



Aviation Investigation Final Report

Location: GT. BARRINGTON, Massachusetts Accident Number: NYC91FA103

Date & Time: April 7, 1991, 19:00 Local Registration: N1269R

Aircraft: BELLANCA 17-31 ATC Aircraft Damage: Destroyed

Defining Event: 1 Fatal

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

DURING TAKEOFF, THE AIRPLANE'S ENGINE LOST POWER WHICH RESULTED IN INADEQUATE POWER TO CLEAR TREES LOCATED AT THE END OF THE RUNWAY AND IN THE AIRPLANE'S FLIGHT PATH. THE INVESTIGATION REVEALED THAT AT THE LAST ANNUAL INSPECTION A MECHANIC REPLACED THE FUEL INJECTOR NOZZLES USING AN ANTI-SEIZE COMPOUND ON THE THREADS. THE ANTI-SEIZE COMPOUND WORKED ITS WAY INTO THE NUMBER 1 CYLINDER FUEL INJECTOR NOZZLE THREW THE HOLES AND BLOCKED THE FLOW OF FUEL TO THE CYLINDER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE MECHANIC'S IMPROPER USE OF ANTI-SEIZE COMPOUND ON THE INJECTOR NOZZLE THREADS WHICH RESULTED IN AN ENGINE FAILURE.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

- 1. (C) FUEL SYSTEM, NOZZLE ARCING
- 2. (C) MAINTENANCE, LUBRICATION IMPROPER USE OF OTHER MAINTENANCE PERSONNEL
- 3. (C) COMPLACENCY OTHER MAINTENANCE PERSONNEL
- 4. (F) ALTITUDE NOT ATTAINED PILOT IN COMMAND

5. REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings 6. (C) OBJECT - TREE(S)

Page 2 of 5 NYC91FA103

Factual Information

Pilot Information

Certificate:	Commercial	Age:	55,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Invalid Medical for flight	Last FAA Medical Exam:	November 11, 1988
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1000 hours (Total, all aircraft), 700 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELLANCA	Registration:	N1269R
Model/Series:	17-31 ATC 17-31 ATC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310200
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 6, 1991 Annual	Certified Max Gross Wt.:	3325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540-KIE5
Registered Owner:	BARRETT SCOVILLE	Rated Power:	300 Horsepower
Operator:	BARRETT SCOVILLE	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Page 3 of 5 NYC91FA103

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	30°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	VFR
Destination:	GAITHERSBURG (GAI)	Type of Clearance:	VFR
Departure Time:	19:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	GREAT BARRINGTON GBR	Runway Surface Type:	Asphalt
Airport Elevation:	739 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	2600 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Page 4 of 5 NYC91FA103

Administrative Information

Investigator In Charge (IIC): Yurman, Alan

Additional Participating Persons:

Original Publish Date: April 27, 1993

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=36787

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 5 of 5 NYC91FA103