



Aviation Investigation Final Report

Location: BEDFORD, Massachusetts Accident Number: NYC82FNA13

Date & Time: May 11, 1982, 19:05 Local Registration: N7457N

Aircraft: Beech E33 Aircraft Damage: Substantial

Defining Event: 4 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

THE PILOT WAS UNABLE TO START THE AIRCRAFT WITH THE ELECTRIC STARTER WHEN THE BATTERY HAD INSUFFICIENT POWER TO CRANK THE ENGINE. THE PILOT STATED THAT HE SHUT OFF THE BATTERY AND ALTERNATOR SWITCHES, TURNED OFF THE MAGNETO SWITCH, AND REMOVED THE KEYS. HE STATED THAT HE THEN EXITED THE AIRCRAFT AND BEGAN PULLING THE ENGINE THROUGH TO COAT THE CYLINDER WALLS WITH OIL. SUBSEQUENTLY, THE ENGINE STARTED AND THE AIRCRAFT TRAVELED ACROSS THE RAMP AND STRUCK ANOTHER PLANE. AN INVESTIGATION REVEALED THAT THE KEYS COULD BE REMOVED WITH THE IGNITION SWITCH IN THE RIGHT MAG POSITION. A TEARDOWN OF THE SWITCH REVEALED THAT THE CONTACTS WERE BURNED AND THE LOCK CYLINDER CHAMBER WAS WORN. THERE WAS NO RECORD SHOWING COMPLIANCE WITH AD 76-07-12 FOR AN INSPECTION OF THE BENDIX IGNITION SWITCH, PN 10-357200-1.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: TAXI

Findings

- 1. (F) ELECTRICAL SYSTEM, BATTERY OUTPUT LOW
- 2. (F) IGNITION SYSTEM, IGNITION SWITCH WORN
- 3. (F) MAINTENANCE, INSPECTION INADEQUATE OTHER MAINTENANCE PERSONNEL
- 4. (C) AIRCRAFT PREFLIGHT INADEQUATE PILOT IN COMMAND
- 5. (C) PROPER ASSISTANCE NOT OBTAINED PILOT IN COMMAND
- 6. (F) OBJECT AIRCRAFT PARKED/STANDING

Page 2 of 5 NYC82FNA13

Factual Information

Pilot Information

Certificate:	Commercial	Age:	36,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	November 6, 1980
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	380 hours (Total, all aircraft), 70 hours (Total, this make and model), 6 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N7457N
Model/Series:	E33 E33	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	CD 1182
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3050 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2400 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	10-470
Registered Owner:	M GILBERT & Y E ARMANI	Rated Power:	260 Horsepower
Operator:	M GILBERT & Y E ARMANI	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Page 3 of 5 NYC82FNA13

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipi	tation	
Departure Point:	BEDFORD , MA	Type of Flight Plan Filed:	None
Destination:	BEDFORD , MA	Type of Clearance:	None
Departure Time:	19:05 Local	Type of Airspace:	

Airport Information

Airport:	HENSON FIELD	Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Page 4 of 5 NYC82FNA13

Administrative Information

Investigator In Charge (IIC):

Additional Participating
Persons:

Original Publish Date: May 11, 1983

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=69906

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 NYC82FNA13