



Aviation Investigation Final Report

Location:	MOLALLA, Oregon	Accident Number:	SEA00FA127
Date & Time:	July 8, 2000, 08:40 Local	Registration:	N7625M
Aircraft:	Cessna 175	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercial pilot was participating in a group fly-in from Aurora, Oregon, to Lebanon, Oregon. After failing to arrive at the intended destination and not returning to his home, family members contacted the FAA and a search for the pilot and aircraft was initiated. The following day the aircraft wreckage was located in a wooded area southeast of Molalla, Oregon. The aircraft collided with mountainous terrain and was destroyed. Post-accident examination of the airplane and engine revealed no evidence of a preexisting mechanical malfunction or failure.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure to maintain clearance from mountainous/hilly terrain.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: CRUISE

Findings

1. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On July 08, 2000, about 0840 Pacific daylight time, a Cessna 175, N7625M, was destroyed when it collided with mountainous terrain approximately 13 nautical miles southeast of Molalla, Oregon. The airplane was registered to and operated by the pilot as a visual flight rules (VFR) personal flight under the provisions of Title 14 CFR Part 91, when the accident occurred. The commercial pilot, the sole occupant of the airplane, was fatally injured. Visual meteorological conditions prevailed and no flight plan was filed for the cross-country flight. Impact forces and post-crash fire destroyed the airplane, and there was no report of ELT activation. The airplane departed Aurora, Oregon, at 0800.

On the morning of July 8th, a group of about 16 people and 10 aircraft, including the pilot of the accident airplane, convened at Aurora State Airport (UAO). The gathering was a reoccurring event with participants from the local flying community. The participants planned on flying from Aurora to Salem, Oregon, for breakfast followed by a return flight to Aurora later that day. However, due to low ceilings (reported at 1,800 feet AGL), the group changed the intended destination from Salem to Lebanon, Oregon.

Shortly after departing Aurora, the pilot of the accident airplane was contacted by another pilot (on 122.75 megahertz) who was participating in the fly-in. At that point, the pilot of the accident airplane indicated that he was underway. That was the last known communication to/from the accident airplane.

On the evening of July 8th, after the pilot failed to return home from the morning flight, family members reported the overdue airplane to the Federal Aviation Administration in McMinnville, Oregon. McMinnville Flight Service Station (FSS) subsequently issued an ALNOT (alert notice) and search and rescue personnel were notified. The following day, approximately 2345, search and rescue personnel located the airplane wreckage.

PERSONNEL INFORMATION

The pilot held a commercial pilot certificate with single-engine land, multi-engine land and instrument airplane ratings. The pilot held a third-class medical certificate issued on September 2, 1998. The pilot's flight logbook indicated that he had accumulated approximately 1,572 hours in single-engine airplanes, 11 of which were accumulated in the 90 days preceding the accident. The logbook also indicated that the pilot had successfully completed a biennial flight review on June 16, 2000.

AIRCRAFT INFORMATION

The airplane was manufactured and certificated on February 12, 1959. It was powered by a

Continental GO-300 series engine, rated at 175 horsepower. According to maintenance records, the airplane's last annual inspection was performed on December 11, 1999.

METEOROLOGICAL INFORMATION

The 0840 SPECI (Special) observation at Aurora, approximately 21 nautical northwest of the accident location, reported variable winds at 3 knots; visibility 10 statute miles; scattered clouds at 2,600 feet AGL; overcast clouds at 3,800 feet AGL; temperature 14 degrees C; dew point temperature 10 degrees C; altimeter setting 29.90 inches Hg.

The 0853 SPECI observation at Aurora, reported winds from 190 degrees at 3 knots; visibility 10 statute miles; few clouds at 2,800 feet AGL; broken clouds at 3,400 feet AGL; broken clouds at 4,100 feet AGL; temperature 14 degrees C; dew point temperature 10 degrees C; altimeter setting 29.90 inches Hg.

The 0926 SPECI observation at Aurora, reported winds from 330 degrees at 3 knots; visibility 10 statute miles; few clouds at 2,700 feet AGL; broken clouds at 4,800 feet AGL; broken clouds at 6,000 feet AGL; temperature 16 degrees C; dew point temperature 11 degrees C; altimeter setting 29.90 inches Hg.

WRECKAGE AND IMPACT INFORMATION

On July 10, 2000, investigators from the National Transportation Safety Board, Cessna Aircraft and the Federal Aviation Administration examined the airplane wreckage. The wreckage was located on private forested land at an elevation of approximately 2,826 feet above sea level. The airplane came to rest at 44 degrees, 59 minutes north latitude, and 122 degrees, 26 minutes west longitude. A grouping of large conifer trees (estimated to be 150 feet in height) with fresh scarring, approximately 80 feet above ground level, was observed approximately 470 feet southwest of the main wreckage. The magnetic bearing from the conifer trees to the main wreckage/burn area was approximately 035 degrees magnetic (wreckage diagram and photographs attached).

All airplane components were located at the crash site. The main wreckage, consisting of the charred remains of the cabin area, empennage and engine were located on a service road at the northeast end of the wreckage distribution path. The cabin area, from the engine compartment to the rear bulkhead, was entirely destroyed by fire and impact forces. A section of the left wing and flap assembly was found lying next to the charred remains of the fuselage. The remaining section of left wing and associated aileron were found along the wreckage distribution track, approximately 370 feet southwest of the main wreckage. The airplane's right wing (which had separated at the wing root), lift strut, flap and aileron, were found, as a unit, approximately 310 feet southwest of the main wreckage. Rearward crushing was noted to the right horizontal stabilizer and elevator. The left side horizontal stabilizer and elevator had separated from the empennage and were found lying in the immediate area of the main wreckage. Minimal damage was noted to the vertical stabilizer and still attached rudder. The

propeller assembly and reduction gear separated as a unit from the crankcase and were found approximately 222 feet southwest of the main wreckage. Forward span wise bending (toward the low pressure side of the propeller) was noted to propeller blade A. The last 6-7 inches of the blade was curled forward approximately 120 degrees. Span wise aft bending was noted to propeller blade B.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy on the pilot was conducted by the Oregon State Medical Examiner's Office, Portland, Oregon, on July 10, 2000. According to the postmortem report, the pilot's cause of death was attributed to "blunt force trauma." The manner of death was listed as accidental.

Toxicology testing on the pilot was conducted by the FAA Civil Aeromedical Institute (CAMI), Oklahoma, Oklahoma. According to the toxicology report, results were negative for Ethanol. An unspecified amount of Quinine was detected in the pilot's Liver.

ADDITIONAL INFORMATION

On July 10, 2000, the airplane wreckage was recovered by personnel from HLM Air Service, Inc, and transferred to their facility in Independence, Oregon.

On July 18, 2000, representatives from Teledyne Continental Motors and the National Transportation Safety Board examined the airplane's engine.

Extensive impact and thermal damage was noted to the frontal area, bottom area and accessory region of the engine assembly. The reduction gearbox was broken away from the crankcase exposing the gear assembly. All six cylinders and associated overhead components were intact. Drive train continuity, valve actuation and cylinder compression was established by rotating the crankshaft. The oil sump was broken open. The interior of the engine was visually inspected through the opening in the oil sump. The crankshaft, connecting rods and counterweights were intact. Both magnetos and their respective ignition harnesses sustained extensive thermal damage and were partially melted away. The vacuum pump was partially broken away from its respective mounting pad. The vacuum pump drive coupling was fractured, however, the internal components of the pump were intact and unremarkable. The spark plugs sustained extensive thermal damage, however, exhibited normal operating wear patterns. The DC generator was partially broken away from its respective mounting pad. The engine's carburetor, which was partially broken away from the engine, was disassembled. Both metallic type floats had melted away from the float arm assembly and were resting in the float chamber. The float chamber was free of contaminants, with the exception of the solder from the float arm.

Post-accident inspection and teardown of the airplane's engine revealed no evidence of a mechanical malfunction or failure.

On August 29, 2000, the airplane wreckage and associated components were released to the owner's estate in Portland, Oregon.

Pilot Information

Certificate:	Commercial	Age:	79, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 2, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1573 hours (Total, all aircraft), 1410 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7625M
Model/Series:	175 175	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	55925
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 12, 1999 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	GO-300-A
Registered Owner:	ROBERT F. MCCANN	Rated Power:	175 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	UAO ,200 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	08:40 Local	Direction from Accident Site:	280°
Lowest Cloud Condition:	Scattered / 2600 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 3800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16°C / 12°C
Precipitation and Obscuration:			
Departure Point:	AURORA , OR (UAO)	Type of Flight Plan Filed:	None
Destination:	LEBANON , OR (S30)	Type of Clearance:	None
Departure Time:	08:00 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:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	1 Fatal	Latitude, Longitude:	45.070816,-122.549507(est)

Administrative Information

Investigator In Charge (IIC): Hogenson, Dennis

Additional Participating Persons: TIM D MOON; HILLSBORO , OR
TOM MOODY; WICHITA , KS
MIKE GRIMES; LANCASTER , CA

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Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=49677>

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](#).