



# Aviation Investigation Final Report

<b>Location:</b>	Fredericksburg, Texas	<b>Accident Number:</b>	FTW02LA083
<b>Date &amp; Time:</b>	February 21, 2002, 13:00 Local	<b>Registration:</b>	N71546
<b>Aircraft:</b>	North American T28C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that prior to a day cross-country flight, the airplane was topped with 155 gallons of fuel, and subsequently, flown for 1 hour 25 minutes to the next destination. The airplane was not fueled at that destination, and the flight departed for the subsequent destination. During the descent, the engine lost total power approximately 4 nautical miles east of the destination airport. The pilot landed the airplane in a rough field. The FAA inspector, who responded to the site, drained approximately 12 ounces of fuel from the airplane. The integrity of the fuel system was not compromised.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to refuel the airplane resulting in fuel exhaustion. A contributing factor was the lack of suitable terrain for the forced landing.

## Findings

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

### Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

-----

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

-----

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

4. TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

On February 21, 2002, at 1300 central standard time, a North American T28C, N71546, sustained substantial damage during a forced landing following a loss of engine power near Fredericksburg, Texas. The commercial pilot, sole occupant, was not injured. The airplane was owned by a private individual and operated under 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed for the cross-country flight, and a flight plan was not filed. The personal flight originated from Caldwell, Texas, at 1220.

On the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the pilot reported that the airplane was topped with 155 gallons of fuel at Levelland, Texas. Subsequently, the airplane was flown cross-country for 1 hour 25 minutes to the destination of Caldwell, Texas. The airplane was not fueled at Caldwell, and the flight departed for Fredericksburg. During the descent to the Fredericksburg Gillespie County Airport, the engine lost total power. The pilot landed the airplane, gear retracted, in a rough field approximately 4 nautical miles east of the destination airport. Substantial damage occurred to the firewall, cowling, and fuselage. The engine and propeller were damaged.

The FAA inspector, who responded to the site, found the airplane resting upright with structural damage to the firewall and the lower fuselage. The FAA inspector drained approximately 12 ounces of fuel from the airplane. The integrity of the fuel system was not compromised.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	32, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<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 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	June 12, 2001
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1315 hours (Total, all aircraft), 264 hours (Total, this make and model), 1227 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	North American	<b>Registration:</b>	N71546
<b>Model/Series:</b>	T28C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	140528
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	February 20, 2002 Annual	<b>Certified Max Gross Wt.:</b>	12000 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	8799.4 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming (Curtis-Wright)
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	R1820-103A86A
<b>Registered Owner:</b>	Gordon B. Richardson	<b>Rated Power:</b>	1475 Horsepower
<b>Operator:</b>	Gordon B. Richardson II	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Caldwell, TX (14R )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Fredericksburg, TX (T82 )	<b>Type of Clearance:</b>	Traffic advisory
<b>Departure Time:</b>	12:20 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Fredericksburg T28	<b>Runway Surface Type:</b>	Dirt
<b>Airport Elevation:</b>	1695 ft msl	<b>Runway Surface Condition:</b>	Rough
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	30.24361,-98.909446

## Administrative Information

**Investigator In Charge (IIC):** Roach, Joyce

**Additional Participating Persons:** Ramon Barrera; Federal Aviation Administration; San Antonio, TX

**Original Publish Date:** April 8, 2003

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=54237>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).