



Aviation Investigation Final Report

Location:	HOWARD, Wisconsin	Accident Number:	CHI95FA310
Date & Time:	September 3, 1995, 13:54 Local	Registration:	N9838Y
Aircraft:	Champion 7GCB	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation		

Analysis

Just prior to the flight the pilot had fueled the airplane from a 5-gallon can. During the initial climb after a banner pickup, the engine sustained a power loss. The airplane was observed to make a right turn, enter a stall and impact the terrain. Subsequent examination found the fuel to be contaminated with water at the aft fuel sump drain.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power due to water-contaminated fuel and the pilot's inadequate preflight.

Findings

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

Findings

1. (C) FLUID,FUEL - CONTAMINATION,WATER
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Factual Information

HISTORY OF FLIGHT

On September 3, 1995, at 1354 central daylight time, a Champion 7GCB, N9838Y, operated by a commercial, instrument rated pilot, was destroyed during a forced landing attempt following a loss of engine power shortly after takeoff from runway 18 (2,025' x 80' dry/turf), at Howard, Wisconsin. The pilot sustained fatal injuries. The purpose of the flight was for banner towing. The airplane had just picked up the banner when the event occurred. No flight plan was on file for the 14 CFR Part 91 flight. The local flight was operating in visual meteorological conditions. The flight originated at 1349.

Two witnesses to the accident were interviewed on scene and asked to make written statements. The written statements are attached to this report. They stated that the pilot was towing banners for a football game. He was to tow three banners during the first half of the game, land, refuel the airplane and tow three banners during the second half of the game.

According to the witnesses, the pilot had towed the three banners during the first half of the game and had landed and refueled from a five gallon can. He then prepared to tow the banners for the second half. He had three tow hooks mounted on the airplane and carried three tow cables aboard the airplane with him to release as needed. He departed to the north and released two cables instead of one. Heading south, he attempted to pick up the banner, but was unsuccessful. He then made a second pass to drop one cable; however, on release it tangled with the second cable previously released. He made a third pass to release both cables and then returned with the one remaining cable to retrieve the banner. Witnesses reported that the banner pick up was successful and the airplane began a climb, on a south heading. The witnesses stated that just south of the departure end of runway, they heard the engine suffer a loss of power and observed the airplane bank to the right, with the banner still in tow. One witness said that the airplane, "... appeared to stall and pitch down to the right."

OTHER DAMAGE

Crops in the field where damaged during the impact.

PERSONAL INFORMATION

The 53 year old pilot was the holder of a commercial pilot certificate with single engine land and sea privileges and an instrument rating for airplanes. His personal log book entries ended at August 17, 1994, indicating a total flight time of 2,185 hours. His most recent biennial flight review was on June 21, 1994.

AIRCRAFT INFORMATION

The airplane was a Champion 7GCB, N9838Y, serial number 59. At the time of the accident the airplane had accumulated 2,310 hours. The most recent annual inspection was recorded on the day before the accident, September 2, 1995, and the airplane had accumulated three hours since the inspection.

WRECKAGE AND IMPACT INFORMATION

The accident site was initially inspected by a Federal Aviation Administration, Flight Standards District Office inspector on the day of the accident. He reported that he found the wreckage in a corn field with an, "Angle of impact, estimate 60 degrees nose down, right wing low." He further reported that the right wing tank was ruptured; however, the left wing tank was intact. He said that there was fuel spillage evident, with a puddle of fuel, in the field. He observed that the banner was still attached to the airplane tow hook.

He had the airplane moved to a hangar and continued the examination. He reported that, "An estimated two (2) oz. of water and contaminated fuel was recovered from the fuselage aft drain sump."

The NTSB inspector examined the wreckage in the hangar on September 12, 1995. The engine remained attached to the mounts and the firewall. At that time it was noted that both wing spars were broken and the wing struts were bent and separated. All control surfaces remained attached and continuity was established. A fuel can identified by witnesses as used by the pilot for fueling the airplane between the banner tows, was found to be near full. It contained approximately five gallons of fuel which was light yellow in color similar to auto fuel. No contamination was found in this container. Both fuel caps on the airplane had gaskets and were tight. No fuel remained in either tank. The fuel vent outlets were clear and passed air. Both the fuel selector and fuel valve were found in the on position; however, the linkage between the selector and valve was separated.

The carburetor was fractured through the throttle shaft bushing holes. The throttle and mixture controls remained attached at their terminal ends. The carburetor was disassembled and the bowl was found to be clean. The float valve opened and closed. The fuel inlet screen was examined and found to be clean. The venturi was of multi-piece construction; however, was intact. Fuel was expelled by action of the accelerator pump. The foam floats were placed in gasoline for several hours and then cut open. No leaking was evident inside the floats. The carburetor air box was damaged; however, the air valve and shaft remained attached to the box. The gascolator was separated and damaged.

The propeller flange was bent and three propeller bolts were separated in the thread area of the flange. The engine rotated and there was continuity throughout. There was compression on all cylinders. The left magneto was capable of firing spark plugs through engine rotation. The right magneto was removed and also sparked when rotated. The spark plugs contained

combustion deposits. Number one and three cylinders were removed and inspected. There was scuffing on the skirts of both pistons. Intake ports of both cylinders were found clean and looked as though they had received recent mechanical cleaning.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was conducted by the Brown County Medical Examiner, Green Bay, Wisconsin, on September 4, 1995. The examination revealed nothing of a pathological nature which would have contributed to the accident.

Toxicological examination of specimens from the pilot were negative for the drugs scanned.

ADDITIONAL INFORMATION

Parties to the investigation were the Federal Aviation Administration, Flight Standards District Office, Milwaukee, Wisconsin, and Lycoming of Williamsport, Pennsylvania.

The wreckage was stored in the owner/pilot's hangar. Family members of the owner/pilot were notified of the location of the wreckage.

Pilot Information

Certificate:	Commercial	Age:	53, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 30, 1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2185 hours (Total, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Champion	Registration:	N9838Y
Model/Series:	7GCB 7GCB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	59
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 2, 1995 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2310 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-320-A2B
Registered Owner:	JAHNKE, JAMES H.	Rated Power:	150 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:	Day
Observation Facility, Elevation:	GRB ,695 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	13:50 Local	Direction from Accident Site:	205°
Lowest Cloud Condition:	Scattered / 3500 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(8W1)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:49 Local	Type of Airspace:	Class C

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	44.54021,-88.049797(est)

Administrative Information

Investigator In Charge (IIC):	Wilson, Stephen
Additional Participating Persons:	KAREN KRUEGER; MILWAUKEE , WI CHARLES A EBERT; MILWAUKEE , WI GREGORY ERIKSON; WILLIAMSPORT , PA
Original Publish Date:	May 17, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=9748

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](#).