

# **Aviation Investigation Final Report**

Location:	KAHULUI, Hawaii		Accident Number:	LAX91LA339
Date & Time:	July 24, 1991, 15:15 Loca	al	<b>Registration:</b>	N766MP
Aircraft:	AEROSPATIALE	AS350B	Aircraft Damage:	Substantial
Defining Event:	Injuries: 6 None			
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled			

### Analysis

THE SIGHTSEEING HELICOPTER LANDED HARD DURING AN AUTOROTATION TO SLOPING TERRAIN AFTER EXPERIENCING A TOTAL LOSS OF ENGINE POWER. EXAMINATION OF THE AIRCRAFT FOUND 2 GALLONS OF FUEL REMAINING IN THE TANKS. AFTERWARDS, FUEL WAS ADDED AND THE ENGINE STARTED NORMALLY WITH NO MECHANICAL FAILURES OR MALFUNCTIONS NOTED. THE FUEL QUANTITY INDICATION SYSTEM REVEALED A MALFUNCTION OF THE LOW FUEL INDICATOR LIGHT. THE AIRCRAFT HAD BEEN AIRBORNE FOR ABOUT 45 MINUTES PRIOR TO THE CRASH.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A NON-MECHANICAL LOSS OF ENGINE POWER DUE TO FUEL EXHAUSTION AND SUBSEQUENT HARD LANDING BY THE PILOT. CONTRIBUTING TO THE ACCIDENT WAS A MALFUNCTIONING FUEL LOW LEVEL INDICATION SYSTEM.

#### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: CRUISE - NORMAL

Findings 1. (F) FUEL SYSTEM - EXHAUSTION 2. (C) FUEL SUPPLY - MISREAD - PILOT IN COMMAND 3. (F) FUEL SYSTEM, FUEL QUANTITY FLOAT/SENSOR - INOPERATIVE4. (C) FUEL SUPPLY - NOT IDENTIFIED - PILOT IN COMMAND

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

Findings

5. TERRAIN CONDITION - MOUNTAINOUS/HILLY

# **Factual Information**

### **Pilot Information**

Certificate:	Commercial; Military	Age:	38,Female
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):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	February 21, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2205 hours (Total, all aircraft), 346 hours (Total, this make and model), 1733 hours (Pilot In Command, all aircraft), 316 hours (Last 90 days, all aircraft), 94 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

#### Aircraft and Owner/Operator Information

AEROSPATIALE	Registration:	N766MP
AS350B AS350B	Aircraft Category:	Helicopter
	Amateur Built:	
Normal	Serial Number:	1301
Skid	Seats:	7
July 3, 1991 Annual	Certified Max Gross Wt.:	4300 lbs
86 Hrs	Engines:	1 Turbo shaft
6959 Hrs	Engine Manufacturer:	Turbomeca
Installed, activated, did not aid in locating accident	Engine Model/Series:	ARRIEL 1B
PAPILLON AIRWAYS, INC.	Rated Power:	641 Horsepower
PAPILLON AIRWAYS, INC.	Operating Certificate(s) Held:	On-demand air taxi (135)
	Operator Designator Code:	ILNA
	AS350B AS350B Normal Skid July 3, 1991 Annual 86 Hrs 6959 Hrs Installed, activated, did not aid in locating accident	AS350B AS350BAircraft Category:AS350B AS350BAmateur Built:NormalSerial Number:SkidSeats:July 3, 1991 AnnualCertified Max Gross Wt.:86 HrsEngines:6959 HrsEngine Manufacturer:Installed, activated, did not aid in locating accidentRated Power:PAPILLON AIRWAYS, INC.Operating Certificate(s) Held:

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
conucions at Accident Site.		-	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	7 miles
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KAHULUI , HI (OGG )	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class G

#### **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	20.869441,-156.449905(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Wilcox, Thomas		
Additional Participating Persons:	LES SARGENT; HONOLULU , HI		
Original Publish Date:	March 10, 1993		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27312		

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.