



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	EVART, MI	<b>Accident Number:</b>	CHI83FA381
<b>Date &amp; Time:</b>	08/11/1983, 1745 EDT	<b>Registration:</b>	N400NA
<b>Aircraft:</b>	BEECH G18S	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	2 Fatal

**Flight Conducted Under:** Part 135: Air Taxi & Commuter - Non-scheduled

---

## Analysis

THE ACFT COLLIDED WITH A UTILITY POLE AND A LARGE TREE DURING A FORCED LANDING AFTER A POWER LOSS ON TAKEOFF. WITNESSES HEARD THE ACFT BACKFIRING AND THE GROUND RUN WAS EXCESSIVELY LONG. IMMEDIATELY AFTER TAKEOFF THE ACFT WENT THROUGH THE TOPS OF PINE TREES. THE BACKFIRING AND SMOKE STOPPED AFTER THE COLLISION WITH THE PINE TREES AND THE ACFT STARTED A DESCENT TOWARD A STREET. IT MANEUVERED AS IF TO AVOID A COLLISION WITH CARS. AFTER THE ACCIDENT THE SPARK PLUGS FROM THE RIGHT ENGINE WERE TESTED AND ALL BUT #5 FRONT PLUG WOULD NOT SPARK. HOWEVER DURING A SUBSEQUENT TEST THE SPARK PLUGSPLUGS, WITH THE EXCEPTION OF #5, DID TEST PROPERLY. A COMPLETE ENGINE TEARDOWN DID NOT REVEAL EVIDENCE OF MECHANICAL FAILURE OR PRE-IMPACT ENGINE DISCREPANCY.

## Probable Cause and Findings

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

## Findings

---

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (F) OBJECT - TREE(S)
2. (C) REASON FOR OCCURRENCE UNDETERMINED

-----

Occurrence #2: FORCED LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

3. (F) OBJECT - UTILITY POLE
4. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	40, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	11/26/1982
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8000 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BEECH	<b>Registration:</b>	N400NA
<b>Model/Series:</b>	G18S G18S	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	BA 591
<b>Landing Gear Type:</b>	Retractable - Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	07/05/1983, Annual	<b>Certified Max Gross Wt.:</b>	10100 lbs
<b>Time Since Last Inspection:</b>	89 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	13983 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R-985-AN14B
<b>Registered Owner:</b>	NORTHERN AIR SERVICES, INC.	<b>Rated Power:</b>	450 hp
<b>Operator:</b>	NORTHERN AIR SERVICES, INC.	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	5 Miles
Lowest Ceiling:	Broken / 3200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	20 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	45°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21 °C / 13 °C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	KENOSHA, WI (ENW)	Type of Clearance:	None
Departure Time:	1745 EDT	Type of Airspace:	Class G

## Airport Information

Airport:	EVART MUNI (9C8)	Runway Surface Type:	Asphalt
Airport Elevation:	1020 ft	Runway Surface Condition:	Dry
Runway Used:	6	IFR Approach:	None
Runway Length/Width:	2825 ft / 50 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	FRED A RATHKE, JR.	Report Date:	
Additional Participating Persons:			
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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](#).