



# National Transportation Safety Board Aviation Accident Final Report

<b>Location:</b>	WOOD RIVER, AK	<b>Accident Number:</b>	ANC91LA113
<b>Date &amp; Time:</b>	08/01/1991, 2030 AKD	<b>Registration:</b>	N6848V
<b>Aircraft:</b>	MOONEY M-20F	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

THE PILOT-IN-COMMAND STATED THT DURING CRUISE FLIGHT THE PROPELLER STOPPED TURNING WITHIN SIX REVOLUTIONS WITHOUT WARNING. HE WAS FORCED TO LAND ON A SAND BAR ON THE WOOD RIVER. DURING THE LANDING THE NOSE GEAR AND RIGHT MAIN GEAR COLLAPSED. EXAMINATION OF THE ENGINE REVEALED THAT THE CONNECTING ROD CAP FROM THE NUMBER 4 CONNECTING ROD HAD FAILED APPROXIMATELY 1/2 INCH FROM THE MATING SURFACE, ABEAM THE HEAD OF THE CONNECTING ROD BOLT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE NUMBER 4 CYLINDER CONNECTING ROD COP DUE TO FATIGUE. CONTRIBUTING TO THE ACCIDENT WAS THE ROUGH SURFACE OF THE FORCED LANDING AREA.

## Findings

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

### Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD CAP - FATIGUE  
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Occurrence #2: FORCED LANDING  
Phase of Operation: LANDING - ROLL

### Findings

2. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	08/22/1989
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1408 hours (Total, all aircraft), 400 hours (Total, this make and model), 1260 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MOONEY	<b>Registration:</b>	N6848V
<b>Model/Series:</b>	M-20F M-20F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	221
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	11/19/1990, Annual	<b>Certified Max Gross Wt.:</b>	2740 lbs
<b>Time Since Last Inspection:</b>	2 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1461 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	IO-360AIA
<b>Registered Owner:</b>	GRIFFIN, HERBERT L., SR.	<b>Rated Power:</b>	200 hp
<b>Operator:</b>	GRIFFIN, HERBERT L., SR.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 5000 ft agl	Visibility	60 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16 °C
Precipitation and Obscuration:			
Departure Point:	FAIRBANKS, AK (FAI)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1950 ADT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	George Kobelnyk	Report Date:	04/27/1993
Additional Participating Persons:	STEVE KETZER; FAIRBANKS, AK		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).