



National Transportation Safety Board Aviation Accident Final Report

Location:	OSHKOSH, WI	Accident Number:	CHI93FA296
Date & Time:	08/01/1993, 1418 CDT	Registration:	N3025
Aircraft:	GRUMMAN G58A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

DURING INITIAL CLIMB THE ENGINE BACKFIRED AND SUSTAINED A POWER LOSS. THE PILOT CONFIGURED THE AIRPLANE FOR A FORCED LANDING WITH THE LANDING GEAR AND FLAPS EXTENDED. ON TOUCHDOWN THE AIRPLANE CARTWHEELED. A POST ACCIDENT EXAMINATION REVEALED THAT THE MIXTURE CONTROL WAS PARTIALLY CLOSED. NO OTHER ANOMALIES WITH THE AIRPLANE WERE FOUND ON FURTHER EXAMINATION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S INADVERTENT USE OF THE MIXTURE RESULTING IN A LEAN MIXTURE.

Findings

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

Findings

1. FLUID,FUEL - STARVATION
2. (C) MIXTURE - INADVERTENT USE - PILOT IN COMMAND

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. TERRAIN CONDITION - SOFT
4. UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On August 1, 1993, at 1418 central daylight time, a Grumman G-58A, N3025, registered to and operated by Elmer F. Ward, a private pilot of Santa Ana, California, experienced a loss of power on takeoff from runway 18 (8,001' x 150' dry/concrete) at the Wittman Regional Airport, Oshkosh, Wisconsin. A forced landing was made in an open field one-half mile south of the airport. On touchdown the airplane impacted the terrain and sustained substantial damage. The pilot received serious injuries. The personal flight was being conducted under the provisions of 14 CFR Part 91, in visual meteorological conditions. The flight was being conducted in conjunction with the annual Experimental Aircraft Association's convention. No flight plan was on file. The local flight was originating at the time of the accident.

The pilot stated that shortly after takeoff (altitude of 75 to 100 feet above ground level) the engine lost power and did not respond to control inputs. He stated that he could not account for the midrange location of the mixture control as found at the accident site.

He stated that he left the gear extended and lowered the flaps to full down. He indicated that the airplane impacted the ground in a full stall condition, right wing low, and cartwheeled clockwise on the nose and left wing.

There were no actual witnesses other than the pilot to the impact, although several witnesses saw the aircraft descending. Their view of the impact was out of their line of sight due a depression in the terrain to the south of the airport, where the accident occurred. One witness near the runway when the airplane departed, stated that the engine sounded as if it was running strong; however, about the time it passed in front of him from north to south, it backfired one time and the engine sound diminished. He watched the airplane descend out of sight, to the south, just prior to impact. He did not hear the engine noise increase during that time, although he believed that it did continue to run at a lower power setting until impact.

PERSONAL INFORMATION

The pilot born May 6, 1921, held a private pilot certificate with an instrument rating for airplanes. He had accumulated 2,256 hours total time at the time of the accident with 56 hours in this make and model of airplane. He was the holder of a third class medical certificate issued April 3, 1992, with the vision restriction for wearing lenses for near vision. His last biennial flight review was on March 26, 1992.

AIRCRAFT INFORMATION

The airplane was a Grumman G58A, N3025, serial number 739A. Total airframe time is unknown. The airplane and engine had accumulated 78 hours time in service since overhaul. The last annual inspection was performed on July 14, 1993.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted the terrain approximately one-half mile off the departure end of runway 18 at Wittman Regional Airport at Oshkosh, Wisconsin. The impact occurred an open field of tall grass, which slopped slightly downhill to the south, in the direction of travel.

The airplane was configured as the pilot indicated with the landing gear and flaps in the extended position. During the impact the landing gear collapsed and was torn from the

airframe.

The pilot stated that the airplane cartwheeled clockwise on the main landing gear and the right wing, followed by the engine and left wing. Ground scars confirm that the impact was as described by the pilot. Wing and landing gear parts were found along the debris trail and within the ground scars left by the impact.

The airplane was examined at the accident site minutes after the accident. At the arrival of inspectors, the pilot was trapped inside the airplane, and rescuers had difficulty in opening the canopy to remove the pilot. During this time the pilot was unconscious and not moving.

Immediately after the pilot was freed from the airplane, an examination of the cockpit was conducted. Switches and controls were in the "as found" condition. The throttle was full forward. The mixture and propeller controls were approximately midrange. The mixture control was near the idle cutoff position.

The airplane was removed from the accident site and returned to the airport for a thorough examination. Flight and engine control continuity was confirmed. The engine controls had full travel. An examination of the engine failed to reveal any anomalies when examined. Fuel was found in the carburetor, lines and tank. Filters were clean. Engine rotation was checked and valve and accessory rotation was observed. Several spark plugs were removed and found to have combustion deposits on the electrodes. Oil was examined and found to be free of foreign material and the oil filter was clean.

ADDITIONAL DATA/INFORMATION

Party to the investigation was the Federal Aviation Administration, Flight Standards District Office, Milwaukee, Wisconsin.

The NTSB did not retain possession of the wreckage beyond the examination, which took place immediately after the accident. The airplane's location was known to the pilot's family at the time the NTSB departed the accident scene and they assumed responsibility for it.

Pilot Information

Certificate:	Private	Age:	72, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/03/1992
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	2256 hours (Total, all aircraft), 56 hours (Total, this make and model), 2256 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N3025
Model/Series:	G58A G58A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Limited	Serial Number:	739A
Landing Gear Type:	Retractable - Tailwheel	Seats:	1
Date/Type of Last Inspection:	07/14/1993, Annual	Certified Max Gross Wt.:	9000 lbs
Time Since Last Inspection:	8 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R2800-97-CA18
Registered Owner:	WARD, ELMER F.	Rated Power:	2150 hp
Operator:	WARD, ELMER F.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OSH, 808 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1420 CDT	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	1418 CDT	Type of Airspace:	Class D

Airport Information

Airport:	WITTMAN REGIONAL (OSH)	Runway Surface Type:	Concrete
Airport Elevation:	808 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	8001 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	08/17/1994
Additional Participating Persons:	DUANE M HAHN; MILWAUKEE, WI ROBERT G BRANDT; MILWAUKEE, WI		
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](#).