



Aviation Investigation Final Report

Location:	CHATTANOOGA, Tennessee	Accident Number:	ATL94LA126
Date & Time:	June 25, 1994, 10:59 Local	Registration:	N11TG
Aircraft:	GREEN STARDUSTER TOO	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE FLIGHT DEPARTED THE AIRPORT IN CHATTANOOGA ON AN ASSIGNED HEADING OF 155 DEGREES. THE PILOT WAS THEN INSTRUCTED TO TURN LEFT, ON COURSE, TO HIS DESTINATION. SHORTLY THEREAFTER, THE AIRCRAFT DISAPPEARED FROM RADAR. WITNESSES OBSERVED THE AIRCRAFT IN A STEEP BANK OVER INTERSTATE 75, FOLLOWED BY A STALL AND STEEP DESCENT INTO THE TREES. THE WRECKAGE WAS FOUND ADJACENT TO THE INTERSTATE HIGHWAY. AFTER RECOVERING FROM HIS INJURIES, THE PILOT COULD NOT RECALL THE EVENTS SURROUNDING THE ACCIDENT. AN EXAMINATION OF THE AIRFRAME AND ENGINE DID NOT REVEAL EVIDENCE OF A MECHANICAL MALFUNCTION OR FAILURE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO MAINTAIN AIRCRAFT CONTROL, RESULTING IN AN INADVERTENT STALL, AND COLLISION WITH TERRAIN.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On June 25, 1994, at 1059 eastern daylight time, a Green Starduster Too, N11TG, collided with trees and terrain following an in flight loss of control at Chattanooga, Tennessee. The commercial pilot was seriously injured, and the aircraft was substantially damaged. The aircraft was operated under 14 CFR Part 91 by the pilot. Visual meteorological conditions existed at the time, and no flight plan was filed for the personal flight to Collegedale, Tennessee. The flight originated at Lovell Field in Chattanooga at 1055.

The pilot reported that the purpose of the flight was to fly to Collegedale to pick up another pilot. He recalled that he ate breakfast prior to the flight. He did not recall any subsequent events on that day, including any preflight preparations, or the accident flight.

According to Air Traffic Control personnel, the flight had departed the airport in Chattanooga, and was assigned a heading of 155 degrees. After a handoff to Departure Control, the pilot was told to turn left, on course, to Collegedale. Moments later, the aircraft disappeared from radar, and no subsequent communications were received from the pilot.

A witness, who was also a police officer and pilot, observed the aircraft over Interstate 75, "in a steep bank." He observed the bank angle steepen, until the airplane entered a spin, at an altitude of about 400 to 500 feet above ground level. The airplane then went into the trees, next to the interstate highway, nose first. Another witness reported that the aircraft was in a steep bank turn, before it went into a "nose dive into the trees," and "looks like the plane stalled."

The engine was removed from the airframe and transported to a maintenance facility for examination. The propeller and spinner was still attached to the engine. The blade surfaces showed no evidence of rotational damage or scoring. One blade was bent aft. The propeller was rotated by hand, and internal continuity was noted throughout the engine. Compression was noted on all cylinders, except the number one cylinder. This cylinder was removed and inspected, with no discrepancies noted. Both magnetos produced a spark when rotated with an electric drill. The fuel manifold was opened, with residual fuel observed on the interior. The engine driven fuel pump operated normally, and contained about 2 tablespoons of fuel. A visual inspection of internal engine parts did not reveal evidence of discoloration or lack of lubrication.

Due to the extent of the pilot's injuries, an NTSB Form 6120.1/2 (Pilot/Operator Report) was not requested from the pilot. The applicable information from the report was obtained from other sources, and through a subsequent telephonic interview with the pilot.

Pilot Information

Certificate:	Commercial	Age:	48, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 1, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2855 hours (Total, all aircraft), 72 hours (Total, this make and model), 164 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GREEN	Registration:	N11TG
Model/Series:	STARDUSTER TOO STARDUSTER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	TG1
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	October 1, 1993 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	49 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	272 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-540-D4A5
Registered Owner:	MCCARTHY, JAMES D.	Rated Power:	300 Horsepower
Operator:	MCCARTHY, JAMES D.	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:	CHA ,682 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	240°
Lowest Cloud Condition:	25000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	25°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	COLLEGEDALE , TN (3M3)	Type of Clearance:	VFR
Departure Time:	10:57 Local	Type of Airspace:	

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	34.999706,-85.230445(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	JAMES W MATHEWS; NASHVILLE , TN ROBERT D DAVIDSON; NASHVILLE , TN
Original Publish Date:	February 24, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=3406

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](#).