



National Transportation Safety Board Aviation Accident Factual Report

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| Location: | Blairstown, NJ | Accident Number: | GAA16CA499 |
| Date & Time: | 09/17/2016, 1145 EDT | Registration: | N528WM |
| Aircraft: | ALEX MICHAEL BANTUM/TERCEL USA TERCEL-GYROPLANE | Aircraft Damage: | Substantial |
| Defining Event: | Loss of control on ground | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

According to the solo student pilot, the experimental amateur built gyrocopter was positioned for takeoff on the runway, and stopped with the brakes set.

He recalled that he engaged the pre-rotor, increased the main rotor speed to 180 revolutions per minute (rpm), then disengaged the pre-rotator, released the brake, and applied full throttle.

He reported that, "this is where I made my mistake. At this point I should have brought the control stick all the way back, but did not." He recalled that the gyrocopter was moving forward rapidly, but the rotor rpm decreased, and he then pulled the control stick aft. He reported that the rotor blades were flapping, the control stick became uncontrollable, and the gyrocopter exited the runway to the left.

The student pilot reduced the throttle to idle, and during the runway excursion the left main and the nose landing gear separated from the gyrocopter. The main rotor blade struck the ground, the blade grip sustained substantial damage, and the rotor head partially separated from the frame.

The student pilot reported that there were no mechanical malfunctions or anomalies with the airframe or the engine that would have prevented normal flight operation.

Pilot Information

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| Certificate: | Private; Student | Age: | 53, Male |
| Airplane Rating(s): | Single-engine Land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | Gyroplane | Restraint Used: | 3-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane Single-engine | Toxicology Performed: | No |
| Medical Certification: | Class 3 Without Waivers/Limitations | Last FAA Medical Exam: | 03/29/2016 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | 05/28/2016 |
| Flight Time: | (Estimated) 200 hours (Total, all aircraft), 20 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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| Aircraft Make: | ALEX MICHAEL BANTUM/TERCEL USA | Registration: | N528WM |
| Model/Series: | TERCEL-GYROPLANE NO SERIES | Aircraft Category: | Gyroplane |
| Year of Manufacture: | 2014 | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | 005 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 10/01/2015, Condition | Certified Max Gross Wt.: | 1300 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 60 Hours at time of accident | Engine Manufacturer: | Rotax |
| ELT: | Not installed | Engine Model/Series: | 912UL |
| Registered Owner: | Tinz Gyro LLC | Rated Power: | 81 hp |
| Operator: | Tinz Gyro LLC | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | K12N, 583 ft msl | Distance from Accident Site: | 12 Nautical Miles |
| Observation Time: | 1554 UTC | Direction from Accident Site: | 79° |
| Lowest Cloud Condition: | | Visibility | |
| Lowest Ceiling: | | Visibility (RVR): | |
| Wind Speed/Gusts: | 7 knots / | Turbulence Type Forecast/Actual: | / None |
| Wind Direction: | 210° | Turbulence Severity Forecast/Actual: | / N/A |
| Altimeter Setting: | 30.22 inches Hg | Temperature/Dew Point: | 22° C / 13° C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Blairstown, NJ (1N7) | Type of Flight Plan Filed: | VFR |
| Destination: | Blairstown, NJ (1N7) | Type of Clearance: | None |
| Departure Time: | 1145 EDT | Type of Airspace: | Class G |

Airport Information

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| Airport: | BLAIRSTOWN (1N7) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 371 ft | Runway Surface Condition: | Dry |
| Runway Used: | 25 | IFR Approach: | None |
| Runway Length/Width: | 3112 ft / 70 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

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|---------------------|--------|----------------------|-----------------------------|
| 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 | Latitude, Longitude: | 40.971111, -74.997500 (est) |

Administrative Information

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| Investigator In Charge (IIC): | Michael A Hicks |
| Additional Participating Persons: | Michael Reichert; FAA; Allentown, PA |
| 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=94058 |