



Aviation Investigation Final Report

Location:	BLACKDUCK, Minnesota	Accident Number:	CHI83LA252
Date & Time:	June 12, 1983, 13:00 Local	Registration:	N2487M
Aircraft:	PIPER PA-12	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE ACFT MADE A HARD LANDING IN AN ALFALFA FIELD AFTER LOSS OF ENGINE POWER. DURING AN ENROUTE PORTION OF THIS FLT THE PILOT STATED THAT OIL CONSUMPTION WAS EXCESSIVE. HE PLANNED AN INTERMEDIATE STOP FOR THAT REASON. BEFORE REACHING THE INTERMEDIATE STOP THE ENGINE 'FROZE'. NO OIL WAS FOUND IN THE ENGINE. THE LOWER FUSELAGE WAS COATED WITH OIL WHICH HAD GONE OUT THROUGH THE BREATHER. THE #2 PISTON ROD HAD FAILED. COMPRESSION ON #1,3 AND 4 CYLINDERS WAS LOW.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,CYLINDER - LOW COMPRESSION
2. (C) MAINTENANCE - INADEQUATE - OTHER MAINTENANCE PERSONNEL
3. (C) FLUID,OIL - EXHAUSTION
4. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
5. (C) ENGINE ASSEMBLY,PUSH ROD - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	42, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 6, 1982
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1303 hours (Total, all aircraft), 34 hours (Total, this make and model), 1278 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2487M
Model/Series:	PA-12 PA-12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	12-1560
Landing Gear Type:	Float	Seats:	2
Date/Type of Last Inspection:	May 2, 1983 100 hour	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	29 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2062 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-290-D2
Registered Owner:	NORTH COUNTRY FLYERS	Rated Power:	135 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:	BJI ,1390 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	12:45 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear	Visibility	7 miles
Lowest Ceiling:	Broken / 2000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	INTL FALLS , MN (IUL)	Type of Flight Plan Filed:	None
Destination:	DETROIT LAKES , MN (DTL)	Type of Clearance:	None
Departure Time:	12:00 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:	47.720157,-94.54074(est)

Administrative Information

Investigator In Charge (IIC): Rathe, Fred

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=12207>

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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](#).