



Aviation Investigation Final Report

Location:	HALSTEAD, Kansas	Accident Number:	CHI97LA228
Date & Time:	July 28, 1997, 11:30 Local	Registration:	N4864Q
Aircraft:	Cessna 188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that he was making a fourth pass on a field during aerial application when he 'failed to initiate a pull-up in time to clear the powerline.' The right main landing gear struck a wire. The wire cutter located on the right landing gear did not sever the wire. The wire broke in two from the force of the impact with the airplane. The wire on the right side of the airplane broke about 30 feet from the airplane. The wire went underneath the empennage and wrapped itself around the left elevator. The left elevator and horizontal stabilizer were being cut in two until the wire on the left side of the aircraft broke. A 75 foot section of wire trailed the airplane as the pilot continued flying. By applying about 40 pounds of forward stick pressure and not dumping the chemical load, he was able to land at Newton, Kansas. The pilot reported that he was fatigued as a result of working approximately 18 hour days the week prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot failed to maintain adequate clearance from the transmission wires. Factors included the malfunctioning of the wire cutter and pilot fatigue.

Findings

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

Findings

1. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
2. (F) FATIGUE(FLIGHT AND GROUND SCHEDULE) - PILOT IN COMMAND
3. (F) MISCELLANEOUS,AIRFRAME - MALFUNCTION

Factual Information

On July 28, 1997, at 1145 central daylight time, a Cessna 188B, N4864Q, operated by Blue Sky Airspray, sustained substantial damage while spraying a field when it hit a powerline. The airline transport pilot was able to maintain control of the aircraft and returned to Newton, Kansas, where he landed the airplane. The 14 CFR Part 137 aerial sprayer had departed Newton, Kansas, on a local aerial application flight. The pilot was not injured. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that he was making a fourth pass on a field during aerial application and "failed to initiate a pull-up in time to clear the powerline." The right main landing gear struck a wire. The pilot reported that the wire cutter located on the right landing gear did not sever the wire. As the airplane continued forward, the wire broke in two from the force of the impact with the airplane. The wire on the right side of the airplane broke about 30 feet from the airplane. The wire went underneath the empennage and wrapped itself around the left elevator. The left elevator and horizontal stabilizer were being cut in two until the wire on the left side of the aircraft broke. A 75 foot section of wire trailed the airplane as the pilot continued flying. By applying about 40 pounds of forward stick pressure and not dumping the chemical load, he was able to land at Newton, Kansas.

The pilot reported that he was fatigued as a result of working approximately 18 hour days the week prior to the accident.

Pilot Information

Certificate:	Airline transport	Age:	34, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 28, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3500 hours (Total, all aircraft), 450 hours (Total, this make and model), 3400 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4864Q
Model/Series:	188B 188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802600T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	February 15, 1997 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	160 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5641 Hrs	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-520-D
Registered Owner:	BLUE SKY AIRSPRAY	Rated Power:	300 Horsepower
Operator:		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:		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:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NEWTON , KS (TNU)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/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:	37.99921,-97.500488(est)

Administrative Information

Investigator In Charge (IIC):	Silliman, Jim
Additional Participating Persons:	WEBSTER MCKINLEY; WICHITA , KS
Original Publish Date:	January 7, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10644

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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](#).