



Aviation Investigation Final Report

Location:	COTTAGE GROVE, Oregon	Accident Number:	SEA99LA109
Date & Time:	July 7, 1999, 15:30 Local	Registration:	N4707C
Aircraft:	Piper PA-22	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The aircraft experienced a sudden loss of engine power and the pilot initiated an off-field landing. During the landing roll-out, the aircraft's nose wheel collided with a rock causing the aircraft to nose over. The pilot unintentionally ran the left fuel tank dry. He selected the right fuel tank but, was unsuccessful in restarting the engine and elected to land in a nearby field. No evidence was found of 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 pilot's inadequate management of fuel which led to fuel starvation.. A related factor was the unsuitable terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

- Findings
1. FLUID,FUEL - STARVATION
 2. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings

3. (F) TERRAIN CONDITION - ROCK(S)/BOULDER(S)

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

4. LANDING GEAR, NOSE GEAR - OVERLOAD

Factual Information

On July 7, 1999, about 1530 Pacific daylight time, a Piper PA-22, N4707C, registered to and operated by the pilot, was substantially damaged during an off airport forced landing following a sudden loss of engine power. The accident occurred approximately three miles west of Cottage Grove Airport, Cottage Grove Oregon. The private pilot, the sole occupant of the aircraft, was not injured. No flight plan was filed and visual meteorological conditions prevailed for the 14CFR91 personal/pleasure flight. The flight originated from Gasquet Airport, Gasquet, California approximately one hour and 30 minutes prior to the accident.

While in a cruise configuration, approximately 3,500 feet MSL, the aircraft experienced a sudden loss of engine power. The pilot initiated an off-field landing in a open field. During the landing roll-out, the aircraft's nose wheel struck a large rock causing the aircraft to nose over, resulting in substantial damage to the aircraft's wings and fuselage.

The pilot stated he ran the left fuel tank dry. He selected the right fuel tank, but was unsuccessful in restarting the engine and elected to land in a nearby field. The pilot reported the right fuel tank was full at the time of the accident.

No evidence was found to indicate a mechanical failure or malfunction.

Pilot Information

Certificate:	Private	Age:	52, Male
Airplane Rating(s):	Single-engine land; Multi-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 Medical-w/ waivers/lim	Last FAA Medical Exam:	July 19, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	767 hours (Total, all aircraft), 2 hours (Total, this make and model), 690 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N4707C
Model/Series:	PA-22 PA-22	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-3291
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 12, 1999 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	4 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2048 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	ROBERT L. DUNN	Rated Power:	150 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:	EUG ,369 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	15:56 Local	Direction from Accident Site:	300°
Lowest Cloud Condition:	Thin Overcast / 3700 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 3700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	20°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GASQUET , CA (009)	Type of Flight Plan Filed:	None
Destination:	SALEM , OR (SLE)	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:	Rough;Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	43.709918,-123.030578(est)

Administrative Information

Investigator In Charge (IIC):	Hogenson, Dennis
Additional Participating Persons:	ROBERT HAXBY; PORTLAND , OR
Original Publish Date:	August 3, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=46978

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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](#).