



Aviation Investigation Final Report

Location:	ENGLEWOOD, Colorado	Accident Number:	DEN82DA181
Date & Time:	September 3, 1982, 16:40 Local	Registration:	N87141
Aircraft:	ERCOUPE 415C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

WHILE ON THE DOWNWIND LEG OF THE TRAFFIC PATTERN, A STRONG ODOR OF FUEL WAS DETECTED BY THE AIRCREW. A FEW SECONDS LATER, THERE WAS A CONSIDERABLE LOSS OF POWER. THE ENGINE CONTINUED TO OPERATE AT REDUCED POWER, BUT THE SINK RATE WAS TOO GREAT TO REACH THE RUNWAY. THE AIRCRAFT NOSED OVER DURING A LANDING ON UNEVEN TERRAIN. AN INVESTIGATION REVEALED THAT A THREADED COUPLING BETWEEN THE GASCOLATOR AND CARBURETOR FAILED FROM FATIGUE.

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: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) FUEL SYSTEM,LINE FITTING - FATIGUE
 2. (C) FLUID - LEAK
 3. FLUID,FUEL - FUMES
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Occurrence #2: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 19, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	7343 hours (Total, all aircraft), 41 hours (Total, this make and model), 5731 hours (Pilot In Command, all aircraft), 241 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ERCOUPE	Registration:	N87141
Model/Series:	415C 415C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	314
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1400 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2385 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	C-85-12F
Registered Owner:	AUSTIN/SCHWEITZER/MURPHY	Rated Power:	85 Horsepower
Operator:	AUSTIN/SCHWEITZER/MURPHY	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 13000 ft AGL	Visibility	50 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	84°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ENGLEWOOD , CO (APA)	Type of Flight Plan Filed:	None
Destination:	ENGLEWOOD , CO (APA)	Type of Clearance:	
Departure Time:	16:15 Local	Type of Airspace:	

Airport Information

Airport:	ARAPAHOE COUNTY APA	Runway Surface Type:	Grass/turf
Airport Elevation:	0 ft msl	Runway Surface Condition:	Soft
Runway Used:	0	IFR Approach:	
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: September 3, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=70602>

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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](#).