



National Transportation Safety Board Aviation Accident Final Report

Location:	FELTON, MN	Accident Number:	CHI93LA245
Date & Time:	07/01/1993, 1930 CDT	Registration:	N1841A
Aircraft:	PIPER PA-18	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE AIRPLANE DEPARTED A RESTRICTED LANDING AREA RUNWAY FOR A LOCAL FLIGHT. SHORTLY AFTER DEPARTING, AT 300 FEET ABOVE THE GROUND, THE AIRPLANE'S ENGINE STOPPED RUNNING. THE PILOT PERFORMED A 180 DEGREE TURN TOWARD THE DEPARTURE RUNWAY. DURING THE TURN THE AIRPLANE STALLED AND SUBSEQUENTLY COLLIDED WITH THE GROUND. THE AIRPLANE WAS DESTROYED BY A POST IMPACT FIRE. THE ON-SCENE INVESTIGATION REVEALED A CARBURETOR FLOAT WITH MULTIPLE CRACKS IN IT. LIQUID EMERSION OF THE FLOAT REVEALED LIQUID PENETRATION INTO THE FLOAT. THE LAST ANNUAL INSPECTION WAS PERFORMED 21 MONTHS PRIOR TO THE ACCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S FAILURE TO MAINTAIN AIRSPEED. FACTORS CONTRIBUTING TO THE ACCIDENT WERE A CRACKED CARBURETOR FLOAT, FUEL STARVATION, AND THE FAILURE TO PERFORM AN ANNUAL INSPECTION.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FUEL SYSTEM,CARBURETOR - CRACKED
2. (F) MAINTENANCE,INSPECTION - NOT PERFORMED - PILOT IN COMMAND
3. (F) FLUID,FUEL - STARVATION

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

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
5. STALL - INADVERTENT - PILOT IN COMMAND

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

Factual Information

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Invalid Medical for flight	Last FAA Medical Exam:	12/11/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	700 hours (Total, all aircraft), 700 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N1841A
Model/Series:	PA-18 PA-18	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	18-1735
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	12/05/1991, Annual	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	25 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3334 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-C1
Registered Owner:	ALDEN BRENDEMUHL	Rated Power:	108 hp
Operator:	ALDEN BRENDEMUHL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FAR, 900 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	1850 CDT	Direction from Accident Site:	225°
Lowest Cloud Condition:	Scattered / 1500 ft agl	Visibility	7 Miles
Lowest Ceiling:	Overcast / 4500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	20° C / 18° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1928 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	FRANK S GATTOLIN	Report Date:	02/10/1994
Additional Participating Persons:	WILLIAM JOHNSON; MINNEAPOLIS, MN		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).