



National Transportation Safety Board Aviation Accident Final Report

Location:	Crozet, VA	Accident Number:	ERA15CA121
Date & Time:	02/04/2015, 1400 EST	Registration:	N595X
Aircraft:	AUTOGYRO GMBH CALIDUS	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

After departing from the airport where the pilot kept the gyroplane, he flew to his family farm and landed without incident on a 1,500-foot-long grass polo field. Later on, during an attempted takeoff from the same field, when the gyroplane was traveling at 25 to 30 knots and was about 150 feet into the takeoff roll, the gyroplane rose to a balanced position on its main wheels, but then began to bounce up and down violently. The pilot then lost control of the gyroplane and it rolled over on its left side about 300 feet into the takeoff roll. The pilot advised that there was nothing mechanically wrong with the gyroplane. He further advised that it was "pilot error" and that he had "over advanced" the blades by pushing the control stick too far forward and that the blades were not yet at speed (too low a rotor rpm) when he did it. The pilot was not injured, but the gyroplane incurred damage to the rotor blades, the pusher propeller, the horizontal stabilizer, the vertical stabilizer, the rudder, the engine cowling, and the wheel pants.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper control inputs which resulted in a loss of control and rollover during the takeoff roll.

Findings

Aircraft	Performance/control parameters - Capability exceeded (Cause)
Personnel issues	Aircraft control - Pilot (Cause)

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event) Collision with terr/obj (non-CFIT)
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Pilot Information

Certificate:	Private	Age:	60
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	03/23/2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	10/17/2013
Flight Time:	713 hours (Total, all aircraft), 27 hours (Total, this make and model), 495 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AUTOGYRO GMBH	Registration:	N595X
Model/Series:	CALIDUS	Aircraft Category:	Gyroplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	C00350
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	12/16/2014, Conditional	Certified Max Gross Wt.:	1235 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	22 Hours	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	914UL
Registered Owner:	On file	Rated Power:	115 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	CHO, 640 ft msl	Observation Time:	1353 EST
Distance from Accident Site:	12 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	90°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	13° C / -6° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	6 knots/ 18 knots, Variable	Visibility (RVR):	
Altimeter Setting:	30.04 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Crozet, VA (PVT)	Type of Flight Plan Filed:	None
Destination:	Waynesboro, VA (W13)	Type of Clearance:	None
Departure Time:	1400 EST	Type of Airspace:	Class G

Airport Information

Airport:	Polo Field (PVT)	Runway Surface Type:	Grass/turf
Airport Elevation:	796 ft	Runway Surface Condition:	Dry; Vegetation
Runway Used:	None	IFR Approach:	None
Runway Length/Width:	1500 ft / 450 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Todd G Gunther	Adopted Date:	08/11/2015
Additional Participating Persons:	Roberto N Possumato; FAA / FSDO; Richmond, VA		
Publish Date:	08/11/2015		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=90693		

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