

# **Aviation Investigation Final Report**

Location: MADRAS, Oregon Accident Number: SEA97LA059

Date & Time: February 6, 1997, 16:30 Local Registration: N5618J

Aircraft: Cessna 172N Aircraft Damage: Substantial

**Defining Event:** 2 Serious, 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The pilot had been en route in visual meteorological conditions, but came to a point where it appeared low-level clouds stretched many miles ahead toward his destination. He therefore elected to attempt to fly underneath the overcast through the mountainous/hilly terrain that was between his location and his destination. While flying through a narrow canyon under the lowering ceiling, he encountered an area of fog and low clouds, and therefore elected to reverse course. During the reversal, the pilot inadvertently entered instrument meteorological conditions, and immediately initiated a climb. While attempting to climb out of the conditions, he saw an area of terrain that he thought he should try to crash land on. As he maneuvered to execute the crash landing, the aircraft impacted a tree, and the left wing separated from the fuselage.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent visual flight rules (VFR) flight into instrument meteorological conditions (IMC). Factors include the pilot's improper decision to fly under a low ceiling while in mountainous/hilly terrain, and his encounter with fog and low clouds while maneuvering in a narrow canyon.

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

#### Findings

- 1. (C) VFR FLIGHT INTO IMC INADVERTENT PILOT IN COMMAND
- 2. OBJECT TREE(S)
- 3. (F) IN-FLIGHT PLANNING/DECISION IMPROPER PILOT IN COMMAND
- 4. (F) WEATHER CONDITION CLOUDS
- 5. (F) WEATHER CONDITION FOG
- 6. (F) TERRAIN CONDITION MOUNTAINOUS/HILLY
- 7. (F) WEATHER CONDITION LOW CEILING

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#### **Factual Information**

On February 6, 1997, approximately 1630 Pacific standard time, a Cessna 172N, N5618J, collided with trees about 25 miles northwest of Madras, Oregon. The private pilot and one of his passengers received serious injuries, one passenger received minor injuries, and the aircraft sustained substantial damage. The personal pleasure flight, which departed Klamath Falls, Oregon about two hours and twenty minutes earlier, was en route to The Dalles, Oregon. The flight, which was intended to be conducted entirely under visual flight rules, was in instrument meteorological conditions (IMC) at the time of the accident. No flight plan had been filed, and the ELT, which was activated by the impact, was the primary means of locating the wreckage.

According to the pilot, he had been flying in visual meteorological conditions while en route to The Dalles, but he encountered an area of low-level clouds shortly after passing Madras, Oregon. He said that it appeared that the clouds stretched "many miles ahead," so he elected to attempt to fly under them. At first, the ceiling was about 3,000 feet above the ground level(AGL), but as he continued on toward The Dalles, the ceiling began to lower. While flying through a narrow canyon under the lowering ceiling, the pilot entered an area of low clouds and fog, and elected to reverse course. While making the course reversal, the pilot inadvertently entered IMC and immediately started to climb. While attempting to climb out of the IMC, the pilot saw an area of relatively open terrain through an opening in the clouds, and decided he should make a "controlled" crash landing on that terrain. While maneuvering toward the spot he had elected to crash land on, the aircraft impacted trees, and its left wing separated from the fuselage.

#### **Pilot Information**

Certificate:	Private	Age:	63,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	August 16, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	356 hours (Total, all aircraft), 212 hours (Total, this make and model), 245 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N5618J
Model/Series:	172N 172N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17272823
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-320-H2AD
Registered Owner:	TORRES, C. & ORRANTE, R.	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	0.5 miles
Lowest Ceiling:	100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	KLAMATH FALLS , OR (LMT)	Type of Flight Plan Filed:	None
Destination:	THE DALLLES , OR (DLS)	Type of Clearance:	None
Departure Time:	14:10 Local	Type of Airspace:	Class G

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## **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 1 Minor	Latitude, Longitude:	44.600353,-121.050346(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Anderson, Orrin	
Additional Participating Persons:	KEITH CRIMMIN; HILLSBORO , OR	
Original Publish Date:	October 14, 1997	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42562	

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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.

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