

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: Dubuque State: IA
 ZIP: _____ Country: United States of America
 Latitude: _____ Longitude: _____
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 06/27/2019 Local Time: 3:00 PM
mm/dd/yyyy Time Zone: Central

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

AIRCRAFT INFORMATION

Registration Number: N318RW

Manufacturer: Cessna

Model: 560

Serial Number: 560-0051

Year of Manufacture: 1990

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

☒ IFR-Equipped and Certified

☐ Commercial Space Flight

☐ Unmanned Aircraft

Maximum Gross Weight: 16,500 lbs

Weight at Time of Accident/Incident: 12,800 lbs

Number of Seats: 10 Flight Crew Seats: 2

Cabin Crew Seats: 0 Passenger Seats: 8

Number of Engines: 2

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

Special

- ☐ Restricted
☐ Limited
☐ Provisional
☐ Special Flight
☐ Experimental
☐ Special Light-Sport
☐ Experimental Light-Sport

☒ Certificate of Authorization or Waiver (COA)
☐ None ☐ Unknown

Landing Gear

(Check all that apply)

☐ Retractable

- ☒ Tricycle ☐ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ 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/Serial	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Rated Power ☐ Horsepower or ☒ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Pratt & Whitney	JTD15-5A	PCE 108095		2,900	8820.7	45.8	1836.7
Eng. 2	Pratt & Whitney	JTD15-5A	PCE 108097		2,900	8820.7	45.8	1836.7
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 01/30/2018
mm/dd/yyyy

Airframe Total Time: 8957.5 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: Engine Fire Bottles

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: Artex

Model or Part No.: C-402/453-5000-999

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☒ C126 (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: Mueller Aero, Inc.City: State: ZIP: Fractional Ownership Aircraft: ☐ Yes ☒ NoCountry: **Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered OwnerName: 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: Distance From Airport Center: smAirport Identifier: Direction From Airport: degrees trueProximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/AAirport Elevation: ft. msl**Runway Information**Runway ID: (L/R/C) Length: ft Width: 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 ☐ 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: David

City of Residence: [REDACTED]

Middle Initial: R

State: [REDACTED] ZIP: [REDACTED]

Last Name: Landsverk

Country: [REDACTED]

Age at time of Accident/Incident: [REDACTED] Date of Birth: [REDACTED] 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

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
☐ Student
 ☐ Sport
 ☐ Flight Engineer

Principal Occupation

☒ Pilot
☐ Other
☐ Unknown

Medical Certificate

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

Medical Certificate Validity

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

Date of Last Medical

12/21/2018
 mm/dd/yyyy

Medical Certificate Limitations

Holder shall possess glasses for near/intermediate vision.

Medical Certificate Special Issuance

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

08/10/2018
 mm/dd/yyyy

Flight Review Aircraft

Make: Cessna

Model: 560

Airplane Rating(s)

(Check all that apply)

☐ None
☐ 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 Multi-Engine
 ☐ Helicopter
☐ Gyroplane
 ☐ Glider
☐ Powered Lift
 ☐ Sport

Type Ratings

CE-500

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	11,663	1,292	2,703	8,960						
Pilot in Command (PIC)		1,292								
Time as Instructor		0								
This Make/Model										
Last 90 Days		52								
Last 30 Days		13								
Last 24 Hours		0								

"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) <i>(Check all that apply)</i> <table style="width: 100%;"> <tr> <td>☐ None</td> <td>☐ Flight Instructor</td> <td>☐ Commercial</td> <td>☐ US Military</td> </tr> <tr> <td>☐ Private</td> <td>☐ Recreational</td> <td>☐ Airline Transport</td> <td>☐ Foreign</td> </tr> <tr> <td>☐ Student</td> <td>☐ Sport</td> <td>☐ Flight Engineer</td> <td></td> </tr> </table>		☐ None	☐ Flight Instructor	☐ Commercial	☐ US Military	☐ Private	☐ Recreational	☐ Airline Transport	☐ Foreign	☐ Student	☐ Sport	☐ Flight Engineer		Medical Certificate <table style="width: 100%;"> <tr> <td>☐ None</td> <td>☐ Class 3</td> </tr> <tr> <td>☐ Class 1</td> <td>☐ Driver's License (Sport Pilot only)</td> </tr> <tr> <td>☐ Class 2</td> <td>☐ Unknown</td> </tr> </table>		☐ None	☐ Class 3	☐ Class 1	☐ Driver's License (Sport Pilot only)	☐ Class 2	☐ Unknown
☐ None	☐ Flight Instructor	☐ Commercial	☐ US Military																		
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☐ Student	☐ Sport	☐ Flight Engineer																			
☐ None	☐ Class 3																				
☐ Class 1	☐ Driver's License (Sport Pilot only)																				
☐ Class 2	☐ Unknown																				
Principal Occupation ☐ Pilot ☐ Other ☐ Unknown		Medical Certificate Validity <table style="width: 100%;"> <tr> <td>☐ Without limitations/waivers</td> <td>☐ Unknown</td> </tr> <tr> <td>☐ With limitations/waivers</td> <td>☐ N/A</td> </tr> <tr> <td>☐ Special Issuance</td> <td></td> </tr> </table>		☐ Without limitations/waivers	☐ Unknown	☐ With limitations/waivers	☐ N/A	☐ Special Issuance													
☐ Without limitations/waivers	☐ Unknown																				
☐ With limitations/waivers	☐ N/A																				
☐ Special Issuance																					
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: _____ mm/dd/yyyy		Flight Review Aircraft Make: _____ Model: _____																			

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> <table style="width: 100%;"> <tr> <td> ☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift </td> <td> ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport </td> </tr> </table>	☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift	☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
☐ 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 <i>(Enter appropriate number of hours in each box)</i>	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 ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign					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 ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign					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: <u>Curtis</u> City: _____ Middle Initial: <u>F</u> State: _____ Last Name: <u>Mueller</u> 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: <u>Jill</u> City: _____ Middle Initial: <u>K</u> State: _____ Last Name: <u>Garcia-Richmond</u> 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: <u>Wesley</u> City: _____ Middle Initial: <u>A</u> State: _____ Last Name: <u>Richmond</u> 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>KLAS</u> City: <u>Las Vegas</u> State: <u>NV</u> Country: <u>USA</u>	Time of Departure Time: <u>9:58 AM</u> Time Zone: <u>PDT</u>	Destination Airport ID: <u>91C</u> City: <u>Prairie du Sac</u> State: <u>WI</u> Country: <u>USA</u>	Type Flight Plan Filed ☐ None ☐ VFR/IFR ☐ Company VFR ☒ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☒ Yes ☐ No ☐ Unknown
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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 B ☐ Class C ☐ Class D ☐ Class E	☐ Class G ☐ Demo Area ☐ Warning Area ☐ Prohibited Area ☐ Restricted Area	☐ Military Operations Area (MOA) ☐ Airport Advisory Area ☐ Jet Training Area ☐ TRSA ☐ FAR 93	☐ Special ☐ Air Traffic Control Area ☐ Unknown	Altitude of In-Flight Occurrence: <u>23000</u> ft msl
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WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information

(Check all that apply)

☐ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☐ Automated Report ☐ Commercial Weather Service (DUATS) ☒ On-Board Weather	☐ Company ☐ Military ☐ Internet ☐ None ☐ Unknown
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Weather Observation Facility

Facility ID: _____
 Observation Time: _____
 Time Zone: _____
 Distance from Accident Site: _____ nm
 Direction from Accident Site: _____ 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: 29.92 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

_____ 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 ☐ 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 ☐ Explosion at Unknown Time
☐ On-Ground ☐ Unknown

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

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.

The pilot rested in his hotel room throughout the day prior to the accident flight completing light administrative duties. The pilot checked Prog charts, TAFs, and NOTAMS before bedtime. The next day, June 27, 2019, the pilot filed an IFR flight plan from Las Vegas, NV (KLAS) to Prairie du Sac, WI (91C) and received a standard weather briefing before leaving the hotel. The primary weather concern on this flight was a squall line moving out of Eastern Minnesota and Northeast Iowa impacting the last portion of the planned route. Deviations around this weather appeared routine. The only concern was the speed of the system as the planned arrival at 91C would be within an hour of the passage of this system. The pilot arrived at the FBO approximately two hours before the planned departure of 10:00 AM PDT (1700 Z) and performed a preflight with no discrepancies noted. The FBO GPU was turned on at approximately 9:00 AM PDT to cool the aircraft cabin and operate the Garmin GTN 750 to obtain latest weather with Sirius weather data.

There was one crewmember and three passengers on this flight. The owner of the aircraft, an elderly man, occupied the forward facing starboard seat in the center club. A female passenger, an employee of the aircraft owner and designated as his caregiver for this trip, sat in the rear facing starboard center club seat, directly across from the owner. A third male passenger, married to the caregiver, sat directly behind the copilot partition in the rear facing starboard seat.

The flight departed Runway 19L at KLAS at 1658Z, per the aircraft Honeywell GNS-XLS, with a clearance to 91C via the Las Vegas Five Departure using the Dove Creek transition (LAS5.DVC). The departure and climb were relatively smooth and the flight continued as planned to the filed altitude of 41,000 FT MSL (FL 410). The seat belt sign remained illuminated from start up through cruise.

Using the weather function on the GTN 750, the pilot was able to track cell movement, lightning, precipitation intensity, and cloud tops associated with the line of weather that had crossed the Mississippi as the flight approached the Midwest. Another important feature of the weather menu was PIREPs. For example crossing the Rocky Mountains the pilot noticed two PIREPS issued for Mountain Wave activity made recently along the route of flight. There were brief 300-400 ft. VSI fluctuations noted in the vicinity of the Mountain Wave PIREPS. Notably missing were any PIREPS on the south or southeast edge of the advancing squall line that was being closely monitored by the pilot. The cruise portion of the flight remained smooth as the flight entered Iowa.

While planning a deviation around the south side of the squall line, the pilot received an amended clearance (direct KG72I, then direct 91C) from Minneapolis Center. This clearance took the flight to a point northwest of KCID to avoid the weather. While monitoring the weather primarily with onboard weather radar and using the delayed NEXRAD as a secondary reference, the pilot asked for and received permission to fly past the assigned waypoint KG72I in an effort to obtain a greater distance from the squall line before turning direct to 91C. The pilot completed the Landing Data portion of the TOLD card and recorded ATIS Juliet at KMSN as well as the latest AWOS broadcast from the Baraboo-Dells Airport (KDLL) which was the closest weather source to 91C. No weather hazards were noted and the flight conditions remained smooth.

After turning direct to 91C and confirming this action with Air Traffic Control, the pilot, using onboard weather radar, determined that a greater deviation to the east was needed. The flight was now being controlled by Chicago Center. The request for a right (easterly deviation) was denied. The flight was instructed to descend from FL 240 to FL 200. During the descent the flight encountered the first of four 15-20 second severe turbulence events with a 5-10 second interval between events. The pilot made several urgent requests for a deviation to the right but was denied permission. The pilot did note prior to the descent that the ADS-B traffic displayed an aircraft 1,000 feet below, ahead and to the right. There may have been other aircraft in the area that prevented an immediate deviation. At one point the pilot did receive a clearance to deviate, but it was immediately canceled, most likely by a supervisor monitoring training. The severe turbulence flung checklists, charts, etc. out of their pockets and onto the panel and floor. At some point the assigned frequency of 133.30 flipped to standby so the pilot did transmit once on the last assigned frequency of 127.77 before returning to 133.30. The pilot reduced engine thrust to lessen the stress on the aircraft and help control the aircraft during the severe turbulence events.

After the first severe turbulence event, one of the passengers, the elderly man, could be heard complaining loudly about the severe



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

Operator/Owner Safety Recommendation

When a caretaker sees his or her charge in need of immediate help, and the severe turbulence has stopped, it is reasonable and perhaps admirable to render assistance to an elderly man struggling right in front of you. This event, however, shows the importance of always wearing a seat belt during flight. The pilot always wears the 5-point restraint from start up to shut down.

The threat of turbulence or other adverse weather can be mitigated in part by developing better models for prediction and dissemination during a standard weather briefing and Air Traffic Control communication with flight crews. Sirius and other weather services in the cockpit are excellent planning devices, but better onboard weather equipment with turbulence capabilities may help prevent encounters with severe turbulence in the future. Pilot Reports are always a valuable source of firsthand experiences of weather conditions in flight.

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.)

**Total Time/Cycles
On Part**

_____ Hours

_____ Cycles

**Time Since This Part
Inspected/Overhauled**

_____ Hours

FUEL & SERVICES INFORMATION**Fuel on Board at Last Takeoff**

(Convert from pounds, as necessary)

862 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

FBO provided GPU to power aircraft air conditioner and avionics one hour before 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

Normal exit through main cabin 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

07/01/2019

mm/dd/yyyy

Name of Pilot/Operator: David Rolf Landsverk

Signature:

-- or --

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.

CEN19LA188

Reviewed by NTSB Regional Office

Central Region

Name of Investigator

Lemishko

Date Report Received

7/1/2019