



National Transportation Safety Board Aviation Accident Final Report

Location:	FORT SCOTT, KS	Accident Number:	CHI91LA023
Date & Time:	11/02/1990, 2300 CST	Registration:	N739VN
Aircraft:	CESSNA 172	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

DURING A NIGHT IFR TRAINING FLIGHT, ON FINAL APPROACH THE ENGINE FAILED TO RESPOND WHEN ADDITIONAL, NEEDED THROTTLE WAS ADDED. THE CFI TOOK OVER THE CONTROLS AND TURNED TO AN ADJACENT FIELD, SHORT OF THE RUNWAY, WHERE AN EMERGENCY LANDING WAS ATTEMPTED WHICH RESULTED IN A NOSE OVER. POST ACCIDENT INVESTIGATION REVEALED THE FUEL MIXTURE CONTROL TO BE IN THE OUT, OR IDLE CUTOFF POSITION. NO DEFECTS, MALFUNCTIONS OF FUEL SHORTAGES WERE DISCOVERED, AND ENGINE RUN-UP NORMAL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE MIXTURE CONTROL WAS SET INCORRECTLY RESULTING IN FUEL STARVATION, AND THE CHECK LIST WAS NOT FOLLOWED BY THE CFI/PIC.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) MIXTURE - IMPROPER USE OF - DUAL STUDENT
2. (C) FLUID,FUEL - STARVATION
3. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND(CFI)

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER
Phase of Operation: LANDING

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	25, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	06/29/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	970 hours (Total, all aircraft), 230 hours (Total, this make and model), 860 hours (Pilot In Command, all aircraft), 220 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N739VN
Model/Series:	172 172	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	17270842
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	0 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-320-E2D
Registered Owner:	UNKNOWN	Rated Power:	160 hp
Operator:	MISTWOOD AVIATION INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	CNU, 1001 ft msl	Distance from Accident Site:	50 Nautical Miles
Observation Time:	2050 CST	Direction from Accident Site:	240°
Lowest Cloud Condition:	Scattered / 10000 ft agl	Visibility	12 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	2015 CST	Type of Airspace:	

Airport Information

Airport:	FORT SCOTT (FSK)	Runway Surface Type:	Dirt
Airport Elevation:	916 ft	Runway Surface Condition:	Dry; Soft
Runway Used:	17	IFR Approach:	Practice
Runway Length/Width:	4500 ft / 75 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JOHN R HRUBAN	Report Date:	11/09/1992
Additional Participating Persons:	VERLE ENGEL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).