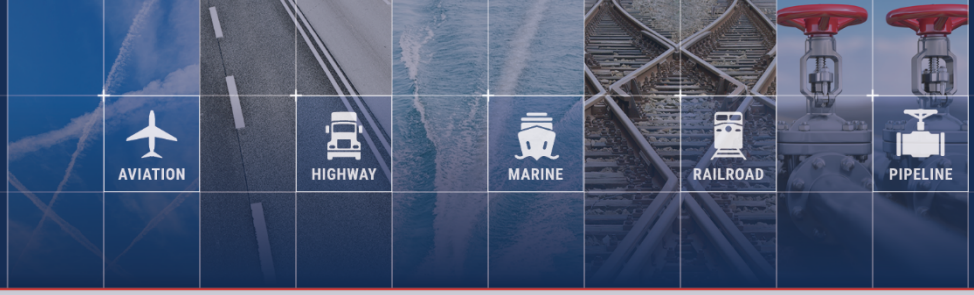

Aviation Investigation Final Report

Location:	Oshkosh, Wisconsin	**Accident Number:**	CHI01FA235
Date & Time:	July 24, 2001, 08:45 Local	**Registration:**	N202RP
Aircraft:	Payne Giles G-202	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane collided with the terrain following a loss of control while turning final approach for runway 36L at Wittman Regional Airport (OSH), Oshkosh, Wisconsin. One witness reported that during the approach to OSH, N202RP was flying in a "very nose high attitude" at an estimated speed of about 90 mph, and its altitude was varying plus or minus 250 feet. The witness reported, "He appeared to overshot the base to final turn, and suddenly became unstable with a sudden bank to the right." Another witness reported seeing the airplane turn what appeared to be a final for runway 36R. This witness reported, "As the aircraft began a left turn for the runway, the right wing dipped and the aircraft dropped nose down behind the trees." The investigation revealed the pilot had approximately 37 hours in N202RP since he completed building it. With the exception of a couple of hours of instruction in an Extra and the 37 hours in N202RP, the pilot had only flown transport category airplanes during the past 4 years. Post accident inspection of the airplane and engine failed to reveal any failure/malfunction which would have resulted in the loss of control.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot failed to maintain aircraft control which resulted in an inadvertant stall. Factors with the accident were the pilot misjudged the approach and the pilot's lack of total experience in the Giles G-202.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Findings
1. (F) PLANNED APPROACH - MISJUDGED - PILOT IN COMMAND
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (C) STALL - INADVERTENT - PILOT IN COMMAND
4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

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

Factual Information

HISTORY OF FLIGHT

On July 24, 2001, at 0845 central daylight time, a Payne Giles G-202, N202RP, collided with the terrain following a loss of control while turning final approach for runway 36L at the Wittman Regional Airport (OSH), Oshkosh, Wisconsin. The airline transport rated pilot was fatally injured and the airplane was destroyed. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions and a visual flight rules flight plan had been filed. The flight originated from Muskegon, Michigan, at 0645.

The purpose of the flight was for the pilot to attend Experimental Aircraft Association (EAA) AirVenture 2001, Oshkosh, Wisconsin. The pilot's wife stated that he had originally planned on making the flight on the day prior to the accident; however, he delayed the trip for a day due to storms in the area.

One witness was flying a Luscombe behind N202RP during their arrival to OSH from Fisk. Fisk is a VFR check point for aircraft arrivals to OSH during AirVenture. This witness reported that he originally was following a Cherokee, but N202RP entered the approach at Ripon between his airplane and the Cherokee. He reported that he was flying at 92 miles per hour (mph) and he had to slow down to remain behind N202RP. He reported that N202RP was flying "very nose high attitude" at an estimated speed of about 90 mph. This witness reported the ground track of N202RP was "somewhat wandering" as it followed the railroad tracks during the approach. In addition, he reported that N202RP's altitude was varying plus or minus 250 feet. The witness reported, "He appeared to overshot the base to final turn, and suddenly became unstable with a sudden bank to the right." The witness reported that he then lost sight of N202RP, later seeing the airplane on the ground. The witness then advised the tower of the accident.

Another witness reported seeing a flight of three Bird Dogs (Cessna O-1, Classic aircraft) approaching the airport on a right base. The witness reported, "I heard the Extra call asking if he was OK to turn final. The controllers needed to let the last Birdbog in ahead of him." The witness reported that he looked away and when he looked back, the "Extra" was about 500 feet above the ground and pointed down at an angle perpendicular with the ground. The witness reported the airplane descended below the tree line.

A third witness reported, "I observed 3 Bird Dog aircraft turning a right base for runway 36 left. As the lead aircraft turned final I
observed a white and yellow low wing aircraft pass behind the Bird Dogs west to east and appeared to begin a left base for runway 36 right. As the aircraft began a left turn for the runway, the right wing dipped and the aircraft dropped nose down behind the trees."

PERSONAL INFORMATION

The pilot, age 56, held an Airline Transport Pilot certificate with airplane single engine land and airplane multi-engine land ratings. The pilot held type ratings in Boeing 737 and Learjet airplanes along with a Flight Engineer Certificate for turbojet powered airplanes. The pilot was issued a First Class Medical Certificate on June 25, 2001, with the limitation "Holder shall possess correcting glasses for near vision."

The pilot's logbook(s) were not located during the investigation. On the application for his First Class Medical Certificate, dated May 25, 2001, the pilot reported having a total flight time of 21,800 hours. In addition, he reported having flown 400 hours in the past 6 months. At the time of the accident, the pilot was flying for a major airline. That airline provided his airline flight times for the 12 months preceding the accident. For the months of June and July, the flight time total was 100.59 hours.

The pilot's wife reported the pilot had been a corporate pilot for approximately 16 years. At the time of the accident, he had been flying for an airline for the past 17 years. She stated that the pilot had owned a Pitts, but he sold it when he purchased the kit to build N202RP. She stated that it took approximately 4 years for the N202RP to be built. She reported that the pilot had received a couple hours of training in an Extra because it has handling characteristics similar to N202RP.

A friend of the pilot's reported that with the exception of a couple of hours of flight time, the pilot had not flown small aircraft between the time he purchased the kit for N202RP and the time the airplane was completed. He also reported that prior to the flight to OSH, the pilot had approximately 35 hours of flight time in N202RP.

AIRCRAFT INFORMATION

N202RP, s/n G-202-003, was a low wing, 2-seat amateur built, aerobatic airplane. According to the pilot's family, it had taken him between 3 1/2 - 4 years to build the airplane. The airplane was issued its experimental airworthiness certificate on September 22, 2000. The aircraft logbook indicates the initial test flight was completed on December 6, 2000, at which time the tach time was recorded as 8 hours. The Phase I, 25-hour inspection, was accomplished on June 16, 2001, at a tach time of 25 hours. According to the aircraft logbook, the Phase II inspection was completed in June (no date noted), 2001 at a tach time of 35 hours.

The airplane was powered by a Lycoming AEIO-360-A1E, engine. According to the logbook records, the engine was new when installed on the airplane on August 1, 2000.

N202RP was equipped with a Vision Microsystems VM1000 Engine Management System. This unit was taken to the manufacturer and its stored data was recovered. See attached report for details.

METEOROLOGICAL INFORMATION

Weather conditions reported at OHS at the time of the accident were sky conditions clear, visibility 10 sm, wind from 300 degrees at 3 knots, temperature 24 degrees C, dew point 19 degrees C, altimeter 29.92 inches of Hg.

The pilot received a weather briefing from the Lansing, Michigan, Automated Flight Service Station, at 0624, on the morning of the accident.

COMMUNICATIONS

The Federal Aviation Administration (FAA) institutes special air traffic control procedures for the AirVenture fly-ins. These procedures are published in a notice to airmen (NOTAM). The pilot of N202RP was following the "VFR Arrival from Ripon to Fisk" for a landing on runway 36L. These procedures state in part:

> Enter transition over Ripon. Maintain 90 knots (or best cruise speed if below 90 knots) and 1,800 MSL. If unable, maintain 135 knots and 2,300 MSL.
>
> Proceed single file over the railroad tracks toward FISK (FISK can be identified by railroad track/road intersection and white strobe lights.) Fly over the railroad tracks; do not fly over the strobe lights.
>
> Listen for controller instructions as you approach FISK. Controller will use color and type of aircraft at FISK. Pilots should vigorously rock wings to acknowledge ATC instructions and refrain from verbal responses unless requested.
>
> Controller will advise your assigned runway and when to monitor Oshkosh Tower on 118.5 or 126.6.

A transcript of the OSH Air Traffic Controller Tower communications is attached to this report. It should be noted that the aircraft are not identified by N-number. They are identified by either make and model, color, wing configuration, or any combination thereof.

At 0840:06, a flight of three AT-6's was cleared to make a right break over runway 36L.

At 0841:05, a Ford Tri-Motor was cleared to land on runway 36L.

At 0841:59, a flight of three Bird Dogs requested to land on runway 36L. The controller instructed the Bird Dogs to fly their initial approach to runway 36R, and to expect to land on runway 36L after they made their break.

At 0842:41, the controller cleared the flight of AT-6's to land on runway 36L.

At 0844:10, the controller cleared the Bird Dogs to land on runway 36L.

At 0845:37, the controller transmitted, "looks like a high wing tail dragger there across the highway ah runway ah three six left keep your base for now keep your base square and ah plan to land at the ah third intersection off the left."

At 0846:07, an unidentified airplane transmitted, "and you want the Extra to turn in now."

At 0846:10, the controller reported "okay you're following traffic that is just now turning base on the ah off the right side so you see him out there."

At 0846:18, an unidentified aircraft transmitted "ah yea I."

At 0846:20, the controller transmitted, "okay start your altitude down let the descent go an ah plan to follow him runway three six left cleared to land."

At 0846:26, the unidentified aircraft transmitted, "okay I copy behind him now."

At 0846:39, the controller transmitted "little small low wing there on the base ah three six left cleared to land maybe it's a navion."

At 0847:02, the controller transmitted "Aircoupe on the base ah you're following a high wing that is just coming back around from the ah from your right do you see him." The pilot of the airplane identified as the Aircoupe responds "roger that."

At 0847:10, the controller transmitted "thanks and ah plan to follow him and ah quick s turn if you need it runway three six left cleared to land put it down just the second intersection the ah high wing coming back to final now keep it in the air all the way to at least the third intersection traffic following you."

At 0847:21, an aircraft identified as a high wing Cessna reported "tower do you have an airplane on the ground ah just where I made that circle I see ah a crashed airplane on the ground."

Two air traffic controllers who witnessed the accident reported that they called in an "Alert 3." One of the controllers along with local authorities proceeded to the location of the accident site.

AIRPORT INFORMATION

Runways 09/27 and 18/36 are the main runways used at the OSH during AirVenture. In

addition to these runways, taxiway Alpha that parallels runway 36 is also used for takeoffs and landings. This surface is designated as runway 18L/36R. The permanent runway 18/36 is designated as runway 18R/36L.

WRECKAGE AND IMPACT INFORMATION

The Safety Board's investigation began at 0930 on the morning of the accident. The airplane was located in an open field on a farm located at 3145 County Highway N (approximately 1/2 mile south of OSH). The airplane was upright and all of the airplane structure was in the same area.

The engine remained attached to its mounts and the firewall. The firewall was crushed and was partially separated from the remainder of the airplane. The forward portion of the engine was imbedded approximately 6 inches into the ground. The propeller remained attached to the engine. Two of the wooden propeller blades incurred minor damage. The third blade was buried in the ground and was found splintered when it was dug out.

The wings remained attached to the fuselage. Both the bottom and top surfaces of both wings were cracked. No fuel was present in the wing fuel tanks; however, the odor of fuel was present at the accident site. The right wing tip was separated from the wing. The left wing was buckled mid-span. The left wing aileron was separated from the wing and was found on the ground next to the wing.

The cockpit canopy was shattered into numerous pieces. The fuselage was cracked and separated just aft of the cockpit. The rudder was pulled away at the top of the vertical stabilizer. The right horizontal stabilizer and elevator remained intact. The left elevator was pulled away from the horizontal stabilizer at the outboard attach fitting. Flight control continuity was established from the cockpit controls to the flight control surfaces.

Inspection of the engine revealed thumb compression and suction on all cylinders. The exhaust stacks for all four cylinders were intact and crushed aft. The right magneto was separated from its mounting flange and produced a spark on all the leads when rotated by hand. The left magneto sparked on all leads when the propeller was turned. The top spark plugs were sooty. The fuel servo was separated from its mounting flange with the hoses still attached. The fuel servo was later torn down and with the exception of impact damage, no discrepancies were found. (See attached report.) The fuel flow divider was opened. It did not contain any debris and fuel was present. Fuel was found in the fuel line from the fuel servo to the flow divider and in the fuel line to the engine driven pump. Fuel was also found in the fuel line from the engine driven fuel pump to the fuel servo.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed by the Winnebago County Coroner's Office at the Mercy Medical Center on July 24, 2001.

The FAA Civil Aeronautical Institute performed toxicological tests. The results were negative for those substances tested.

ADDITIONAL INFORMATION

Parties to the investigation were the FAA and Textron Lycoming.

The wreckage was released to Myers Aviation, Inc. on July 24, 2001. The fuel servo was released to Myers Aviation, Inc., on October 17, 2001. The Vision Microsystems VM1000 display was released to a claims representative of Universal Loss Management, on October 10, 2001.

Pilot Information

Certificate:	Airline transport; Flight engineer	**Age:**	56,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Instrument airplane	**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 25, 2001
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	21936 hours (Total, all aircraft), 37 hours (Total, this make and model), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Payne	**Registration:**	N202RP
Model/Series:	Giles G-202	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	3
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	1600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	45 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	AEIO-360-A1E
Registered Owner:	Robert C. Payne	**Rated Power:**	200 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:	OSH,808 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	08:45 Local	**Direction from Accident Site:**	180°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.92 inches Hg	**Temperature/Dew Point:**	24°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Muskegon, MI (MKG)	**Type of Flight Plan Filed:**	VFR
Destination:	Oshkosh, WI (OSH)	**Type of Clearance:**	VFR
Departure Time:	06:45 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	Witmann Regional OSH	**Runway Surface Type:**	Concrete
Airport Elevation:	808 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	36L	**IFR Approach:**	None
Runway Length/Width:	8002 ft / 150 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	Chester J Cybulski; FAA; Milwaukee, WI Raymond P Yank; FAA; Milwaukee, WI Greg Erikson; Lycoming Engines; Wayne, IL
Original Publish Date:	September 10, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52814