



# **Aviation Investigation Final Report**

Location: Grand Prarie, Texas Accident Number: FTW04CA240

Date & Time: September 23, 2004, 08:45 Local Registration: N70HR

Aircraft: Carter-Jones Volmer Sportsman Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

A 15,540-hour pilot reported that during an approach to land his amphibian experimental airplane on a lake, he noticed that the oil temperature gauge read excessively high and the oil pressure gauge read excessively low. Distracted by these indications and other factors, the pilot failed to complete his pre-landing checklist. The airplane touched down in the water with the landing gear extended, which resulted in a nose-over. The airplane came to rest inverted and submerged in the water.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to complete a pre-landing checklist, which resulted in a gear down landing on the water. A factor was the pilot's diverted attention as a result of abnormal engine indications.

#### **Findings**

Occurrence #1: WHEELS DOWN LANDING IN WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### **Findings**

- 1. (C) GEAR RETRACTION NOT PERFORMED PILOT IN COMMAND
- 2. (F) DIVERTED ATTENTION PILOT IN COMMAND
- 3. (C) CHECKLIST NOT PERFORMED PILOT IN COMMAND

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#### **Factual Information**

On September 23, 2004, approximately 0845 central daylight time, a Carter-Jones Volmer Sportsman amphibian airplane, N70HR, was substantially damaged during a wheels-down landing in the water on Joe Pool Lake near Grand Prairie, Texas. The commercial pilot, sole occupant and owner and operator of the single-engine home-built aircraft, was not injured. Visual meteorological conditions prevailed and a flight plan was not filed for the personal flight conducted under 14 Code of Federal Regulations Part 91 that originated from the Mid-Way Regional Airport (4T6) near Waxahachie, Texas.

In a written statement, the 15,540-hour pilot reported that he approached Joe Pool Lake from the south and entered a left traffic pattern on the downwind segment. He reported that he was performing a pre-landing checklist, when he noticed that the oil temperature gauge read excessively high and the oil pressure gauge read excessively low. Subsequently, the pilot reduced power to reduce strain on the engine. The pilot stated that he became distracted by the possible loss of power from the engine, in addition to other potential traffic in the area and the altitude required to maintain clearance with a dam on his final approach path.

He reported that the combination of these distractions prevented him from completing the prelanding checklist. The pilot made a second power reduction to 1,700 revolutions per minute (rpm) to continue his approach to land on the glassy water, not realizing that his landing gear was extended. Assuring that the area was clear of traffic and a safety boat was in position, the pilot continued his approach and touched down in the water, tail wheel first, and felt that his attitude was correct for a smooth landing. When the pilot expected to hear the hissing of the water on the hull at the step, the pilot, instead, saw two columns of water on both sides of the cockpit shooting straight up. The airplane then violently nosed down into the water and came to rest inverted and submerged in the lake. Realizing that he was under water, the pilot proceeded with the emergency egress technique and escaped to the surface, uninjured.

A Federal Aviation Administration (FAA) inspector responded to the site of the accident, and the aircraft was recovered from the lake on the day of the accident.

At 0845, the automated weather observing system at the Grand Prairie Municipal Airport (GPM) near Grand Prairie, Texas, located approximately five miles west of the accident site, reported wind from 160 degrees at 3 knots, 10 statute miles of visibility, scattered clouds at 7,500 feet and 12,000 feet, temperature 72 degrees Fahrenheit, dew point 62 degrees Fahrenheit, and a barometric pressure setting of 30.09 inches of Mercury.

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#### **Pilot Information**

Certificate:	Airline transport; Flight instructor	Age:	69,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 2, 2004
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	15540 hours (Total, all aircraft), 50 hours (Total, this make and model)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Carter-Jones	Registration:	N70HR
Model/Series:	Volmer Sportsman	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	CJ-1
Landing Gear Type:	Tailwheel; Amphibian	Seats:	2
Date/Type of Last Inspection:	Continuous airworthiness	Certified Max Gross Wt.:	1700 lbs
Time Since Last Inspection:	55 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	600 Hrs at time of accident	Engine Manufacturer:	Franklin
ELT:	Not installed	Engine Model/Series:	Sport 4 R
Registered Owner:	David Hoffmeister	Rated Power:	130 Horsepower
Operator:		Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GPM,589 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	13:25 Local	Direction from Accident Site:	270°
<b>Lowest Cloud Condition:</b>	Scattered / 7500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	22°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Midlothian, TX (4T6)	Type of Flight Plan Filed:	Unknown
Destination:	Grand Prarie, TX	Type of Clearance:	Unknown
Departure Time:		Type of Airspace:	Unknown

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.698333,-97.046386

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#### **Administrative Information**

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	Jim Gillispie; Dallas FSDO ; Dallas, TX
Original Publish Date:	December 28, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60220

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.

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