



Aviation Investigation Final Report

Location:	MADISONVILLE, Tennessee	Accident Number:	ATL85FA068
Date & Time:	December 27, 1984, 12:30 Local	Registration:	UNREG
Aircraft:	GYROCOPTER B-8M	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

STUDENT PILOT ATTEMPTING FLIGHT IN GYROCOPTER LOSS CONTROL CUSING MAIN ROTOR SYSTEM TO CONTACT THE RUDDER SYSTEM. PILOT WAS NOT QUALIFIED TO CONDUCT THIS FLIGHT. A/C WAS NOT ASSIGNED AN IDENTIFICATION NUMBER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE - NORMAL

Findings

1. FLT CONTROL SYST, RUDDER CONTROL - FAILURE, TOTAL
 2. (C) FLT CONTROL SYST, RUDDER CONTROL - OVERLOAD
 3. (C) CYCLIC - IMPROPER USE OF - PILOT IN COMMAND
 4. INADEQUATE TRAINING - PILOT IN COMMAND
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Occurrence #2: PROPELLER/ROTOR CONTACT TO PERSON
Phase of Operation: CRUISE - NORMAL

Findings

- 5. FLT CONTROL SYST, RUDDER CONTROL - FAILURE, TOTAL
- 6. (C) ROTORCRAFT FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

- 7. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Student	Age:	34, Male
Airplane Rating(s):	None	Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 24, 1980
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	50 hours (Total, all aircraft), 10 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	GYROCOPTER	Registration:	UNREG
Model/Series:	B-8M B-8M	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:	MCCULLOCH
ELT:	Not installed	Engine Model/Series:	4318B
Registered Owner:	KENNETH YEARWOOD	Rated Power:	100 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TYS ,981 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	12:51 Local	Direction from Accident Site:	220°
Lowest Cloud Condition:	Unknown	Visibility	6 miles
Lowest Ceiling:	Overcast / 4500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MADISONVILLE , TN	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	35.520458,-84.349113(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	WILLIAM WHITMORE; NASHVILLE , TN
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=6587

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](#).