



Aviation Investigation Final Report

Location: SHARON, Vermont Accident Number: NYC97LA119

Date & Time: June 13, 1997, 11:00 Local Registration: N5700J

Aircraft: Enstrom F-280C Aircraft Damage: Substantial

Defining Event: 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot and passenger departed on a local flight to land in a school yard to display the helicopter. After takeoff from the departure airport, the pilot over flew the school, then established a long final approach to the school yard. After crossing an interstate overpass, the pilot descended over a river. The helicopter struck wires that extended across the river, about 100 feet above the water, approximately 3/4 of a mile west of the intended school landing area. The helicopter came to rest in 2 feet of water. The pilot listed 429 hours of total flight experience, of which 193 were in helicopters, and 152 hours of helicopter pilot-in-command experience. The pilot did not provide experience in make and model, but listed 1.3 hours of helicopter experience during the previous 90 days.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper decision to descend and fly at 100 feet over a river and his failure to maintain adequate obstacle clearance, which resulted in the in-flight collision with wires.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH

Findings

1. OBJECT - WIRE, TRANSMISSION

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

3. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

4. TERRAIN CONDITION - WATER

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Factual Information

On June 13, 1997, about 1100 eastern daylight time, an Enstrom F-280C, N5700J, was substantially damaged during a collision with wires and descent into water near Sharon, Vermont. The certificated private pilot and passenger received minor injuries. Visual meteorological conditions prevailed for the personal flight that originated at Lebanon, New Hampshire, about 1045, destined for Sharon. No flight plan had been filed for the flight conducted under 14 CFR Part 91.

In a written statement, the pilot stated that the purpose of the flight was to land in a school yard and give a speech to students about helicopters. After departure from Lebanon, the pilot flew to Sharon, and circled the school.

The pilot further stated:

"...I then turned a slow 180 degrees, lining up with the river. After crossing over the Interstate bridge, I started a descent into the valley. This particular year my passenger requested we go lower into the valley...I slowed the ship down to approx 40 knots, and descended lower for a few seconds maintaining an approach to an island in from of us...I had just started to abort the approach to the island and started a slow climb when I caught the wire ahead...I tried to ascend immediately, but still caught the top high tension lines...suddenly the wire let go...I started a forward flight to the island to land...I heard and felt a severe noise followed by a loss of tail rotor control...I cut back power to stop [the] helicopter from spinning...The helicopter landed in 2 feet of water..."

According to a Federal Aviation Administration Inspector, the helicopter came to rest in about 2 to 3 feet of water. Impact damage to the helicopter from contact with the wires began on the upper cabin area, and extended to the main rotor mast and main rotor blades. Examination of the helicopter revealed no preimpact failure of the flight controls or engine.

The helicopter struck wires that extended across the river, about 100 feet above the water, approximately 3/4 of a mile west of the intended school landing area.

In the NTSB Form 6120.1/2, the pilot listed 429 hours of total flight experience, of which 193 were in helicopters, and 152 hours of helicopter pilot-in-command experience. The pilot did not provide experience in make and model, but did list 1.3 hours of helicopter experience during the previous 90 days.

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Pilot Information

Certificate:	Private	Age:	45,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	May 1, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	429 hours (Total, all aircraft), 314 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Enstrom	Registration:	N5700J
Model/Series:	F-280C F-280C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1219
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	March 19, 1997 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	34 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1267 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	HIO-360-E1BD
Registered Owner:	ROGER D. SHARKEY	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LEB ,598 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	10:45 Local	Direction from Accident Site:	165°
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 11000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	24°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LEBANON , NH (LEB)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	10:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

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Administrative Information

Investigator In Charge (IIC): Pearce, Robert

Additional Participating Persons:

Original Publish Date: February 2, 1998

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=39378

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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