



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	MAUNALOA, HI	<b>Accident Number:</b>	LAX88FA075
<b>Date &amp; Time:</b>	12/23/1987, 1853 HST	<b>Registration:</b>	N712AN
<b>Aircraft:</b>	PIPER PA-31-350	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	8 Fatal

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

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## Analysis

THE FLIGHT WAS TO BE FLOWN ACROSS A 22 MILE CHANNEL BETWEEN ISLANDS ON AN OVERCAST NIGHT WITH NO MOON AND NO GROUND REFERENCE LIGHTS. THE AIRCRAFT DISAPPEARED FROM RADAR AND, AFTER EXTENSIVE SEARCHES, COULD NOT BE FOUND. A THREE DIMENSIONAL FLIGHT TRACK WAS RECONSTRUCTED USING RECORDED RADAR DATA. THE DATA INDICATED THAT IN THE LAST 60 SEC THE AIRCRAFT SLOWED FROM 170 TO 95 KTS, GAINED 500 FT IN ALTITUDE, AND TURNED LEFT 190 DEGREES BEFORE ABRUPTLY DISAPPEARING FROM RADAR. FLIGHT TESTS INDICATED THAT THE MOVEMENTS OF THE AIRCRAFT IN THE LAST 60 SEC OF THE FLIGHT WERE CONSISTENT WITH A LOSS OF THE LEFT ENGINE, WITHOUT COMPENSATION BY THE PILOT. THE OPERATOR'S TRAINING PROGRAM DID NOT PROVIDE FOR NIGHT OR INSTRUMENT FLIGHT CONDITIONS. THE LAST DOCUMENTED INSTRUMENT TIME FOR THE PILOT WAS 15 MONTHS PRIOR DURING A CHECKRIDE. THE PILOT FLEW SPORADIC NIGHT FLIGHTS. THE PILOT HAD PREVIOUSLY FLOWN DURING THE DAY AND WAS ON HIS THIRTEENTH HOUR OF DUTY. AIRCRAFT DAMAGE AND INJURY INDEX PRESUMED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

## Findings

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Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: CRUISE - NORMAL

### Findings

1. (F) 1 ENGINE - UNDETERMINED

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE - NORMAL

### Findings

2. (F) LIGHT CONDITION - DARK NIGHT

3. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

4. (F) SPATIAL DISORIENTATION - PILOT IN COMMAND

5. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND

6. (F) FATIGUE(FLIGHT AND GROUND SCHEDULE) - PILOT IN COMMAND

7. (F) LACK OF RECENT INSTRUMENT TIME - PILOT IN COMMAND

8. (F) INADEQUATE TRAINING - COMPANY/OPERATOR MANAGEMENT

9. (C) STALL/SPIN - INADVERTENT - PILOT IN COMMAND

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	27, 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>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	08/31/1987
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2987 hours (Total, all aircraft), 617 hours (Total, this make and model), 1246 hours (Pilot In Command, all aircraft), 260 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N712AN
<b>Model/Series:</b>	PA-31-350 PA-31-350	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	31-7652151
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	10
<b>Date/Type of Last Inspection:</b>	12/06/1987, AAIP	<b>Certified Max Gross Wt.:</b>	7000 lbs
<b>Time Since Last Inspection:</b>	46 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	6516 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	TIO-540-J2BD
<b>Registered Owner:</b>	AIRTOUR ACQUISITION CORP.	<b>Rated Power:</b>	350 hp
<b>Operator:</b>	PANORAMA AIR TOURS	<b>Operating Certificate(s) Held:</b>	Commuter Air Carrier (135)
<b>Operator Does Business As:</b>	PANORAMA AIR TOURS	<b>Operator Designator Code:</b>	PAHA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	HNL, 13 ft msl	Distance from Accident Site:	31 Nautical Miles
Observation Time:	1855 HST	Direction from Accident Site:	262°
Lowest Cloud Condition:	Scattered / 2100 ft agl	Visibility	12 Miles
Lowest Ceiling:	Broken / 4500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23° C / 21° C
Precipitation and Obscuration:			
Departure Point:	HONOLULU, HI (HNL)	Type of Flight Plan Filed:	VFR
Destination:	MOLOKAI, HI (MKK)	Type of Clearance:	VFR
Departure Time:	1840 HST	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	7 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	8 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JEFF R RICH	Report Date:	09/01/1989
Additional Participating Persons:	STEVEN E DAHLEN; HONOLULU, HI		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@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](#).