



Aviation Investigation Final Report

Location:	Cross City, Florida	Accident Number:	ATL01LA044
Date & Time:	March 30, 2001, 11:14 Local	Registration:	N7640P
Aircraft:	Piper PA-24	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During cruise flight at 6,000 feet about two to three miles off shore, the pilot heard a loud bang followed by a violent shake of the airplane and a subsequent loss of engine power. The pilot glided the plane toward shore, then elected to ditch the airplane into the Gulf of Mexico. The airplane was recovered and the connecting rod and connecting rod bearing were sent via FedEx to the NTSB lab for examination on April 18, 2001. The NTSB lab never received the parts. Several attempts to track the parts through FedEx were unsuccessful.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The fracture of the crankshaft assembly that resulted in a total loss of engine power.

Findings

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

Findings
1. (C) ENGINE ASSEMBLY, CRANKSHAFT - FRACTURED

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

Occurrence #3: DITCHING
Phase of Operation: EMERGENCY DESCENT/LANDING

Factual Information

On March 30, 2001, at 1114 eastern standard time, a Piper PA-24, N7640P, registered to a private owner, was ditched in the Gulf of Mexico 21 miles west of Cross City, Florida, after a total loss of engine power. The personal flight was operated by the pilot under the provisions of Title 14 CFR Part 91 with an instrument flight plan filed. Instrument metrological conditions prevailed at the time of the accident. The private pilot and passenger received minor injuries, and the airplane sustained substantial damage. The flight originated from Sarasota International Airport, Sarasota, Florida, at 1000.

According to the pilot, during cruise at 6,000 feet approximately two to three miles off the coast of Florida, a loud bang was heard. Shortly after the loud bang, the airplane started to shake violently, and the engine began to lose power. The pilot declared an emergency and headed toward the shore. The airplane descended through the clouds and broke out around 1,000 feet. The pilot noticed the RPM reading went to zero, and there were no signs of oil pressure or vacuum pressure. The propeller was wind milling. The pilot elected to ditch the airplane into the Gulf of Mexico. The pilot and passenger were rescued by a fishing boat about 10 minutes after the airplane was ditched.

Examination of the engine revealed the crankshaft was fractured at the number four connecting rod journal just forward of the gear shaft. A review of the engine maintenance logbook showed that the crankshaft had 72 hours since its last maintenance overhaul and 4680 hours total time. The connecting rod bearing, the entire crankshaft assembly and the connecting rod were sent via FedEx to the NTSB materials lab for examination on April 18, 2001. The NTSB lab never received the parts. Several attempts to track the parts through FedEx were unsuccessful.

Pilot Information

Certificate:		Age:	63, Male
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	February 14, 2001
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 18, 2000
Flight Time:	1806 hours (Total, all aircraft), 1000 hours (Total, this make and model), 1674 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7640P
Model/Series:	PA-24	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2852
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	December 16, 2000 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4680 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360
Registered Owner:	John R. Stevenson	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SRQ,27 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:35 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.34 inches Hg	Temperature/Dew Point:	18°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sarasota, FL, FL (SRQ)	Type of Flight Plan Filed:	IFR
Destination:	Jack Edwards, AL (JKA)	Type of Clearance:	IFR
Departure Time:	11:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	Sarasota International Airport SRQ	Runway Surface Type:	
Airport Elevation:	28 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	29.635555,-83.104721

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	Linda Nevin; Tampa FSDO; FL
Original Publish Date:	August 28, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=52014

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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](#).