

NATIONAL TRANSPORTATION SAFETY BOARD • PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT Use this form (Form 6120.1) to report civil and public aircraft accidents and incidents**BASIC INFORMATION****Accident/Incident Location**Nearest City/Place: Eveleth State: MNZIP: 55734 Country: USALatitude: 47-25-27.0N Longitude: 92-29-47.6W

(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/TimeDate: 11/16/2024 Local Time: 16:15
mm/dd/yyyy HH:MMTime Zone: CSTCollision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None**AIRCRAFT INFORMATION**Registration Number: NoneManufacturer: Rotor Flight DynamicsModel: Dominator gyrocopterSerial Number: Unknown

Year of Manufacture: _____

Amateur-Built: ☒ Yes ☐ No If Yes: ☐ Original Design ☒ Kit/PlansMake: Dominator

- ☐
- IFR-Equipped and Certified
-
- ☐
- Commercial Space Flight
-
- ☐
- Unmanned Aircraft

Maximum Gross Weight: 254 lbs.

Weight at Time of Accident/Incident: _____ lbs.

Number of Seats: 1 Flight Crew Seats: _____

Cabin Crew Seats: _____ Passenger Seats: _____

Number of Engines: 1**Category of Aircraft**
(Select one)

- ☐
- Airplane
-
- ☐
- Balloon
-
- ☐
- Blimp/Dirigible
-
- ☐
- Glider
-
- ☐
- Gyroplane
-
- ☐
- Helicopter
-
- ☐
- Powered Lift
-
- ☐
- Rocket
-
- ☒
- Ultralight
-
- ☐
- Unknown

Type of Airworthiness Certificate
(Check all that apply)

- | | |
|---|---|
| Standard | Special |
| ☐ Normal | ☐ Restricted |
| ☐ Aerobatic | ☐ Limited |
| ☐ Balloon | ☐ Provisional |
| ☐ Commuter | ☐ Special Flight |
| ☐ Transport | ☐ Experimental |
| ☐ Utility | ☐ Special Light-Sport |
| | ☐ Experimental Light-Sport |
| ☐ Certificate of Authorization or Waiver (COA) | |
| ☒ None ☐ Unknown | |

Landing Gear
(Check all that apply)

- | | |
|---|------------------------------------|
| ☐ Retractable | ☐ High Skid |
| ☒ Tricycle | ☐ Skid |
| ☐ Tailwheel | ☐ Ski/Wheel |
| ☐ Emergency Float | ☐ Hull |
| ☐ Float | ☐ Ski |
| ☐ Amphibian | |
| ☐ Other Launch/Recovery System | |
| ☐ None | ☐ Unknown |

Engine Type (Select one)

- | | |
|--|-------------------------------------|
| ☒ Reciprocating | ☐ Liquid Rocket |
| ☐ Turbo Shaft | ☐ Solid Rocket |
| ☐ Turbo Prop | ☐ Hybrid Rocket |
| ☐ Turbo Jet | ☐ None |
| ☐ Turbo Fan | ☐ Unknown |
| ☐ Electric | |

Fuel System Type (Reciprocating)

- ☒
- Carburetor
- ☐
- Fuel Injected

Engine	Engine Manufacturer	Engine Model/Series	Engine Serial Number	Date of Mfg. (mm/dd/yyyy)	Rated Power ☐ Horsepower or ☐ Lbs. of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	<u>Rotax</u>	<u>582 UL</u>			<u>65</u>	<u>15</u>	<u>15</u>	<u>15</u>
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

- ☐
- 100-Hour
-
- ☐
- AAIP
-
- ☐
- Annual
-
- ☐
- Continuous Airworthiness
-
- ☐
- Condition Inspection
-
- ☒
- Unknown

Date of Last Inspection: _____
mm/dd/yyyyAirframe Total Time: 15.0 hrs

Hours measured at (Select one)

☐ Last Inspection ☒ Time of Accident/Incident**Type of Maintenance Program** (Select One)

- ☐
- Annual
-
- ☐
- Conditional (Amateur-built only)
-
- ☐
- Manufacturer's Inspection Program
-
- ☐
- Other Approved Inspection Program
-
- ☐
- (AAIP) Continuous Airworthiness
-
- ☐
- Other, specify: _____

Description of Fire Extinguishing System

- ☒
- None
-
- ☐
- Specify: _____

Additional Equipment

- ☐
- ADS-B
-
- ☐
- Airframe Parachute
-
- ☐
- Angle of Attack Indicator
-
- ☐
- Autopilot
-
- ☐
- Autopilot/FMS, Model: _____
-
- ☐
- Coupled Flight Director
-
- ☐
- Data Recorder
-
- ☐
- Device Stall Warning System
-
- ☐
- Electronic Flight Bag or Handheld Device
-
- ☐
- Electronic Multifunction Display
-
- ☐
- Electronic Primary Flight Display
-
- ☐
- Flight Management System

- ☒
- Handheld GPS
-
- ☐
- Heads Up Display
-
- ☐
- Night Vision Goggles
-
- ☐
- Onboard Weather
-
- ☐
- Primary Flight Display
-
- ☐
- SAS, Number of Axes: _____ Model: _____
-
- ☐
- Satellite Tracking Device
-
- ☐
- Stall Warning System
-
- ☐
- Video Recording Device
-
- ☐
- Wire Strike Detection
-
- ☐
- Wire Strike Protection
-
- ☒
- Other, Specify:
- handheld aircraft band radio and
- +

ELT Installed: ☐ Yes ☒ No If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☐ C126 (406 MHz)Was ELT still mounted in aircraft? ☐ Yes ☐ NoWas ELT still connected to antenna? ☐ Yes ☐ NoDid ELT activate? ☐ Yes ☐ NoIf activated: Did ELT aid in locating aircraft? ☐ Yes ☐ NoIf not activated: Indicate Reason: ☐ Impact Damage☐ Fire Damage ☐ Battery Expired/Damaged ☐ Unknown**Propeller 1** ☐ Fixed Pitch
☐ Controllable Pitch
☒ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2 ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: Not registered, but purchaser is Steven Koepek

Fractional Ownership Aircraft:

☐ Yes☒ NoCity: EvelethState: MNZIP: 55734Country: USA**Operator of Aircraft**☒ The Operator is also the Registered Owner☒ Same address as Registered Owner

Name: _____

Doing Business As: _____

City: _____

State: _____

Air Carrier/Operator Designator (4-character code): _____

ZIP: _____

Country: _____

Operating Certificates Held

(Check all that apply)

- ☒ None
- ☐ Flag Carrier Operating Certificate (FAR 121)
- ☐ Supplemental
- ☐ Air Cargo
- ☐ Foreign Air Carriers (FAR 129)
- ☐ Rotorcraft External Load (FAR 133)
- ☐ Commuter Air Carrier (FAR 135)
- ☐ On-Demand Air Taxi (FAR 135)
- ☐ Commercial Air Tour (FAR 136)
- ☐ Agricultural Aircraft (FAR 137)
- ☐ Pilot School (FAR 141)
- ☐ Certificate of Authorization or Waiver (COA)
- ☐ Commercial Space Transportation Experimental Permit
- ☐ Commercial Space Transportation License
- ☐ Other Operator of Large Aircraft

Regulation Flight Conducted Under

- ☐ FAR 91 ☐ FAR 129 ☐ FAR 415
- ☒ FAR 103 ☐ FAR 133 ☐ FAR 431
- ☐ FAR 121 ☐ FAR 135 ☐ FAR 435
- ☐ FAR 125 ☐ FAR 137 ☐ FAR 437
- ☐ FAR 450
- ☐ FAR 91 Special Flight
- ☐ Non-US, Commercial
- ☐ Non-US, Non-commercial
- ☐ Public Aircraft (Select one)
- ☐ Armed Forces
- ☐ Federal
- ☐ State
- ☐ Local
- ☐ Unknown

Revenue Operation for FAR 121, 125, 129, 135

(Select one for each group)

- ☐ Scheduled or Commuter ☐ Domestic
- ☐ Non-Scheduled or Air Taxi ☐ International
- ☐ Passenger
- ☐ Cargo
- ☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137 (Select one)

- ☐ Aerial Application ☐ Firefighting
- ☐ Aerial Observation ☐ Flight Test
- ☐ Air Drop ☐ Glider Tow
- ☐ Air Race/Show ☐ Instructional
- ☐ Banner Tow ☐ Other Work Use
- ☐ Business ☒ Personal
- ☐ Executive/Corporate ☐ Positioning
- ☐ External Load ☐ Skydiving
- ☐ Ferry ☐ Unknown

Revenue Sightseeing Flight☐ Yes ☐ No**Air Medical Flight**☐ Yes ☐ No**AIRPORT INFORMATION (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)**Airport Name: Eveleth Virginia Regional AirportDistance From Airport Center: 1.50 sm.Airport Identifier: KEVMDirection From Airport: 25.00 degrees trueProximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/AAirport Elevation: 1,385.00 ft. MSL**Runway Information**Runway ID: 27L Length: 4,000 ft. Width: 75 ft.**Runway/Landing Surface (Check all that apply)**

- ☒ Asphalt ☐ Grass/Turf ☐ Ice ☐ Snow
- ☐ Concrete ☐ Gravel ☐ Macadam ☐ Water
- ☐ Dirt ☐ Helideck ☐ Metal/Wood ☐ Unknown
- ☐ Elevated Heliport ☐ Helistop ☐ Off-site landing area

Condition of Runway/Landing Surface (Check all that apply)

- ☒ Dry ☐ Snow-Compacted ☐ Water-Calm
- ☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
- ☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
- ☐ Rough ☐ Snow-Wet ☐ Wet
- ☐ Rubber Deposits ☐ Soft
- ☐ Slush-Covered ☐ Vegetation ☐ Unknown

Approach/Departure Segment (Select one)

- ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach
- ☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☐ Go Around
- ☐ Initial Climb ☐ Crosswind ☒ Unknown

IFR Approach (Check all that apply)

- ☐ None
- ☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice
- ☐ SDF ☐ Sidestep ☐ LDA ☐ GPS
- ☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Unknown
- ☐ VOR/DME ☐ Localizer Only ☐ Visual
- ☐ TACAN ☐ LOC-back course ☐ Contact
- ☐ RNAV ☐ Circling

VFR Approach (Check all that apply)

- ☒ None
- ☐ Traffic Pattern ☐ Stop and Go
- ☐ Straight-In ☐ Touch and Go
- ☐ Valley/Terrain Following ☐ Simulated Forced Landing
- ☐ Go Around ☐ Forced Landing
- ☐ Full Stop ☐ Precautionary Landing
- ☐ Unknown

"FLIGHT CREWMEMBER 1" INFORMATION**"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident**

☐ Captain ☐ First Officer ☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 1" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 1" Identification

First Name: Steven

City of Residence: Eveleth

Middle Initial: A

State: MN ZIP: 55734

Last Name: Koepeke

Country: USA

Age at time of Accident/Incident: 57

Date of Birth: [REDACTED] (mm/dd/yyyy)

Certificate Number: [REDACTED]

Degree of Injury

☐ None ☐ Serious
☐ Unknown ☐ Fatal
☒ Minor

Seat Occupied

☐ Left ☐ Front ☐ Unknown
☐ Right ☐ Rear
☐ Center ☒ Single

Restraint Type**Available**

☐ None
☒ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Used

☐ None
☐ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Supplemental Restraint, specify: _____

Inflatable Restraints

☐ Not Installed
☐ Installed
☐ Not Deployed
☐ Deployed
☐ Unknown

Pilot Certificate(s) (Check all that apply)

☒ None ☐ Flight Instructor ☐ Commercial
☐ US Military ☐ Private ☐ Recreational
☐ Airline Transport ☐ Foreign ☐ Sport
☒ Student ☐ Flight Engineer

Principal Occupation

☐ Pilot
☒ Other
☐ Unknown

Medical Certificate

☒ None ☐ Class 3 ☐ Unknown
☐ Class 1 ☐ BasicMed
☐ Class 2 ☐ Driver's License (Sport Pilot only)

Medical Certificate Validity

☐ Without limitations/waivers ☐ Unknown
☐ With limitations/waivers ☒ N/A
☐ Special Issuance

Date of Last Medical

 mm/dd/yyyy

Medical Certificate Limitations**Medical Certificate Special Limitations****Personal Flight Equipment** (Check all that apply)

☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ Personal locator beacon(s) (PLB) ☐ Fire resistant gloves
☐ Helmet visor ☐ Night vision goggles ☐ Personal flotation ☒ Other: Handheld aviation radio and headset inside helmet

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:

 mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

Airplane Rating(s)
(Check all that apply)

☐ Single-Engine Land
☐ Single-Engine Sea
☐ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s)
(Check all that apply)

☐ None
☐ Airship
☐ Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s)
(Check all that apply)

☒ None
☐ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s)
(Check all that apply)

☒ None ☐ Instrument Airplane
☐ Airplane Single-Engine ☐ Instrument Helicopter
☐ Airplane Multiengine ☐ Helicopter
☐ Gyroplane ☐ Glider
☐ Powered lift ☐ Sport

Type Ratings and Applicable Logbook Endorsements

Sport pilot aircraft solo
 Sport pilot solo cross country
 Sport pilot takeoffs and landings at another airport within 25nm
 Sport pilot flight in LSA greater than 87 nautical mph

Student Endorsements (Include dates)

Student pilot issued July 10, 2020. Expired July 10, 2022 because did not take checkride and oral exam, and did not retake student pilot written exam. Certificate [REDACTED]

Have flown 120 hrs in powered paragliders and 130 hours in ultralight fixed wing type aircraft (FAR 103)

Flight Time (Enter hours for each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Multi-engine Rotorcraft	Tail-wheel
						Actual	Simulated					
Total Time	325		75									
Pilot in Command (PIC)	270		55									
Time as Instructor												
This Make/Model												
Last 90 Days	15											
Last 30 Days	0											
Last 24 Hours	0											

"FLIGHT CREWMEMBER 2" INFORMATION**"Flight Crewmember 2" Responsibilities at the Time of Accident/Incident**

☐ Captain ☐ First Officer ☐ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 2" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 2" Identification

First Name: _____

City of Residence: _____

Middle Initial: _____

State: _____ ZIP: _____

Last Name: _____

Country: _____

Age at time of Accident/Incident: _____

Date of Birth: _____ (mm/dd/yyyy)

Certificate Number: _____

Degree of Injury

☐ None ☐ Serious
☐ Unknown ☐ Fatal
☐ Minor

Seat Occupied

☐ Left ☐ Front ☐ Unknown
☐ Right ☐ Rear
☐ Center ☐ Single

Restraint Type**Available**

☐ None
☐ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Used

☐ None
☐ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Inflatable Restraints

☐ Not Installed
☐ Installed
☐ Not Deployed
☐ Deployed
☐ Unknown

Pilot Certificate(s) (Check all that apply)

☐ None ☐ Flight Instructor ☐ Commercial
☐ US Military ☐ Private ☐ Recreational
☐ Airline Transport ☐ Foreign ☐ Sport
☐ Student ☐ Flight Engineer

Supplemental Restraint, specify: _____

Principal Occupation

☐ Pilot
☐ Other
☐ Unknown

Medical Certificate

☐ None ☐ Class 3 ☐ Unknown
☐ Class 1 ☐ BasicMed
☐ Class 2 ☐ Driver's License (Sport Pilot Only)

Medical Certificate Validity

☐ Without limitations/waivers ☐ Unknown
☐ With limitations/waivers ☐ N/A
☐ Special Issuance

Date of Last Medical

 mm/dd/yyyy

Medical Certificate Limitations**Medical Certificate Special Limitations****Personal Flight Equipment** (Check all that apply)

☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ Personal Locator Beacon(s) (PLB) ☐ Fire resistant gloves
☐ Helmet visor ☐ Night vision goggles ☐ Personal flotation ☐ Other: _____

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:

 mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

Airplane Rating(s)
(Check all that apply)

☐ Single-Engine Land
☐ Single-Engine Sea
☐ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s)
(Check all that apply)

☐ None
☐ Airship
☐ Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s)
(Check all that apply)

☐ None
☐ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s)
(Check all that apply)

☐ None ☐ Instrument Airplane
☐ Airplane Single-Engine ☐ Instrument Helicopter
☐ Airplane Multiengine ☐ Helicopter
☐ Gyroplane ☐ Glider
☐ Powered lift ☐ Sport

Type Ratings and Applicable Logbook Endorsements**Student Endorsements** (Include dates)

Flight Time (Enter hours for each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Multi-engine Rotorcraft	Tail-wheel
						Actual	Simulated					
Total Time												
Pilot in Command (PIC)												
Time as Instructor												
This Make/Model												
Last 90 Days												
Last 30 Days												
Last 24 Hours												

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information.)

Additional Crewmember Information		Seat Occupied	Injury
First Name: _____	City of Residence: _____	☐ Left ☐ Rear ☐ Center ☐ Single ☐ Right ☐ Unknown ☐ Front	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Middle Initial: _____	State: _____ Zip: _____		
Last Name: _____	Country: _____		
Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ Personal locator beacon(s) (PLB) ☐ Fire resistant gloves ☐ Helmet visor ☐ Night vision goggles ☐ Personal flotation ☐ Other: _____			
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer		Restraint Type Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs.		

Additional Crewmember Information		Seat Occupied	Injury
First Name: _____	City of Residence: _____	☐ Left ☐ Rear ☐ Center ☐ Single ☐ Right ☐ Unknown ☐ Front	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Middle Initial: _____	State: _____ Zip: _____		
Last Name: _____	Country: _____		
Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ Personal Locator Beacon(s) (PLB) ☐ Fire resistant gloves ☐ Helmet visor ☐ Night vision goggles ☐ Personal flotation ☐ Other: _____			
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer		Restraint Type Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs.		

PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet, if necessary.)

Number of Passengers _____	Seat	Injury	Restraint Type	Inflatable Restraints	Age
Passenger Information First Name: _____ City: _____ Middle Initial: _____ State: _____ Zip: _____ Last name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ PLB ☐ Fire resistant gloves ☐ Night vision goggles ☐ Helmet visor ☐ Personal flotation ☐ Other: _____	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If under 5 years, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

First Name: _____ City: _____ Middle Initial: _____ State: _____ Zip: _____ Last name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ PLB ☐ Fire resistant gloves ☐ Night vision goggles ☐ Helmet visor ☐ Personal flotation ☐ Other: _____	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If under 5 years, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ Zip: _____ Last name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ PLB ☐ Fire resistant gloves ☐ Night vision goggles ☐ Helmet visor ☐ Personal flotation ☐ Other: _____	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If under 5 years, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ Zip: _____ Last name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other Personal Flight Equipment (Check all that apply) ☐ Fire resistant flight suit ☐ Helmet ☐ Laser protective visor/glasses ☐ PLB ☐ Fire resistant gloves ☐ Night vision goggles ☐ Helmet visor ☐ Personal flotation ☐ Other: _____	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Supplemental Restraint, specify: _____	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If under 5 years, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION

Last Departure Point	Time of Departure	Flight Information	Destination	Type Flight Plan Filed
Airport ID: <u>KEVM</u> City: <u>Eveleth</u> State: <u>MN</u> Country: <u>USA</u>	Time: <u>16:05</u> HH:MM Time Zone: <u>CST</u>	Flight Number: _____ Operating as Flight _____	Airport ID: <u>KEVM</u> City: <u>Eveleth</u> State: <u>MN</u> Country: <u>USA</u>	☒ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown Activated? ☐ Yes ☐ No ☐ Unknown

Type of ATC Clearance/Service <i>(Check all that apply)</i>					
☐ Certificate of Authorization	☐ Special VFR	☐ Special IFR	☐ VFR Flight Following	☐ Cruise	
☐ VFR	☐ IFR	☐ VFR On Top	☐ Traffic Advisory	☐ Unknown / NA	
☒ None					
Airspace where the accident/incident occurred <i>(Check all that apply)</i>					
☐ Class A	☐ Class G	☐ Military Operations Area (MOA)	☐ Special		
☐ Class B	☐ Demo Area	☐ Airport Advisory Area	☐ Air Traffic Control Area		
☐ Class C	☐ Warning Area	☐ Jet Training Area	☐ Unknown		
☐ Class D	☐ Prohibited Area	☐ TRSA			
☒ Class E	☐ Restricted Area	☐ FAR 93			
Altitude of In-Flight Occurrence: _____ ft. MSL					
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE					
Source of Pilot Weather Information <i>(Check all that apply)</i>			Weather Observation Facility		
☐ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☒ Automated Report ☐ Electronic Flight Bag-Application:			☐ Company ☐ Military ☐ Internet ☐ None ☐ Unknown		
☐ On-Board Weather			Facility ID: <u>KEVM</u> Observation Time: <u>3pm</u> Time Zone: <u>CST</u> Distance from Accident Site: <u>1.50</u> nm Direction from Accident Site: <u>25.00</u> degrees true		
Basic Conditions		Lowest Cloud Condition	Light Condition		
☒ VMC ☐ IMC ☐ Unknown		_____ ft. AGL	☐ Dawn ☒ Day ☐ Dusk ☐ Night ☐ Dark Night ☐ Bright Night ☐ Unknown		
Sky/Lowest Cloud Condition		Ceiling	Ceiling Height		
☒ Clear ☐ Few ☐ Partial ☐ Obscuration ☐ Scattered		☐ Thin Broken ☐ Thin Overcast ☐ Unknown	☒ None (Clear) ☐ Broken ☐ Overcast ☐ Obscured ☐ Indefinite ☐ Unknown	_____ ft. AGL	
				Temperature: _____ (°C) or <u>48.6</u> (°F) Dewpoint: _____ (°C) or _____ (°F)	
Altimeter Setting:	Wind Direction	Wind Speed	Wind Gusts	Visibility	
_____ (Hg), or _____ (mb)	☐ Variable or Direction: <u>270.00</u> degrees true	☐ Calm ☐ Light and Variable or Speed: <u>8.0</u> kts	☒ Not Gusting or Speed: _____ kts	_____ miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft.	
Type of Precipitation <i>(Check all that apply)</i>				Restriction to Visibility <i>(Check all that apply)</i>	
☒ None ☐ Rain ☐ Snow ☐ Hail ☐ Rain Showers				☐ Drizzle ☐ Ice Pellets ☐ Snow Pellets ☐ Snow Grains ☐ Ice Crystals	
☐ Freezing Rain ☐ Snow Shower ☐ Ice Pellets Shower ☐ Freezing Drizzle				☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☒ Smoke ☐ Dust ☐ Unknown	
Icing Forecast		Intensity of Precipitation	Icing Actual		Turbulence <i>(Check all that apply)</i>
Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown	Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown	Amount ☐ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown	Type ☒ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme
NOTAMS (D and FDC), AIRMETS, SIGMETs, PIREPs in effect at the time of the accident/incident:					
<u>none</u>					

DAMAGE TO AIRCRAFT AND OTHER PROPERTY**Aircraft Damage**

- ☐ None ☒ Substantial
☐ Minor ☐ Destroyed
 ☐ Unknown

Aircraft Fire

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Aircraft Explosion

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Description of Damage to Aircraft and Other Property *(Use additional sheet, if necessary.)*

Rotor was bent and now unuseable. Engine has failed, but it shows now damage on the exterior. Lower section of rudder/horizontal stabilizer is bent slightly. Wind screen is broken off from screws. Otherwise, it is intact. Propeller is not damaged.

NARRATIVE HISTORY OF FLIGHT *(Please type or print in ink.)*

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and location, services obtained, and intended destination. Provide as much detail as possible.

Hello Mr. Thurston,

I have gotten out of the hospital and am still recovering from my gasoline burns, but all seems to be healing although it will take time. I have copied your list of questions and given you my answers following the note "My answers:"

In addition to the flight hour totals below, please reply to the following:

1) Tell me your story, from your preflight brief/plan to the mishap location? My answer: On November 16 at about 3pm at the Eveleth/Virginia airport (KEVM), I checked the weather and it was sunny in the upper 40's to low 50's degrees F. I removed the gyrocopter from my rented hanger. I checked over the gyrocopter components and found it to be flight worthy. I filled the fuel tank which was enough for about 1 hr of flight. I started the engine and warmed it up for about 10 minutes. There was another airplane that doing touch and goes, so I waited another 5 to 10 minutes to clear the runway so I could back taxi to the other end and take off into the approximately 7 mph head on wind. After back taxiing to the off runway taxi waiting area, I set my rpms to 3800 and checked each of the dual ignitions (found working ok), I then announced my departure on my handheld radio (fitted to a chest mount holder). I pulled out onto the runway (27) and did a normal take off (gradual throttle increase, nose wheel raised slightly by controlling the rotor angle, then full throttle (6400 rpm), then flight in ground effect until reaching about 40 mph at which I maintained to climb out). I then flew to the left and went down wind to the east past the start of runway 27 maybe about a 3/4 mile (speed about 50 mph). Then I turned to the left (north) and flew for about another half mile and began to turn back to the west. I reached an altitude of 1000 ft AGL. I throttled the engine back to about 5800 rpm and went for another minute or two prior to the engine abruptly stopping (no sputtering, or whining, or popping, or drop in rpm....just sudden stop). Then I flew it to the ground in autorotation. I knew that I would be too far from the airport to make it back. I looked for an area within the bushy swamp without any trees and I landed it gently with a flaired landing so that it didn't need any forward movement. I didn't think of immediately releasing my seat belt when I touched down. I was preoccupied with shutting off the master electrical power, and holding the rotor control stick as steady as possible while the rotor was spinning down. As the rotor was spinning down, it got into its normal unstable rpm where it wants to flap and wobble. In hard ground this is not a problem. However, in the swampy ground which is spongy and soft, it became unstable enough to cause the gyrocopter to wobble and tip over on to the still spinning rotor assembly. The gyrocopter sunk some into the swamp. I think one of the main wheels might have landed in between the bunches of swamp vegetation growth such that it

OPERATOR/OWNER SAFETY RECOMMENDATION *(How could this accident/incident have been prevented?)*

Engine maintenance. Don't trust Rotax 2-stroke ultralight engines regardless of how many hours run from new condition.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on a separate sheet.)Was there Mechanical Malfunction/Failure? ☒ Yes ☐ No

(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)

Engine abruptly stopped with no indication of high exhaust gas temp, cylinder head temp., or coolant temp. There was no decline or increase in engine rpm or any popping noises. The engine just suddenly stopped.

Total Time/ Cycles On Part

15.0 Hours

_____ Cycles

Time Since This Part Inspected/Overhauled

15.0 Hours**FUEL & SERVICES INFORMATION**

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

5.0 Gallons

Fuel Type

☐ 100 Low Lead☒ Automotive☐ Jet A☐ Jet A-1☐ Unleaded AV☐ Other, specify _____

Other Services, if any, prior to departure:

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location:

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft.)

Aircraft Registration Number

Manufacturer: _____

Damage to Other Aircraft:

☐ Destroyed☐ Minor☐ Substantial☐ None

Model: _____

Registered Owner of Other Aircraft

Pilot of Other Aircraft

Name: _____

Name: _____

City: _____

City: _____

State: _____ ZIP: _____

State: _____ ZIP: _____

Country: _____

Country: _____

ADDITIONAL INFORMATION (Additional space for answers to any question.)

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

I understand that the information provided may be subject to public release.

Date of this report: <u>12/30/2024</u> <i>mm/dd/yyyy</i>	Name of Pilot/Operator: <u>Steven Koepke</u> Signature: _____ -or- ☒ Check here to electronically sign this document
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If a person other than Pilot/Operator is filing this report

Name: _____ Signature: _____ -or- ☐ Check here to electronically sign this document	Title: _____
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FOR NTSB USE ONLY

NTSB Accident/Incident No. CEN25LA046	Reviewed by NTSB AS Division Central Region Office (CEN)	Name of Investigator Michael J. Hodges	Date Report Received 12/30/2024
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gyrocopter to wobble and tip over on to the still spinning rotor assembly. The gyrocopter sunk some into the swamp. I think one of the main wheels might have landed in between the bunches of swamp vegetation growth such that it probably wasn't a flat surface.

When it toppled over, I was pinned underneath of it, hanging there with the waist only seat belt holding me. The seat belt wasn't super snugged up, but it pulled me in hard at a my torso when I was suspended from it. I tried to make some aviation radio calls without response on the local channel and the emergency channels. My radio was connected to my helmet with a headset and microphones, but I couldn't hear any responses. I thought I lost my cell phone after checking for it in its stored pocket, but I couldn't find it. About an hour later, I found my phone setting underneath by chest so I called 911 and then they sent rescue people. During this time of being suspended under the seat, gasoline was slowly running out of the seat molded fuel tank onto my coat and torso for which I received the chemical. I tried to reach the seat belt but couldn't get the button to move and release me. I had to have skin graft surgery to cover my burns and heal them, which is why it has taken me a while to respond.

2) Please explain anything with the aircraft or the flight that was out of the ordinary My answer: Nothing seemed out of ordinary until the engine suddenly stopped. I flew the gyrocopter to the ground while it was in autorotation. It still flew perfectly fine to the ground.... nothing else was broken on it.

3) What do you think the causal factors were? Thorough preflight check of fuel in the tank, no fuel, 2-stroke oil, or coolant leaks (as well as checking for sufficient oil and coolant), check of fuel lines, throttle cables, intact and connected electrical wires, flight control cables and mechanical linkage to rotor, and overall condition were done. Engine was warmed up for at least 15 minutes. Air temperature of 48 degrees should not have required richer jetting. Engine started right up and was running well at warm up, take off, and at cruise before it suddenly stopped (without a sputter or whining up or popping noise).

4) Are there lessons learned that you can share and teach in the future to help reduce the risk of this happening again to someone? My answer: Engine had low hours. I don't know why it just stopped running (will do more investigation when it is recovered). I don't think

the Rotax brand 2-stroke engines can be trusted to run any length of time. The time between overhauls is supposed to be 300hrs. This one didn't even make it to 5% of that time. I will never fly and ultralight aircraft with a 2-stroke engine because they can't be trusted (I have heard this from others, but now I believe them). I don't want to fly any ultralight aircraft again. Concerning seat belts, have a cutting tool available in case you are trapped and can't release the buckle.

5) What is the total time of the aircraft at the time of the incident? My answer: roughly 15 hrs

Send photo/scan the following Pilot Documents:

- Pilot Certificate Private pilot certificate with rotocraft category gyroplane class or Sport pilot certificate with gyroplane endorsement
- Medical Certificate
- Picture ID
- Pilot logbooks/ Last 12 months
- Flight Review Endorsement

My answers: I had a student pilot license (light sport) obtained in 2020 that was valid for 2 years. I have taken 37.2 hr of instructor flight lessons and 46 hours solo in fixed wing light sport airplanes. I did not have the time and life situations did not allow me to complete the checkride, so I just decided to fly ultralight aircraft: Powered paraglider, fixed wing ultralight airplanes, and the latest being an ultralight gyrocopter. I have my pilot log book for review. I'm not sure if I still have the student pilot license card.

Send photo/scan the following Aircraft Documents:

- Aircraft maintenance records for the last year including last annual condition inspection (airframe, engine, rotor and propeller)
- Airworthiness certificate
- Aircraft registration

My answers: This gyrocopter is a single seat ultralight single seat RFD Dominator that I purchased in early August 2025. It wasn't registered and it was sold to me without any documentation or manuals. I was told that it was a kit that had been assembled some 8 to 10 years ago, and that the original builder had passed away since then. It was being sold by his relative. I purchased it from a guy in Hayward, Wisconsin. I traded him a used travel trailer camper for his gyrocopter plus [REDACTED]. I was told that they had ran it up and down their runway at the Hayward airport over the years. It supposedly had around 10 hrs on it. At the time of purchased, we ran the engine and turned the rotor. It looked complete and in good condition, so I decided to purchase it.

The following you can provide in a return e-mail (times can be approximate):

Total time in make/model of aircraft

My answers = Powered paraglider=120 hrs, Cessna 172=4.5 hrs, Aventura 2 Light sport amphibian airplane=10 hrs, Aventura UL ultralight airplane=40 hrs, Phantom Ultralight airplane=60 hrs, Rans S6 LSA airplane=55 hrs, M-square LSA airplane, 5 hrs, Quicksilver MX sport ultralight=30hrs

- Total time in all aircraft in last 90 days

My answers = under 5 hrs ultralight

- Total time in all aircraft in the last year

My answer = under 15 hrs ultralight

- Total time in all aircraft

My answer=325hr

Weather Information:

- What weather services you obtained?
- What were the weather factors/conditions?

My answer: I listened to the airport weather service. The weather was sunny and warm enough for a short flight. The gyro has a partial wind blocking pod and windshield, but it otherwise open and non-enclosed. The winds were about 7 mph from the southwest/west and maybe about 10 to 12 mph in the air as judged comparing my indicated airspeed to my gps groundspeed.

Personal training within the last 2 years:

- Have you participated in the Wings program in the last 2 years? If so, provide two most recent dates.
- Have you attended any safety seminars in the last 2 years? If so, provide two most recent dates.
- Have you completed any Simulator training in the last 2 years? If so, provide two most recent dates.
- Have you completed any commercial or third party training in the last 2 years? If so, provide two most recent dates.

My answer: I spoke to some instructors about how to fly gyrocopters. I spoke to a person that had a similar ultralight single seat RTD dominator gyrocopter concerning how to take off and land. I studied much literature about how to fly gyrocopters. I took a ride in a larger 2 person gyrocopter. I watch all the Youtube episodes of Ron's Gyros in Searcy AL and spoke to him about techniques. I watched his several hours of videos many times. I did many practice runs of driving the gyrocopter on the ground before take off. I flew the gyrocopter about 10 short flights before having the engine out of my last flight. I thought the gyrocopter flew excellent and was very steady and controllable compared to ultralight fixed wing airplanes.

Air Carrier Specific Training within the last 2 years:

- Have you completed any air carrier initial training in the last 2 years? If so, provide two most recent dates.
- Have you completed any air carrier recurrent training in the last 2 years? If so, provide two most recent dates.
- Have you completed any air carrier re-qualification training in the last 2 years? If so, provide two most recent dates.
- Have you completed any air carrier transition training in the last 2 years? If so, provide two most recent dates.

My answers: No air carrier training concerning the above.

There was no damage to the swamp property on the ground. Landowner will remove the gyrocopter for me, and I will provide it to NTSB for inspection.