

# **Aviation Investigation Final Report**

Location:	GAMBELL, Alaska		Accident Number:	ANC83LA021
Date & Time:	December 13, 1982	2, Local	Registration:	N8225Y
Aircraft:	PIPER	PA-34-200T	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General av	viation		

## Analysis

ON 12/12/82, THE AIRCRAFT DEPARTED ON A FLIGHT FROM SAVOONGA TO NOME, AK. AFTER DEPARTURE, THE PILOT NOTED A PROBLEM WITH THE LEFT ENGINE AND DIVERTED TO GAMBELL, AK. WHILE EN ROUTE TO GAMBELL, THERE WAS A GRADUAL LOSS OF OIL PRESSURE. AFTER LANDING, THE PILOT NOTICED THE OIL FILLER CAP WAS MISSING AND FOUND NO OIL INDICATION OF THE DIPSTICK. A MECHANIC ADDED 7 QTS OF OIL. AN OIL CAP FROM ANOTHER VEHICLE WAS PLACED ON THE OIL FILLER NECK AND SECURED WITH DUCT TAPE AND SAFETY WIRE. REPORTEDLY, THE ENGINE WAS OPERATIONALLY CHECKED AND NO DISCREPANCIES WERE NOTED. THE PILOT TOOK OFF AND TRIED TO FILE AN IFR FLIGHT PLAN, BUT ENCOUNTERED FREEZING RAIN. HE DECIDED TO RETURN TO GAMBELL, AND WHILE RETURNING NOTICED THE LEFT ENGINE OIL PRESSURE WAS DROPPING. AFTER THE LEFT ENGINE WAS SHUT DOWN, ICE BEGAN ACCUMULATING ON THE WINDSHIELD AND RIGHT WINDOWS. THE AIRCRAFT TOUCHED DOWN 25 DEG LEFT OF THE RUNWAY HEADING AND STRUCK A GRAVEL/SNOW BERM BESIDE THE RUNWAY. THE NO 1 CYLINDER HAD NO COMPRESSION, A HOLE WAS FOUND IN THE PISTON.

#### **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(PARTIAL) - MECH FAILURE/MALF Phase of Operation: CRUISE

Findings

1. (C) ENGINE ASSEMBLY, PISTON - FAILURE, PARTIAL

2. (C) MAINTENANCE, INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL

3. (C) MAINTENANCE - IMPROPER - COMPANY MAINTENANCE PERSONNEL

4. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT ENCOUNTER WITH WEATHER Phase of Operation: CRUISE

Findings
5. (F) WEATHER CONDITION - RAIN
6. (F) WEATHER CONDITION - TEMPERATURE EXTREMES
7. (F) WEATHER CONDITION - ICING CONDITIONS
8. FLIGHT TO ALTERNATE DESTINATION - INITIATED - PILOT IN COMMAND

Occurrence #3: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: CRUISE

Findings 9. PROPELLER FEATHERING - INITIATED - PILOT IN COMMAND 10. ANTI-ICE/DEICE SYSTEM, WINDSHIELD - INADEQUATE 11. (C) WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - ICE

Occurrence #4: FORCED LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

## **Factual Information**

#### **Pilot Information**

Certificate:	Commercial	Age:	28,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	3102 hours (Total, all aircraft), 200 hours (Total, this make and model), 2980 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8225Y
Model/Series:	PA-34-200T PA-34-200T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	34-8070250
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	4570 lbs
Time Since Last Inspection:	87 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	1787 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	TSI0360
Registered Owner:	GENE K. ZERKEL	Rated Power:	200 Horsepower
Operator:	BERING AIR INC.	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:		Operator Designator Code:	

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	15°C
Precipitation and Obscuration:	N/A - None - Snow		
Departure Point:	GAMBELL , AK	Type of Flight Plan Filed:	IFR
Destination:	NOME , AK (C )	Type of Clearance:	
Departure Time:	11:00 Local	Type of Airspace:	

## **Airport Information**

Airport:	GAMBELL	Runway Surface Type:	Asphalt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Snow
Runway Used:	34	IFR Approach:	
Runway Length/Width:	4500 ft / 100 ft	VFR Approach/Landing:	Straight-in

## 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:	63.750556,-171.689041(est)

#### Administrative Information

Investigator In Charge (IIC):	
Additional Participating Persons:	
Original Publish Date:	December 13, 1983
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=70805

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.