



# Aviation Investigation Final Report

<b>Location:</b>	LINDSAY, Texas	<b>Accident Number:</b>	FTW00LA129
<b>Date &amp; Time:</b>	April 20, 2000, 10:45 Local	<b>Registration:</b>	N99470
<b>Aircraft:</b>	Ercoupe (Eng & Research Corp.) 415-D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During an approach to the runway, the student pilot allowed the airplane to descend and impact the top of an embankment and a fence located prior to the runway. According to the pilot, the airplane had encountered a downdraft. At 1053, the reported wind at the nearest reporting point, located 24 nautical miles south of the accident site, was from 310 degrees at 15 knots gusting to 19 knots. According to an FAA inspector, the student pilot 'was not and had never been endorsed by an authorized flight instructor for solo flight.' Prior to the accident, the student pilot had accumulated 14 total flight hours, of which 11 hours were in the accident airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's inadequate compensation for wind conditions. A factor was the downdraft wind condition.

### Findings

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

#### Findings

1. (F) WEATHER CONDITION - DOWNDRAFT

2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

## Factual Information

On April 20, 2000, at 1045 central daylight time, an Ercoupe 415-D single-engine airplane, N99470, was substantially damaged when it impacted terrain during an approach to Freedom Field Airport near Lindsay, Texas. The airplane was registered to and operated by a private individual. The student pilot, sole occupant of the airplane, sustained minor injuries. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight originated from the Freedom Field Airport, approximately 1000.

The student pilot reported that while attempting to land on runway 35, the airplane encountered a downdraft. The airplane descended and impacted the top of an embankment and struck a fence located prior to the runway.

At 1053, the reported wind at the Denton Municipal Airport, Denton, Texas, located 24 nautical miles south of the accident site, was from 310 degrees at 15 knots gusting to 19 knots.

Examination of the airplane by the FAA inspector revealed that the nose landing gear was folded aft, the engine mount was fractured, and the firewall and wing spar were structurally damaged.

According to the FAA inspector, the student pilot "was not and had never been endorsed by an authorized flight instructor for solo flight." Prior to the accident, the student pilot had accumulated 14 total flight hours, of which 11 hours were in the accident airplane.

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	October 15, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	14 hours (Total, all aircraft), 11 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Ercoupe (Eng & Research Corp.)	<b>Registration:</b>	N99470
<b>Model/Series:</b>	415-D 415-D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2093
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	October 27, 1999 100 hour	<b>Certified Max Gross Wt.:</b>	1400 lbs
<b>Time Since Last Inspection:</b>	33 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1716 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	C-75-12
<b>Registered Owner:</b>	MICHAEL D. BROWN	<b>Rated Power:</b>	75 Horsepower
<b>Operator:</b>	ROGER DALE BROWN	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	DTO ,642 ft msl	<b>Distance from Accident Site:</b>	24 Nautical Miles
<b>Observation Time:</b>	10:53 Local	<b>Direction from Accident Site:</b>	180°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 19 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(TA22)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	
<b>Departure Time:</b>	10:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	FREEDOM FIELD AIRPORT TA22	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	885 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	35	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2400 ft / 60 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	33.630203,-97.209838(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wigington, Douglas
<b>Additional Participating Persons:</b>	LARRY G WILKINSON; FORT WORTH , TX
<b>Original Publish Date:</b>	May 8, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=49008">https://data.ntsb.gov/Docket?ProjectID=49008</a>

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](#).