



Aviation Investigation Final Report

Location: Pueblo, Colorado Accident Number: DEN05CA079

Date & Time: May 19, 2005, 09:20 Local Registration: N958CP

Aircraft: Schweizer 269C Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

According to the flight instructor, they were conducting steep approaches to runway 26L. The first three approaches and landings were uneventful. During the fourth approach, approximately 10 to 15 feet agl, the student noted that the rpm's had dropped into the yellow arc around 2800 rpm. The student stated that he "lowered the collective and rolled on the throttle." The helicopter "dropped dramatically." The student attempted to cushion the landing by adding collective. The helicopter impacted the ground and "spun left" approximately 180 degrees before coming to a rest. An examination of helicopter showed substantial damage to the tail boom, skids, tail rotor drive shaft, and the frame. An examination of the helicopter's systems revealed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the student pilot's failure to maintain control of the helicopter during the landing. Contributing to the accident was the flight instructor's inadequate supervision of the student pilot.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - DUAL STUDENT

2. (F) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2: HARD LANDING

Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - RUNWAY

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Factual Information

On May 19, 2005, approximately 0920 mountain daylight time, a Schweizer 269C helicopter, N958CP, was substantially damaged when it made a hard landing during a short approach at the Pueblo Memorial Airport (PUB), Pueblo, Colorado. Visual meteorological conditions prevailed at the time of the accident. The instructional flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The flight instructor and student pilot on board reported no injures. The local flight departed PUB approximately 0830.

According to the accident report submitted by the flight instructor, they were conducting steep approaches to runway 26L. The first three approaches and landings were uneventful. During the fourth approach, approximately 10 to 15 feet agl, the student noted that the rpm's had dropped into the yellow arc around 2800 rpm. The student stated that he "lowered the collective and rolled on the throttle." The helicopter "dropped dramatically." The student attempted to cushion the landing by adding collective. The helicopter impacted the ground and "spun left" approximately 180 degrees before coming to a rest. During the impact the skids split, the tail boom was bent backwards, the tail rotor drive shaft separated, and the frame of the helicopter was bent. An examination of the helicopter's systems revealed no anomalies.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	23,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	January 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 1, 2005
Flight Time:	313 hours (Total, all aircraft), 114 hours (Total, this make and model), 254 hours (Pilot In Command, all aircraft), 128 hours (Last 90 days, all aircraft), 89 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Student pilot Information

			2214
Certificate:	Student	Age:	33,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	January 1, 2005
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 1, 2005
Flight Time:	5 hours (Total, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N958CP
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51710
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	April 1, 2005 100 hour	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	37 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5129 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	HIO-360-D1A
Registered Owner:	LJ AIR	Rated Power:	190 Horsepower
Operator:	Silver State Helicopters	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PUB,4726 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	08:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	14°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pueblo, CO (PUB)	Type of Flight Plan Filed:	None
Destination:	Pueblo, CO (PUB)	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	

Airport Information

Airport:	PUEBLO MEMORIAL PUB	Runway Surface Type:	Asphalt
Airport Elevation:	4726 ft msl	Runway Surface Condition:	Dry
Runway Used:	26L	IFR Approach:	None
Runway Length/Width:	4073 ft / 75 ft	VFR Approach/Landing:	Stop and go;Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.289165,-104.496391

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Administrative Information

Investigator In Charge (IIC):	Bowling, David
Additional Participating Persons:	Roger O Kenny; FAA Flight Standards District Office; Denver, CO
Original Publish Date:	September 13, 2005
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=61515

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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.

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