



Aviation Investigation Final Report

Location:	Westminster, Maryland	Accident Number:	ERA13CA122
Date & Time:	January 29, 2013, 16:00 Local	Registration:	N393GX
Aircraft:	AMIRKHANIAN SHAHRAM CHARL COMMANDER	Aircraft Damage:	Substantial
Defining Event:	Loss of visual reference	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot of the gyroplane, he was practicing aborted takeoffs from a field that had power lines near the practice area and performing 180-degree turns to simulate a return to the runway. He successfully completed one practice maneuver, taking off to the south and making a 180-degree turn to the north. During the second practice maneuver, he took off to the north and began a 180-degree turn to the south. The pilot stated that, immediately after making the turn, the sun obscured his vision for several seconds. The gyroplane then struck a power line, and the pilot pushed the cyclic forward to land in the field. Subsequently, the gyroplane impacted the ground hard, which resulted in substantial damage to the airframe. At the time of the accident, the angle of the sun was low and directly in the flightpath during the turn. The pilot reported no preimpact mechanical malfunctions or failures with the gyroplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Impact with power lines due to the pilot's obscured vision due to the low angle of the sun, which prevented the pilot from seeing the lines.

Findings

Environmental issues	Bright light - Contributed to outcome
Personnel issues	Aircraft control - Pilot
Environmental issues	Wire - Contributed to outcome

Factual Information

History of Flight

Maneuvering-low-alt flying	Loss of visual reference (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Autorotation	Hard landing

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	55, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 22, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 10, 2011
Flight Time:	1560 hours (Total, all aircraft), 224 hours (Total, this make and model), 1338 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AMIRKHANIAN SHAHRAM CHARL	Registration:	N393GX
Model/Series:	COMMANDER	Aircraft Category:	Gyroplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	SCA001
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	August 19, 2012 Condition	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	209 Hrs at time of accident	Engine Manufacturer:	ROTAX
ELT:	Not installed	Engine Model/Series:	503ULDCDI
Registered Owner:	AMIRKHANIAN SHAHRAM C	Rated Power:	52 Horsepower
Operator:	AMIRKHANIAN SHAHRAM C	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KDMW,789 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	15:30 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	10°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Westminster, MD (2W2)	Type of Flight Plan Filed:	None
Destination:	Westminster, MD (2W2)	Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	

Airport Information

Airport:	Clearview Airpark 2W2	Runway Surface Type:	
Airport Elevation:	799 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	39.450279,-77.017219(est)

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Tony Serio; FAA/FSDO; Baltimore, MD
Original Publish Date:	May 23, 2013
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.nts.gov/Docket?ProjectID=86106

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