



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Saint Marys, GA	<b>Accident Number:</b>	ATL04LA001
<b>Date &amp; Time:</b>	10/01/2003, 1803 EDT	<b>Registration:</b>	N1928J
<b>Aircraft:</b>	Johnson Walter A Hornet	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

According to witnesses in the area, the airplane had been circling when they heard the engine sputter. The airplane descended nose down behind a stand of trees and they heard a "boom". Several witnesses in the area telephoned the 911-operator and reported the accident. Examination of the wreckage on-scene found the airplane in a nose down attitude. Examination of the engine found one of the two sparkplugs out of its cylinder hanging by the sparkplug wire. During a telephone interview with the brother of the pilot he stated that about 15 to 20 hours prior to the accident they had done some maintenance on the engine including changing the spark plugs. He further stated that he believes that the spark plugs were not tightened adequately which allowed one to "blow out causing the loss of engine power".

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to improper maintenance and the pilot's failure to maintain airspeed during the attempted forced landing that resulted in a stall.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: MANEUVERING

Findings

1. (C) IGNITION SYSTEM, SPARK PLUG - LOSS, TOTAL
2. (F) MAINTENANCE - IMPROPER - OWNER/PILOT MECHANIC

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: EMERGENCY LANDING

Findings

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

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - GROUND

## Factual Information

On October 1, 2003, at 1803 eastern daylight time, a Walter A. Johnson homebuilt Hornet experimental airplane, N1928J, registered to and operated by the non-certificated pilot, collided with the ground following a loss of engine power in St. Mary's, Georgia. The personal flight was operated under the provisions of Title 14 CFR Part 91, and visual flight rules. Visual meteorological conditions prevailed and no flight plan was filed. The non-certificated pilot sustained fatal injuries and the airplane was substantially damaged. The flight originated from a private grass strip in St. Mary's, Georgia, at an undetermined time.

According to witnesses in the area, the airplane had been circling when they heard the engine sputter. The airplane descended nose down behind a stand of trees and they heard a "boom". Several witnesses in the area telephoned the 911-operator and reported the accident. Examination of the wreckage on-scene found the airplane in a nose down attitude. Examination of the engine found one of the two sparkplugs out of its cylinder hanging by the sparkplug wire. During a telephone interview with the brother of the pilot he stated that about 15 to 20 hours prior to the accident they had done some maintenance on the engine including changing the spark plugs. He further stated that he believes that the spark plugs were not tightened adequately which allowed one to "blow out causing the loss of engine power".

The Division of Forensic Sciences, Georgia Bureau of Investigation, State of Georgia conducted a postmortem examination of the pilot on October 2, 2003. The reported cause of death was "Blunt Force Injury, and the Manner of death was Accident". The Forensic Toxicology Research Section, Federal Aviation Administration, Oklahoma City, Oklahoma performed postmortem toxicology of specimens from the pilot. There was no Carbon Monoxide, no Cyanide or Ethanol detected in Blood, and no drugs detected in the Liver.

## Pilot Information

<b>Certificate:</b>	None	<b>Age:</b>	52, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

Aircraft Make:	Johnson Walter A	Registration:	N1928J
Model/Series:	Hornet	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	0043
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	09/12/2003, Unknown	Certified Max Gross Wt.:	1045 lbs
Time Since Last Inspection:	5 Hours	Engines:	1 Reciprocating
Airframe Total Time:	47 Hours at time of accident	Engine Manufacturer:	Hirth
ELT:	Not installed	Engine Model/Series:	2703
Registered Owner:	Glen & Rock Readdick	Rated Power:	65 hp
Operator:	Glen M. Readdick	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SSI, 19 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1753 EDT	Direction from Accident Site:	43°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	23° C / 17° C
Precipitation and Obscuration:			
Departure Point:	Kingsland, GA (PVT)	Type of Flight Plan Filed:	None
Destination:	Kingsland, GA (PVT)	Type of Clearance:	None
Departure Time:	1803 EDT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	30.757778, -81.562222

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Butch Wilson	<b>Report Date:</b>	07/07/2005
<b>Additional Participating Persons:</b>	Robert R Hessler; Atlanta FSDO; College Park, GA		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).