



Aviation Investigation Final Report

Location:	ANKENY, Iowa	Accident Number:	MKC87LA122
Date & Time:	June 8, 1987, 12:15 Local	Registration:	N1990N
Aircraft:	CESSNA 140	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

WHILE PRACTICING TAKE OFFS AND LANDINGS, CFI AND STUDENT EXPERIENCED ENGINE FAILURE SHORTLY AFTER TAKE OFF. AN EMERGENCY LANDING WAS INITIATED, AND DURING FORCED LANDING ATTEMPT THE AIRCRAFT WAS SUBSTANTIALLY DAMAGED. THE CFI STATED THE ENGINE QUIT DUE TO FUEL STARVATION. ACFT FUEL SELECTOR VALVE WAS ON INCORRECT AND EMPTY FUEL TANK.

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) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FLUID,FUEL - STARVATION
 2. (C) FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND(CFI)
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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: MAIN GEAR COLLAPSED
Phase of Operation: LANDING

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	49, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	May 20, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	11000 hours (Total, all aircraft), 200 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1990N
Model/Series:	140 140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	12226
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	C-85-12
Registered Owner:	TODD'S FLYING SERVICE, INC.	Rated Power:	85 Horsepower
Operator:		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:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	2 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ANKENY , IA (Y42)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:10 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.720169,-93.599601(est)

Administrative Information

Investigator In Charge (IIC):	Hruban, John
Additional Participating Persons:	TIM GRIFFITH; DES MOINES , IA
Original Publish Date:	May 2, 1988
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=34398

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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](#).