Aviation Investigation Final Report

Location:	Warrenton, Missouri	**Accident Number:**	CHI07CA311
Date & Time:	September 29, 2007, 14:00 Local	**Registration:**	N9583L
Aircraft:	Grumman American AA-5 Traveler	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 Minor, 1 None
Flight Conducted Under:	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

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

Certificate:	Private	**Age:**	57,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	September 1, 2007
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	March 1, 2006
Flight Time:	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

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

Meteorological Information and Flight Plan

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

Airport Information

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

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Tom Russell; STL FSDO
Original Publish Date:	November 29, 2007
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.ntsb.gov/Docket?ProjectID=66931