



Aviation Investigation Final Report

Location:	FORT WAYNE, Indiana	Accident Number:	CHI97LA062
Date & Time:	January 31, 1997, 22:02 Local	Registration:	N4696G
Aircraft:	Cessna 172N	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The flight originated from Hendersonville, North Carolina, at 1730 est with the intended destination of Elkhart, Indiana. The pilot said that on final approach to runway 23 at Fort Wayne Municipal Airport, he lost power and discovered that he was out of fuel. 1.5 gallons of clean blue fuel was drained from the fuel filter. The Pilot's Operating Handbook states a total unusable fuel as 3 gallons.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate fuel management and fuel system exhaustion. A factor involved was the inadequate in-flight planning/decision.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) FUEL SYSTEM - EXHAUSTION
 2. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND
 3. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
-

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

Factual Information

On January 31, 1997, at 2202 eastern standard time (est), a Cessna 172N, N4696G, registered to Aerolina, Inc., of Hendersonville, North Carolina, received substantial damage when it landed short of runway 23 at the Fort Wayne Municipal Airport, Fort Wayne, Indiana, following a total loss of engine power. The pilot intended to stop at Fort Wayne, Indiana for fuel. The private pilot and passenger reported no injuries. The personal 14 CFR Part 91 flight was operating in visual meteorological conditions. No flight plan was filed. The flight originated from Hendersonville, North Carolina, at 1730 est with the intended destination of Elkhart, Indiana.

According to the pilot's written statement, he said, "...on final approach to FWA [Fort Wayne Municipal Airport] & lost power later discovered out of fuel."

Post accident examination of the airplane by the Federal Aviation Administration Principal Maintenance Inspector (PMI) stated that he removed the spark plugs, and they were clean and dry. Turned propeller through and received a good spark from both magnetos. The PMI drained fuel from the fuel filter at the bottom of the engine compartment and received a total of one and a half gallons of clean blue color fuel.

The Pilot's Operating Handbook states that the total unusable fuel is 3 gallons.

Pilot Information

Certificate:	Private	Age:	41, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 23, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	149 hours (Total, all aircraft), 130 hours (Total, this make and model), 100 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4696G
Model/Series:	172N 172N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17273322
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 10, 1997 100 hour	Certified Max Gross Wt.:	2307 lbs
Time Since Last Inspection:	15 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6862 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-H2AD
Registered Owner:	AEROLINA, INC.	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	FWA ,815 ft msl	Distance from Accident Site:	
Observation Time:	21:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Thin Overcast / 3100 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 3100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	16 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HENDERSONVILLE , NC (OA7)	Type of Flight Plan Filed:	None
Destination:	ELKHART , IN (EKM)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	FORT WAYNE MUNICIPAL FWA	Runway Surface Type:	Asphalt
Airport Elevation:	815 ft msl	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	Visual
Runway Length/Width:	12000 ft / 150 ft	VFR Approach/Landing:	Forced landing;Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.070068,-85.17073(est)

Administrative Information

Investigator In Charge (IIC):	Carlson, Todd
Additional Participating Persons:	JOSEPH G ROMANO; SOUTH BEND, IN
Original Publish Date:	August 25, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10514

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](#).