



Aviation Investigation Final Report

Location:	NASHUA, New Hampshire	Accident Number:	NYC94LA073
Date & Time:	March 25, 1994, 10:33 Local	Registration:	N403DW
Aircraft:	Burkhart Grob G109B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THIS WAS A TRAINING FLIGHT WITH A CERTIFIED FLIGHT INSTRUCTOR (CFI) AND A RATED STUDENT PILOT (RSP), IN A MOTOR-GLIDER. THE CFI HAD INFORMED THE TOWER CONTROLLERS THAT HE PLANNED TO PRACTICE A SIMULATED ROPE BRAKE AFTER TAKEOFF. AT 525 FEET THE CFI REDUCED THE POWER TO IDLE AND THE RSP INITIATED A 30 DEGREE BANK TO THE RIGHT TO RETURN TO THE RUNWAY. AFTER 120 DEGREES OF TURN, AS THE RSP AND CFI LOOKED OVER THEIR SHOULDERS TOWARD THE RUNWAY, THE RIGHT WING DROPPED AND THE BANK ANGLE INCREASED TO ABOUT 65 DEGREES. THE CFI TOOK THE CONTROLS, LEVELED THE WINGS AND ADDED POWER. THE GLIDER THEN COLLIDED WITH TREES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE CERTIFIED FLIGHT INSTRUCTOR'S DELAY IN TAKING REMEDIAL ACTION, WHICH RESULTED IN THE MOTOR-GLIDER COLLIDING WITH TREES.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

1. EMERGENCY PROCEDURE - SIMULATED - DUAL STUDENT

2. (C) AIRSPEED - NOT MAINTAINED - DUAL STUDENT
3. STALL - INADVERTENT - DUAL STUDENT
4. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: GO-AROUND (VFR)

Findings

5. OBJECT - TREE(S)

Factual Information

On March 25, 1994, about 1033 eastern standard time, a Grob G109B, motor-glider, piloted by Barry Meeker, was substantially damaged during a practice forced landing to Boire Field, Nashua, New Hampshire. The certified flight instructor (CFI) received minor injuries and the rated student pilot (RSP) was uninjured. Visual meteorological conditions prevailed. A flight plan had not been filed for the flight operating under 14 CFR 91.

In the NTSB Form 6120.1/2, the CFI stated that the flight was to simulate an engine loss on takeoff. After the takeoff, at about 525 feet, the power was reduced to idle and a 30 degree bank to the right was initiated by the RSP.

The CFI further stated:

"...120 degrees of turn was completed when the student and instructor looked over their shoulders at the runway, at this time [the] glider quickly increased bank to 60 to 70 degrees, power was added and the wings were leveled, but too much altitude was lost and the glider would not clear the trees on the east side of Nashua's runway. The glider lost speed in the treetops and entered a spin, hitting nose first next to the runway."

The Federal Aviation Administration (FAA) Inspector's report stated that during an interview, the CFI stated after 120 degrees of turn, when the right wing dropped, the CFI took the controls, added power and leveled the wings.

The report further stated that there were three Air Traffic Controllers on duty in the Nashua Control Tower at the time of the accident. The controllers told the Inspector that the pilot had requested a simulated "rope break" and he would start his turn at 500 feet. After the motor-glider departed runway 32, the controllers observed the glider in a right turn off the departure end of the runway and it "looked low." They observed the aircraft clip the trees and impact the ground.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	31, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Glider; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	November 16, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	560 hours (Total, all aircraft), 62 hours (Total, this make and model), 422 hours (Pilot In Command, all aircraft), 29 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Burkhart Grob	Registration:	N403DW
Model/Series:	G109B G109B	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6304
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 14, 1993 Annual	Certified Max Gross Wt.:	1874 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1158 Hrs	Engine Manufacturer:	GROB
ELT:	Not installed	Engine Model/Series:	25000-E1
Registered Owner:	FRANK C. WALLER	Rated Power:	60 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:	ASH ,200 ft msl	Distance from Accident Site:	
Observation Time:	09:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	BOIRE FIELD ASH	Runway Surface Type:	Asphalt
Airport Elevation:	200 ft msl	Runway Surface Condition:	Dry
Runway Used:	32	IFR Approach:	
Runway Length/Width:	5500 ft / 100 ft	VFR Approach/Landing:	Simulated forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Pearce, Robert
Additional Participating Persons:	SHARON L FELTON; BOSTON , MA DANIEL JOCKETT; PORTLAND , ME
Original Publish Date:	February 14, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=38746

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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](#).