



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Blue Springs, NE	<b>Accident Number:</b>	CEN11LA316
<b>Date &amp; Time:</b>	05/03/2011, 1430 CDT	<b>Registration:</b>	N103EB
<b>Aircraft:</b>	Norris Dominator	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

Witnesses reported seeing the gyrocopter depart from a private airstrip. Shortly after the gyrocopter was airborne, it struck a telephone line, descended and impacted the road. A postimpact fire ensued and the gyrocopter sustained substantial damage during the impact with the road and the postimpact fire. A postaccident examination of the gyrocopter, engine, and its systems revealed no mechanical anomalies 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:  
The pilot's failure to maintain clearance from power lines.

## Findings

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<b>Aircraft</b>	Altitude - Not attained/maintained (Cause)
<b>Personnel issues</b>	Use of equip/info - Pilot (Cause)

## Factual Information

### HISTORY OF FLIGHT

On May 3, 2011, approximately 1430 central daylight time, a Norris Dominator experimental amateur-built gyroplane, N103EB, was substantially damaged when it impacted a telephone line while departing from a private residence near Blue Springs, Nebraska. A postimpact fire ensued. The private pilot was fatally injured. The gyroplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which operated without a flight plan. The flight originated from Blue Springs, Nebraska, approximately 1430.

The Gage County Sheriff's Department took witness statements from three individuals. In addition, a National Transportation Safety Board (NTSB) investigator interviewed three witnesses. According to these witnesses, the gyrocopter initiated a takeoff roll from the private runway, and shortly after becoming airborne, impacted a telephone line. The gyrocopter descended to the ground and caught fire. The gyrocopter was consumed by the fire.

### PERSONNEL INFORMATION

The pilot, age 68, held a private pilot certificate with airplane single engine land privileges. He was issued a third class airman medical certificate on March 17, 2010. The certificate contained the limitation "holder shall possess glasses that correct for near vision."

The pilot's family was unable to locate his flight logbook. At the time of airman medical certificate application, the pilot reported he had logged 650 hours of flight time, 5 of which had been logged in the previous six months.

### AIRCRAFT INFORMATION

According to Federal Aviation Administration (FAA) records, in 2010 the pilot/owner had manufactured the gyroplane, Norris Dominator (serial number 001). It was registered with the FAA on a special airworthiness certificate for experimental amateur-built operations. A Subaru EA 81 engine rated at 100 horsepower powered the gyrocopter. The engine drove a 3-blade, composite propeller, and a two bladed aluminum main rotor.

The FAA had issued Experimental Amateur-Built Aircraft Operating Limitations for the gyrocopter on November 24, 2010. For the phase I flight testing, the gyrocopter was limited to operate within a 25-mile radius of Beatrice Municipal Airport, (KBIE), Beatrice, Nebraska. This limitation was placed in the first 40 hours of operation.

The pilot's family was unable to locate the maintenance logbooks or any records related to the gyrocopter. They reported that the pilot had purchased the kit in April of 2010 and had it certified in November of 2010. Other than installing new rotors, the family stated that there was no other maintenance performed on the gyrocopter prior to the accident.

### METEOROLOGICAL INFORMATION

The closest official weather observation station was Beatrice, Nebraska (KBIE), located 10 nautical miles (nm) northwest of the accident site. The elevation of the weather observation station was 1,324 feet mean sea level (msl). The routine aviation weather report (METAR) for KBIE, issued at 1435, reported, winds 250 degrees at 5 knots, visibility 10 miles, sky condition clear, temperature 15 degrees Celsius (C), dew point minus 01 degrees C, altimeter 30.27

inches.

## WRECKAGE AND IMPACT INFORMATION

The accident site was located in the middle of a street in front of the pilot's house. The gyroplane impacted the ground on a magnetic heading of 270 degrees.

The main wreckage included one seat, the instrument panel, fuel tank, engine, propeller, main rotor, and structure of the gyrocopter. The entire assembly had been charred, melted, and partially consumed by fire. Two FAA inspectors examined the wreckage. Flight control continuity was confirmed. An examination of the engine revealed no anomalies.

## MEDICAL AND PATHOLOGICAL INFORMATION

The Douglas County Hospital Morgue performed the autopsy on the pilot on May 4, 2011. The autopsy concluded that the cause of death was blunt force trauma and the report listed the specific injuries.

The FAA's Civil Aerospace Medical Institute, Oklahoma City, Oklahoma, performed toxicological tests on specimens that were collected during the autopsy (CAMI Reference # 201100082001). Results were negative for carbon monoxide, cyanide, and ethanol. Etomidate was detected in the liver and blood, 0.031 ug/ml of Midazolam was detected in the blood, and trace amounts were detected in the liver. Midazolam and Etomidate are used for sedation and would have been administered as the pilot was transported to the hospital.

## History of Flight

Initial climb	Collision with terr/obj (non-CFIT) Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

## Pilot Information

Certificate:	Private	Age:	68, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	03/17/2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	650 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Norris	Registration:	N103EB
Model/Series:	Dominator	Aircraft Category:	Gyroplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	001
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Subaru
ELT:	Not installed	Engine Model/Series:	EA 81
Registered Owner:	On file	Rated Power:	100 hp
Operator:	On file	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	KBIE, 1324 ft msl	Observation Time:	1435 CDT
Distance from Accident Site:	10 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	335°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	15°C / -1°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 250°	Visibility (RVR):	
Altimeter Setting:	30.27 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Blue Springs, NE	Type of Flight Plan Filed:	None
Destination:	Blue Springs, NE	Type of Clearance:	None
Departure Time:	1430 CDT	Type of Airspace:	

## Wreckage and Impact Information

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

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Jennifer Rodi	<b>Adopted Date:</b>	11/17/2011
<b>Additional Participating Persons:</b>	Jim Sazama; FAA FSDO; Lincoln, NE Owen Grimm; FAA Flight Standards District Office; Lincoln, NE		
<b>Publish Date:</b>	11/17/2011		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=79022">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=79022</a>		

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