



Aviation Investigation Final Report

Location:	Gainsville, Texas	Accident Number:	CEN13LA147
Date & Time:	January 28, 2013, 17:45 Local	Registration:	N4844W
Aircraft:	WEBB WEBB 2	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The pilot was performing initial high-speed taxi tests of his experimental amateur-built gyroplane when it inadvertently became airborne. The pilot then initiated a climb above the runway and continued to fly the airplane to return for landing on the departure runway, which was contrary to the test plan. He did not want to fly past the airport boundary nor any of the hangars on the southeast side of the runway, so he initiated a left turn to crosswind. The gyroplane lost altitude faster than the pilot anticipated and became "low, slow, and behind the power curve" at too low of an altitude to recover. The lower tailboom touched down in a hard landing, which deformed the rudder and tailboom. The rotor was damaged when it contacted the ground.

The pilot stated that the accident could have been prevented if he had followed the test plan and landed that gyroplane when it first lifted off. The pilot also stated that a lack of experience in the make and model gyroplane contributed to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to follow his test plan and abort the takeoff after inadvertently lifting off during a high speed taxi test. Contributing to the accident was the pilot's lack of flight experience in the gyroplane.

Findings

Personnel issues	Incorrect action selection - Pilot
Aircraft	Airspeed - Not attained/maintained
Aircraft	Climb rate - Not attained/maintained
Personnel issues	Total experience w/ equipment - Pilot

Factual Information

History of Flight

Taxi	Miscellaneous/other
Takeoff	Attempted remediation/recovery
Initial climb	Loss of control in flight (Defining event)
Landing	Hard landing

On January 28, 2013, about 1745 central standard time, an experimental Webb 2, N4844W, descended into terrain while maneuvering in the airport traffic pattern after takeoff at Gainesville Municipal Airport (GLE), Gainesville, Texas. The commercial pilot was attempting a high-speed taxi test when the gyrocraft inadvertently became airborne. The gyrocopter sustained substantial damage to the rotor and tail. The pilot was uninjured. The gyrocopter was registered to and operated by the pilot under 14 Code of Federal Regulations Part 91 as a test flight. Visual meteorological conditions prevailed at the time of the accident.

The pilot stated that he received a temporary airworthiness certificate for the gyrocraft on January 26, 2013, and attended a Federal Aviation Administration Safety meeting in Olney, Texas. On the day of the accident, the pilot followed his test plan for high-speed taxi tests, which he performed at his home airport. During the fifth taxi test, the gyrocraft was about 3,000 feet down the runway when it "gently" lifted off the runway. The pilot was not "overly concerned" since everything felt "very smooth," and initiated a climb to about 50 feet above ground level at an indicated airspeed of 55-60 mph. He flew the gyrocraft down the runway for about 2,000 feet. He did not want to fly past the airport boundary nor any of the hangars on the southeast side of the runway, so he initiated a left turn to crosswind. The gyrocraft lost altitude faster than the pilot anticipated. The gyrocraft became "low, slow, and behind the power curve" at too low of altitude to recover and to prevent it from "mushing" into a "rough" landing. The lower tailboom touched down in a hard landing, which deformed the rudder and tailboom. The rotor was damaged when it contacted the ground.

The pilot stated that the accident could have been prevented if he had followed the test plan and landed that gyrocraft when it first lifted off. The pilot said that a lack of experience in the make and model of gyroplane contributed to the accident.

Pilot Information

Certificate:	Commercial; Sport Pilot	Age:	61
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Gyroplane	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 26, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 25, 2012
Flight Time:	1821 hours (Total, all aircraft), 1 hours (Total, this make and model), 1560 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	WEBB	Registration:	N4844W
Model/Series:	WEBB 2	Aircraft Category:	Gyroplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental light sport (Special)	Serial Number:	001
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	January 28, 2013 Condition	Certified Max Gross Wt.:	1150 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	0 Hrs	Engine Manufacturer:	Viking Conversion of Honda
ELT:	Not installed	Engine Model/Series:	1.5L
Registered Owner:	Pilot	Rated Power:	115 Horsepower
Operator:	Pilot	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GLE,256 ft msl	Distance from Accident Site:	
Observation Time:	17:35 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Overcast / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.84 inches Hg	Temperature/Dew Point:	21°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Gainesville, TX (GLE)	Type of Flight Plan Filed:	None
Destination:	Gainesville, TX (GLE)	Type of Clearance:	None
Departure Time:	07:43 Local	Type of Airspace:	

Airport Information

Airport:	Gainesville Municipal Airport GLE	Runway Surface Type:	Asphalt
Airport Elevation:	845 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	6001 ft / 100 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.651668,-97.197219(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Thomas McGregor; Federal Aviation Administration; Fort Worth, TX
Original Publish Date:	March 24, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=86110

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