



# National Transportation Safety Board

## Aviation Accident Final Report

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<b>Location:</b>	AGUADILLA, PR	<b>Accident Number:</b>	MIA91FA140
<b>Date &amp; Time:</b>	05/10/1991, 1120 AST	<b>Registration:</b>	N134FS
<b>Aircraft:</b>	MCDONNELL DOUGLAS DC-3C	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

THE AIRPLANE SUSTAINED A PARTIAL LOSS OF ENGINE POWER ON THE LEFT ENGINE ON TAKEOFF CLIMB DUE TO THE FAILURE OF THE NO. 8 ENGINE ASSEMBLY CYLINDER. THE AIRPLANE WAS OBSERVED BY WITNESSES AT 400 FEET AGL IN A 20 DEGREE LEFT BANK WHILE MANEUVERING TO RETURN TO THE DEPARTURE AIRPORT. THE ANGLE OF BANK INCREASED TO 60 DEGREES WITH A NOTICEABLE DECREASE IN AIRSPEED WHILE THE AIRPLANE DESCENDED BELOW 300 FEET AGL. THE LEFT WING DROPPED 90 DEGREES TO THE LEFT AND THE NOSE PITCHED DOWN VERTICALLY. THE AIRPLANE APPEARED TO REGAIN ELEVATOR AUTHORITY AND LEVELED OUT BEFORE ENCOUNTERING A SECONDARY STALL. THE AIRPLANE COLLIDED WITH THE TERRAIN AND WAS DESTROYED BY POSTCRASH FIRE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT IN COMMAND'S FAILURE TO MAINTAIN AIRSPEED (VS) AFTER A PARTIAL LOSS OF ENGINE POWER ON THE LEFT ENGINE DUE TO FAILURE OF THE NO. 8 ENGINE ASSEMBLY CYLINDER. THIS RESULTED IN AN IN FLIGHT LOSS OF CONTROL (STALL), AND IN FLIGHT COLLISION WITH TERRAIN.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. 1 ENGINE
2. (C) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
3. (F) ENGINE ASSEMBLY,CYLINDER - FAILURE,TOTAL

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
5. (C) STALL - INADVERTENT - PILOT IN COMMAND

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - GROUND

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Occurrence #4: FIRE  
Phase of Operation: OTHER

Findings

7. FUEL SYSTEM - RUPTURED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	05/14/1990
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3068 hours (Total, all aircraft), 873 hours (Total, this make and model), 102 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MCDONNELL DOUGLAS	<b>Registration:</b>	N134FS
<b>Model/Series:</b>	DC-3C DC-3C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	99848
<b>Landing Gear Type:</b>	Retractable - Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	26900 lbs
<b>Time Since Last Inspection:</b>	0 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	R1830-90D
<b>Registered Owner:</b>	FOUR STAR AVIATION	<b>Rated Power:</b>	1200 hp
<b>Operator:</b>	FOUR STAR AVIATION	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	FHCA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JBQ, 237 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1153 AST	Direction from Accident Site:	80°
Lowest Cloud Condition:	Scattered / 2000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:			
Departure Point:	AGUADILLA, PR (JBQ)	Type of Flight Plan Filed:	Unknown
Destination:	PONCE, PR (PSE)	Type of Clearance:	None
Departure Time:	1118 AST	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	2 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	CARROL A SMITH	Report Date:	05/27/1993
Additional Participating Persons:	ANDRES A PACHECHO; SAN JUAN, PR		
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:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.ntsb.gov/pubdms/">http://dms.ntsb.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](#).