



Aviation Investigation Final Report

Location:	Greene, Rhode Island	Accident Number:	NYC04CA129
Date & Time:	May 23, 2004, 16:00 Local	Registration:	N7132L
Aircraft:	Grumman American AA-5	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While departing from the 1,600-foot long, grass runway, with the flaps set to 10 degrees, the pilot realized that the airspeed was too slow to climb out, and there was not sufficient runway to abort the takeoff. As the airplane continued, the left wing came in contact with a tree top and the pilot performed a forced landing to an adjacent corn field. The pilot added that the accident could have been prevented if the airplane was not flown beyond its capabilities, and that the high density altitude and the short grass runway were the cause of the accident. In addition, the "Before Take-Off" checklist required the flaps to be selected to the "UP" position (zero degrees) prior to takeoff.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilots improper decision to depart with the flaps set to 10 degrees, and his failure to obtain proper airspeed, which resulted in a collision with trees.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. OBJECT - TREE(S)
2. (C) SHORT FIELD TAKEOFF/PROCEDURE - IMPROPER - PILOT IN COMMAND

3. (C) AIRSPEED - NOT OBTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

4. TERRAIN CONDITION - CROP

Factual Information

On May 23, 2004, about 1600 eastern daylight time, a Grumman-American AA-5, N7132L, was substantially damaged during takeoff at the Riconn Airport (RI11), Greene, Rhode Island. The certificated private pilot received minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the local personal flight conducted under 14 CFR part 91.

The pilot stated that he performed a normal engine run-up, and decided to add 10 degrees of flaps for the takeoff. During the takeoff from runway 27, a 1,600-foot-long, grass runway, the airplane became airborne, approximately 300 feet into the takeoff roll. At that point, the pilot realized that the airspeed was too low to climb-out and there was not sufficient runway to abort the takeoff. As the airplane continued, the left wing came in contact with a tree top and the pilot performed a forced landing to an adjacent corn field. After touchdown, the airplane bounced, veered left, and came to rest in a wooded area. The pilot added that the accident could have been prevented if the airplane was not flown beyond its capabilities, and that the high density altitude and the short grass runway were the cause of the accident.

The pilot stated that he did not experience any mechanical malfunctions with the airframe or engine.

The "Short Field Take-Off" procedure, as described in the Grumman-American owners manual, stated that " After alignment in the take-off direction, advance the throttle and begin the take-off roll with the elevator neutral. At 60 MPH apply elevator back pressure for rotation, then climb at 73 MPH while in ground effect below 50 ft. If terrain and other obstacles are to be cleared after take-off and above the 50 foot obstacle, accelerate to best angle of climb (78 MPH at sea level) ." In addition, the "Before Take-Off" checklist required the flaps to be selected to the "UP" position (zero degrees) prior to takeoff. The owners manual did not include a performance chart to calculate the takeoff distance from a grass runway.

A weather observation at the Theodore Francis Green State Airport, located approximately 16 miles southwest of the private airport, reported about the time of the accident, included winds from 160 degrees at 9 knots, temperature 69 degrees Fahrenheit, dew point temperature 59 degrees Fahrenheit and altimeter setting 29.83 inches of Hg. The calculated density altitude was approximately 1,040 feet msl.

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	November 20, 2003
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	September 13, 2003
Flight Time:	331 hours (Total, all aircraft), 325 hours (Total, this make and model), 331 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman American	Registration:	N7132L
Model/Series:	AA-5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0432
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	September 9, 2003 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	45 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2100 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O 320
Registered Owner:	Leslie Jo Capozzi	Rated Power:	150 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:	PVD,55 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	15:51 Local	Direction from Accident Site:	55°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 4900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	21°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greene, RI	Type of Flight Plan Filed:	None
Destination:	Greene, RI	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Riconn Airport RI11	Runway Surface Type:	Grass/turf
Airport Elevation:	385 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	1600 ft / 150 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.696666,-71.783607

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen
Additional Participating Persons:	Dave O Sullivan; Bedford, MA
Original Publish Date:	September 1, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=59283

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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](#).