



Aviation Investigation Final Report

Location:	SITKA, Alaska	Accident Number:	ANC97LA086
Date & Time:	June 19, 1997, 14:40 Local	Registration:	N60859
Aircraft:	Cessna 185F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The certificated commercial pilot (first pilot) was receiving training in preparation for a CFR Part 135 check ride in a float equipped airplane. The company's chief pilot (second pilot), was seated in the right front seat of the airplane. The second pilot briefed the first pilot about a training maneuver that was a simulated engine failure after takeoff from the water. After takeoff with 20 degrees of flaps selected, the second pilot pulled the engine throttle to idle about 60 to 100 feet above the water. The first pilot lowered the nose of the airplane and descended for landing. The first pilot landed the airplane on the water in a level attitude, but with an excessive rate of descent. The front float strut attach points separated from the fuselage, and the front of the fuselage pivoted downward, coming to rest on the front float spreader bar. The airplane received wrinkling damage to the fuselage aft of the float attach points.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot(s) to properly flare the airplane during a simulated forced landing. The excessive rate of descent on final approach was a related factor.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. TERRAIN CONDITION - WATER
2. EMERGENCY PROCEDURE - SIMULATED - CHECK PILOT
3. (F) PROPER DESCENT RATE - EXCEEDED - PILOT IN COMMAND
4. (C) FLARE - NOT ATTAINED - FLIGHTCREW

Occurrence #2: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. LANDING GEAR,FLOAT ASSEMBLY - OVERLOAD

Factual Information

On June 19, 1997, about 1440 Alaska daylight time, an amphibious float equipped Cessna 185F, N60859, crashed during a simulated forced landing on a remote lake, about 10 miles south of Sitka, Alaska. The airplane was being operated as a visual flight rules (VFR) local area instructional flight under Title 14 CFR Part 91 when the accident occurred. The airplane, operated by Mountain Aviation Inc., Sitka, sustained substantial damage. The certificated commercial pilot (first pilot), a certificated airline transport pilot (second pilot), and the sole passenger, were not injured. Visual meteorological conditions prevailed. A VFR flight plan was filed. The flight originated at the Sitka airport, about 1330.

On June 20, 1997, at 1320, the second pilot reported in a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), he was preparing the first pilot and the passenger for a CFR Part 135 check ride to be conducted in a float equipped airplane. The second pilot is the chief pilot for Mountain Aviation. The second pilot, seated in the right front seat, stated he briefed the first pilot about the planned training maneuver that was a simulated engine failure after takeoff from the water. Following a takeoff with 20 degrees of flaps selected, the second pilot pulled the engine throttle to idle about 60 to 100 feet above the water. The first pilot, seated in the left front seat, lowered the nose of the airplane and descended for landing. The first pilot landed the airplane on the water in a level attitude but with an excessive rate of descent.

The front float strut attach points separated from the fuselage and the front of the fuselage pivoted downward, coming to rest on the front float spreader bar. The airplane received wrinkling damage to the fuselage aft of the float attach points and under the front doors. The propeller struck the front portion of one float.

Pilot Information

Certificate:	Commercial	Age:	45, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 21, 1996
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4911 hours (Total, all aircraft), 1155 hours (Total, this make and model), 40 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N60859
Model/Series:	185F 185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18504064
Landing Gear Type:	Float	Seats:	4
Date/Type of Last Inspection:	June 11, 1997 100 hour	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	14380 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-D27B
Registered Owner:	MOUNTAIN AVIATION INC.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	M5VA

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:	Unknown	Visibility	20 miles
Lowest Ceiling:	Broken / 4000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	135°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(SIT)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Simulated forced landing

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	56.729312,-135.000579(est)

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	JEFF PRITCHARD; JUNEAU , AK
Original Publish Date:	May 29, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=3016

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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](#).