



Aviation Investigation Final Report

Location:	PRINCETON, Minnesota	Accident Number:	CHI83LA140
Date & Time:	March 15, 1983, 18:45 Local	Registration:	N10HR
Aircraft:	BEECH 35-C33	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT SAID THAT AT 6000 FEET MSL THE ENGINE BEGAN TO MISS AND GOT WORSE. HE TRIED TO CORRECT THE SITUATION BUT COULD NOT. HE REQUESTED AND WAS GIVEN VECTORS TO THE PRINCETON ARPT. THE ARPT WAS CLOSED AT THE TIME DUE TO SNOW COVERED RUTS ON THE RNWY AND THE RNWY LIGHTS WERE OUT. HE WAS UNABLE TO LOCATE THE RNWY AND A LANDING WAS ACCOMPLISHED IN A OPEN AREA ON THE ARPT. THE ACFT RAN INTO THE EMBANKMENT DURING LANDING ROLL. POST-ACCIDENT EXAM REVEALED THAT THE RIGHT MAGNETO WOULD NOT BENCH CHECK SATISFACTORILY. THE SPARK PLUG CENTER ELECTRODES WERE BURNED DOWN ALMOST TO THE PORCLAIN.

Probable Cause and Findings

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

Findings

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

Findings

1. IGNITION SYSTEM,MAGNETO - OPEN
2. (C) MAINTENANCE,MAJOR REPAIR - NOT PERFORMED - OTHER MAINTENANCE PERSONNEL
3. IGNITION SYSTEM,SPARK PLUG - BURNED
4. (C) MAINTENANCE,REPLACEMENT - NOT PERFORMED - OTHER MAINTENANCE PERSONNEL

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

5. (F) AIRPORT FACILITIES, RUNWAY EDGE LIGHTS - UNAVAILABLE
6. (F) WEATHER CONDITION - SNOW
7. (F) LIGHT CONDITION - DUSK
8. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	29, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 1, 1982
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3403 hours (Total, all aircraft), 1402 hours (Total, this make and model), 3229 hours (Pilot In Command, all aircraft), 175 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N10HR
Model/Series:	35-C33 35-C33	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	CD1110
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 28, 1983 100 hour	Certified Max Gross Wt.:	3050 lbs
Time Since Last Inspection:	100 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2240 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470-K
Registered Owner:	EPISCOPAL COMMUNITY SERV., INC	Rated Power:	225 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Dusk
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown / 1000 ft AGL	Visibility	
Lowest Ceiling:	Overcast / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	Moderate - None - Snow		
Departure Point:	ST. PAUL , MN (STP)	Type of Flight Plan Filed:	IFR
Destination:	BEMIDJI , MN (BJI)	Type of Clearance:	IFR
Departure Time:	18:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	PRINCETON MUNI 14D	Runway Surface Type:	Asphalt
Airport Elevation:	978 ft msl	Runway Surface Condition:	Snow
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	45.569519,-93.590911(est)

Administrative Information

Investigator In Charge (IIC): Rathke jr., Fred

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=12110>

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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](#).