Aviation Investigation Final Report

Location:	Milwaukee, Wisconsin	**Accident Number:**	CHI02LA091
Date & Time:	March 13, 2002, 15:38 Local	**Registration:**	N29RG
Aircraft:	Aviat Pitts S-2B	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane experienced a total loss of engine power approximately three minutes after departure and the pilot performed a forced landing into an agricultural field. During the forced landing, the airplane impacted a telephone pole. During a post-accident inspection the engine was started and ran without anomalies between 600 and 800 rpm. The engine was not run at a higher rpm due to vibrations caused by the bent propeller. The engine responded to throttle control inputs and the engine was shut down using the mixture control. The propeller was removed, straightened, and reinstalled on the engine. The engine was subjected to a static power-run and operated with no anomalies at 2,500 rpm for approximately 10 minutes. No anomalies were found with the fuel system and/or engine that could be associated with any preexisting condition that would have precluded the normal operation of the engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons. A factor in the accident was the telephone pole.

Findings

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

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
2. (F) OBJECT - POLE

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - PLOWED/FURROWED

Factual Information

On March 13, 2002, at 1538 central standard time, an Aviat Pitts S-2B, N29RG, piloted by a private pilot, sustained substantial damage during an in-flight collision with a telephone pole while executing a forced landing in Milwaukee, Wisconsin. Visual meteorological conditions prevailed at the time of the accident. The flight was being operated under the provisions of 14 CFR Part 91 without a flight plan. The pilot, the sole occupant of the airplane, reported minor injuries. The local flight departed the Lawrence J. Timmerman Airport (MWC), Milwaukee, Wisconsin, at 1531.

According to MWC control tower records the accident airplane departed northeast bound at 1531 and three minutes after departure the pilot reported a loss of engine power.

According to the pilot's written statement, "Approximately 15 minutes into the flight, while at cruise, the engine suddenly quit. I looked for a place to land & spotted a field with a limited flat spot for landing. I did not have enough altitude to make an airport. While landing on the field, the aircraft struck a pole." The pilot reported, "Prior to exiting the aircraft, I turned off all switches, including gas."

Inspectors with the Federal Aviation Administration (FAA) Milwaukee Flight Standards District Office (FSDO) performed the post-accident inspection of the airframe and engine. Fuel was found in the main fuel tank, main fuel sump, engine driven fuel pump, and all fuel distribution lines. The engine driven fuel pump operated when the engine was rotated. The electric fuel pump operated when electrical power was applied to the pump. The mixture and throttle controls regulated fuel flow in all positions without anomalies. When the engine was rotated both magnetos produced a spark on all leads and there was compression on all cylinders.

The engine was started and ran without anomalies between 600 and 800 rpm. The engine was not run at a higher rpm due to vibrations caused by the bent propeller. The engine responded to throttle control inputs and the engine was shut down using the mixture control. The propeller was removed, straightened, and reinstalled on the engine. The engine was subjected to a static power-run and operated with no anomalies at 2,500 rpm for approximately 10 minutes.

No anomalies were found with the fuel system and/or engine that could be associated with any preexisting condition that would have precluded the normal operation of the engine.

Pilot Information

Certificate:	Private	**Age:**	61,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 3, 2001
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	May 4, 2001
Flight Time:	1500 hours (Total, all aircraft), 700 hours (Total, this make and model), 1500 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aviat	**Registration:**	N29RG
Model/Series:	Pitts S-2B	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Aerobatic; Normal	**Serial Number:**	5229
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	January 10, 2001 Annual	**Certified Max Gross Wt.:**	1450 lbs
Time Since Last Inspection:	40 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	430 Hrs at time of accident	**Engine Manufacturer:**	Textron Lycoming
ELT:	Installed	**Engine Model/Series:**	AEIO-540-D4A5
Registered Owner:	Ralph Gary Gorenstein	**Rated Power:**	300 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	MWC,745 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	15:45 Local	**Direction from Accident Site:**	325°
Lowest Cloud Condition:		**Visibility**	7 miles
Lowest Ceiling:	Overcast / 12000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	330°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.84 inches Hg	**Temperature/Dew Point:**	11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Milwaukee, WI (MWC)	**Type of Flight Plan Filed:**	None
Destination:	Milwaukee, WI (MWC)	**Type of Clearance:**	VFR
Departure Time:	15:31 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	Lawrence J. Timmerman MWC	**Runway Surface Type:**	
Airport Elevation:	745 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	FOX, ANDREW
Additional Participating Persons:	Tim Derner; Federal Aviation Administration - Milwaukee FSDO; Milwaukee, WI Gregory Erikson; Textron Lycoming; Wayne, IL
Original Publish Date:	April 15, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=54368