



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.nts.gov/Docket?ProjectID=49188

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](#).