



National Transportation Safety Board Aviation Accident Final Report

Location:	Crowley Ranch, OR	Accident Number:	SEA08FA005
Date & Time:	10/03/2007, 1410 PDT	Registration:	N91254
Aircraft:	Piper PA-18	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

According to witnesses near the accident site, the pilot was maneuvering the airplane while herding cattle when the accident occurred. A witness reported that he observed the airplane "...dive down at the cows and then pull up at a pretty sharp angle." The witness stated this occurred twice, and after the second maneuver, the pilot initiated a 360 degree turn. After completing the turn, with the wings level, the airplane collided with a series of power transmission lines that were located at the pilot's 12 o'clock position. The airplane subsequently collided with terrain. Postaccident examination and teardown of the airframe and engine revealed no evidence of a mechanical malfunction or failure prior to impact.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate clearance from a power transmission line while maneuvering. Contributing to this accident was the pilot's diverted attention, and decision to maneuver at a low altitude.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING

Findings

1. OBJECT - WIRE, TRANSMISSION
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) DIVERTED ATTENTION - PILOT IN COMMAND
4. (C) ALTITUDE - LOW - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On October 3, 2007, about 1410 Pacific daylight time, a Piper PA-18 (Super Cub), N91254, was substantially damaged during a collision with power transmission lines and terrain near the Crowley Ranch Airstrip (78OR), Crowley, Oregon. The solo commercial pilot, the airplane owner, was killed. The visual flight rules (VFR) personal flight was operated under the provisions of 14 Code of Federal Regulations (CFR) Part 91, when the accident occurred. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated from Crowley Ranch about 1400.

Witnesses reported that the pilot was working cattle when the accident occurred. A witness said that he observed the airplane "...dive down at the cows and then pull up at a pretty sharp angle." The witness stated this occurred twice, and after the second maneuver, the pilot initiated a 360 degree turn. After completing the turn, with the wings level, the airplane collided with a series of power transmission lines that were located at the pilot's 12 o'clock position.

A second witness, who was working the same cattle from an all terrain vehicle (ATV), reported that he observed the airplane flying in the area just before the accident. He noted that he heard the airplane, but lost sight of it. Moments later he became concerned when he heard the airplane's engine "shut off." He looked out in the direction of the airplane just as it collided with terrain in a nose-low attitude and rolled over.

PERSONNEL INFORMATION

The pilot, age 76, held an airline transport pilot (ATP) certificate, commercial pilot certificate and flight instructor certificate. He held a second-class airman medical certificate issued on June 18, 2007. On the Application for Airman Medical Certificate, the pilot listed 35,000 hours total flight time and 400 hours total flight time in the 6 months preceding the medical application.

AIRCRAFT INFORMATION

Piper Aircraft manufactured the tailwheel-equipped PA-18 airplane, serial number 91254, in 1982. The two-place tandem seat airplane was powered by a 150-hp Lycoming O-360 engine.

Review of copies of maintenance logbook records showed an annual inspection of the airframe, engine and propeller was completed on September 7, 2007, at a recorded tachometer reading of 2,571 hours. The annual inspection included the airframe, engine and propeller.

Review of engine, airframe and propeller records disclosed no open maintenance discrepancies.

METEOROLOGICAL INFORMATION

The closest weather reporting facility to the accident site was the Rome State Airport, (KREO), located approximately 43 nautical miles (nm) south of the accident location at an elevation of 4,050 feet msl. The following meteorological report was issued during the period of the accident: At 1352, the observation was, in part, wind variable at 7 knots, temperature 14 degrees Celsius, dew point 2 degrees Celsius. Visibility and sky conditions were not reported. Witnesses stated the visibility was unrestricted.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted terrain approximately two miles south of the airstrip. A deputy from the Malheur County Sheriff's Office reported that it came to rest, inverted, approximately 267 feet from where it struck the power lines. He reported that wreckage debris was scattered between the point of initial impact and the final resting point of the main wreckage. First responders reported that the airplane's wing fuel tanks contained fuel, but could not quantify the specific amount.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot on October 5, 2007. According to the autopsy report, the cause of death was attributed to "Blunt Force Trauma."

The FAA's Civil Aerospace Medical Institute, Oklahoma City, Oklahoma, performed forensic toxicology tests on specimens from the pilot. The toxicology reports stated no ethanol, carbon monoxide, cyanide or listed drugs were detected. No drugs of abuse were detected.

ADDITIONAL DATA/INFORMATION

A wreckage examination was completed on November 8, 2007, by the NTSB IIC and Parties to the investigation.

The cylinders, crankcase and overhead components were intact and no evidence of an uncontained engine failure was noted. The spark plugs were removed and the center electrodes showed normal operating signatures when compared to the Champion aviation check a plug chart. The cylinders were examined utilizing a borescope and no mechanical damage or evidence of oil starvation was noted. Lubrication was present throughout the engine. The crankshaft rotated by hand; compression was established in all cylinders and drive train continuity was established throughout the engine. Both magnetos produced spark at each lead when manually rotated.

Examination and teardown of the engine revealed no evidence of a mechanical malfunction or failure prior to impact.

Examination of the airframe revealed no evidence of a pre impact flight control surface anomaly or flight control system component failure.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	76, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Without Waivers/Limitations	Last FAA Medical Exam:	06/01/2007
Occupational Pilot:		Last Flight Review or Equivalent:	06/01/2006
Flight Time:	35000 hours (Total, all aircraft), 3163 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N91254
Model/Series:	PA-18	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	18-8209018
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	09/01/2007, Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	10 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2581 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320
Registered Owner:	Ronald J Sutphin	Rated Power:	150 hp
Operator:	Ronald J Sutphin	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KREO, 4053 ft msl	Distance from Accident Site:	43 Nautical Miles
Observation Time:	1352 PST	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	14° C / 2° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Crowley Ranch, OR (78OR)	Type of Flight Plan Filed:	None
Destination:	Crowley Ranch (78OR)	Type of Clearance:	None
Departure Time:	1400 PDT	Type of Airspace:	

Airport Information

Airport:	CROWLEY RANCH AIRSTRIP (78OR)	Runway Surface Type:	
Airport Elevation:	4128 ft	Runway Surface Condition:	
Runway Used:	NA	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	43.307778, -117.894167

Administrative Information

Investigator In Charge (IIC):	Dennis J Hogenson	Report Date:	07/30/2008
Additional Participating Persons:	Lew Sanders; Federal Aviation Administration; Boise, ID Troy R Helgeson; Textron Lycoming; Williamsport, PA Charlie Little; Piper Aircraft; Vero Beach, FL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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