

Aviation Investigation Final Report

Location:	MIAMI, Florida		Incident Number:	MIA85IA120
Date & Time:	March 15, 1985, 02:5	5 Local	Registration:	N55CA
Aircraft:	DOUGLAS	DC-6B	Aircraft Damage:	Minor
Defining Event:			Injuries:	3 None
Flight Conducted Under:	Part 129: Foreign			

Analysis

CREW STATED THAT ON TAKEOFF ROLL THE NUMBER FOUR ENGINE FAILED AND AN ABORTED TAKEOFF WAS INTIATED. DURING THE DECELLERATION AFTER THE THROTTLES WERE CLOSED THE NUMBER FOUR ENGINE SEIZED AND THE NUMBER FOUR PROPELLER SEPARATED WHEN THE PROPELLER SHAFT FAILED. INSPECTION OF THE PROPELLER SHAFT REVEALED IT SHEARED OFF EIGHT INCHES FROM THE TIP, AND EXHIBITED NO EVIDENCE OF A PRIOR CRACK. INSPECTION OF THE ENGINE OIL SCREENS REVEALED THE PRECENTS OF METAL CONTAMINATION. THE OPERATOR HAD NO PLANS TO DISASSEMBLE THE ENGINE. BUT PLANNED TO EXCHANGE IT FOR AN OVERHAULED ENGINE. THE EXPCT CAUSE OF THE ENGINES INTERNAL FAILURE WAS NOT DETERMINED.

Probable Cause and Findings

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

Findings

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

Findings 1. (C) ENGINE ASSEMBLY - FAILURE, TOTAL 2. ABORTED TAKEOFF - INITIATED - PILOT IN COMMAND 3. (C) ENGINE ASSEMBLY - UNDETERMINED -----

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: TAKEOFF - ROLL/RUN

Findings 4. (F) PROPELLER SYSTEM/ACCESSORIES - OVERLOAD

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	September 1, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	21800 hours (Total, all aircraft), 120	00 hours (Total, this make and model))

Aircraft and Owner/Operator Information

Aircraft Make:	DOUGLAS	Registration:	N55CA
Model/Series:	DC-6B DC-6B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	25328
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	February 27, 1985 AAIP	Certified Max Gross Wt.:	103800 lbs
Time Since Last Inspection:	31 Hrs	Engines:	4 Reciprocating
Airframe Total Time:	41074 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R2800-CB16/17
Registered Owner:	F. A. CONNER	Rated Power:	2400 Horsepower
Operator:	APA INTERNATIONAL AIR, S.A.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	MIA ,10 ft msl	Distance from Accident Site:	
Observation Time:	02:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 10000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	SANTO DOMINGO , OF (SDO)	Type of Clearance:	IFR
Departure Time:	02:55 Local	Type of Airspace:	Class B;Class D;Class E

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=31282

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 here.