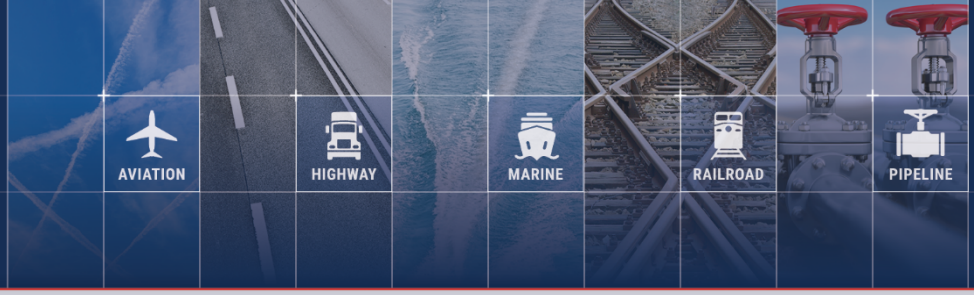

Aviation Investigation Final Report

Location:	BOCA RATON, Florida	**Accident Number:**	MIA00LA158
Date & Time:	May 14, 2000, 15:45 Local	**Registration:**	N70546
Aircraft:	Piper J-3	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that the aircraft was in level flight at 1,300 feet when the engine ceased operating. During the resulting forced landing the aircraft collided with a rock and flipped upside down, incurring substantial damage. An FAA inspector who examined the accident airplane said that fuel was in the aircraft, but it was contaminated with debris when it was transferred to containers during recovery. Postcrash examination of the aircraft did not reveal any preexisting failure or malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power due to undetermined reasons that resulted in a forced landing and substantial damage to the aircraft.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings
1. REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings
2. TERRAIN CONDITION - ROCK(S)/BOULDER(S)

Factual Information

On May 14, 2000, about 1545 eastern daylight time, a Piper J-3, N70546, registered to and operated by a private owner as a Title 14 CFR Part 91 personal flight, made an emergency landing on a beach in Boca Raton, Florida. Visual meteorological conditions prevailed, and no flight plan was filed. The airplane incurred substantial damage, and the commercial-rated pilot and one passenger did not sustain any injuries. The flight originated from Willis Glider Port, in Boynton Beach, Florida, the same day, about 1500.

The pilot stated that the aircraft was in level flight at an altitude of 1,300 feet when the engine ceased operating. The pilot further stated that he looked for space to land, but the beach was crowded, except for a small rocky area. During the landing, the left main landing gear assembly hit a rock and separated from the aircraft. The left wing then dropped and hit a sand berm, and the airplane flipped upside down.

An FAA inspector who conducted the on-scene examination of the accident aircraft said that fuel was in the aircraft, but it was contaminated with debris when it was transferred to containers, during recovery of the aircraft.

Postcrash examination of the aircraft did not reveal any preexisting failure or malfunction. Examination of the engine assembly showed that it rotated normally and continuity of the crankshaft, camshaft, valve train and accessory drives were confirmed. Each cylinder produced finger compression and suction. All oil screens and filters were free of debris. Each magneto operated normally when turned by hand. Examination of the fuel tank, fuel lines, and gascolator revealed no obstructions. The carburetor was disassembled and found to be unobstructed, except for a light filmy residue in the main jet, which was easily dislodged.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	63,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	July 5, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	3600 hours (Total, all aircraft), 722 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N70546
Model/Series:	J-3 J-3	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	17555
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 16, 1999 Annual	**Certified Max Gross Wt.:**	1170 lbs
Time Since Last Inspection:	55 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4310 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	A65-8
Registered Owner:	RONALD STUKE	**Rated Power:**	65 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PBI ,19 ft msl	**Distance from Accident Site:**	
Observation Time:	15:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered / 4500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	140°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	31°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WILLIS GLIDER , FL	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	15:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	BOCA RATON BCT	**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	Rough
Runway Used:	0	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	26.369949,-80.099624(est)

Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	MICHAEL J PAVISICH; FORT LAUDERDALE, FL DAVID HAMMOND; FORT LAUDERDALE, FL JOHN BURES; MOBILE , AL
Original Publish Date:	March 2, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49188