



# National Transportation Safety Board Aviation Accident Final Report

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

**Flight Conducted Under:** Part 91: General Aviation - Ferry

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## 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

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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

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Occurrence #2: DITCHING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

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

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	03/01/1989
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PSG, 107 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1051 ADT	Direction from Accident Site:	340°
Lowest Cloud Condition:	Scattered / 4000 ft agl	Visibility	12 Miles
Lowest Ceiling:	Overcast / 12000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots / 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13° C / 7° C
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	Report Date:	01/23/1992
Additional Participating Persons:	JOHN STEVENSON; JUNEAU, AK		
Publish Date:			
Investigation Docket:	NTSB accident and incident docket 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:pubinq@ntsb.gov">pubinq@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](#).