



# Aviation Investigation Final Report

<b>Location:</b>	Warrenton, Missouri	<b>Accident Number:</b>	CHI07CA311
<b>Date &amp; Time:</b>	September 29, 2007, 14:00 Local	<b>Registration:</b>	N9583L
<b>Aircraft:</b>	Grumman American AA-5 Traveler	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The aircraft was substantially damaged after it impacted trees and terrain while on approach for landing. The accident landing attempt was the pilot's sixth and last one for the day because of increasing wind variability. The pilot and three passengers reported minor injuries. The pilot was conducting rides for children of a local organization. The pilot reported that during the base to final turn, the airplane experienced a 100 foot per second descent rate from a wind gust. The pilot reportedly applied full power during recovery, but the airplane descended further when it encountered another wind gust. The pilot reported trying to put the airplane into a full stall so it would not impact the trees nose first. Examination of the airplane revealed impact damage to the right wing from the tree. The flaps were not fully extended.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The low airspeed gust factor by the pilot, the altitude/clearance not maintained by the pilot, and the inadequate compensation for wind conditions by the pilot during the landing approach. Contributing factors were the trees and wind gusts.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) AIRSPEED - LOW - PILOT IN COMMAND
3. (F) OBJECT - TREE(S)
4. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
5. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

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

Findings

6. TERRAIN CONDITION - GROUND

## Factual Information

The aircraft was substantially damaged after it impacted trees and terrain while on approach for landing. The accident landing attempt was the pilot's sixth and last one for the day because of increasing wind variability. The pilot and three passengers reported minor injuries. The pilot was conducting rides for children of a local organization. The pilot reported that during the base to final turn, the airplane experienced a 100 foot per second descent rate from a wind gust. The pilot reportedly applied full power during recovery, but the airplane descended further when it encountered another wind gust. The pilot reported trying to put the airplane into a full stall so it would not impact the trees nose first.

Examination of the airplane revealed impact damage to the right wing from the tree. The flaps were not fully extended. The pilot did not have his required pilot certificate and medical certificate with him during the operation of the airplane. There was no airworthiness certificate nor a aircraft registration certificate aboard the airplane which is contrary to Federal Aviation Regulations.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	57, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	September 1, 2007
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 1, 2006
<b>Flight Time:</b>	338 hours (Total, all aircraft), 265 hours (Total, this make and model), 302 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Grumman American	<b>Registration:</b>	N9583L
<b>Model/Series:</b>	AA-5 Traveler	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	AA5-0583
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 1, 2007 Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1937 Hrs at time of accident	<b>Engine Manufacturer:</b>	Textron Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-320-E2G
<b>Registered Owner:</b>	Pilot	<b>Rated Power:</b>	
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	SUS,463 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	14:54 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / 16 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.19 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 6°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Mountain Home, AR (KBPK)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Wwarrenton, MO (MU02)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	C.E.F. Airport MU02	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	638 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
<b>Runway Used:</b>	13	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3000 ft / 100 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Minor, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Minor, 1 None	<b>Latitude, Longitude:</b>	38.809722,-91.103332

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gallo, Mitchell
<b>Additional Participating Persons:</b>	Tom Russell; STL FSDO
<b>Original Publish Date:</b>	November 29, 2007
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=66931">https://data.nts.gov/Docket?ProjectID=66931</a>

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](#).