



Aviation Investigation Final Report

Location:	CUMMING, Georgia	Accident Number:	MIA97LA106
Date & Time:	March 30, 1997, 09:00 Local	Registration:	N3201Z
Aircraft:	Piper PA22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While in cruise flight the pilot noticed a decrease in engine RPM's. He switched fuel tanks and applied carburetor heat. He further stated that the only thing that helped was the 'in and out motion on the throttle.' The engine did not regain power so the pilot attempted a forced landing in a pasture, which resulted in impact with the ground. The engine was removed from the airplane and placed on a test stand and run with all the original parts that were on the engine at the time of the accident with the exception of the carburetor. The carburetor had sustained impact damage and the throttle valve was separated from the body of the carburetor. The engine test run did not reveal any discrepancies. The carburetor was disassembled and the gasket was found dry and in pieces. There was no fuel found in the bowl.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power for an undermined reason, which resulted in a forced landing and subsequent impact with the ground.

Findings

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

Findings

1. 1 ENGINE - UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. TERRAIN CONDITION - GROUND

Factual Information

On March 30, 1997, about 0900 eastern standard time, a Piper PA-22-150, N3201Z, registered to a private owner, crashed during a forced landing near Cumming, Georgia. Visual meteorological conditions prevailed at the time and no flight plan was filed for the Title 14 CFR Part 91 local personal flight. The private-rated pilot was not injured. The airplane was substantially damaged. The flight had originated about 15 minutes before the accident.

The airplane was in cruise flight when the pilot noticed a "decrease in engine RPM's." The pilot switched fuel tanks and applied carburetor heat. He further stated that the only thing that helped was the "in and out motion on the throttle." The engine did not regain power so the pilot attempted a forced landing in a pasture, which resulted in impact with the ground.

The engine was removed from the airplane and examined at Lycoming Engine's facilities in Williamsport, Pennsylvania, July 2, 1997, under the supervision of the FAA. The engine was placed on a test stand and run with all the original parts that were on the engine at the time of the accident with the exception of the carburetor. The carburetor had impact damage and the throttle was separated from the body of the carburetor. The engine test run did not reveal any discrepancies.

The carburetor was shipped to the NTSB Southeast Regional office, Miami, Florida, where it was disassembled. The carburetor was received with all safety wires attached, and throttle valve which was laying separate from the body of the carburetor. The carburetor was disassembled and the gasket was found dry and in pieces. There was no fuel found in the bowl. The float retention valve pin was in place, and the needle valve operated.

The engine was released on July 11, 1997, and shipped from Lycoming's factory on the same day, under shipping order No. P597459. The carburetor was shipped on the same day from the NTSB Southeast Regional office, Miami, Florida.

Pilot Information

Certificate:	Private	Age:	60, 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-w/ waivers/lim	Last FAA Medical Exam:	November 24, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1201 hours (Total, all aircraft), 400 hours (Total, this make and model), 900 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3201Z
Model/Series:	PA22-150 PA22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-7141
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1601 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320
Registered Owner:	MILES R. DUNCAN	Rated Power:	150 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(84A)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:47 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
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:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Yurman, Alan
Additional Participating Persons:	MARK MEOLA; ATLANTA, GA
Original Publish Date:	October 14, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=38236

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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](#).