

# **Aviation Investigation Final Report**

Location: COLD BAY, Alaska Accident Number: DCA83AA029

Date & Time: June 8, 1983, 13:55 Local Registration: N1968R

Aircraft: LOCKHEED 188C Aircraft Damage: Substantial

**Defining Event:** Injuries: 15 None

Flight Conducted Under: Part 121: Air carrier - Scheduled

### **Analysis**

DURING A CRUISE CLIMB, THE AIRCREW NOTED AN UNUSUAL VIBRATION; HOWEVER, ATTEMPTS TO ISOLATE THE VIBRATION WERE UNSUCCESSFUL. WHILE CLIMBING FROM FL190 TO FL250, THE FLT ENGINEER WENT AFT TO OBSERVE THE ENGS & PROPS, BUT NOTED NOTHING UNUSUAL. A FLT ATTENDANT WENT FORWARD TO ADVISE THE CAPT THAT NOTHING WAS OBSERVED, WHEN THE VIBRATION INCREASED IN INTENSITY. AS SHE LEFT THE COCKPIT, SHE PEERED OUT THE RGT WINDOW & SAW THE #4 PROP SEPARATE & STRIKE THE ACFT. THIS CAUSED MAJOR DAMAGE TO THE LOWER FUSELAGE & RESULTED IN DECOMPRESSION OF THE CABIN. THE FLT CONTROLS BECAME JAMMED & THE ENGS WOULD NOT RESPOND TO THROTTLE MOVEMENT. THE AUTOPLT WAS USED FOR MINIMAL CONTROL & THE FLT CREW WERE ABLE TO DIVERT TO ANCHORAGE, AK. THEY WERE ABLE TO CLIMB & DESCEND BY RETRACTING & EXTENDING THE LANDING GEAR WITH THE #2 ENG SHUT DOWN. THE ACFT WAS LANDED SAFETY & THE ENGS WERE SHUT DOWN TO DECELERATE. THE EXACT CAUSE OF THE PROP SEPARATION WAS NOT DETERMINED SINCE IT FELL IN THE OCEAN DURING THE OCCURRENCE.

### **Probable Cause and Findings**

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

### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CLIMB - TO CRUISE

#### **Findings**

- 1. (C) PROPELLER SYSTEM/ACCESSORIES UNDETERMINED
- 2. PROPELLER SYSTEM/ACCESSORIES VIBRATION
- 3. PROPELLER SYSTEM/ACCESSORIES SEPARATION
- 4. FUSELAGE, CABIN DECOMPRESSION
- 5. FLIGHT CONTROL SYSTEM JAMMED
- 6. THROTTLE/POWER LEVER DISCONNECTED
- 7. FLIGHT TO ALTERNATE DESTINATION PERFORMED PILOT IN COMMAND
- 8. PRECAUTIONARY LANDING PERFORMED PILOT IN COMMAND

Page 2 of 5 DCA83AA029

# **Factual Information**

#### **Pilot Information**

Certificate:	Airline transport	Age:	54,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 3, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13874 hours (Total, all aircraft), 5711 hours (Total, this make and model), 133 hours (Last 90 days, all aircraft), 58 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

# **Aircraft and Owner/Operator Information**

Aircraft Make:	LOCKHEED	Registration:	N1968R
Model/Series:	188C 188C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	2007
Landing Gear Type:	Retractable - Tricycle	Seats:	69
Date/Type of Last Inspection:	June 8, 1983 Continuous airworthiness	Certified Max Gross Wt.:	116000 lbs
Time Since Last Inspection:	8 Hrs	Engines:	4 Turbo prop
Airframe Total Time:	32994 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	501-D13
Registered Owner:	REEVE ALEUTIAN AIRWAYS	Rated Power:	4000 Horsepower
Operator:		Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	

Page 3 of 5 DCA83AA029

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CDB	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	50 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:	
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	COLD BAY , AK (CDB)	Type of Flight Plan Filed:	IFR
Destination:	SEATTLE , WA (SEA )	Type of Clearance:	IFR
Departure Time:	13:24 Local	Type of Airspace:	Class G

# **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

### **Wreckage and Impact Information**

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Crew injuries.	3 None	All Craft Dallaye.	Substantial
Passenger Injuries:	10 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	15 None	Latitude, Longitude:	55.220092,-162.780105(est)

Page 4 of 5 DCA83AA029

#### **Administrative Information**

Investigator In Charge (IIC):	Schleede, R.
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15785

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.

Page 5 of 5 DCA83AA029