



National Transportation Safety Board Aviation Accident Final Report

Location:	GREENVILLE, VA	Accident Number:	BF092LA083
Date & Time:	07/01/1992, 1330 EDT	Registration:	N8141H
Aircraft:	PIPER PA-32R-301T	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

WHILE IN CRUISE AT 12,000 FEET MSL THE ENGINE LOST TOTAL POWER. THE PILOT MADE A FORCED LANDING ON A FIELD IN GREENVILLE, VA. THE ON SCENE INVESTIGATION REVEALED THE FUEL INJECTOR LINE BETWEEN THE FUEL MANIFOLD AND THE NUMBER 6 CYLINDER FUEL NOZZLE WAS BROKEN. A METALLURGICAL STUDY REVEALED THAT THE SEPARATION OF THE FUEL LINE OCCURRED BY METAL FATIGUE. THE SAFETY BOARD RECOMMENDED TO THE FAA, RECOMMENDATION A-29-10, ON MARCH 2, 1992, THAT AN AIRWORTHINESS DIRECTIVE (A) BE PUBLISHED ADDRESSING THE FUEL LINE FAILURES. THE FAA ISSUED AN AD (92-12-10), ON JUNE 5, 1992, REQUIRING A VISUAL INSPECTION, WITHIN 10 FLIGHT HOURS, OF EACH FUEL INJECTOR FUEL LINE, AND LOOK FOR MISSING SUPPORT CLAMPS, OR SUPPORT CLAMPS THAT ARE NOT SECURE AND ARE NOT PROPERLY SUPPORTING THE FUEL LINE. THE ACCIDENT AIRPLANE HAD NOT YET ACCRUED 10 FLIGHT HOURS SINCE THE ADOPTION OF THE AD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FATIGUE FAILURE OF THE FUEL INJECTOR FUEL LINE RESULTING IN ENGINE FAILURE. CONTRIBUTING TO THE ACCIDENT WAS THE UNSUITABLE TERRAIN IN WHICH THE FORCED LANDING WAS MADE.

Findings

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

Findings

1. (C) FUEL SYSTEM,LINE - FRACTURED

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

Occurrence #3: HARD LANDING
Phase of Operation: DESCENT - EMERGENCY

Findings

2. TERRAIN CONDITION - MOUNTAINOUS/HILLY
3. LANDING GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Private	Age:	36, Male
Airplane Rating(s):	Single-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:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	06/29/1990
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	338 hours (Total, all aircraft), 68 hours (Total, this make and model), 319 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8141H
Model/Series:	PA-32R-301T PA-32R-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	32R-80290042
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	04/09/1992, 100 Hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	40 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2357 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TIO-540-S1AD
Registered Owner:	MARK P. VINCENT	Rated Power:	300 hp
Operator:	BUTLER AIR INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CHO, 1 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1245 EDT	Direction from Accident Site:	1°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	6 Miles
Lowest Ceiling:	Overcast / 2000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28° C / 23° C
Precipitation and Obscuration:			
Departure Point:	N. MYRTLE BEACH, SC (CRE)	Type of Flight Plan Filed:	IFR
Destination:	BUTLER, PA (BTP)	Type of Clearance:	IFR
Departure Time:	1130 EDT	Type of Airspace:	Class D

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	MARGARET B NAPOLITAN	Report Date:	08/13/1993
Additional Participating Persons:	DUANE HUNTER; RICHMOND, VA GEORGE BUSH; RICHMOND, VA		
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](#).