



# **Aviation Investigation Final Report**

Location:	CERESCO, Michigan	Accident Number:	CHI83LA208
Date & Time:	May 11, 1983, 19:23 Local	Registration:	N3355H
Aircraft:	Ercoupe (Eng & Research Corp.) 415-C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

## Analysis

THE PLT REPORTED THAT THE ACFT WAS NORMAL UNTIL HE WAS ON FINAL APCH TO LAND. THE ACFT BEGAN TO LOOSE TOO MUCH ALTITUDE, SO HE ADVANCED THE THROTTLE, THEN THE ENG LOST POWER. SUBSEQUENTLY, THE ACFT HIT THE TOP OF A TREE SHORT OF THE RWY, THEN CRASHED. AN EXAM OF THE ACFT REVEALED THAT THE CARBURETOR HEAT CABLE WAS LOOSE & HEAVY SOOT DEPOSITS WERE FOUND IN THE EXHAUST STACKS & ON THE SPARK PLUGS. THE TEMP & DEW POINT WERE 74 & 42 DEG, RESPECTIVELY. ACCORDING TO ICING PROBABILITY CHARTS, SERIOUS CARBURETOR ICING COULD OCCUR AT GLIDE POWER.

## **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(TOTAL) - MECH FAILURE/MALF Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

- 1. (C) CARBURETOR HEAT CONTROL LOOSE
- 2. (F) WEATHER CONDITION CARBURETOR ICING CONDITIONS
- 3. (C) FUEL SYSTEM, CARBURETOR ICE

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Occurrence #2: FORCED LANDING Phase of Operation: APPROACH

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings 4. (F) OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

# **Factual Information**

### **Pilot Information**

Certificate:	Student	Age:	47,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 1, 1982
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	81 hours (Total, all aircraft), 28 hour all aircraft), 3 hours (Last 90 days, a	rs (Total, this make and model), 29 ho Il aircraft)	urs (Pilot In Command,

### Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe (Eng & Research Corp.)	Registration:	N3355H
Model/Series:	415-C 415-C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3980
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 6, 1982 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1276 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	C-85-12F
Registered Owner:	GEORGE B. WILSON	Rated Power:	85 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dav
Conditions at Accident Site.		Condition of Light.	Day
Observation Facility, Elevation:	BTL ,1125 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	18:45 Local	Direction from Accident Site:	310°
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	RAY FARM RLA	Runway Surface Type:	Grass/turf
Airport Elevation:	940 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	1600 ft / 50 ft	VFR Approach/Landing:	Straight-in

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	42.269096,-85.060485(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Mcavoy, E
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=12170

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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.