



# Aviation Investigation Final Report

<b>Location:</b>	PANAMA CITY BCH, Florida	<b>Accident Number:</b>	MIA85LA237
<b>Date &amp; Time:</b>	August 22, 1985, 10:30 Local	<b>Registration:</b>	N4253A
<b>Aircraft:</b>	BELL 47D1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

THE HELICOPTER CONTACTED A FENCE AND SLID NOSE DOWN INTO A RAVINE DURING A FORCED LANDING. THE PLT REPORTED THAT AFTER TAKEOFF AT AN ALT OF 35 TO 40 FT AGL, A LOAD BANG WAS HEARD AND GRAY/WHITE SMOKE WAS EMITTED FROM THE TRANSMISSION/ENG AREA. THE THROTTLE WAS ROLLED OFF AND COLLECTIVE LOWERED FOR THE FORCED LANDING. POST ACCIDENT INSPECTION OF THE ENG REVEALED 11 SPARK PLUGS WERE MISFIRING AND THE RIGHT MAGNETO 'P' LEAD HAD SHORTED OUT ON THE ENG CASE.

## 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) IGNITION SYSTEM,MAGNETO - SHORTED
2. (C) IGNITION SYSTEM,SPARK PLUG - INOPERATIVE
3. (C) MAINTENANCE,INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. TERRAIN CONDITION - DITCH

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	25, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	February 25, 1985
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2010 hours (Total, all aircraft), 900 hours (Total, this make and model), 1890 hours (Pilot In Command, all aircraft), 400 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BELL	<b>Registration:</b>	N4253A
<b>Model/Series:</b>	47D1 47D1	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	100
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>	30 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	FRANKLIN
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	6VS-335A
<b>Registered Owner:</b>	CHERYL BROWN	<b>Rated Power:</b>	225 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	ELLOW WHIRLEYBIRD, INC.	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	TLH ,20 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	10:30 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	2 miles
<b>Lowest Ceiling:</b>	Broken / 1500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 26°C
<b>Precipitation and Obscuration:</b>	N/A - None - Fog		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	Gravel
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Wet
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	30.169015,-85.670021(est)

## Administrative Information

**Investigator In Charge (IIC):** Hill, Bruce

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=31444>

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