



Aviation Investigation Final Report

Location:	BERRIEN SPRINGS, Michigan	Accident Number:	CHI92FA053
Date & Time:	December 11, 1991, 18:27 Local	Registration:	N6919P
Aircraft:	PIPER PA-24-250	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal, 2 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT-RATED PASSENGERS REPORTED THE AIRPLANE WAS LOW ON FUEL AS THEY NEARED THEIR DESTINATION. THEY DISCUSSED AN INTERMEDIATE FUEL STOP, BUT DECIDED THEY HAD SUFFICIENT FUEL TO REACH THEIR DESTINATION. THE AIRPLANE WAS IN CRUISE FLIGHT APPROXIMATELY 80 MILES FROM THE DESTINATION AIRPORT WHEN THE ENGINE LOST POWER. THE INSTRUCTOR PILOT SWITCHED FROM THE RIGHT FUEL TANK TO THE LEFT TANK AND THE ENGINE RESTARTED. SEVERAL MINUTES LATER THE ENGINE LOST POWER AGAIN. RESTART ATTEMPTS WERE UNSUCCESSFUL, AND THE PILOT TURNED TOWARDS THE NEAREST AIRPORT. THE AIRPLANE IMPACTED TREES ABOUT 1 1/2 MILES SHORT OF THE LANDING RUNWAY. POST-ACCIDENT EXAMINATION REVEALED NO EVIDENCE OF USEABLE FUEL IN THE AIRPLANE FUEL SYSTEM. THE PASSENGERS REPORTED IT WAS A DARK NIGHT, AND THE AIRPLANE HIT THE TREES AFTER TURNING TO AVOID AN AREA WITH RESIDENTIAL LIGHTS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S (CFI'S) POOR IN-FLIGHT PLANNING/DECISION-MAKING AND MISJUDGED FUEL SUPPLY/CONSUMPTION. A RELATED FACTOR IS OVERCONFIDENCE IN PERSONAL ABILITY.

Findings

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

Findings

1. FLUID,FUEL - EXHAUSTION
 2. (C) FUEL SUPPLY - MISREAD - PILOT IN COMMAND
 3. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
 4. FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND
 5. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - EMERGENCY

Findings

6. LIGHT CONDITION - DARK NIGHT
7. VISUAL LOOKOUT - RESTRICTED
8. TERRAIN CONDITION - HIGH VEGETATION
9. UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA
10. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	56, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 3, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	14000 hours (Total, all aircraft), 100 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N6919P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2053
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 18, 1991 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	56 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2605 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1A5
Registered Owner:	HOVIOUS,M.;VANLINDER;CRA WFORD	Rated Power:	250 Horsepower
Operator:	HOVIOUS,M.;VANLINDER;CRA WFORD	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	25000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BATES CITY , MO (2MI)	Type of Flight Plan Filed:	None
Destination:	KALAMAZOO , MI (AZO)	Type of Clearance:	None
Departure Time:	15:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal, 1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 2 Serious	Latitude, Longitude:	41.939136,-86.340667(est)

Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	D. KEPPLE; SOUTH BEND , IN D. ANGSTADT; SOUTH BEND , IN
Original Publish Date:	April 23, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15277

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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](#).