



National Transportation Safety Board Aviation Accident Final Report

Location:	RALEIGH, NC	Accident Number:	ATL86FA208
Date & Time:	07/24/1986, 0845 EDT	Registration:	N3643Q
Aircraft:	PIPER PA-60-600	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PLT WAS ISSUED RWY 5, 7,500', FOR IFR DEPARTURE WITH FAVORING 4 KT QUARTERING HEADWIND. PLT REQUESTED RWY 14, 4,498', FOR TAKEOFF WITH A 4 KT QUARTERING TAILWIND. GROUND WITNESS AND CONTROL TOWER OBSERVED ACFT USE NEARLY ALL OF THE RWY ON TAKEOFF ROLL. AFTER AN ABRUPT ROTATION, THE CONTROLLER OBSERVED ACFT YAW TO LEFT AND MAKE A LOW ALT LEFT TURN. SECONDS LATER THE ACFT RAPIDLY DESCENDED INTO TREES AND CAUGHT FIRE. THE LEFT PROPELLER WAS FOUND IN THE FEATHERED POSITION AND THE LEFT ENGINE WAS CONSUMED BY A GROUND FIRE. THERE WAS NO EVIDENCE OF ANY INTERNAL ENGINE FAILURE. THE ENGINE TIME SMOH WAS 43 HRS. WITNESS HEARD THE ACFT TAKEOFF WITH A SERIES OF LOUD BACKFIRES 25 DAYS PRIOR TO THE ACCIDENT. INJECTOR NOZZLES ON THE RIGHT ENGINE WERE LEANED TO CORRECT THE PROBLEM AFTER 6 HRS OF OPERATION ONE WEEK LATER. THE PLTS LOG FAILED TO SHOW ANY RECENT TRAINING IN SINGLE ENGINE PROCEDURES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: TAKEOFF

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. (C) WRONG RUNWAY - SELECTED - PILOT IN COMMAND
3. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. (F) WEATHER CONDITION - LOW CEILING
5. WEATHER CONDITION - TAILWIND
6. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

8. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/17/1986
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	4518 hours (Total, all aircraft), 1954 hours (Total, this make and model), 4132 hours (Pilot In Command, all aircraft), 97 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N3643Q
Model/Series:	PA-60-600 PA-60-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	600836816123
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	05/09/1986, Annual	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	40 Hours	Engines:	2 Reciprocating
Airframe Total Time:	2009 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540-K1J5
Registered Owner:	WILLIAM H. ADAMS	Rated Power:	290 hp
Operator:	WILLIAM H. ADAMS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RDU, 437 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0851 EDT	Direction from Accident Site:	210°
Lowest Cloud Condition:	Unknown / 400 ft agl	Visibility	1 Miles
Lowest Ceiling:	Obscured / 400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24° C / 22° C
Precipitation and Obscuration:			
Departure Point:	RALEIGH, NC (RDU)	Type of Flight Plan Filed:	IFR
Destination:	PAWTUCKET, RI (SFZ)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class E

Airport Information

Airport:	RALEIGH/DURHAM (RDU)	Runway Surface Type:	Asphalt
Airport Elevation:	437 ft	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	4498 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	BEN R COLEMAN	Report Date:	
Additional Participating Persons:	BOB SIMMONS; RALEIGH, NC		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).