



National Transportation Safety Board Aviation Accident Data Summary

Location:	Grandfield, OK	Accident Number:	FTW03LA091
Date & Time:	02/01/2003, 1300 CST	Registration:	N474BG
Aircraft:	Gilbertson Zodiac CH601HDS	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Analysis

During a test flight on the morning of the accident, the engine was running rough; however, the pilot landed the airplane without further incident. The pilot removed the carburetor screen, cleaned the debris from the screen, and reinstalled the screen. During the accident flight, the oil and water temperature indicated 205-210 degrees, and the flight was returning to the airport. At an airspeed of 70 knots and an altitude of 500 feet agl, there was a total loss of engine power. The pilot performed the emergency landing procedures; however, he was not able to turn the airplane into the wind due to an unsafe landing area east of the airport traffic pattern for the runway. The pilot landed the airplane with a right quartering tailwind (25 knots, gusts 30 knots) in a field. During the landing roll, the nose landing gear struck a berm, the nose landing gear collapsed, and the airplane structure twisted as the airplane came to rest. The reason for the loss of engine power was not determined. The pilot reported the winds were from the southwest at 25 knots with gust to 30 knots. The airplane had accumulated 27.6 hours of the required 40 hours of flight time under the operating limitations for the homebuilt airplane.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for an undetermined reason. Contributing factors were the lack of suitable terrain for the forced landing and the unfavorable wind.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings

- 2. (F) TERRAIN CONDITION - NONE SUITABLE
- 3. TERRAIN CONDITION - HIGH VEGETATION
- 4. (F) WEATHER CONDITION - UNFAVORABLE WIND

Pilot Information

Certificate:	Airline Transport	Age:	53
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane; Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	5043 hours (Total, all aircraft), 28 hours (Total, this make and model), 3117 hours (Pilot In Command, all aircraft), 67 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:	Gilbertson	Registration:	N474BG
Model/Series:	Zodiac CH601HDS	Engines:	1 Reciprocating
Operator:	Keith G. Gilbertson	Engine Manufacturer:	Subaru
Operating Certificate(s) Held:	None	Engine Model/Series:	EA81
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Weather Information Source:	Pilot
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	25 knots / 30 knots, 325°
Temperature:	21 °C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Chattanooga, OK (92F)	Destination:	Chattanooga, OK (92F)

Airport Information

Airport:	Chattanooga Sky Harbor (92F)	Runway Surface Type:	Asphalt
Runway Used:	17	Runway Surface Condition:	Dry
Runway Length/Width:	3400 ft / 60 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	34.237778, -98.741944		

Administrative Information

Investigator In Charge (IIC): Joyce Roach

Adopted Date: 05/13/2003

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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