

National Transportation Safety Board Aviation Accident Final Report

Location: HONOLULU, HI Accident Number: LAX82DA042

Date & Time: 01/17/1982, 2245 HST Registration: N21DR

Aircraft: CONVAIR 440 Aircraft Damage: Destroyed

Defining Event: Injuries: 2 Minor, 1 None

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

Analysis

AFTER LIFT-OFF, THE PILOT CALLED FOR THE LANDING GEAR TO BE RAISED. AS THE PLANE WAS CLIMBING THROUGH ABOUT 100 FT AGL, THE PILOT NOTED A LOSS OF POWER IN THE RIGHT ENGINE AND SAW A FIRE LIGHT. GROUND WITNESSES HEARD A MUFFLED EXPLOSION AND SAW SMOKE AND FIRE TRAILING FROM THE RIGHT ENGINE. THE RIGHT ENGINE WAS FEATHERED AND THE PILOT ATTEMPTED TO RETURN TO THE AIRPORT, BUT WAS UNABLE TO MAINTAIN ALTITUDE. THE PLANE WAS DITCHED NEAR THE ENTRANCE OF PEARL HARBOR. A TEARDOWN OF THE RIGHT ENGINE REVEALED THAT THE TOP RING LANDS OF THE NO. 10 AND NO. 14 PISTONS WERE BROKEN AND THE TOP RING WAS MISSING FROM EACH OF THE PISTONS. ALSO, THE REAR COUNTER- BALANCE DRIVE INTERMEDIATE GEAR WAS WORN AND 11 GEAR TEETH WERE MISSING. ADDITIONALLY, THE REAR COUNTERBALANCE DRIVE GEAR WAS WORN.

Probable Cause and Findings

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

Findings

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

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) ENGINE ASSEMBLY, PISTON - FAILURE, PARTIAL 2. (C) ENGINE ASSEMBLY, RING - FAILURE, PARTIAL

3. (F) ENGINE ASSEMBLY, OTHER - WORN

Occurrence #2: FIRE/EXPLOSION

Phase of Operation: TAKEOFF - INITIAL CLIMB

Occurrence #3: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #4: DITCHING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. LIGHT CONDITION - DARK NIGHT

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Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last Medical Exam:	11/02/1981
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3550 hours (Total, all aircraft), 88 hours (Total, this make and model), 2900 hours (Pilot In Command, all aircraft), 125 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CONVAIR	Registration:	N21DR
Model/Series:	440 440	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	325
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	48000 lbs
Time Since Last Inspection:	8 Hours	Engines:	2 Reciprocating
Airframe Total Time:	40846 Hours	Engine Manufacturer:	P & W
ELT:	Installed, not activated	Engine Model/Series:	R-2800
Registered Owner:	EMISSARY AIRWAYS, INC.	Rated Power:	2400 hp
Operator:	ISLAND AIRLINES HAWAII INC.	Air Carrier Operating Certificate:	Commuter Air Carrier (135)

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	HNL, 0 ft msl	Observation Time:	1800
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	70°C / 0°C
Lowest Ceiling:	Unknown / 0 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	4 knots, 110°	Visibility (RVR):	0 ft
Altimeter Setting:		Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	HONOLULU, HI	Type of Flight Plan Filed:	IFR
Destination:	MAUI, HI	Type of Clearance:	Traffic Advisory
Departure Time:	2244	Type of Airspace:	

Airport Information

Airport:	HONOLULU INTL	Runway Surface Type:	
Airport Elevation:	0 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Minor, 1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	In-Flight
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Adopted Date: 01/17/1983
Additional Participating Persons:	
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 publing@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.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.

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