Aviation Investigation Final Report

Location:	Brighton, Michigan	**Accident Number:**	CHI07CA110
Date & Time:	April 21, 2007, 13:40 Local	**Registration:**	N99811
Aircraft:	Engineering & Research Ercoupe 415-C	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane impacted terrain while on final approach to runway 22 (3,120 feet by 24 feet, asphalt). The student pilot stated that the airplane "was caught in a downdraft/wind shear and was not able to clear perimeter fence, even with application of full power." The pilot reported there was a small valley to the northeast of the airport which "probably caused the downdraft." An on-scene investigation revealed that the airplane impacted the radio-antenna of a passenger vehicle operating on the road adjacent to the airport. The airplane then impacted a rising embankment and proceeded through the airport perimeter fence, coming to rest short of the approach threshold. The student pilot was flying with an expired 90 day solo endorsement and did not have a medical certificate. The student pilot was operating the airplane as a light-sport pilot. A local weather reporting station reported the winds were from 260 magnetic degrees at 4 knots at the time of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to maintain proper glidepath to the runway. Contributing factors to the accident included the passenger vehicle, the rising embankment, and the airport perimeter fence.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
1. (C) PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
2. (F) OBJECT - VEHICLE

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
3. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT
4. (F) OBJECT - FENCE

Factual Information

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Pilot Information

Certificate:	Student	**Age:**	72,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	None None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	103 hours (Total, all aircraft), 73 hours (Total, this make and model), 56 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Engineering & Research	**Registration:**	N99811
Model/Series:	Ercoupe 415-C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	2434
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	July 1, 2006 Annual	**Certified Max Gross Wt.:**	1260 lbs
Time Since Last Inspection:	42 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	C85
Registered Owner:	On file	**Rated Power:**	85 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	OZW,962 ft msl	**Distance from Accident Site:**	10 Nautical Miles
Observation Time:	13:35 Local	**Direction from Accident Site:**	292°
Lowest Cloud Condition:	Clear	**Visibility**	
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	260°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.22 inches Hg	**Temperature/Dew Point:**	21°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brighton, MI (45G)	**Type of Flight Plan Filed:**	None
Destination:	(45G)	**Type of Clearance:**	None
Departure Time:	13:20 Local	**Type of Airspace:**	

Airport Information

Airport:	Brighton Airport 45G	**Runway Surface Type:**	Asphalt
Airport Elevation:	0 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	22	**IFR Approach:**	None
Runway Length/Width:	3120 ft / 24 ft	**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	42.893611,-83.998886

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Serge Cote; Federal Aviation Administration, Detroit FSDO; Detroit, MI
Original Publish Date:	June 27, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65667