



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	BOLIVAR, TN	<b>Accident Number:</b>	ATL89LA119
<b>Date &amp; Time:</b>	04/01/1989, 1630 CST	<b>Registration:</b>	N6475Q
<b>Aircraft:</b>	CESSNA 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None

**Flight Conducted Under:** Part 91: General Aviation - Instructional

---

## Analysis

THE ACFT WAS IN THE TRAFFIC PATTERN TO BOLIVAR AIRPORT WHEN THE ENGINE QUIT. THE PILOT HAD FLOWN ABOUT 4.0 HOURS AND ESTIMATED THAT HE HAD ABOUT 6.4 GALLONS OF FUEL RESERVE FOR THE FLT. THE WRECKAGE EXAMINATION FAILED TO DISCLOSE ANY SYSTEM MALFUNCTION OR COMPONENT FAILURE. THE AIRCRAFT COLLIDED WITH A TREE DURING THE LANDING.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO PROPERLY PLAN REQUIRED FUEL FOR THIS FLIGHT WHICH RESULTING IN FUEL EXHAUSTION AND A FORCED LANDING IN A FIELD.

## Findings

---

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

### Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND

-----

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

-----

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

4. OBJECT - TREE(S)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	28, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<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 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	03/13/1989
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	191 hours (Total, all aircraft), 57 hours (Total, this make and model), 41 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N6475Q
<b>Model/Series:</b>	152 152	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	152852559
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	03/29/1989, 100 Hour	<b>Certified Max Gross Wt.:</b>	1675 lbs
<b>Time Since Last Inspection:</b>	10 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3878 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	JIMMY D. MANAHAN	<b>Rated Power:</b>	110 hp
<b>Operator:</b>	BOLIVAR AVIATION	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:	HOLY SPRING, MS (M41)	Type of Flight Plan Filed:	VFR
Destination:	BOLIVAR, TN (M08)	Type of Clearance:	None
Departure Time:	1530 CDT	Type of Airspace:	Class G

## Airport Information

Airport:	HARDEMAN COUNTY (M08)	Runway Surface Type:	Asphalt
Airport Elevation:	510 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	4000 ft / 50 ft	VFR Approach/Landing:	Forced Landing; Straight-in

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Report Date:	05/22/1990
Additional Participating Persons:	ROY MENARD; MEMPHIS, TN		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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](#).