National Transportation Safety Board
Aviation Accident Final Report

Location:	ALICEVILLE, AL	**Accident Number:**	ATL93LA001
Date & Time:	10/02/1992, 0845 CDT	**Registration:**	N8548P
Aircraft:	PIPER PA-24-260	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	4 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

ACCORDING TO THE PILOT, HE COMPLETED A PREFLIGHT INSPECTION AND DID NOT NOTICE ANY PROBLEMS WITH THE AIRPLANE. THE TAKEOFF AND CLIMB TO 5500 FEET WERE REPORTED AS NORMAL, BUT 30 MINUTES INTO THE FLIGHT THE PILOT EXPERIENCED A COMPLETE LOSS OF ENGINE POWER. THE EMERGENCY PROCEDURE TO RESTORE ENGINE POWER FAILED, THEREFORE THE PILOT ESTABLISHED AN EMERGENCY DESCENT FOR A FORCED LANDING. THE AIRPLANE SUSTAINED SUBSTANTIAL DAMAGE DURING THE FORCED LANDING. EXAMINATION OF THE AIRPLANE DISCLOSED THAT THE FUEL LINE BETWEEN THE FUEL PUMP AND FUEL INJECTOR HAD SEPARATED AT THE FUEL INJECTOR. THE MAINTENANCE LOG REVIEW DISCLOSED THAT THE AIRPLANE HAD UNDERGONE A 100 HOUR INSPECTION AND AN ENGINE INSTALLATION 5 HOURS PRIOR TO THE ACCIDENT. NO OTHER MAINTENANCE PROBLEMS WERE NOTED DURING THE EXAMINATION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
MAINTENANCE PERSONNEL'S FAILURE TO PROPERLY SECURE THE FUEL LINE FROM THE FUEL PUMP TO THE FUEL INJECTOR DURING THE ENGINE INSTALLATION, WHICH RESULTED IN A COMPLETE ENGINE FAILURE.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings
1. (C) FUEL SYSTEM,LINE - NOT SECURED
2. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Factual Information

Pilot Information

Certificate:	Commercial	**Age:**	52, Male
Airplane Rating(s):	Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	01/19/1992
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	684 hours (Total, all aircraft), 19 hours (Total, this make and model), 609 hours (Pilot In Command, all aircraft), 29 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	**Registration:**	N8548P
Model/Series:	PA-24-260 PA-24-260	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	24-4005
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	05/08/1992, Annual	**Certified Max Gross Wt.:**	3100 lbs
Time Since Last Inspection:	5 Hours	**Engines:**	1 Reciprocating
Airframe Total Time:	2468 Hours	**Engine Manufacturer:**	LYCOMING
ELT:	Installed	**Engine Model/Series:**	I0-540-04A5
Registered Owner:	PICKERING AND MCKINNEY	**Rated Power:**	260 hp
Operator:	PICKERING AND MCKINNEY	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	GTR, 264 ft msl	**Distance from Accident Site:**	25 Nautical Miles
Observation Time:	0835 CDT	**Direction from Accident Site:**	300°
Lowest Cloud Condition:	Clear / 0 ft agl	**Visibility**	10 Miles
Lowest Ceiling:	None / 0 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	50°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	14°C / 11°C
Precipitation and Obscuration:			
Departure Point:	COLUMBUS, MS (GTR)	**Type of Flight Plan Filed:**	None
Destination:	GAINESVILLE, FL (GNV)	**Type of Clearance:**	None
Departure Time:	0800 CDT	**Type of Airspace:**	Class G

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):	PHILLIP POWELL	**Report Date:**	06/21/1993
Additional Participating Persons:	JERRY YATES; BIRMINGHAM, AL		
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.ntsb.gov/pubdms/.		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.