



National Transportation Safety Board Aviation Accident Data Summary

Location:	SKAGWAY, AK	Accident Number:	ANC93LA077
Date & Time:	06/02/1993, 1455 AKD	Registration:	N8127K
Aircraft:	PIPER PA-32-300	Injuries:	3 Minor, 2 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

ABOUT 15 MIN AFTER DEPARTING SKAGWAY, WHILE MANEUVERING OVER A GLACIER, THE PILOT NOTED DECREASING ENGINE OIL PRESSURE. SHORTLY THEREAFTER THE ENGINE BEGAN TO EMIT METALLIC SOUNDS, AND THEN THE ENGINE QUIT. AN EMERGENCY LANDING WAS MADE ON THE GLACIER. ON-SCENE EXAMINATION OF THE ENGINE REVEALED THAT THE #2 CYLINDER CONNECTING ROD HAD FAILED. SUBSEQUENT METALLURGICAL EXAMINATION BY THE SAFETY BOARD REVEALED THAT THE FRACTURE OF THE ROD THROUGH THE STRAP AREA ADJACENT TO THE HEAD OF THE ROD BOLT DISPLAYED FEATURES TYPICAL OF A FATIGUE FRACTURE.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A TOTAL LOSS OF ENGINE POWER AS A RESULT OF A FATIGUE FAILURE OF THE #2 CONNECTING ROD. A FACTOR WHICH CONTRIBUTED TO THE ACCIDENT WAS THE LACK OF SUITABLE TERRAIN FOR THE EMERGENCY LANDING.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD - FATIGUE
2. ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	25
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:	1210 hours (Total, all aircraft), 50 hours (Total, this make and model), 1105 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8127K
Model/Series:	PA-32-300 PA-32-300	Engines:	1 Reciprocating
Operator:	SKAGWAY AIR SERVICE, INC.	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	On-demand Air Taxi (135)	Engine Model/Series:	IO-540-K1G5
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JNU, 19 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 5000 ft agl	Wind Speed/Gusts, Direction:	6 knots / , 230°
Temperature:	16° C	Visibility	15 Miles
Precipitation and Obscuration:			
Departure Point:	Destination:		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	TIMOTHY A BORSON	Adopted Date:	08/18/1994
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 pubin@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.