



Aviation Investigation Final Report

Location:	COKEVILLE, Wyoming	Accident Number:	SEA92LA196
Date & Time:	September 6, 1992, 09:00 Local	Registration:	N78599
Aircraft:	PIPER PA-12	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT OF THE PIPER PA 12 REALIZED THAT HE WAS EXPERIENCING A POWER LOSS WHILE MANEUVERING, LOOKING FOR MISSING SHEEP. HE TURNED TO LOWER, FLATTER TERRAIN. THE ENGINE CONTINUED TO LOSE POWER, SO HE MADE A FORCED LANDING IN UNSUITABLE TERRAIN. THE AIRCRAFT NOSED OVER AFTER TOUCHING DOWN. METALLURGICAL TESTING REVEALED THAT THE CRANKSHAFT HAD EXPERIENCED FATIGUE FAILURE. THE ENGINE HAD BEEN INSTALLED ON A FIELD APPROVAL. THE PROPELLER/ENGINE COMBINATION INSTALLED IN THIS AIRCRAFT HAD NOT BEEN TESTED OR APPROVED FOR THIS, OR ANY OTHER, INSTALLATION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FATIGUE FAILURE OF THE CRANKSHAFT. FACTORS INCLUDE NON SUITABLE TERRAIN FOR A FORCED LANDING AND AN IMPROPER PROPELLER.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: MANEUVERING

Findings

1. (C) ENGINE ASSEMBLY, CRANKSHAFT - FATIGUE
2. (F) PROPELLER SYSTEM/ACCESSORIES - IMPROPER

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER
Phase of Operation: LANDING

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 19, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	861 hours (Total, all aircraft), 824 hours (Total, this make and model), 821 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N78599
Model/Series:	PA-12 PA-12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	12-3961
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 16, 1992 Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	68 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4777 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-340-A1A
Registered Owner:	JOHN I RITTER	Rated Power:	170 Horsepower
Operator:	JOHN I RITTER	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	10°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KEMMERER , WY	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:15 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:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.079898,-110.949218(est)

Administrative Information

Investigator In Charge (IIC):	Stockhill, Michael
Additional Participating Persons:	SAM SHAW; SALT LAKE CITY , UT
Original Publish Date:	September 14, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42893

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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](#).