

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: KNOXVILLE State: TN

ZIP: 37920 Country: USA

Latitude: 35-53-08.2970 N Longitude: 083-57-27.6610 W

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

Accident/Incident Date/Time

Date: 10/22/2023 Local Time: 09:30 AM
mm/dd/yyyy

Time Zone: EST

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N 246 MZ

Manufacturer: AVIATION AIRCRAFT

Model: AVIATION FLYER MK IV

Serial Number: 1186-D

Year of Manufacture: 1996

Amateur-Built: ☒ Yes ☐ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

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

Maximum Gross Weight: 1150 lbs

Weight at Time of Accident/Incident: ± 850 lbs

Number of Seats: 2 Flight Crew Seats: _____

Cabin Crew Seats: _____ Passenger Seats: 1

Number of Engines: 1

Category of Aircraft

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

Type of Airworthiness Certificate

(Check all that apply)

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

Landing Gear

(Check all that apply)

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

Engine Type (Select one)

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

Fuel System Type (Reciprocating)

- ☒ Carburetor ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's 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	ROTAX	582	4016678		64	180	53	
Eng 2								
Eng 3								
Eng 4								

Last Inspection Type

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

Date Last Inspection: 02/27/2023
mm/dd/yyyy

Airframe Total Time: 177 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: _____

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☒ Ground Adjustable

Manufacturer: IVO

Model: _____

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☐ Yes ☒ No

If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

TSO No.: ☐ OC91 (121.5 MHz) ☐ OC91a (121.5 MHz)
☐ OC126 (406 MHz)

Was ELT still mounted in aircraft? ☐ Yes ☐ No

Was ELT still connected to antenna? ☐ Yes ☐ No

Did ELT Activate? ☐ Yes ☐ No

If activated:

Did ELT Aid in Locating Aircraft? ☐ Yes ☐ No

If not activated:

- Indicate Reason: ☐ Impact Damage
☐ Fire Damage
☐ Battery Expired/Damaged
☐ Unknown

Additional Equipment (Check all that apply)

- ☐ ADS-B
☐ Airframe Parachute
☐ Angle of Attack Indicator
☐ Autopilot
☐ Data Recorder
☐ Electronic Flight Bag or Handheld Device
☐ Electronic Multifunction Display
☐ Electronic Primary Flight Display
☒ Handheld GPS
☐ Heads Up Display
☐ Onboard Weather
☐ Satellite Tracking Device
☐ Stall Warning System
☐ Video Recording Device
☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: MARTIN J. ODENDAALCity: MARYVILLEState: TN ZIP: 37803Fractional Ownership Aircraft: ☐ Yes ☒ NoCountry: USA**Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered Owner

Name: _____

City: _____

Doing Business As: _____

State: _____ ZIP: _____

Air Carrier/Operator Designator (4 Character Code): _____

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 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 ☐ Unknown
☐ 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

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: SKY RANCHAirport Identifier: TN 98Proximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/ADistance From Airport Center: 1 smDirection From Airport: 136 degrees trueAirport Elevation: 830 ft. msl**Runway Information**Runway ID: 10 (L/R/C) Length: 2003 ft Width: 150 ft**Runway/Landing Surface (Check all that apply)**

- ☐ Asphalt ☒ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood
☐ Dirt ☐ Ice ☐ Snow ☐ Unknown

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 ☐ Final ☐ Aborted Landing (after touchdown)
☐ Crosswind ☐ Unknown

IFR Approach (Check all that apply)

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

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

☒ 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: MARTIN

City of Residence: MARYVILLE

Middle Initial: J

State: TN ZIP: 37803

Last Name: OPENDAALE

Country: BLOUNT

Age at time of Accident/Incident: 66 Date of Birth: 1957 mm dd yyyy

Certificate Number: [REDACTED]

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Restraint Type <table border="0"> <tr> <th>Available</th> <th>Used</th> </tr> <tr> <td> ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown </td> <td> ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown </td> </tr> </table>	Available	Used	☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Available	Used						
☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown						
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☒ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport		Medical Certificate Validity ☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance					
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown	Medical Certificate ☐ None ☒ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown	Date of Last Medical <u>06/09/2022</u> mm dd yyyy					

Medical Certificate Limitations

MUST HAVE AVAILABLE GLASSES FOR NEAR VISION.

Medical Certificate Special Issuance

Date of Last Flight Review
or Equivalent, Including
FAR 121/135 Checks: 07/08/2022
mm dd yyyy

Flight Review Aircraft

Make: CESSNA 150

Model: 150

Airplane Rating(s) (Choose all that apply) ☐ None ☒ Single-Engine Land ☒ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) (Choose all that apply) ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) (Choose all that apply) ☒ None ☐ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) (Choose all that apply) ☒ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
---	--	---	--

Type Ratings

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	232	23	232	---						
Pilot in Command (PIC)	232	23	232	---						
Time as Instructor										
This Make/Model										
Last 90 Days		23								
Last 30 Days		12								
Last 24 Hours										

"FLIGHT CREWMEMBER 2" INFORMATION

"Flight Crewmember 2" Responsibilities at the Time of Accident/Incident

☐ 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 ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☐ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Restraint Type <table style="width: 100%;"> <tr> <th style="text-align: left;">Available</th> <th style="text-align: left;">Used</th> </tr> <tr> <td>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☐ Lap only</td> <td>☐ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☐ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☐ 5-point</td> <td>☐ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>	Available	Used	☐ None	☐ None	☐ Lap only	☐ Lap only	☐ 3-point	☐ 3-point	☐ 4-point	☐ 4-point	☐ 5-point	☐ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Available	Used																
☐ None	☐ None																
☐ Lap only	☐ Lap only																
☐ 3-point	☐ 3-point																
☐ 4-point	☐ 4-point																
☐ 5-point	☐ 5-point																
☐ Unknown	☐ Unknown																
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer		Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance															
Principal Occupation ☐ Pilot ☐ Other ☐ Unknown	Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown	Date of Last Medical _____ mm dd yyyy															

Medical Certificate Limitations

Medical Certificate Special Issuance

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: _____
 mm dd yyyy

Flight Review Aircraft

Make: _____

Model: _____

Airplane Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
---	--	--	--

Type Ratings

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						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)

Crew Name and Address	Seat Occupied	Injury
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____	☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
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	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	

Crew Name and Address	Seat Occupied	Injury
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____	☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
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	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)

Name and Address	Seat	Injury	Restraint Type	Inflatable Restraints	Age
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ 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	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ 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	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ 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	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ 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	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>TN 98</u> City: <u>Knoxville</u> State: <u>TN</u> Country: <u>KNOX</u>	Time of Departure Time: <u>09:30 am</u> Time Zone: <u>EST</u>	Destination Airport ID: <u>TN 98</u> City: <u>Knoxville</u> State: <u>TN</u> Country: <u>KNOX</u>	Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
---	--	--	---

Type of ATC Clearance/Service (Check all that apply) ☒ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☐ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA			
Airspace where the accident/incident occurred (Check all that apply) ☐ 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: <u>1200</u> ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply) ☐ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☒ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☐ On-Board Weather	Weather Observation Facility Facility ID: <u>TYS</u> Observation Time: <u>09:15 am</u> Time Zone: <u>EST</u> Distance from Accident Site: <u>6</u> nm Direction from Accident Site: <u>± 300 10</u> degrees true
---	--

Basic Conditions ☒ VMC ☐ IMC ☐ Unknown	Light Condition ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night
Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered Lowest Cloud Condition Height _____ ft agl	Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl
Temperature: _____ (C) or _____ (F) Dew Point: _____ (C) or _____ (F) Altimeter Setting: _____ in. Hg or _____ MB	

Wind Direction ☐ Variable - or - Direction: _____ degrees true	Wind Speed ☒ Calm ☐ Light and Variable - or - Speed: _____ kts	Wind Gusts ☒ Not Gusting - or - Speed: _____ kts	Visibility <u>10 +</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft
---	---	--	---

Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☐ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☒ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals	Restriction to Visibility (Check all that apply) ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown
---	--	---

Icing Forecast Amount Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Icing Actual Amount Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Turbulence Type (Check all that apply) Severity ☒ None ☐ Light ☐ Clear Air ☐ Moderate ☐ Terrain-Induced ☐ Severe ☐ Convective Turbulence ☐ Extreme
---	---	---

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:

DAMAGE TO AIRCRAFT AND OTHER PROPERTY

Aircraft Damage

- ☐ None
☐ Minor
☒ Substantial
☐ Destroyed
☐ Unknown

Aircraft Fire

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

Aircraft Explosion

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

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

STARBOARD SIDE MAIN LANDING GEAR BADLY DAMAGED. STARBOARD SIDE HORIZONTAL STABILIZER DAMAGED. AIRFRAME TRANSVERSE TRUSS DAMAGED. AFT AIRFRAME BENT TO PORT $\pm$ 3 DEGREES. LEFT WING DAMAGED, OUTBOARD END. LOWER ENGINE COWL DESTROYED (FIBERGLASS).

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 and location, services obtained, and intended destination. Provide as much detail as possible.

AFTER PRE-FLIGHT INSPECTION, FUEL TAKEN ON, ^(10 GALS) ENGINE WARM UP, ENGINE RUN-UP, TYS ATIS INFO, I TOOK OFF ON RUNWAY 01 WITH THE ENGINE RPM AT 6300 RPM (MAX RPM IS 6800 RPM FOR 1 MINUTE ON THIS ENGINE). AT 100 FT ABOVE RUNWAY ALTITUDE (830 MSL) I REDUCED POWER TO 6000 RPM. (MAX CONTINUOUS RPM IS 6200 FOR THIS ENGINE - ROTAX 582). ABOUT 1 MINUTE INTO THE FLIGHT AT 400 FT ABOVE TERRAIN (1200 FT MSL) THE ENGINE STOPPED IN 2 ~~SEC~~ SECONDS FROM 6000 RPM. I WAS OVER U.T. AGRICULTURE RESEARCH FARM, AN AREA CONSIDERED AN EMERGENCY LANDING AREA. I TURNED AROUND ^(LEFT) IMMEDIATELY TO ATTEMPT A LANDING ON THE FARM. ABOUT 3/4 WAY THROUGH THE TURN A BUILDING CAME IN SIGHT WHICH I WOULD HAVE HIT IF I CONTINUED THE TURN. FOR A MOMENT I CONSIDERED TURNING STEEPER BUT ABANDONED THE IDEA AS I WAS AT TOO LOW AN AIRSPEED AND MAY HAVE STALLED AND SPIN. I MADE A RIGHT TURN, LOWERED ALTITUDE RAPIDLY, TOUCHED DOWN ON THE RIVER BANK, BOUNCED TO A NOSE HIGH ATTITUDE AND TO SLOW DOWN. I AVOIDED A TREE TO THE RIGHT AND HIT A SMALL TREE WITH THE LEFT WING AND THE AIRPLANE TURNED LEFT, $\pm$ 20°, AND ENTERED THE RIVER WITH A NOSE HIGH ATTITUDE. ABOUT 30 FT FROM THE SHORE. AFTERWARD I SAW A SMALL STEEL FENCE POST ON THE RIVER BANK WHICH BROKE THE ENGINE COWL, ~~RIGHT~~ MAIN GEAR AND RIGHT HORIZONTAL STABILIZER.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

I COULD HAVE AVOIDED SUBSTANTIAL DAMAGE TO THE AIRCRAFT BY LANDED DIRECTLY IN THE WATER BUT I WOULD HAVE HAD ABOUT 1000 FT TO SWIM. HENCE MY DECISION TO BOUNCE OFF THE RIVER BANK.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on 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.)

ROTAX 582. PISTON SEIZURE IN CYLINDER

Total Time/Cycles
On Part

177 Hours
Cycles

Time Since This Part
Inspected/Overhauled

Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff
(Convert from pounds, as necessary)

± 13 Gallons

Fuel Type

☐ 80/87 ☐ 115/145 ☐ Jet B ☐ Other, specify _____
☐ 100 Low Lead ☐ Jet A ☐ JP8
☐ 100/130 ☐ Jet A-1 ☒ Automotive

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFT

Was an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

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

OPENED THE PILOT SIDE DOOR, DISCONNECTED SEAT BELT AND EXITED THROUGH THE DOOR.

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

Aircraft Registration Number

Manufacturer: _____

Model: _____

Damage to Other Aircraft

☐ Destroyed ☐ Minor
☐ Substantial ☐ None

Registered Owner of Other Aircraft

Name: _____
City: _____
State: _____ ZIP: _____
Country: _____

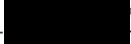
Pilot of Other Aircraft

Name: _____
City: _____
State: _____ ZIP: _____
Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

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

Date of this Report <u>12/06/2023</u> mm dd yyyy	Name of Pilot/Operator: <u>MARTIN J. GRENDAAL</u> Signature:  -- or -- ☐ Check here to electronically sign this document
--	---

If a Person Other than Pilot/Operator is Filing Report

Name: _____	Title: _____
Signature: _____	
-- or -- ☐ Check here to electronically sign this document	

FOR NTSB USE ONLY

NTSB Accident/Incident No. ERA24LA018	Reviewed by NTSB Regional Office ERA	Name of Investigator Ryan Enders	Date Report Received 12/15/2024
---	--	--	---