

# **Aviation Investigation Final Report**

Location:	WILLIAMSON, New \	/ork	Accident Number:	NYC83FFJ01
Date & Time:	April 15, 1983, 16:15	Local	Registration:	N731VY
Aircraft:	CESSNA	A188B	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultura	I		

## **Analysis**

THE ACFT COLLIDED WITH A TREE DURING A FORCED LANDING AFTER A POWER LOSS ON TAKEOFF. THE PILOT HAD A LOAD OF 125 GALLONSOF A FUNGICIDE FOR SPRAYING TREES WHEN THE ENGINE QUIT AT ABOUT 100 FT AGL. THE LOAD WAS DUMPED AND THE ACFT WAS TURNED TO THE RIGHT FOR A LANDING IN AN OPEN FIELD. THE ACFT CONTACTED A TREE ON THE BOUNDARY OF THE FIELD AND ROTATED ABOUT 45DEGREES TO THE RIGHT. IT THEN LANDED AND BOUNCED AROUND AND ENDED UP HEADING NORTH IN AN UPRIGHT POSITION. A POST ACCIDENT EXAMINATION DETERMINED THAT THE ENGINE WOULD ONLY RUN WITH THE ELECTRIC FUEL BOOST PUMP ON. THE ENGINE DRIVEN FUEL PUMP (PN 638154-1) HAD SEIZED AND THE DRIVE SHAFT HAD SHEARED. THE SEIZURE OCCURRED AT THE SHAFT SEAL (P/N 13507).

## **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(TOTAL) - MECH FAILURE/MALF Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings 1. (C) FUEL SYSTEM, PUMP - FAILURE, TOTAL -----

Occurrence #2: FORCED LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (F) LOAD JETTISON - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings 3. (F) OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

# **Factual Information**

#### **Pilot Information**

Certificate:	Commercial	Age:	30,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 18, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3000 hours (Total, all aircraft), 2000 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N731VY
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18803201T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 16, 1983 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	16 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	464 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520D
Registered Owner:	THOMAS J. AVERY, JR.	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:	Dav
Observation Facility, Elevation:		Distance from Accident Site:	24,
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	5 miles
Lowest Ceiling:	Overcast / 2500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	7°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	WILLIAMSON , NY (3G7 )	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

# **Airport Information**

Airport:	WILLIAMSON/SODUS 3G7	Runway Surface Type:	Asphalt
Airport Elevation:	425 ft msl	Runway Surface Condition:	Wet
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	3375 ft / 40 ft	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:	43.240619,-77.149719(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Alborano, A.
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=35089

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 <u>here</u>.