



Aviation Investigation Final Report

Location:	Cicero, New York	Accident Number:	NYC01LA206
Date & Time:	August 8, 2001, 09:20 Local	Registration:	N1281R
Aircraft:	Schweizer 300C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

With the pilot at the controls, receiving instruction, an approach to the runway was made. As the helicopter neared the runway, it was flared and leveled about 3 feet above the ground, with no forward airspeed. The CFI observed that the rotor and engine rpm began to decrease, and helicopter was turning to the left. He then took the controls and attempted to correct the situation; however, the helicopter rotated 360 degrees, and the left landing skid struck the ground. The helicopter rolled over onto its left side and came to rest. When the helicopter and its powerplant were examined after the accident, no pre-impact failures were noted. The right landing skid was separated from the struts, and its fasteners were sheared. Dirt was observed packed into the heel of the skid. The middle and aft skid shoes were deformed and twisted clockwise on the skid. The damage was consistent of skid to ground contact while moving in a right lateral direction with significant impact force.

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 directional control while hovering, and the CFI's delayed remedial action.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - COPILOT/SECOND PILOT
2. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #2: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On August 8, 2001, about 0920 eastern daylight time, a Schweizer 300C, N1281R, was substantially damaged while landing at the Michael Airport (1G6), Cicero, New York. The certificated private pilot and certified flight instructor (CFI) sustained minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed for the local instructional flight conducted under 14 CFR Part 91.

According to the pilot, he was receiving instruction from the CFI. The flight departed from the Syracuse International Airport, Syracuse, New York, and proceeded to 1G6, where a normal approach and landing was conducted. After landing, the pilot took off from the runway, and re-entered the traffic pattern for a second approach. The second approach to the runway was "normal," and the helicopter was flared and leveled about 3 feet above the ground, with no forward airspeed. The helicopter then began to turn to the left. The CFI took the controls and attempted to correct the situation; however, the helicopter touched down and rolled over.

According to the CFI, the helicopter was in a 3-foot hover, with the engine manifold pressure indicating 17 inches, and the rotor in the green arc. He then observed that the rotor and engine rpm began to decrease, and the helicopter was turning to the left. The CFI took the controls from the pilot, lowered the collective, and "rolled on the throttle." The helicopter rotated 360 degrees, and the left landing skid struck the ground, before the helicopter rolled over onto its left side.

The helicopter came to rest at the edge of the runway, with the left side of the fuselage remaining on grass.

A Federal Aviation Administration inspector and a representative of Schweizer Aircraft Corporation examined the helicopter and its powerplant after the accident. According to a report prepared by the representative of the Schweizer Aircraft Corporation, no pre-impact failures were noted. When the landing skids were examined, the right skid was separated from the struts, and its fasteners were sheared. Dirt was observed packed into the heel of the skid. The middle and aft skid shoes were deformed and twisted clockwise on the skid. The damage was consistent of skid to ground contact while moving in a right lateral direction with significant impact force.

The pilot reported that the accident flight was the first flight in make and model helicopter. He also reported his total flight experience in helicopters was 130 hours.

The winds reported at an airport located about 5 miles north of 1G6, about the time of the accident, were from 260 degrees at 9 knots.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	50, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	July 25, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	January 4, 2001
Flight Time:	1600 hours (Total, all aircraft), 70 hours (Total, this make and model), 1361 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Private	Age:	44, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 15, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 25, 1999
Flight Time:	130 hours (Total, all aircraft), 45 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N1281R
Model/Series:	300C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1812
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	March 12, 2001 Annual	Certified Max Gross Wt.:	2050 lbs
Time Since Last Inspection:	42 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	42 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	H10-360-D1A
Registered Owner:	Frank Tartaglia Inc.	Rated Power:	180 Horsepower
Operator:	Highland Helicopter Services	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SYR,421 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	08:54 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	27°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Syracuse, NY (SYR)	Type of Flight Plan Filed:	None
Destination:	Cicero, NY (1G6)	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Michael Airport 1G6	Runway Surface Type:	Asphalt
Airport Elevation:	400 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	2500 ft / 60 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	43.170303,-76.110725(est)

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen
Additional Participating Persons:	Thomas Williams; FAA; Rochester, NY
Original Publish Date:	April 18, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52966

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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](#).