

Aviation Investigation Final Report

Location: Cedar Valley, Utah Accident Number: LAX08CA178

Date & Time: June 13, 2008, 13:20 Local Registration: N54LC

Aircraft: Schweizer 269C Aircraft Damage: Substantial

Defining Event: Collision with terr/obj (non-CFIT) **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Air race/show

Analysis

The pilot reported that the purpose of the flight was to demonstrate the helicopter's performance at an air show. He traveled from overseas by scheduled airline, arriving 2 days before the air show. The day before the air show he flew the helicopter for 50 minutes of demonstration practice at a similar density altitude to that anticipated for the following day's performance. The accident flight began about 1315, and the first two maneuvers were completed without incident. The third maneuver was "a standard 180-degree 'wing-over' commenced from a standard 300 feet." According to the pilot, the helicopter "failed to fully recover from the descent phase of the maneuver and struck the surface at approximately 40-50 knots." The helicopter rolled onto its left side. The pilot reported that the density altitude at the time of the accident was 8,500 feet. He stated that the accident could have been prevented "possibly by greater awareness and practice at the local density altitude conditions."

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 terrain clearance while maneuvering. A contributing factor was the high density altitude.

Findings

Environmental issues	High density altitude - Contributed to outcome
Aircraft	Altitude - Not attained/maintained

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Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT) (Defining ev	ent)
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Pilot Information

Certificate:	Commercial	Age:	75,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1	Last FAA Medical Exam:	February 1, 2008
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	13750 hours (Total, all aircraft), 4300 hours (Total, this make and model), 60 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N54LC
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S1581
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	HIO-360
Registered Owner:	L J Air Inc	Rated Power:	
Operator:	AMW Aerospace LLC	Operating Certificate(s) Held:	None
Operator Does Business As:	Whirlybird Helicopters	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:	PVU,4497 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	13:49 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	23°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cedar Valley, UT (UT99)	Type of Flight Plan Filed:	None
Destination:	(UT99)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	West Desert Airpark UT99	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2600 ft / 40 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor	Latitude, Longitude:	40.242778,-112.093055

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Administrative Information

Investigator In Charge (IIC):	Struhsaker, Georgia
Additional Participating Persons:	Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	July 30, 2008
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=68222

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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