



# **Aviation Investigation Final Report**

Location: Louisville, Kentucky Accident Number: IAD01LA063

Date & Time: June 5, 2001, 18:08 Local Registration: N9773U

Aircraft: Grumman AA-5A Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

The pilot/owner and the flight instructor completed a local training flight without incident, and then they returned to their home airport. On final approach, air traffic control asked that they perform a go-around due to traffic on the landing runway. During the subsequent traffic pattern, the pilot surrendered the flight controls to the flight instructor. The instructor performed the approach and landing, but immediately after touchdown, the airplane veered left, departed the runway, crossed a grass apron, and struck railroad ties that bordered a runway under construction. Examination of the wreckage by the FAA revealed no mechanical deficiencies with the airplane, its brakes, or its landing gear. Both the flight instructor and the pilot reported there were no mechanical deficiencies with the airplane. According to the flight instructor, "The airplane flew very nicely. Always does."

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to maintain directional control after landing.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings
2. OBJECT - AIRPORT SIGN/MARKER

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#### **Factual Information**

On June 5, 2001, at 1808 eastern daylight time, a Grumman American AA-5A, N9773U, was substantially damaged during landing at Bowman Field (LOU), Louisville, Kentucky. The certificated private pilot/owner and the certificated flight instructor (CFI) were not injured. Visual meteorological conditions prevailed for the local instrument training flight that originated at Bowman Field at 1610. An instrument flight rules flight plan was filed for the flight conducted under 14 CFR Part 91.

During a telephone interview, the pilot said he had been flying since 1982, but started training for an instrument rating in August 2000. The pilot said that, beginning in September 2000, he had received 37 hours of instruction from the CFI who was on board the airplane. He said he was happy with the instruction he had received to date.

The pilot said they completed preflight planning and inspections, serviced the airplane with fuel, and departed on their training flight. He said they completed the training and returned for landing at Bowman Field.

The pilot stated they returned to Bowman Field under visual flight rules and that they were cleared for a straight-in landing to Runway 19. On final approach, the pilot was instructed to do a go-around due to traffic on the runway. He said that on the downwind leg, he surrendered the flight controls to the CFI.

In a written statement, the pilot said:

"The Tower instructed us to turn right and fly a right downwind/base approach. On right downwind about mid-field, we were cleared for landing by Tower. [CFI] suggested that we do a short-in landing and I said OK. At this point [CFI] took control of the aircraft. I asked him if he wanted to do the landing and he said yes. I then said 'It's your plane'.

"[CFI] made a smooth touchdown but upon rollout, the plane immediately veered to the left and went off the runway into the grass. We hit some railroad ties that were blocking/across the closed runway/taxiway (I can't remember which). Upon hitting the railroad ties, my left main landing gear broke off, debris flew up over us, and we kept sliding to the left on the left wing and elevator skidding across another grass area until we hit some other railroad ties blocking another closed taxiway. We then came to a stop on top of a railroad tie. I shut off the engine and gas. I called the tower and told them that we were fine/not injured. I then shut down all the electronic equipment in the plane. The time was approximately 6:10PM. [CFI] and I were not injured in any way and we got out of the plane and waited for the airport authority."

In a telephone interview, the CFI stated the purpose of the flight was to provide instrument

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flight instruction to the pilot/owner. He said runway 01/19 was in use temporarily, due to construction on the airport's remaining runways and taxiways.

"I didn't touch the flight controls until landing. At touchdown, the airplane veered left. There was a series of railroad ties blocking the closed runways and taxiways. Before I could get the airplane to respond, I struck the railroad ties that were blocking the runway."

The CFI was asked if he had his feet on both pedals during the landing. He responded:

"That was my intention because the aircraft steers with brakes, but I can't be 1,000 percent sure. I don't know if it's something I did or didn't do."

The CFI was asked if he tested the brakes and steering prior to departure. He said:

"I didn't touch the flight controls until landing. [The pilot] tested his and he didn't have any trouble. We made a lot of left and right turns."

The CFI explained that he follows a routine when he takes over the flight controls. He said he would place his feet on the rudder pedals, make pedal inputs to confirm rudder response, and then test the brakes with his toes.

When questioned whether he had any physical restrictions that would hinder or restrict his ability to reach or manipulate the flight controls, the CFI stated:

"No. I don't."

A Federal Aviation Administration (FAA) aviation safety inspector examined the airplane in a hangar at Bowman Field on June 6, 2001. In a telephone interview, the inspector stated that examination of the airplane revealed no mechanical discrepancies. He said he tested the brakes on the right side, and they functioned as designed.

The left main landing gear was separated from the airplane, but visual examination revealed no discrepancies in the brakes or landing gear.

The CFI held a commercial pilot certificate with ratings for airplane single-engine land, multiengine land, and instrument airplane. He also held a flight instructor certificate with ratings for airplane single-engine land, multi-engine land, and instrument airplane.

The CFI reported 2,862 hours of flight experience, 76 hours of which were in make and model.

The pilot held a private pilot certificate with a rating for airplane single-engine land. He reported 435 hours of flight experience, 317 hours of which were in make and model. The pilot said he had 82 hours of flight experience in the accident airplane.

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The pilot said there were no mechanical deficiencies with the airplane. He said, "It performed beautifully. It was running fine. I'm convinced it wasn't anything mechanical."

The CFI was asked about the performance and handling of the airplane on the day of the accident. He said:

"The airplane flew very nicely. Always does. I've never had any problems in the 35-odd hours that we've flown and I've landed that airplane numerous times."

At 1817, the winds reported at Bowman Field were from 210 degrees at 9 knots.

#### **Flight instructor Information**

Certificate:	Commercial; Flight instructor	Age:	59,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	November 14, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 28, 1999
Flight Time:	2862 hours (Total, all aircraft), 76 hours (Total, this make and model), 2742 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

#### **Pilot Information**

Certificate:	Private	Age:	52,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	February 22, 2000
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 20, 2000
Flight Time:	435 hours (Total, all aircraft), 316 hours (Total, this make and model), 363 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Grumman	Registration:	N9773U
Model/Series:	AA-5A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5A-0173
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 25, 2000 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	34 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3833 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-320-E2G
Registered Owner:	Chase Donaldson	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	Chase International and Associates	Operator Designator Code:	

**Meteorological Information and Flight Plan** 

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LOU,546 ft msl	Distance from Accident Site:	
Observation Time:	18:17 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>		Visibility	10 miles
Lowest Ceiling:	Broken / 4000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	29°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Louisville, KY (LOU )	Type of Flight Plan Filed:	VFR/IFR
Destination:		Type of Clearance:	VFR
Departure Time:	16:10 Local	Type of Airspace:	Class D

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## **Airport Information**

Airport:	Bowman Field LOU	Runway Surface Type:	Asphalt
Airport Elevation:	546 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	3700 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.226665,-85.66333

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#### **Administrative Information**

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	William DeVine; FAA; Louisville, LA
Original Publish Date:	May 13, 2003
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52422

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.

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