



Aviation Investigation Final Report

Location:	TEMPLE, Texas	Accident Number:	FTW93LA212
Date & Time:	July 8, 1993, 18:30 Local	Registration:	N4739R
Aircraft:	CESSNA A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE OPERATOR AND PILOT REPORTED A TEMPERATURE OF 95 DEGREES FAHRENHEIT WITH THE WINDS FROM THE SOUTHWEST AT 20 KNOTS GUSTING TO 30 KNOTS. THEY FURTHER REPORTED THAT DURING THE LOW TURN AROUND IN THE HIGH DENSITY ALTITUDE CONDITIONS OF APPROXIMATELY 3,200 FEET, THE AIRPLANE DID NOT SUSTAIN FLIGHT. THE LEFT WING OF THE AIRPLANE HIT A TREE AND THE AIRPLANE DESCENDED TO THE CORN FIELD. THE OPERATOR REPORTED THAT THE TURN-AROUND WAS NOT PERFORMED AT SUFFICIENT ALTITUDE TO ALLOW ADEQUATE CLEARANCE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT'S FAILURE TO MAINTAIN PROPER OBJECT/TERRAIN CLEARANCE. FACTORS WERE TAILWINDS AND HIGH DENSITY ALTITUDE.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. OBJECT - TREE(S)
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
4. (F) WEATHER CONDITION - TAILWIND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On July 8, 1993, at 1830 central daylight time, a Cessna A188B, N4739R, was substantially damaged near Temple, Texas, during aerial application maneuvering. The commercial pilot did not sustain injury. Visual meteorological conditions prevailed throughout the area for the aerial application flight.

During telephone interviews, conducted by the investigator in charge, the operator and the pilot stated that the airplane was loaded with 48 gallons of fuel and 80 gallons of chemical. They further stated that the temperature for the day was at least 95 degrees Fahrenheit and during a low turn-around in high humidity and high density altitude conditions the airplane did not maintain altitude. They reported the winds were from the southwest at 20 knots gusting to 30 knots and the turn-around was attempted with a quartering tailwind. The pilot stated that the left wing hit a tree and the airplane descended into the corn field. The operator reported (enclosed statement) that the turn-around maneuver was not made high enough.

Numerous attempts were made by the investigator in charge to obtain the Pilot/Operator Report (NTSB Form 6120.1/2). This report has not been received.

Pilot Information

Certificate:	Commercial	Age:	19, 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--no waivers/lim.	Last FAA Medical Exam:	August 31, 1993
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	700 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N4739R
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802312T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 3, 1993 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	PRATER, JAMES B.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	CEN TEX FLYING SERVICE	Operator Designator Code:	EDZG

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	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	20 knots / 30 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	225°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	35°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TAYLOR , TX	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:15 Local	Type of Airspace:	Class G

Airport Information

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

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:	31.079948,-97.250289(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Joyce
Additional Participating Persons:	LEROY WIGFALL; FORT WORTH , TX
Original Publish Date:	September 26, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=18792

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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](#).