



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Jefferson, GA	<b>Accident Number:</b>	ERA12LA141
<b>Date &amp; Time:</b>	01/08/2012, 1130 EST	<b>Registration:</b>	N4626
<b>Aircraft:</b>	BOWERS FLY BABY 1-A	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The airplane was about 200 feet above ground level when it stalled, spun about one-half turn to the right, impacted the ground in a nose down attitude, and burned. A witness reported that the pilot was attempting to diagnose an engine problem prior to departure. The witness also said that the engine was running rough and backfiring. A postaccident examination revealed that the right magneto distributor gear was unsecured inside the housing, and galling signatures were present. The galling signatures were consistent with damage found after the gear became loose while the engine was under power. Since limited maintenance records were available, it could not be determined how many flight hours had accumulated since the last engine overhaul; however, it is probable that the cotter pin was not installed in either magneto rotor drive shaft and that the right magneto's castellated nut came loose during engine operation. It is probable that the unsecured distributor gear reduced engine performance, which resulted in a partial loss of engine power. The probability also exists that, at the time of the accident, the airplane was being operated in conditions conducive to serious carburetor icing at cruise power; however, the investigation could not conclusively determine that carburetor icing occurred.

## Flight Events

Prior to flight - Aircraft maintenance event  
Initial climb - Aerodynamic stall/spin  
Uncontrolled descent - Collision with terr/obj (non-CFIT)  
Post-impact - Explosion (post-impact)  
Post-impact - Fire/smoke (post-impact)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain airplane control which resulted in an aerodynamic stall and spin. Also causal was the partial loss of engine power during the initial climb due to the improper installation of a magneto. Contributing to the accident was the pilot's decision to take off with an engine problem and the mechanic's failure to detect the missing magneto rotor cotter pins during the last engine overhaul.

## Findings

Aircraft-Aircraft power plant-Ignition system-Magneto/distributor-Incorrect service/maintenance - C  
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not

attained/maintained - C

Personnel issues-Task performance-Maintenance-Installation-Other/unknown - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - F

Personnel issues-Task performance-Inspection-Post maintenance inspection-Maintenance personnel - F

Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to carburetor icing-Not specified

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	50
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	2082 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOWERS FLY BABY	<b>Registration:</b>	N4626
<b>Model/Series:</b>	1-A	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	C85 SERIES
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	19A, 951 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Broken / 12000 ft agl	<b>Wind Speed/Gusts, Direction:</b>	Calm / ,
<b>Temperature:</b>	12° C	<b>Visibility</b>	7 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Jefferson, GA (19A)	<b>Destination:</b>	Jefferson, GA (19A)

## Airport Information

<b>Airport:</b>	Jackson County Airport (19A)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	35	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	5009 ft / 75 ft		

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Latitude, Longitude:	34.172222, -83.556944 (est)		

## Administrative Information

Investigator In Charge (IIC):	Shawn Etcher	Adopted Date:	04/10/2013
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82646">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82646</a>		

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