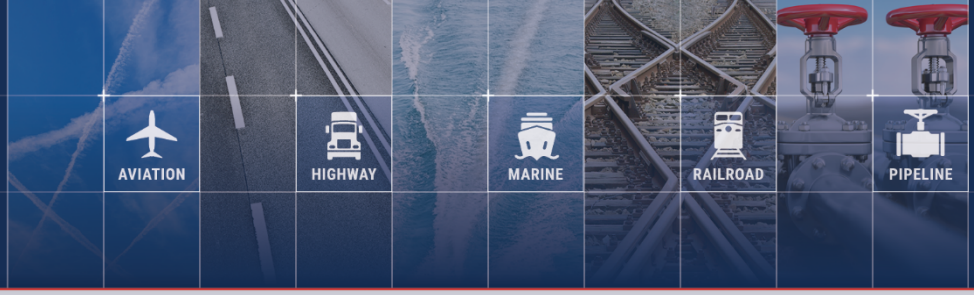

Aviation Investigation Final Report

Location:	ALEXANDER CITY, Alabama	**Accident Number:**	ATL96LA016
Date & Time:	December 1, 1995, 11:30 Local	**Registration:**	N53870
Aircraft:	Bellanca 8KCAB	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, while at 4,500 feet msl, the aircraft engine began to run rough, and then lost power. The pilot attempted to execute a forced landing on a roadway, but the aircraft hit trees during the approach, then it impacted the terrain next to the roadway. Examination of the engine revealed that the fuel injector diaphragm and 'O' ring were leaking.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The leaking fuel injector, which created a rich mixture, and caused the aircraft engine to lose power.

Findings

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

Findings
1. (C) FUEL SYSTEM,INJECTOR - LEAK

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings
2. OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On December 1, 1995, at 1130 central standard time, a Bellanca 8KCAB, N53870, was substantially damaged following a collision with trees and terrain during a forced landing attempt near Alexander City, Alabama. The airline transport pilot received minor injuries in the accident. The aircraft was being operated under the provisions of 14 CFR Part 91 by the pilot. Visual meteorological conditions existed at the time, and a visual flight rules flight plan was in effect for the flight. The flight departed Columbus, Georgia, at 1045.

The pilot stated that while at cruise flight at 4,500 feet above mean sea level, the aircraft engine began to run roughly, and then stopped producing power. The pilot attempted to execute a forced landing on a roadway, but impacted trees, and the terrain during the approach.

Examination of the aircraft engine revealed that the "O" ring and diaphragm in the fuel injector servo were leaking. The leaking servo resulted in a rich fuel/air mixtureand subsequent loss of engine power.

Pilot Information

Certificate:	Airline transport; Flight instructor	**Age:**	37,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	January 10, 1995
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	8716 hours (Total, all aircraft), 6 hours (Total, this make and model), 3088 hours (Pilot In Command, all aircraft), 233 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N53870
Model/Series:	8KCAB 8KCAB	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	225-76
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 4, 1995 Annual	**Certified Max Gross Wt.:**	1800 lbs
Time Since Last Inspection:	85 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1690 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	AEIO-320-E1B
Registered Owner:	MICHELLE C. HILL	**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:	MGM ,221 ft msl	**Distance from Accident Site:**	40 Nautical Miles
Observation Time:	12:56 Local	**Direction from Accident Site:**	310°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	230°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	14°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	COLUMBUS , GA (CSG)	**Type of Flight Plan Filed:**	VFR
Destination:	BIRMINGHAM , AL (BHM)	**Type of Clearance:**	None
Departure Time:	10:45 Local	**Type of Airspace:**	Class G

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 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	32.919624,-85.930297(est)

Administrative Information

Investigator In Charge (IIC):	Sasser, Roff
Additional Participating Persons:	WILLIAM G ELLIOT; BIRMINGHAM , AL
Original Publish Date:	June 7, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3675