



# **Aviation Investigation Final Report**

Location: PALOUSE, Washington Accident Number: SEA94FA164

Date & Time: July 5, 1994, 10:15 Local Registration: N5833T

Aircraft: CESSNA 185C Aircraft Damage: Substantial

**Defining Event:** Injuries: 1 Fatal

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

WHILE EN ROUTE FROM ONE PRIVATE AIRSTRIP TO ANOTHER A SHORT DISTANCE AWAY, THE AIRPLANE COLLIDED WITH ROLLING TERRAIN IN A NOSE DOWN ATTITUDE. A WITNESS REPORTED THAT HE HEARD AN AIRPLANE CIRCLING THE AREA, THEN HE HEARD A THUD. WHEN HE WENT TO INVESTIGATE, THE AREA WAS COVERED WITH DENSE FOG AND VISIBILITY WAS LIMITED TO 75 FEET. THERE WAS NO EVIDENCE TO INDICATE A MECHANICAL FAILURE OR MALFUNCTION.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE INADVERTENT DISORIENTATION OF THE PILOT AFTER ENTERING INSTRUMENT METEOROLOGICAL CONDITIONS. FOG WAS A RELATED FACTOR.

## **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

#### **Findings**

1. (F) WEATHER CONDITION - FOG

2. (C) VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND

3. (C) BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND

Page 2 of 7 SEA94FA164

### **Factual Information**

### HISTORY OF FLIGHT

On July 5, 1994, approximately 1015 Pacific daylight time (PDT), a Cessna 185C, N5833T, impacted rolling terrain about three miles west of Palouse, Washington. The commercial pilot, who was the sole occupant of the aircraft, received fatal injuries, and the aircraft was substantially damaged. The FAR Part 91 personal pleasure flight, which departed the pilot's private airstrip in Tensed, Idaho, about 15 minutes earlier, was en route to another private strip about 5 miles southeast of the accident site. At the time of the accident, the aircraft was in instrument meteorological conditions. No flight plan had been filed, and there was no report of an ELT activation.

A witness in the area reported that while in his shop he heard an airplane circle twice under full engine power, then he heard a thud. The witness got in his automobile to check out what he heard and stated that "it was too foggy to see far." The witness then returned to his shop to get additional assistance before returning to search the fields. The wreckage was found a short time later. The witness stated that visibility in the fog was approximately 75 feet.

#### PERSONNEL INFORMATION

The pilot held a commercial and flight instructor certificate and was rated in airplane single and multi-engine land, airplane single engine sea, helicopter, and instrument. The pilot also held an Inspection Authorization.

The Federal Aviation Administration records branch reported that the pilot indicated a total flight time of 16,800 hours on his last medical dated March 4, 1994. The pilot's flight logbook was not located.

#### WRECKAGE AND IMPACT INFORMATION

The wreckage was located in an area of rolling terrain and positioned with its nose on a 122 degree magnetic bearing. The terrain angle was measured at a 12 degree up slope. The soft ground was covered with low vegetation. There were no obstructions in the local area. The wreckage was positioned with the engine embedded straight into the ground. The entire fuselage structure was crushed directly on top of the engine. Both wings remained in place with respect to the fuselage. The entire leading edge of both wings displayed accordion crushing.

The flaps and ailerons remained in place with respect to the wings. The horizontal stabilizers and vertical stabilizer also displayed leading edge rearward crushing. Control continuity was

Page 3 of 7 SEA94FA164

not established due to the extensive impact damage and compromise of the flight cables when the pilot was removed.

An engine examination revealed that one propeller blade had separated from the hub and was in the hole made by the engine. The other blade remained attached to the hub. Both blades displayed rearward and slight "S" bending. Chordwise scratches were noted along the blade back. Both magnetos were destroyed. The top spark plugs displayed normal operating signatures. The oil filter was clear from contaminants. The fuel injector metering screen was clear. The two forward cylinders received extensive impact damage. The vacuum pump was found intact and rotated. The crankshaft would not rotate due to impact damage. A strong smell of fuel was present in the area. The browning vegetation around the wreckage indicated the area of fuel spillage.

### MEDICAL AND PATHOLOGICAL INFORMATION

Doctor Robert W. Cihak, Pathologist's Regional Laboratory, Lewiston, Idaho, reported that the pilot's cause of death was due to marked whole body trauma and disruption. Toxicological samples were sent to the Federal Aviation Administration Civil Aeromedical Institute for examination. The result of the tests were negative.

#### ADDITIONAL INFORMATION

The wreckage was released to the pilot's wife on July 25, 1994, and the wreckage was to be disposed of by the family.

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	41,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 4, 1994
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	16800 hours (Total, all aircraft)		

Page 4 of 7 SEA94FA164

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

Aircraft Make:	CESSNA	Registration:	N5833T
Model/Series:	185C 185C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1850733
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	February 6, 1994 Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470-F
Registered Owner:	TEAL, DENNIS A.	Rated Power:	260 Horsepower
Operator:	TEAL, DENNIS A.	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	
Lowest Ceiling:	75 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	TENSED , ID	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Page 5 of 7 SEA94FA164

## **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 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	46.880813,-117.15097(est)

Page 6 of 7 SEA94FA164

### **Administrative Information**

Investigator In Charge (IIC): Anderson, Orrin Additional Participating TOM PRYDE; RENTON , WA MICHAEL GRIMES; LANCASTER , CA Persons: **EMILE** LOHMAN; WICHITA . KS **Original Publish Date:** October 13, 1995 Last Revision Date: **Investigation Class:** Class Note:

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=41811">https://data.ntsb.gov/Docket?ProjectID=41811</a>

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.

Page 7 of 7 SEA94FA164