



National Transportation Safety Board Aviation Accident Final Report

Location:	ALEXANDER CITY, AL	Accident Number:	ATL96LA016
Date & Time:	12/01/1995, 1130 CST	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 mixture and subsequent loss of engine power.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	37, Female
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
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:	01/10/1995
Occupational Pilot:		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:	No
Airworthiness Certificate:	Normal	Serial Number:	225-76
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	05/04/1995, Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	85 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1690 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	AEIO-320-E1B
Registered Owner:	MICHELLE C. HILL	Rated Power:	150 hp
Operator:	MICHELLE C. HILL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MGM, 221 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	1256 CST	Direction from Accident Site:	310°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
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:			
Departure Point:	COLUMBUS, GA (CSG)	Type of Flight Plan Filed:	VFR
Destination:	BIRMINGHAM, AL (BHM)	Type of Clearance:	None
Departure Time:	1045 CST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): ROFF H SASSER **Report Date:** 06/07/1996

Additional Participating Persons: WILLIAM G ELLIOT; 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.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](#).