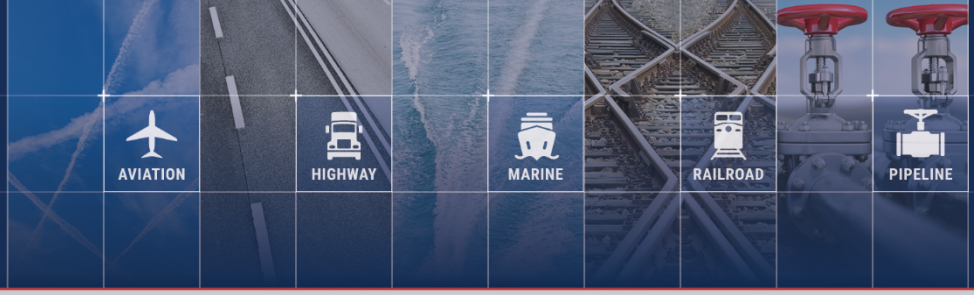

Aviation Investigation Final Report

Location:	Driggs, Idaho	**Accident Number:**	SEA01LA043
Date & Time:	January 29, 2001, 16:30 Local	**Registration:**	N31330
Aircraft:	S.N.I.A.S SE 3130 Alouette II	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that the flight was uneventful until the landing. When the helicopter touched down on the ramp, the cyclic control began to shake "very violently" in his hand along with the helicopter starting to move forward and aft. The pilot thought that it might be ground resonance and lifted off to a hover. The condition worsened, and the pilot increased the hover. The helicopter began to oscillate and the pilot could not stabilize the movement. The pilot then turned the helicopter to the left then back to the right to verify the location of a fuel truck. When the truck was locate, the pilot lowered the collective to land. The right rear skid contacted the surface first and the helicopter rocked forward and to the right. The helicopter rolled to the right, coming to rest on its right side. Post-accident inspection of the main rotor dampers found no mechanical failures or malfunctions.

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 aircraft control for undetermined reasons.

Findings

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

Findings
1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: ROLL OVER
Phase of Operation: LANDING

Factual Information

On January 29, 2001, at 1630 mountain standard time, a S.N.I.A.S. SE 3130 Alouette II, N31330, registered to and operated by J.H. Jet as a 14 CFR Part 91 pleasure flight, rolled over on the ramp at Reed Memorial airport, Driggs, Idaho. Visual meteorological conditions prevailed at the time and no flight plan was filed for the local flight. The helicopter was substantially damaged and the airline transport pilot and his two passengers were not injured. The flight originated from Driggs about one hour and 30 minutes prior to the accident.

During a telephone interview and subsequent written statement, the pilot reported that the local sightseeing flight was uneventful. When they returned to the airport, the pilot entered into a hover over the departure end of runway 21 to hover taxi to the ramp. The pilot stated that the helicopter touched down on the ramp and he lowered the collective to unload the main rotor blades. At this point the cyclic control started shaking "very violently" in his hand along with the helicopter starting to move forward and aft. The pilot thought that it might be ground resonance and lifted the helicopter back off to about a three to six foot hover. The conditions worsened as the helicopter began to oscillate and could not be stabilized. The pilot raised the hover to about 10 to 12 feet, and lowered the collective thinking that it might reduce the movement. When that did not help, the pilot turned the helicopter about 90 degrees to verify the location of a fuel truck. When the truck was located, the pilot then turned the helicopter back to the right and prepared to touchdown, cautioning his passengers that the helicopter might roll after touchdown. During the landing, the right rear skid contacted the ground first and the helicopter tipped forward to the right and started to roll. The helicopter rolled over to the right and came to rest on its right side.

After the accident, the main rotor dampers were removed from the helicopter. The mechanic from Teton Aviation Center, Driggs, Idaho, performing the inspection reported that, "Functional checks of the dampers showed normal operation. Disassembled dampers and inspected, found no obvious damage or hidden damage that would cause abnormal function."

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	**Age:**	47,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	January 17, 2000
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	January 11, 2001
Flight Time:	12773 hours (Total, all aircraft), 26 hours (Total, this make and model), 106 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	S.N.I.A.S	**Registration:**	N31330
Model/Series:	SE 3130 Alouette II	**Aircraft Category:**	Helicopter
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1133
Landing Gear Type:	Skid	**Seats:**	5
Date/Type of Last Inspection:	December 19, 2000 Annual	**Certified Max Gross Wt.:**	3300 lbs
Time Since Last Inspection:	3 Hrs	**Engines:**	1 Turbo shaft
Airframe Total Time:	10001 Hrs at time of accident	**Engine Manufacturer:**	Turbomeca
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	Artouste IIC5
Registered Owner:	J. H. Jet	**Rated Power:**	496
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	210°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	-23°C
Precipitation and Obscuration:			
Departure Point:	Driggs, ID (U59)	**Type of Flight Plan Filed:**	None
Destination:	(U59)	**Type of Clearance:**	None
Departure Time:	15:15 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Reed Memorial U59	**Runway Surface Type:**	Asphalt
Airport Elevation:	6228 ft msl	**Runway Surface Condition:**	Dry
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	43.747776,-111.083335

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	Ralph Chadburn; FAA-FSDO; Salt Lake City, UT
Original Publish Date:	July 30, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51411