



Aviation Investigation Final Report

Location: Nampa, Idaho Accident Number: WPR14CA006

Date & Time: October 5, 2013, 09:15 Local Registration: N104BJ

Aircraft: SIEMENS ROTORWAY EXEC 162F Aircraft Damage: Substantial

Defining Event: Flight control sys malf/fail **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that while in cruise flight, about 500 feet above ground level (agl), the cyclic control seemed to require a higher than normal input. He changed speed, however, that seemed to make it worse. The pilot was over a field and entered a 180 degree autorotation to lose altitude. At the completion of the autorotation, forward velocity had dissipated and the lateral movement to the left increased even with full right cyclic input. The helicopter collided with trees that bordered the field and subsequently rolled over onto its left side after touchdown. The fuselage and tailboom were substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A flight control malfunction during cruise flight for reasons that could not be determined. No follow-up examination was conducted due to a lapse in agency funding and subsequent government shutdown.

Findings

Aircraft (general) - Malfunction

Not determined (general) - Unknown/Not determined

Factual Information

History of Flight

Enroute-cruise	Flight control sys malf/fail (Defining event)
Autorotation	Off-field or emergency landing

Pilot Information

Certificate:	Airline transport; Flight engineer; Flight instructor	Age:	49
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	September 3, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 19, 2013
Flight Time:	30000 hours (Total, all aircraft), 100 hours (Total, this make and model), 22000 hours (Pilot In Command, all aircraft), 220 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Page 2 of 5 WPR14CA006

Aircraft and Owner/Operator Information

Aircraft Make:	SIEMENS	Registration:	N104BJ
Model/Series:	ROTORWAY EXEC 162F F	Aircraft Category:	Helicopter
Year of Manufacture:	1997	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	6194
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotorway
ELT:	Not installed	Engine Model/Series:	RI 162F
Registered Owner:	On file	Rated Power:	150
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	EUL	Distance from Accident Site:	7 Nautical Miles
Observation Time:	08:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CALDWELL, ID (EUL)	Type of Flight Plan Filed:	None
Destination:	CALDWELL, ID (EUL)	Type of Clearance:	None
Departure Time:	08:45 Local	Type of Airspace:	Class E

Page 3 of 5 WPR14CA006

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	43.57722,-116.615837(est)

Page 4 of 5 WPR14CA006

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	Morris Pitman; FAA-FSDO; Boise, ID
Original Publish Date:	December 2, 2013
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=88175

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.

Page 5 of 5 WPR14CA006