



National Transportation Safety Board Aviation Accident Final Report

Location:	ARCADIA, LA	Accident Number:	FTW86FA023
Date & Time:	11/02/1985, 1247 CST	Registration:	N93527
Aircraft:	CESSNA 152	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

THE INSTRUMENT FLIGHT INSTRUCTOR AND STUDENT EXPERIENCED A DIRECTIONAL GYRO FAILURE. THEY COVERED THE INSTRUMENT AND REQUESTED A RETURN TO THEIR DEPARTURE POINT. THE AIRCRAFT WAS NOT EQUIPPED TO FLY THE PUBLISHED APPROACH. THEY REQUESTED A DESCENT TO AN ALTITUDE BELOW THE BASE OF THE CONTROLLER'S RADAR, AND DISAPPEARED SHORTLY AFTER. THE AIRCRAFT IMPACTED TALL TREES IN RAINSHOWER. WITNESSES REPORTED THAT CLOUD BASE WAS AT TREE TOP LEVEL. INSTRUMENTS REQUIRED FOR PARTIAL PANEL FLIGHT WERE FUNCTIONAL. NO OTHER DISCREPANCIES WERE NOTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FLIGHT/NAV INSTRUMENTS,DIRECTIONAL GYRO - FAILURE,TOTAL
2. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND(CFI)
3. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - IMPROPER - PILOT IN COMMAND(CFI)
4. (C) NOT PERFORMED - PILOT IN COMMAND(CFI)
5. (C) ARTCC SERVICE - DISREGARDED - PILOT IN COMMAND(CFI)

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - NORMAL

Findings

6. (F) OBJECT - TREE(S)
7. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND(CFI)
8. (C) ATC CLEARANCE - DISREGARDED - PILOT IN COMMAND(CFI)
9. (C) SELF-INDUCED PRESSURE - PILOT IN COMMAND(CFI)
10. (F) WEATHER CONDITION - LOW CEILING
11. (C) VISUAL/AURAL DETECTION - PILOT IN COMMAND(CFI)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	21, Female
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/13/1985
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	550 hours (Total, all aircraft), 313 hours (Total, this make and model), 416 hours (Pilot In Command, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N93527
Model/Series:	152 152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	152-85508
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	05/13/1985, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	35 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1564 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:		Rated Power:	108 hp
Operator:	LOUISIANA TECH UNIVERSITY	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MLU, 79 ft msl	Distance from Accident Site:	36 Nautical Miles
Observation Time:	1152 CST	Direction from Accident Site:	85°
Lowest Cloud Condition:	Scattered / 1500 ft agl	Visibility	7 Miles
Lowest Ceiling:	Overcast / 2300 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	14° C / 11° C
Precipitation and Obscuration:			
Departure Point:	RUSTON, LA (RSN)	Type of Flight Plan Filed:	IFR
Destination:	HOUSTON, TX (IAW)	Type of Clearance:	IFR
Departure Time:	1233 CST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	JEAN H DAUGHERTY	Report Date:	
Additional Participating Persons:	EARL E COOK; BATON ROUGE, LA BOB JOURNAGAN; WICHITA, KS TERRY SPATH; WICHITA, KS		
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/ .		

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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](#).