



Aviation Investigation Final Report

Location: PREU, Indiana **Accident Number:** CHI88DET04

Date & Time: August 6, 1988, 19:00 Local Registration: N5550G

Aircraft: CESSNA A188B Aircraft Damage: Substantial

Defining Event: Injuries: 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

AERIAL APPLICATOR EXPERIENCED TOTAL FAILURE OF THROTTLE CABLE DURING APPLICATION SWATH RUN. AIRCRAFT RECEIVED SUBSTANTIAL DAMAGE WHEN PILOT EXECUTED FORCED LANDING IN ADJACENT CROP FIELD. AIRCRAFT AND ENGINE HAD RECEIVED ANNUAL INSPECTION 125 HOURS PRIOR TO FAILURE. POST ACC INVEST REVEALED THAT THE THROTTLE CABLE BROKE, ALLOWING THE ENGINE TO GO TO IDLE RPM. ACCORDING TO THE PLT, THE ENG ORIGINALLY HAD A SPRING, SLEEVE, AND BRACKET ASSY TO PROVIDE POWER IN CASE OF A CABLE FAILURE. THESE ITEMS WERE SUBSEQUENTLY REMOVED FROM THE ENG BY PERSONS UNKNOWN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) THROTTLE/POWER LEVER, CABLE - FAILURE, TOTAL

2. (F) MAINTENANCE, MODIFICATION - IMPROPER - UNKNOWN

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - EMERGENCY

Findings

3. (F) TERRAIN CONDITION - CROP

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Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Invalid Medical for flight	Last FAA Medical Exam:	September 19, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8075 hours (Total, all aircraft), 3550 hours (Total, this make and model), 8025 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N5550G
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1881112
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 8, 1988 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	125 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3134 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	10-520
Registered Owner:	WAYNE ECK	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	5 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:	29°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	KOKOMO , IN (OKK)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

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Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing;Straight-in

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:	40.750877,-86.059501(est)

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Administrative Information

Investigator In Charge (IIC): Knipp, Roland

Additional Participating Persons:

Original Publish Date: September 25, 1989

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=13902

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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