

# **Aviation Investigation Final Report**

Location:	NAPERVILLE, Illino	is	Accident Number:	CHI98LA081
Date & Time:	January 18, 1998, 2	20:00 Local	Registration:	N8277W
Aircraft:	PIPER	PA-28RT-201T	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal			

#### **Analysis**

The pilot said he was about 7-miles from his home airport when the '...engine began to run rough and quit.' He said he attempted to restart the engine without success. After he picked out a field for a forced landing the pilot said the engine restarted and ran rough. He said the '...prop was windmilling and the engine started sputtering just before touchdown...' on a snow-covered field. The on-scene investigation revealed no mechanical anomalies with the engine or airframe that would prevent flight. No evidence of fuel was found in the fuel tanks, on the ground near the airplane, the fuel servo, fuel manifold, or injector ports. The throttle arm was found in the 'Closed' position on the throttle body.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: improper preflight planning and preparation by the pilot which resulted in fuel exhaustion.

#### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: CRUISE - NORMAL

Findings 1. (C) FLUID,FUEL - EXHAUSTION 2. (C) PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND Occurrence #2: FORCED LANDING Phase of Operation: EMERGENCY LANDING

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

Findings

3. TERRAIN CONDITION - SNOW COVERED

## **Factual Information**

On January 18, 1998, at 2000 central standard time (cst), a Piper PA-28RT-201T, N8277W, piloted by an instrument rated private pilot, was destroyed during a collision with the ground following a total loss of engine power. The 14 CFR Part 91 personal flight was not operating on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The pilot was seriously injured. The flight departed Naperville, Illinois, at 1900 cst.

According to the pilot's written statement, he was flying his airplane toward the airport. He reported that "...approximately 7-miles out from LL10 [the airport identifier] I switched tanks. Cont'd approach to LL10 and the engine began running rough and quit. I then set up for best glide, put [the] fuel pump on, switched tanks back to original [position]. Tried to restart. Engine would not start." The pilot reported he picked out a field in which to land and at an altitude of 2,000 feet above mean sea level the engine started and ran rough. He said, "The prop was windmilling and the engine started sputtering just before touch down."

The Will County Illinois, Sheriff's Department Deputy interviewed the pilot about 6-hours after the accident. The Deputy reported the pilot said "...his engine lost power, possibly [due] to frozen water in the fuel line." The Sheriff Department's report said the pilot stated he "...picked a snow-covered field to land in." The report said the pilot stated that "When his front landing gear wheel made contact with the ground, the wheel got caught in the dirt and snow. Aircraft then cartwheeled end-over-end and slid [to a stop]."

A Federal Aviation Administration Principal Maintenance Inspector (PMI) conducted the onscene investigation. His report states, "There was no evidence of fuel in the [fuel] tanks, nor was there any fuel discoloration in the area of the fuel tanks or anywhere else at the crash site." Examination of the engine revealed no fuel in the fuel servo, fuel manifold or injector ports. The throttle was in the "Closed" position according to the arm's position on the throttle body. There were no mechanical anomalies with the engine, and its accessories, or the airframe that would have prevented flight.

#### **Pilot Information**

Certificate:	Private	Age:	43,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 Medicalno waivers/lim.	Last FAA Medical Exam:	August 12, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	616 hours (Total, all aircraft), 271 hours (Total, this make and model), 563 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8277W
Model/Series:	PA-28RT-201T PA-28RT-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28R-8131007
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	December 4, 1997 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2744 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-360-FB
Registered Owner:	D&S FORMAL, INC.	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	DPA ,680 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	19:00 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	1 miles
Lowest Ceiling:	Overcast / 300 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	7°C / 7°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	(LL10)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Snow
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

# Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	41.729732,-88.119262(est)

#### Administrative Information

Investigator In Charge (IIC):	Gattolin, Frank	
Additional Participating Persons:	EDMOND G POTTLE; W. CHICAGO , IL	
Original Publish Date:	February 16, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10820	

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.