



Aviation Investigation Final Report

Location:	ARCHER CITY, Texas	Accident Number:	FTW94LA249
Date & Time:	July 21, 1994, 15:55 Local	Registration:	N2260V
Aircraft:	CESSNA 140	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

WHILE ON INITIAL CLIMB, THE ENGINE BEGAN TO RUN ROUGH AND ULTIMATELY EXPERIENCED A TOTAL POWER LOSS AT APPROXIMATELY 500 FEET AGL. THE PILOT LANDED THE AIRPLANE IN A SOFT FIELD; THE AIRPLANE NOSED OVER AND CAME TO REST INVERTED. SOIL WAS FOUND IN THE FUEL SYSTEM. THE SAME TYPE OF SOIL WAS ALSO FOUND IN THE OPEN CONTAINERS THAT THE AIRPLANE HAD RECENTLY BEEN REFUELED FROM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL CONTAMINATION INDUCED POWER LOSS. FACTORS WERE THE IMPROPER REFUELING TECHNIQUES USED BY THE PILOT AND THE LACK OF SUITABLE TERRAIN ONTO WHICH A FORCED LANDING COULD BE EXECUTED.

Findings

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

Findings

1. (C) FLUID,FUEL - CONTAMINATION
2. (F) REFUELING - IMPROPER - PILOT IN COMMAND

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

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On July 21, 1994, at approximately 1555 central daylight time, a Cessna 140, N2260V, was substantially damaged during a forced landing near Archer City, Texas. The commercial pilot was not injured. Weather for the 14 CFR 91 business flight was visual meteorological conditions.

The airplane had just departed on a cross country flight from Archer City, to Jacksboro, Texas. The pilot stated that the engine began to run rough as he was climbing through about 500 feet AGL, and then the engine experienced a complete power loss. An examination of the aircraft by a Federal Aviation Administration inspector revealed that the fuel system was blocked by soil. The aircraft was recently refueled from a series of open containers. An inspection of the fuel nozzle revealed that insects had built a nest out of mud. Parts of the nest were broken away and the residue in the fuel system was of the same type of soil.

During the landing the airplane touched down in a freshly plowed field, resulting in the airplane nosing over to the inverted position and damaging the empennage section.

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 5, 1993
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1812 hours (Total, all aircraft), 310 hours (Total, this make and model), 1742 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N2260V
Model/Series:	140 140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14491
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 17, 1993 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5309 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	C-90
Registered Owner:	BYRD, BECKY D.	Rated Power:	90 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	35°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	JACKSBORO , TX (21F)	Type of Clearance:	None
Departure Time:	15:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Soft
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.590133,-98.620903(est)

Administrative Information

Investigator In Charge (IIC):	Ellis, Matthew
Additional Participating Persons:	JAMES MCELVAIN; FORT WORTH , TX
Original Publish Date:	February 24, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19122

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