

National Transportation Safety Board Aviation Accident Final Report

Location: TAU, American Samoa Accident Number: LAX84FA415

Date & Time: 07/21/1984, 1340 AST **Registration:** N43SP

Aircraft: de Havilland DHC-6-300 Aircraft Damage: Substantial

Defining Event: Injuries: 1 Fatal, 7 Serious, 8

Minor

Flight Conducted Under: Part 135: Air Taxi & Commuter - Scheduled

Analysis

THE ACFT CRASH LANDED AFTER THE PLT USED FLAPS AND POWER TO SEMI-CONTROL PITCH AFTER THE ELEVATOR DOWN CONTROL CABLE FAILED AT ABOUT 300 FT AGL ON FINAL APPROACH. THE LEFT WING OF THE ACFT HIT THE TERMINAL ROOF DURING THE STALL MUSH FROM50 FT AGL. THE COMPANY IS CHANGING THEIR ACFT CONTROL CABLES FROM STEEL TO STAINLESS STEEL TO AID IN THE ANTI-CORROSION AND MODIFYING THEIR INSPECTION PERIOD FROM 800 TO 100 HOURS BETWEEN INSPECTIONS. THE CABLE THAT SEPARATED FAILED FROM CORROSION. NO EVIDENCE OF FATIGUE CRACKING OR MECHANICAL WEAR WAS FOUND. CORROSION PRODUCTS WERE FOUND WITHIN 2 INCHES OF THE SERAPATION ON BOTH CABLE PIECES.

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: APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Findings

1. (C) FLT CONTROL SYST, ELEVATOR CONTROL - CORRODED 2. (C) FLT CONTROL SYST, ELEVATOR CONTROL - FAILURE, TOTAL

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	32, 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 Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.		
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	5094 hours (Total, all aircraft), 1020 hours (Total, this make and model), 4026 hours (Pilot In Command, all aircraft), 391 hours (Last 90 days, all aircraft), 117 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N43SP
Model/Series:	DHC-6-300 DHC-6-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	669
Landing Gear Type:	Tricycle	Seats:	16
Date/Type of Last Inspection:	07/20/1984, Continuous Airworthiness	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	3 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	11281 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT6A-27
Registered Owner:	SOUTH PACIFIC ISLAND	Rated Power:	620 hp
Operator:	SOUTH PACIFIC ISLAND	Operating Certificate(s) Held:	Commuter Air Carrier (135)

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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	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 21°C
Precipitation and Obscuration:			
Departure Point:	PAGO PAGO,SAMOA, OF (PPG)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	
Departure Time:	1300 GMT	Type of Airspace:	Class G

Airport Information

Airport:	TAU (HI36)	Runway Surface Type:	Dirt
Airport Elevation:	185 ft	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2170 ft / 100 ft	VFR Approach/Landing:	Forced Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal, 3 Serious, 7 Minor	Aircraft Fire:	None
Ground Injuries:	2 Serious	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 7 Serious, 8 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ALAN	L CRAWFORD	Report Date:
Additional Participating Persons:		E TILTON; HONOLULU, HI MAU; HONOLULU, HI	
Publish Date:			
Investigation Docket:	investig Record	ations. Dockets released prior to Ju	s permanent archival information for the NTSB's ne 1, 2009 are publicly available from the NTSB's b.gov, or at 800-877-6799. Dockets released after gov/pubdms/.

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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.

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