



Aviation Investigation Final Report

Location:	Talkeetna, Alaska	Accident Number:	ANC15CA026
Date & Time:	May 16, 2015, 09:30 Local	Registration:	N7347D
Aircraft:	Piper PA 22-150	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor and private pilot were practicing takeoffs and landings in a float-equipped airplane. The flight instructor stated that on the seventh approach to landing, the private pilot misjudged the airplane's rate of descent, and struck the top of a spruce tree with the right elevator resulting in a full up deflection of the elevator. The airplane entered an uncontrolled descent, and impacted the water in a flat stalled condition sustaining substantial damage to the fuselage and elevator. The flight instructor stated that there were no preaccident mechanical anomalies with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The private pilot's failure to maintain clearance from a spruce tree during final approach, which resulted in a loss of control and hard landing. Contributing to the accident was the flight instructor's failure to adequately monitor the landing.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained	
Personnel issues	Aircraft control - Pilot	
Personnel issues	Task monitoring/vigilance - Instructor/check pilot	

Factual Information

History of Flight

Approach-VFR pattern final	Miscellaneous/other (Defining event)
Approach-VFR pattern final	Collision with terr/obj (non-CFIT)
Landing-flare/touchdown	Abnormal runway contact

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	Age:	60
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 10, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 5, 2015
Flight Time:	2400 hours (Total, all aircraft), 260 hours (Total, this make and model), 2340 hours (Pilot In Command, all aircraft), 48 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Private	Age:	55
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 25, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 24, 2013
Flight Time:	488 hours (Total, all aircraft), 11 hours (Total, this make and model), 415 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7347D
Model/Series:	PA 22-150 160	Aircraft Category:	Airplane
Year of Manufacture:	1957	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5138
Landing Gear Type:	Tailwheel; Float	Seats:	
Date/Type of Last Inspection:	January 15, 2015 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3281.7 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-320 SERIES
Registered Owner:	CHRISTIANSON LAKE RENTALS & MAINTENANCE	Rated Power:	160 Horsepower
Operator:	Roger Anderson	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PATK,358 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Few / 4500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	11°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Talkeetna, AK	Type of Flight Plan Filed:	None
Destination:	Talkeetna, AK	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

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:	62.449535,-149.789367(est)

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	
Original Publish Date:	July 8, 2015
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=91204

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.