

Aviation Investigation Final Report

Location:	HANALEI, Hawaii		Accident Number:	FTW94MA235
Date & Time:	July 14, 1994, 15:36 Loca	al	Registration:	N151BH
Aircraft:	AEROSPATIALE	AS350D	Aircraft Damage:	Substantial
Defining Event:			Injuries:	3 Fatal, 4 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled			

Analysis

THE HELICOPTER WAS ON A 14 CFR PART 135 AIR TOUR OPERATION WITH A PILOT & 6 PASSENGERS ABOARD. IT WAS FLYING PARALLEL TO THE SHORELINE WHEN A COMPLETE LOSS OF ENGINE POWER OCCURRED. THE PILOT PERFORMED AN AUTOROTATION TO THE WATER ABOUT 150' FROM A CLIFF SHORELINE. THE HELICOPTER WAS NOT EQUIPPED WITH FLOATS. ALL OCCUPANTS EXITED THE HELICOPTER UNINJURED AS IT WAS SINKING. LIFE VESTS WERE ABOARD THE HELICOPTER, BUT WERE NOT WORN BY THE OCCUPANTS. THREE OF THE PASSENGERS MANAGED TO CLIMB ONTO ROCKS & WERE EVENTUALLY RESCUED BY HELICOPTER. THEY INDICATED THAT THEY HAD NOT BEEN BRIEFED THAT LIFE PRESERVERS WERE ABOARD THE HELICOPTER. THE OTHER FOUR OCCUPANTS WERE UNABLE TO CLIMB ONTO ROCKS ALONG THE SHORE. ONE OF THESE (A PASSENGER) WAS RESCUED BY PERSONNEL OF A BOAT. THE PILOT & THE OTHER TWO PASSENGERS DROWNED. THE HELICOPTER WAS RECOVERED FROM THE OCEAN. AN EXAM & TESTS OF COMPONENTS REVEALED THE INTERNAL DRIVE SPLINES OF THE ENGINE-DRIVEN FUEL PUMP (MFP-261) HAD WORN TO THE POINT OF SLIPPAGE. THIS FAILURE WOULD HAVE RESULTED IN A TOTAL LOSS OF ENGINE POWER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE ENGINE-DRIVEN FUEL PUMP, WHICH RESULTED IN THE LOSS OF POWER, AND THE LACK OF AIRCRAFT FLOTATION EQUIPMENT. FACTORS RELATED TO THE ACCIDENT WERE: FLIGHT OVER WATER ADJACENT TO TERRAIN THAT AFFORDED NO SUITABLE FORCED LANDING SITE, AND THE LACK OF A PASSENGER BRIEFING BY THE OPERATOR ON THE LOCATION AND OPERATION OF LIFE PRESERVERS.

Findings

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

Findings 1. (C) FUEL SYSTEM, PUMP - FAILURE

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

Occurrence #3: DITCHING Phase of Operation: LANDING

Findings

- 2. (F) CREW/GROUP BRIEFING INADEQUATE COMPANY/OPERATOR MANAGEMENT
- 3. (F) PLANNING/DECISION IMPROPER
- 4. (C) MISC ROTORCRAFT, EMERGENCY FLOATATION GEAR NOT INSTALLED
- 5. (F) TERRAIN CONDITION NONE SUITABLE
- 6. TERRAIN CONDITION WATER

Factual Information

See Group Chairman's Factual Report.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	June 21, 1994
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:		0 hours (Total, this make and model),) days, all aircraft), 5 hours (Last 24 ho	

Aircraft and Owner/Operator Information

Aircraft Make:	AEROSPATIALE	Registration:	N151BH
Model/Series:	AS350D AS350D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1298
Landing Gear Type:	Skid	Seats:	7
Date/Type of Last Inspection:	July 13, 1994 100 hour	Certified Max Gross Wt.:	4300 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	7221 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	LTS-101-A3
Registered Owner:	PAPILLON HELICOPTERS, LTD.	Rated Power:	650 Horsepower
Operator:	PAPILLON HAWAIIAN HELICOPTERS	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	PAPILLON HAWAIIAN HELICOPTERS	Operator Designator Code:	ILNA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LIH ,153 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Scattered / 2600 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LIHUE , HI (LIH)	Type of Flight Plan Filed:	Company VFR
Destination:	(LIH)	Type of Clearance:	None
Departure Time:	14:52 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	2 Fatal, 4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal, 4 None	Latitude, Longitude:	22.200258,-159.499526(est)

Administrative Information

Investigator In Charge (IIC):	Wiemeyer, Norman	
Additional Participating Persons:	JEFF WELLER; HONOLULU , HI	
Original Publish Date:	June 26, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19180	

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