRASH, AND OBSERVED ICE ON THE AIRPLANE'S WINGS AND EMPENNAGE. ONE OF THE ANG PILOT REPORTED HIS OBSERVATION OF THE ICE ON THE AIRCRAFT: 'IT APPEARED TO BE APPROXIMATELY 1/8 INCH IN THICKNESS THROUGHOUT THE LEFT AND RIGHT WING SURFACES AND THE REAR EMPENNAGE SECTIONS . . .' ANOTHER ANG PILOT DESCRIBED THE WEATHER AT THE TIME OF THE ACCIDENT AS, VISIBILITY LESS THEN ONE MILE WITH 'FREEZING RAIN AND SLEET.' THE EXAMINATION OF THE AIRPLANE DID NOT DISCLOSE EVIDENCE OF MECHANICAL MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate inflight decision which resulted in ice accretion on the aircraft, degradation of aircraft performance, an aerodynamic stall, loss of control and inflight collision with the ground. Factors were icing conditions.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (F) WEATHER CONDITION - ICING CONDITIONS

2. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

3. AIRCRAFT PERFORMANCE - DETERIORATED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND 5. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings 6. TERRAIN CONDITION - GROUND

Factual Information

History of Flight

On March 3, 1994, about 1916 eastern standard time, a Cessna 340, N512SK, piloted by Mr. Leon Elwart, and registered to Capital Associates Corp., collided with the terrain at the Suffolk County Airport, West Hampton, New York. The pilot and one company employee passenger were fatally injured, and the airplane was destroyed. Instrument meteorological conditions prevailed, and an IFR flight plan had been filed. The flight was being conducted under 14 CFR 91.

Air Traffic Control (ATC) had cleared the airplane for the ILS approach to runway 24, circle to land on runway 06. The airplane broke off the approach to runway 24, and was observed at a low altitude, while on a left downwind for runway 06, flying in and out of the clouds. On the base leg, the airplane turned to the left, and the left wing made contact with the ground.

Several witnesses near the accident site saw and heard the airplane prior to impact. Mr. Paul Horwat, a lineman for Malloy Air East Inc., was in front of the hanger "C" at the time of the accident and wrote that he saw the airplane, "...a few hundred feet above the control tower [as the airplane] broke thru the fog." Mr. Horwat saw the airplane continue downwind then start a left turn towards runway 06. Mr. Horwat wrote:

...that's when the engines sounded like they were at full RPM. By following the lights that were on the aircraft, it appeared that the aircraft was in a nose dive and tilting to the left...the aircraft hit the ground. The engines stopped suddenly....

A Federal Technician, working at the Air Force National Guard (ANG), Base located on the southwest section of the airport wrote in his statement to the Southhampton, Police Department, "...I heard a twin...flying close to the building I was in." He looked out the window, and saw, "...an aircraft making a tight [left] bank...all of a sudden the plane went down nose first, as the left wing hit the ground first...."

Several pilots from the ANG, arrived at the crash site to help in any rescue attempts. Mr. Martin Ingram, one of the ANG pilots wrote in his statement:

...approximately 5 minutes after the plane crash I observed a significant amount of ice adhering to the surface of the wreckage, even at areas that were protected by the wind and rain which led me to believe that the ice was on the aircraft prior to impact. It appeared to be approximately 1/8" in thickness throughout the left and right wing surfaces and the rear empennage sections....

Another pilot from the ANG arrived at the crash site shortly after the accident, and wrote in his statement:

...the weather was approximately 500 ft ceiling, about 1 mile visibility or less in freezing rain and sleet. I estimated the wind to be 30-35 KTS. from the north. I felt the surface of the left wing...left and right empennage. The skin was covered with ice....

The accident occurred during the hours of darkness at approximately 40 degrees, 51 minutes north, and 72 degrees, 38 minutes west.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on Mr. Leon Elwart, on March 4, 1994, at the Medical Examiner's

Office, in Riverhead, New York, by Dr. Gwen Harleman.

The toxicological tests were conducted at the Federal Aviation Administration's (FAA), Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma and revealed, "... no drugs or alcohol where found."

METEOROLOGICAL INFORMATION

The West Hampton, 1919 weather observation was; ceiling 500 feet, overcast, visibility 1.5 miles, fog and rain, temperature 33 degrees F, dew point 30, wind 010 degrees, 10 knots, gusts 20, altimeter 29.33 inches Hg.

Witnesses at or near the accident site said that it was foggy at the time of the accident. Several witness saw the airplane flying in out of clouds. One witness said that within minutes of the crash the visibility was less then a mile, and there was "freezing rain and sleet."

WRECKAGE AND IMPACT INFORMATION

The wreckage was examined at the accident site on August 4-5, 1994. The airplane impacted the ground less then a half mile short of the arrival end of runway 06. There was a ground scar found approximately 500 feet southwest of the arrival threshold to runway 06, approximately 6 feet wide, 8 feet long, and 6 inches deep. Located within the confines of the ground were pieces of red lens, from the wing navigation light. The airplane continued in an easterly direction coming to rest approximately 130 feet east of the ground scar described above. The airplane came to rest with the nose heading approximately 035 degrees.

Examination of the wreckage revealed that the airplane was in the landing configuration at the time of impact. Control continuity was established to all the flight controls.

Examination of the engine revealed no discrepancies. Fuel was found in the fuel pumps and fuel lines of both engines.

All six propeller blades were examined, and revealed chordwise marks, curled tips, and bending.

Personnel Information

Mr. Elwart was in position of a commercial pilot's license at the time of the accident, and according to company personnel, and his personal flight records, at the time of the accident he had approximately 6,828 hours of total flight time, of which 2,000 hours were in Cessna 340 airplanes, and had been employed by the company for about three and a half years.

ADDITIONAL INFORMATION

The wreckage was released to the owner's insurance company representative, Mr. Kevin Olsen, on March 5, 1994.

Pilot Information

| Certificate: | Commercial | Age: | 40, Male |
|---------------------------|---|-----------------------------------|-------------------------------|
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | Yes |
| Medical Certification: | Class 1 Valid Medicalno waivers/lim. | Last FAA Medical Exam: | 07/19/1993 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 6828 hours (Total, all aircraft), 2000 hours (Total, this make and model), 5964 hours (Pilot In Command, all aircraft), 77 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | CESSNA | Registration: | N512SK |
|-------------------------------|--------------------------|-----------------------------------|--------------------------|
| Model/Series: | 340 340 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 340-0111 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | 01/11/1994, 100 Hour | Certified Max Gross Wt.: | 6305 lbs |
| Time Since Last Inspection: | 64 Hours | Engines: | 2 Reciprocating |
| Airframe Total Time: | 6857 Hours | Engine Manufacturer: | CONTINENTAL |
| ELT: | Installed, not activated | Engine Model/Series: | TSIO-520J |
| Registered Owner: | CAPITAL ASSOCIATES CORP. | Rated Power: | 310 hp |
| Operator: | JAMES FLYING SERVICE INC | Operating Certificate(s) Held: | On-demand Air Taxi (135) |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Instrument Conditions | Condition of Light: | Night/Dark |
|----------------------------------|-----------------------|---|------------------|
| Observation Facility, Elevation: | FOK, 67 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1919 EST | Direction from Accident Site: | 0 ° |
| Lowest Cloud Condition: | Unknown / 0 ft agl | Visibility | 1.5 Miles |
| Lowest Ceiling: | Overcast / 500 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 10 knots / 20 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 10° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 1°C / -1°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | TRENTON, NJ (TTN) | Type of Flight Plan Filed: | IFR |
| Destination: | | Type of Clearance: | IFR |
| Departure Time: | 1818 EST | Type of Airspace: | Class D |
| | | | |

Airport Information

| Airport: | SUFFOLK COUNTY (GABRESKI) (FOK) | Runway Surface Type: | Asphalt |
|----------------------|---------------------------------|---------------------------|---------------|
| Airport Elevation: | 67 ft | Runway Surface Condition: | Wet |
| Runway Used: | 6 | IFR Approach: | Circling; ILS |
| Runway Length/Width: | 9000 ft / 150 ft | VFR Approach/Landing: | Full Stop |

Wreckage and Impact Information

| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
|---------------------|---------|----------------------|-----------|
| Passenger Injuries: | 1 Fatal | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Fatal | Latitude, Longitude: | |

Administrative Information

| Investigator In Charge (IIC): | ALAN J YURMAN | Report Date: | 11/18/1994 |
|-----------------------------------|---|--------------|------------|
| Additional Participating Persons: | GEORGE VAN EPPS; FARMINGDALE, NY GEORGE HOLLINGSWORTH; RESTON, VA WILLIAM B WELCH; WICHITA, KS | | |
| Publish Date: | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <u>pubinq@ntsb.gov</u> , or at 800-877-6799. Dockets released after this date are available at <u>http://dms.ntsb.gov/pubdms/</u> . | | |

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <u>here</u>.