



Aviation Investigation Final Report

Location: MCCOMB, Ohio Accident Number: BF096LA016

Date & Time: November 7, 1995, 10:35 Local Registration: N116JM

Aircraft: Ryan NAVION A3 Aircraft Damage: Destroyed

Defining Event: 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that the airplane was in cruise flight at 600 feet above the ground, when the engine lost power. He chose a field in front of the airplane for a forced landing, and the airplane touched down between 50 and 60 MPH. The pilot reported that when he applied brakes after touchdown, the airplane began to slide. Subsequently, it went across a road, impacted trees, and came to rest in a creek bed. The pilot stated that the airplane's engine restarted during the landing roll. No preimpact mechanical failure was found. The pilot stated that he believed the loss of engine power was the result of carburetor icing. The temperature and dew point were 44 and 42 degrees F, respectively. Icing probability charts showed that conditions were conducive for carburetor ice.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper use of carburetor heat, and carburetor lce, which resulted in loss of engine power and a subsequent forced landing. The carburetor icing (weather) condition was a related factor.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: CRUISE

Findings

1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

2. (C) FUEL SYSTEM, CARBURETOR - ICE

3. (C) CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

4. OBJECT - TREE(S)

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

5. TERRAIN CONDITION - DROP-OFF/DESCENDING EMBANKMENT

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Factual Information

On Tuesday, November 7, 1995, at 1035 eastern standard time, a Ryan "Navion" A3, N116JM, struck several trees and a creek bed following a forced landing near McComb, Ohio. The certificated private pilot, the sole occupant, received serious injuries, and the airplane was destroyed. Instrument meteorological conditions prevailed at the time of the accident, no flight plan was filed. The flight operated under 14 CFR Part 91, and originated from Henry County, Ohio, at approximately 1015, with an intended destination of Marion, Ohio.

During postaccident interviews, the pilot reported that the airplane was in cruise flight at about 600 feet above the ground, when the engine lost power. The pilot stated that he "...put the [carburetor] heat back on, [the landing] gear down, the fuel pump on, and picked out a field." He reported that the airplane touched down "...under control..." at about 60 knots, but it started to slide towards a building when he applied the brakes. The pilot reported that he swerved to avoid the building, and the airplane crossed a road (State Road 613), a field, then struck several trees and came to rest in a creek bed. The pilot reported that during the forced landing the "...brakes were ineffective, [the] engine restarted which allowed [the] airplane to miss a building and hop over a road."

The straight line distance from the initial touchdown point to State Road 613, as measured by the Ohio State Police, is 1,667 feet. The distance from the point where the airplane entered the highway to the point where the airplane came to rest is an additional 991 feet. One witness stated that the "...airplane [appeared to be] trying to take off. [The] tail was dragging, but if he had a couple more RPM, he would have taken off." Another witness stated that "...he kept trying to take off, but couldn't, because he kept dragging his tail. He kept on going up and down." A third witness estimated that the airplane was traveling about "...40 to 50 [miles per hour] across the road..." and stated that the airplane engine was "...roaring." A Federal Aviation Administration (FAA) Inspector who examined the airplane's ground track, stated that there was "...no evidence of braking." Postaccident examination revealed no evidence of preimpact mechanical anomaly.

The pilot stated that he believed that the loss of engine power was the result of carburetor icing. A carburetor icing probability chart prepared by the FAA is appended.

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Pilot Information

Certificate:	Private	Age:	38,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 Medicalw/ waivers/lim	Last FAA Medical Exam:	March 17, 1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	600 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ryan	Registration:	N116JM
Model/Series:	NAVION A3 NAVION A3	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4-1570
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 11, 1994 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	104 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	E-185-9
Registered Owner:	PAUL H. LANGENKAMP	Rated Power:	205 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	FDY ,812 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	14:50 Local	Direction from Accident Site:	161°
Lowest Cloud Condition:	Unknown	Visibility	2.5 miles
Lowest Ceiling:	Overcast / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	7°C / 6°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	HENRY COUNTY , OH (OH17)	Type of Flight Plan Filed:	None
Destination:	MARION MUNI , OH (MNN)	Type of Clearance:	None
Departure Time:	10:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing;Straight-in

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:	41.099349,-83.779357(est)

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Administrative Information

Investigator In Charge (IIC): Rayner, Brian

Additional Participating Persons:

Original Publish Date: November 11, 1996

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=9109

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.

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