

Aviation Investigation Final Report

Location:	MIAMI, Florida		Incident Number:	MIA87IA185
Date & Time:	June 17, 1987, 15:	30 Local	Registration:	N17271
Aircraft:	BELL	47G-2	Aircraft Damage:	Minor
Defining Event:			Injuries:	3 None
Flight Conducted Under:	Part 91: General a	viation		

Analysis

WHILE IN CRUISE FLT AT APRX 300 FT THE PLT REPORTED THAT HE HEARD A LOUD NOISE FOLLOWED BY A LOSS OF POWER. HE THEN AUTOROTATED & SET THE HELICOPTER DOWN WITH NO FURTHER INCIDENT. INSP OF THE ENG REVEALED THAT THE NUMBER 6 CYLINDER CONNECTING ROD FAILED NEAR THE WRIST PIN DUE TO A FATIGUE FRACTURE, RESULTING IN THE LOSS OF POWER.

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: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY, CONNECTING ROD - FATIGUE

2. (C) ENGINE ASSEMBLY, CONNECTING ROD - FAILURE, TOTAL

3. AUTOROTATION - PERFORMED

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	53,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 4, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8305 hours (Total, all aircraft), 7600 hours (Total, this make and model), 8135 hours (Pilot In Command, all aircraft), 104 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MIA ,10 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	314°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	33°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NORTH MIAMI , FL	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Water
Airport Elevation:		Runway Surface Condition:	Water-calm
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Minor
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	25.929121,-80.139152(est)

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy
Additional Participating Persons:	
Original Publish Date:	July 10, 1989
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=31797

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>.