



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	FT. COLLINS, CO	<b>Accident Number:</b>	DEN88LA117
<b>Date &amp; Time:</b>	06/01/1988, 1710 MDT	<b>Registration:</b>	N6638N
<b>Aircraft:</b>	CESSNA T210N	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Business		

---

## Analysis

DURING FINAL APCH TO LANDING THE PLT TRIED TO ADD POWER TO ARREST THE DESCENT BUT THE ENG DID NOT RESPOND. THE ACFT LANDED SHORT IN A PLOWED FIELD AND FLIPPED OVER. ACFT DAMAGE WAS SUBSTANTIAL AND THE PLT SUSTAINED MINOR INJURIES. EXAMINATION OF THE FUEL SYSTEM REVEALED ONLY FOUR OUNCES OF FUEL. THE PLT STATED THE FUEL GAUGES INDICATED APRX 180 LBS OF FUEL AT DEPARTURE. THE PLT HAD NOT VISUALLY CHECKED FUEL QUANTITY. WRECKAGE EXAMINATION ALSO REVEALED THAT THE LEFT FUEL GAUGE SHOWED 20 GALLONS WHEN 10 GALLONS WAS PLACED IN THE LEFT FUEL TANK. THE ENGINE WAS RUN AFTER THE ACCIDENT WITH NO DEFICIENCIES BEING NOTED.

## 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: APPROACH - VFR PATTERN - FINAL APPROACH

### Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
  2. (C) FLUID,FUEL - EXHAUSTION
  3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
  4. ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - INCORRECT
- 

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

-----

Occurrence #3: NOSE OVER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

5. (F) TERRAIN CONDITION - SOFT
6. (F) LANDING GEAR,NOSE GEAR - OVERLOAD
7. (F) LANDING GEAR,NOSE GEAR - SEPARATION

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	03/01/1988
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3670 hours (Total, all aircraft), 9 hours (Total, this make and model), 3482 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 27 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>	N6638N
<b>Model/Series:</b>	T210N T210N	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	21063127
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	02/01/1988, Annual	<b>Certified Max Gross Wt.:</b>	4000 lbs
<b>Time Since Last Inspection:</b>	10 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	985 Hours	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	TSIO-520R
<b>Registered Owner:</b>	BOND, JACK R.	<b>Rated Power:</b>	285 hp
<b>Operator:</b>	HOUSE, LELAND E.	<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:	FNL, 5016 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1725 MDT	Direction from Accident Site:	330°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	40 Miles
Lowest Ceiling:	Broken / 20000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	16 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21° C / 16° C
Precipitation and Obscuration:			
Departure Point:	JOES, CO (CO84)	Type of Flight Plan Filed:	None
Destination:	FT. COLLINS, CO (FNL)	Type of Clearance:	None
Departure Time:	1600 CDT	Type of Airspace:	Class G

## Airport Information

Airport:	FT. COLLINS/LOVELAND (FNL)	Runway Surface Type:	Asphalt
Airport Elevation:	5016 ft	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	6500 ft / 100 ft	VFR Approach/Landing:	Forced Landing; Straight-in; Traffic Pattern

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	NORMAN F WIEMEYER	Report Date:	04/25/1989
Additional Participating Persons:	GONZALES; AURORA, CO		
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](#).