Aviation Investigation Final Report

Location:	JOHNSON CITY, Kansas	**Accident Number:**	CHI99LA169
Date & Time:	May 31, 1999, 13:20 Local	**Registration:**	N83PG
Aircraft:	Hornbeck GLASSAIR	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Witnesses reported that the experimental airplane was flying about 200 to 300 feet above the ground when it began a roll-type maneuver. According to the witnesses, the airplane became inverted and then descended vertically into the ground. The on-scene investigation revealed no airframe or flight control anomalies that would prevent flight. The pilot did not possess an FAA Statement of Aerobatic Competency.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's intentional low altitude performance of aerobatics.

Findings

Occurrence #1: ABRUPT MANEUVER
Phase of Operation: CRUISE

Findings
1. (C) AEROBATICS - INTENTIONAL - PILOT IN COMMAND
2. (C) ALTITUDE - INADEQUATE - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - GROUND

Factual Information

On May 31, 1999, at 1320 central daylight time, a Hornbeck Glassair, N83PG, piloted by a private pilot, was destroyed when it impacted the ground following a witness reported low altitude maneuver. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 personal flight was not operating on a flight plan. The pilot was fatally injured. The flight departed Ulysses, Kansas, exact time unknown.

Witnesses reported that N83PG was flying east 200 to 300 feet above the ground. They said N83PG was flying at a high rate of speed when it began a roll-like maneuver. The witnesses said the airplane rolled inverted, pitched down, and flew into the ground at a near vertical angle. One witness reported that N83PG's engine was running at "...full throttle..." as it descended into the ground. Other witnesses said the engine sounded normal during the maneuver leading to the accident.

N83PG's wreckage path was about 60 feet long on an approximate magnetic heading of 010 degrees. Most of the wreckage was confined to two areas at the opposite ends of the wreckage path. A section of the wing, next to the main spar and the cockpit aft to the empennage, was at the beginning of the wreckage trail. The engine and portions of the fuselage forward of the instrument panel were at the opposite end of the wreckage trail. The on-scene investigation revealed control continuity for all three axises.

According to the Federal Aviation Administration (FAA)records, the accident pilot did not possess a Statement of Aerobatic Competency.

The pilot's autopsy was performed on June 1, 1999, at Cimarron Pathology, P.A., Liberal, Kansas. The toxicology examination was conducted by the FAA's Civil Aeromedical Institute (CAMI), Oklahoma City, Oklahoma. The examination report stated the toxicological samples were received in a putrified condition. According to a CAMI laboratory representative, the levels of ethanol, methanol, isobutonal, and acetaldehyde shown on the toxicology report were the result of putrification.

Pilot Information

Certificate:	Private	**Age:**	42,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:**	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	February 27, 1999
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	700 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hornbeck	**Registration:**	N83PG
Model/Series:	GLASSAIR GLASSAIR	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	473R
Landing Gear Type:	Retractable - Tricycle	**Seats:**	
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-320
Registered Owner:	KIRK S. MALONE	**Rated Power:**	150 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:	LBL ,3324 ft msl	**Distance from Accident Site:**	42 Nautical Miles
Observation Time:	13:35 Local	**Direction from Accident Site:**	160°
Lowest Cloud Condition:	Unknown	**Visibility**	10 miles
Lowest Ceiling:	Broken / 1900 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	23°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ULYSSES , KS (ULS)	**Type of Flight Plan Filed:**	None
Destination:	(2K3)	**Type of Clearance:**	None
Departure Time:	00:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	Unknown
Total Injuries:	1 Fatal	**Latitude, Longitude:**	37.570354,-101.750579(est)

Administrative Information

Investigator In Charge (IIC):	Gattolin, Frank
Additional Participating Persons:	CALVIN CLARKE; WICHITA , KS
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46546