



Aviation Investigation Final Report

Location:	Troy, Alabama	Accident Number:	MIA01LA134
Date & Time:	April 21, 2001, 19:00 Local	Registration:	N218DH
Aircraft:	David G. Holmes Bensen Gyrocopter	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he performed a power-off approach to the 10th fairway but just before touchdown he elected to fly closer to the club house and pitched the nose up then added power but the engine did not respond. A high sink rate developed resulting in a hard landing. The gyrocopter then began to wobble resulting in main rotor blade contact with the grass fairway. The gyrocopter then rolled over and a postcrash fire damaged one of the main rotor blades, the main rotor pitch change assembly, and the carburetor. He further stated that there was no flight control preimpact failure or malfunction and he believes the engine quit during the approach due to "flooding", as it had happened before. He also stated that he should have added power before pitching up to air taxi.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to maintain airspeed during the approach resulting in a hard landing. A contributing factor in the accident was the loss of engine power during final approach due to undetermined reasons.

Findings

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

Findings

1. (F) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On April 21, 2001, about 1900 central daylight time, a Bensen gyrocopter, N218DH, registered to a private individual, landed hard, bounced then rolled over after touchdown on a golf fairway at the Troy County Club, Troy, Alabama. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 personal flight. The gyrocopter was substantially damaged and the airline transport-rated pilot, the sole occupant, was not injured. The flight originated about 10 minutes earlier from the Brundidge Municipal Airport, Brundidge, Alabama.

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Pilot Information

Certificate:		Age:	62, Male
Airplane Rating(s):		Seat Occupied:	Single
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 5, 2001
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	5000 hours (Total, all aircraft), 250 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	David G. Holmes	Registration:	N218DH
Model/Series:	Bensen Gyrocopter	Aircraft Category:	Gyroplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Subaru
ELT:	Not installed	Engine Model/Series:	EA-81
Registered Owner:	David G. Holmes	Rated Power:	75 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTOI, 397 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Few / 6500 ft AGL	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	22°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brundidge, AL (60A)	Type of Flight Plan Filed:	None
Destination:	Troy, AL	Type of Clearance:	None
Departure Time:	18:50 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	31.759885,-85.999122(est)

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy
Additional Participating Persons:	G G Lieurance; FAA; Birmingham, AL
Original Publish Date:	September 27, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52164

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