



Aviation Investigation Final Report

Location:	COLUMBIA, South Carolina	Accident Number:	ATL94LA061
Date & Time:	March 12, 1994, 09:30 Local	Registration:	N8647D
Aircraft:	PIPER PA-22-160	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AN ANNUAL INSPECTION OF THE AIRCRAFT WAS COMPLETED ON MARCH 1, 1994. THIS WAS TO BE THE SECOND FLIGHT OF THE AIRCRAFT FOLLOWING THE INSPECTION. THE PILOT REPORTED THAT AFTER DEPARTURE, AT AN ALTITUDE OF APPROXIMATELY 1700 FEET, THE ENGINE STOPPED PRODUCING POWER. AN EMERGENCY LANDING WAS EXECUTED INTO A FRESHLY PLOWED FIELD. DURING THE LANDING ROLL, THE AIRCRAFT NOSED OVER AND WAS SUBSTANTIALLY DAMAGED. INSPECTION OF THE AIRCRAFT ENGINE REVEALED THAT A FOREIGN OBJECT (APPEARED TO BE A PIECE OF ELECTRICAL TAPE) WAS LODGED IN THE CARBURETOR BOWL. THE PILOT/OWNER REPORTED THAT THE MECHANIC, WHO CONDUCTED THE ANNUAL INSPECTION, STATED TO HIM THAT DURING THE POST MAINTENANCE FLIGHT FOLLOWING THE INSPECTION, THE ENGINE SEEMED TO BE MISSING. THE MECHANIC WAS REPORTED AS STATING THAT THERE MIGHT BE SOME TRASH IN THE FUEL LINES OR CARBURETOR, BUT THAT HE WAS UNABLE TO LOCATE THE SOURCE OF THE PROBLEM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The poor inspection of the aircraft during the annual inspection by maintenance personnel. A factor in the accident was the foreign object found in the carburetor bowl.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (F) FUEL SYSTEM,CARBURETOR FLOAT - FOREIGN OBJECT
2. (C) MAINTENANCE,INSPECTION - POOR - OTHER MAINTENANCE PERSONNEL

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

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

3. TERRAIN CONDITION - SOFT

Factual Information

On March 12, 1994, about 0930 eastern standard time, a Piper PA-22-160, N8647D, was substantially damaged following a collision with terrain during a forced landing near Columbia, South Carolina. Neither the private pilot nor his passenger were injured in the accident. The aircraft was being operated under 14 CFR Part 91 by the pilot. Visual meteorological conditions existed at the time, and no flight plan had been filed for the personal flight. The flight departed Columbia, South Carolina, about 0915.

The pilot stated that during cruise flight at 1700 feet above mean sea level, the aircraft engine stopped producing power. The pilot executed a forced landing in a plowed field, and during the roll-out, the aircraft nosed over.

An examination of the aircraft engine revealed that there was a foreign object which appeared to be a piece of electrical tape lodged in the carburetor bowl.

The aircraft had undergone an annual inspection on March 1, 1994. This was the second flight of the aircraft following the inspection. The pilot/owner stated that the mechanic who performed the inspection stated that during the post inspection flight, the engine seemed to be misfiring. The mechanic was reported as stating that there might be some trash in the fuel line or carburetor, but that he was unable to locate the problem.

The pilot/owner failed to complete the Pilot/Operator Aircraft Accident Report, NTSB Form 6120.1/2.

Pilot Information

Certificate:	Private	Age:	56, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 1, 1993
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	600 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8647D
Model/Series:	PA-22-160 PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5855
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 1, 1994 Annual	Certified Max Gross Wt.:	1840 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1692 Hrs	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-320
Registered Owner:	REVELS, JERRY H.	Rated Power:	160 Lbs thrust
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:	CAE ,236 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	08:52 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	6°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	HILTON HEAD , SC (49J)	Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Vegetation
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:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	33.99953,-81.029457(est)

Administrative Information

Investigator In Charge (IIC):	Sasser, Roff
Additional Participating Persons:	JAMES R COKER; COLUMBIA , SC THOMAS CONWAY; COLUMBIA , SC
Original Publish Date:	November 14, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3356

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](#).