Aviation Investigation Final Report

Location:	MANITO, Illinois	**Accident Number:**	CHI97LA185
Date & Time:	June 27, 1997, 09:50 Local	**Registration:**	N7015N
Aircraft:	Pzl-Mielec M-18A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that he departed runway 22 using 40 inches of manifold pressure. During takeoff climb, the engine lost power. As the pilot attempted to dump the chemical load, the engine regained full power. The pilot reported that the airplane was too low, and it impacted a powerline, then impacted the ground. The airplane bounced back into the air. The pilot reported that he flew back to land, and received confirmation that the landing gear were operable before he landed. He flew for about a total of five minutes before making an uneventful landing. Witnesses reported that the engine sounded fine as the airplane was taxiied back to the hangar. The engine was inspected, and no anomaly was found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: loss of engine power for undetermined reason(s).

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
2. OBJECT - WIRE,TRANSMISSION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: OTHER

Factual Information

On June 27, 1997, at 0950, central daylight time, a Pzl Mielec, M-18A, N7015N, operated by Mitchell Flying Service, sustained substantial damage during takeoff when it experienced a loss of power, hit a powerline, and impacted a field. The aircraft was able to become airborne again and returned to land at Manito Mitchell Airport, Manito, Illinois. The 14 CFR Part 137 crop duster had departed the airport on a local aerial application flight. The commercial pilot was not injured. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that he departed runway 22 using 40 inches of manifold pressure. During takeoff climb the engine lost power. As the pilot was attempting to dump the chemical load the engine regained power. The pilot reported that the airplane was too low and it impacted a powerline and then impacted the ground. The impact separated the chemical sprayer from the airplane which dumped the chemical load. The airplane bounced back into the air. The pilot reported that he flew back to land but received confirmation that the landing gear were operable before he landed. He flew for about a total of five minutes before making an uneventful landing. Witnesses reported that the engine sounded fine when it taxiied back to the hangar.

The engine was inspected by an Airworthiness Inspector from the Federal Aviation Administration and no anomalies were found.

Pilot Information

Certificate:	Commercial	**Age:**	64,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Center
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	January 3, 1997
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	9500 hours (Total, all aircraft), 350 hours (Total, this make and model), 9350 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pzl-Mielec	**Registration:**	N7015N
Model/Series:	M-18A M-18A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Restricted (Special)	**Serial Number:**	120-18
Landing Gear Type:	Tailwheel	**Seats:**	1
Date/Type of Last Inspection:	October 2, 1996 Annual	**Certified Max Gross Wt.:**	9260 lbs
Time Since Last Inspection:	49 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	WSK
ELT:	Not installed	**Engine Model/Series:**	ASZ-621R-16
Registered Owner:	MITCHELL FLYING SERVICE	**Rated Power:**	954 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:	PIA ,660 ft msl	**Distance from Accident Site:**	25 Nautical Miles
Observation Time:	08:54 Local	**Direction from Accident Site:**	10°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	170°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	24°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(C45)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	09:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	MANITO MITCHELL C45	**Runway Surface Type:**	Asphalt
Airport Elevation:	500 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	22	**IFR Approach:**	
Runway Length/Width:	3000 ft / 100 ft	**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:**	40.420604,-89.779571(est)

Administrative Information

Investigator In Charge (IIC):	Silliman, Jim
Additional Participating Persons:	SCOTT BURKE; SPRINGFIELD , IL
Original Publish Date:	May 21, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10612