



National Transportation Safety Board Aviation Accident Final Report

Location:	PETERSBURG, AK	Accident Number:	SEA89FA122
Date & Time:	06/26/1989, 1105 AKD	Registration:	N8042X
Aircraft:	DOUGLAS DC-3C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

IMMEDIATELY AFTER TKOF AT 200-300 FT AGL, A PORTION OF FABRIC SEPD FROM THE R AILERON. WHILE MANEUVERING THE ACFT THE PLT'S CONTROL WHEEL BECAME FREE, AND HE ELECTED TO DITCH USING FULL RUDDER & DIFFERENTIAL POWER. EXAM OF THE PLT'S CONTROL WHEEL AILERON CONTROL CHAIN REVEALED THAT THE CHAIN FAILED DUE TO OVERLOAD. THE RIGHT SEAT WAS OCCUPIED BY A MECHANIC EMPLOYED BY THE OPERATOR AND HELD A PRIVATE PLT CERT WITH SINGLE & MULTIENGINE RATING. HE STATED THAT HE SUGGESTED TO THE PLT THAT HIS CONTROLS WERE FUNCTIONING NORMALLY, BUT THE PLT DISAGREED & PROCEEDED TO DITCH THE ACFT. EXAM OF THE RIGHT CONTROL YOKE REVEALED AILERON MOVEMENT IN THE CORRECT DIRECTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER DECISION TO DITCH THE AIRCRAFT WHEN IT COULD HAVE BEEN FLOWN BACK TO THE AIRPORT USING THE RIGHT SEAT CONTROLS. CONTRIBUTING FACTOR(S) WAS: THE FAILURE & SEPARATION OF A PORTION OF THE RIGHT AILERON FABRIC, AND THE PILOT'S EXCESSIVE FORCE APPLIED TO THE CONTROL WHEEL WHICH RESULTED IN OVERSTRESSING THE AILERON CONTROL CHAIN.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FLIGHT CONTROL,AILERON SURFACE - SEPARATION
2. (F) FLT CONTROL SYST,AILERON CONTROL CABLE/ROD - OVERLOAD
3. (F) AILERON - EXCESSIVE - PILOT IN COMMAND
4. (F) FLT CONTROL SYST,AILERON CONTROL CABLE/ROD - DISABLED

Occurrence #2: DITCHING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	36, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	03/01/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	9500 hours (Total, all aircraft), 4000 hours (Total, this make and model), 9300 hours (Pilot In Command, all aircraft), 115 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	DOUGLAS	Registration:	N8042X
Model/Series:	DC-3C DC-3C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Special Flight	Serial Number:	19041
Landing Gear Type:	Retractable - Tailwheel	Seats:	33
Date/Type of Last Inspection:	06/23/1989, Unknown	Certified Max Gross Wt.:	26900 lbs
Time Since Last Inspection:	7 Hours	Engines:	2 Reciprocating
Airframe Total Time:	10762 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	R-1830-94
Registered Owner:	CALIFORNIA AIR TOURS, INC	Rated Power:	1350 hp
Operator:	CALIFORNIA AIR TOURS, INC	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:	AIR GRAND CANYON YOSEMITE	Operator Designator Code:	ADVA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PSG, 107 ft msl	Observation Time:	1051 ADT
Distance from Accident Site:	5 Nautical Miles	Direction from Accident Site:	340°
Lowest Cloud Condition:	Scattered / 4000 ft agl	Temperature/Dew Point:	13° C / 7° C
Lowest Ceiling:	Overcast / 12000 ft agl	Visibility	12 Miles
Wind Speed/Gusts, Direction:	8 knots/ 10 knots, 10°	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	PETERSBURG, AK (PSG)	Type of Flight Plan Filed:	Unknown
Destination:	KETCHIKAN, AK (KTN)	Type of Clearance:	VFR
Departure Time:	1100 ADT	Type of Airspace:	Class G

Airport Information

Airport:	PETERSBURG (PSG)	Runway Surface Type:	Water
Airport Elevation:	0 ft	Runway Surface Condition:	Water--calm
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	PRENTISS E MANGUM	Adopted Date:	01/23/1992
Additional Participating Persons:	JOHN STEVENSON; JUNEAU, 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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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