



National Transportation Safety Board Aviation Accident Final Report

Location:	BEAVER VILLAGE, AK	Accident Number:	ANC90LA103
Date & Time:	06/30/1990, 1130 AKD	Registration:	N17689
Aircraft:	DE HAVILLAND DHC-3	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 8 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PILOT REPORTED A SUBSTANTIAL LOSS OF POWER WHILE IN CRUISE FLIGHT. HE WAS UNABLE TO MAINTAIN ALTITUDE AND THE AIRCRAFT CRASHED INTO TREES. AN EXAMINATION OF THE RECENTLY OVERHAULED ENGINE REVEALED A FRACTURED EXHAUST ROCKER ARM THAT CAUSED THE LOSS OF POWER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: MECHANICAL FAILURE OF AN EXHAUST ROCKER ARM.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,ROCKER ARM/TAPPET - FRACTURED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

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

Findings

2. OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	38, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/02/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8400 hours (Total, all aircraft), 165 hours (Total, this make and model), 8200 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DE HAVILLAND	Registration:	N17689
Model/Series:	DHC-3 DHC-3	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	431
Landing Gear Type:	Tailwheel	Seats:	9
Date/Type of Last Inspection:	06/27/1990, 100 Hour	Certified Max Gross Wt.:	8000 lbs
Time Since Last Inspection:	9 Hours	Engines:	1 Reciprocating
Airframe Total Time:	7111 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R-1340
Registered Owner:	WRIGHT AIR SERVICE	Rated Power:	600 hp
Operator:	WRIGHT AIR SERVICE	Operating Certificate(s) Held:	Commuter Air Carrier (135)
Operator Does Business As:		Operator Designator Code:	HYTA

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:	Clear / 0 ft agl	Visibility	50 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21 °C
Precipitation and Obscuration:			
Departure Point:	FAIRBANKS, AK (FAI)	Type of Flight Plan Filed:	VFR
Destination:	ARCTIC VILLAGE, AK (ARC)	Type of Clearance:	None
Departure Time:	0950 ADT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 7 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 8 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JAMES LA BELLE	Report Date:	10/20/1992
Additional Participating Persons:	HUGH H MCLAUGHLIN; 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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).