



Aviation Investigation Final Report

Location:	BENSON, North Carolina	Accident Number:	MIA97LA221
Date & Time:	July 28, 1997, 15:00 Local	Registration:	N53240
Aircraft:	Cessna 188	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was making a swath run and collided with a cable separating the engine gascolator resulting in a total loss of engine power due to fuel starvation, forced landing and subsequent in-flight collision with terrain. Examination of the engine assembly and accessories revealed no evidence of a precrash mechanical failure or malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
 The pilot's failure to maintain a visual lookout during a swath run resulting in an in-flight collision with a cable, subsequent loss of engine power, forced landing, and an in-flight collision with terrain. Contributing to the accident was a total loss of engine power due to the separation of the gascolator (wire strike) resulting in fuel starvation.

Findings

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

- Findings
1. OBJECT - WIRE, TRANSMISSION
 2. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #2: LOSS OF ENGINE POWER

Phase of Operation: MANEUVERING

Findings

3. FUEL SYSTEM, GASCOLATOR - SEPARATION

4. FLUID, FUEL - STARVATION

Occurrence #3: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - EMERGENCY

Findings

5. TERRAIN CONDITION - GROUND

Factual Information

On July 28, 1997, about 1500 eastern daylight time, a Cessna 188, N53240, registered to Goldsboro Aerial Crop Spraying Inc., operating as a 14 CFR Part 137 aerial application flight, experienced a reported total loss of engine power, while maneuvering on a swath run in the vicinity of Benson, North Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The airplane sustained substantial damage. The commercial pilot reported no injuries. The flight originated from Erwin, North Carolina, about 30 minutes before the accident.

The pilot stated he just completed a swath run to a cotton field, and encountered some turbulence about 20 feet above the trees. The airplane descended near the edge of a stall in the vicinity of the trees and power lines. He pulled up to about 250 to 300 feet, and was in a left turn when the airplane experienced a total loss of engine power. He lowered the nose and made a forced landing to an area that had undergone logging operations. The airplane collided with stumps separating the landing gear.

Examination of the airplane revealed, "the aircraft struck a cable at the propeller, the cable disengaged and struck the left wing strut, then traveled below the left wing fouling on the spray boom under and trailing the left wing. The boom was pulled loose and the connection at the boom located under the fuselage center section was pulled in a straight line with the bottom. The routing of the manifold to the boom is located approximately 2 inches forward of the aircraft gascolator. When the boom was pulled from the plane, the manifold for the boom was pulled across the gascolator bowl and disengaged the gascolator bowl.

Examination of the engine assembly and accessories revealed no evidence of a precrash failure or malfunction. For additional information see letter provided by First In Flight Aviation, Maintenance Supervisor, dated August 5, 1997.

Review of weather information obtained from Raleigh Durham, North Carolina, for the time period of the accident revealed no recorded record of turbulence or downdrafts.

The pilot submitted NTSB Pilot/Operator Aircraft Accident Report by fax on August 4, 1997. The report was not signed or dated by the pilot or the operator. Numerous attempts to contact the pilot/operator at (919) 734-1936 were uneventful.

Pilot Information

Certificate:	Commercial	Age:	40, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 3, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2396 hours (Total, all aircraft), 1704 hours (Total, this make and model), 2364 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N53240
Model/Series:	188 188	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801703T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-520D
Registered Owner:	GOLDSBORO AERIAL CROP SPRAYING	Rated Power:	300 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:	RDU ,437 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	14:51 Local	Direction from Accident Site:	323°
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	28 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	36°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ERWIN , NC (37W)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:30 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:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.369415,-78.539588(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	RICHARD L STOCKTON; WINSTON SALEM , NC
Original Publish Date:	January 7, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38317

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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](#).