



Aviation Investigation Final Report

Location:	TOWN CREEK, Alabama	Accident Number:	ATL95LA151
Date & Time:	August 10, 1995, 09:30 Local	Registration:	N731DB
Aircraft:	CESSNA 188T	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

While en route to spray a field 3 miles from the staging airstrip, the pilot heard an unusual noise in the cockpit. Seconds later, smoke and fire from under the instrument panel started filling the cockpit. The pilot made an emergency landing at the staging airstrip, and exited the burning airplane. The cockpit and center section of the airframe were fire damaged. Examination of the instrument panel disclosed that a fuel line for the fuel flow meter was burnt out of the instrument. Several fire damaged electrical wires were located in the immediate vicinity of the fuel line.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The chafing of the fuel flow gage pressure line with an electrical system wire which resulted in arcing.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. ENGINE INSTRUMENTS,FUEL FLOW GAGE - OTHER
2. (C) FUEL SYSTEM,LINE - CHAFED
3. (C) ELECTRICAL SYSTEM,ELECTRIC WIRING - ARCING

Occurrence #2: FIRE
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Factual Information

On August 10, 1995, at 0930 central daylight time, a Cessna 188T, N731DB, experienced an inflight fire while enroute to spray a field near Town Creek, Alabama. The aerial application flight was being operated under the provisions of 14 CFR Part 137, with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The commercial pilot landed the airplane without further incident, and he was not injured. The airplane burned and was destroyed. The flight departed a private airstrip in Town Creek, Alabama, at 0928 hours.

According to the pilot, shortly after takeoff from the staging airstrip, he noticed a loud noise inside the cockpit followed by the smell of smoke. He executed a turn toward the airstrip for an emergency landing. As the pilot maneuvered the airplane for the landing, he observed flames coming from the instrument panel. The pilot landed on the airstrip, and exited the burning airplane.

Examination of the aircraft disclosed that the cockpit and center sections were fire damaged. An examination of the instrument panel revealed that the fuel flow meter was connected to a wet fuel line behind the instrument panel. Several fire damaged electrical wires were located in the immediate vicinity of the wet fuel line. The entire area behind the instrument panel was fire damaged, and the fitting that connected the wet fuel line to the fuel flow meter was burnt.

Pilot Information

Certificate:	Commercial	Age:	49, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
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--w/ waivers/lim	Last FAA Medical Exam:	May 8, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5500 hours (Total, all aircraft), 2500 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N731DB
Model/Series:	188T 188T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	188-02805T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 1, 1995 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	96 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3234 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	CARL RHODES	Rated Power:	300 Horsepower
Operator:	ELLIOTT PARKER	Operating Certificate(s) Held:	
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:	MSL ,731 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	09:53 Local	Direction from Accident Site:	290°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	5 miles
Lowest Ceiling:	Broken / 15000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:28 Local	Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	550 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	2000 ft / 100 ft	VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.66996,-87.400749(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	JERRY M YATES; BIRMINGHAM , AL
Original Publish Date:	April 18, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3609

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