

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: Conway State: SC

 ZIP: 29527 Country: US

 Latitude: 33.78868 Longitude: -79.19368

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

Accident/Incident Date/Time

 Date: 01/14/2025 Local Time: 07:00

mm/dd/yyyy

HH:MM

Time Zone: _____

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

AIRCRAFT INFORMATION

 Registration Number: N938SE

 Manufacturer: Johnathan Eggers

 Model: Challenger 2

 Serial Number: CH2 0591-0687

 Year of Manufacture: 1,991

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

 Make: Challenger 2

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

 Maximum Gross Weight: 960 lbs.

 Weight at Time of Accident/Incident: 872 lbs.

 Number of Seats: 2 Flight Crew Seats: 1

 Cabin Crew Seats: _____ Passenger Seats: 1

Number of Engines: _____

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

- ☐
- 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
- ☐
- 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	Rotax	503	3980465		53	150	150	150
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

 Date of Last Inspection: 03/24/2022
 mm/dd/yyyy

 Airframe Total Time: 150.0 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: _____

 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 ☐ 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

Propeller 1 ☒ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

 Manufacturer: Tennessee Propeller

 Model: 2 Blade Wood 60x44
Propeller 2 ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**

Name: Kyle Rivera
 City: New Albany State: IN
 ZIP: 47150 Country: US

Fractional Ownership Aircraft: ☐ Yes ☒ No

Operator of Aircraft

☒ The Operator is also the Registered Owner

☐ Same address as Registered Owner

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

Doing Business As: _____

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

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 ☐ Fire fighting
☐ 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: _____

Airport Identifier: _____

Proximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A

Distance From Airport Center: _____ sm.

Direction From Airport: _____ degrees true

Airport Elevation: _____ ft. MSL

Runway Information

Runway ID: _____ Length: _____ ft. Width: _____ 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 ☐ Aborted Landing (after touchdown)
☐ 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: Kyle

City of Residence: New Albany

Middle Initial: A

State: IN ZIP: 47150

Last Name: Rivera

Country: US

Age at time of Accident/Incident: 27

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 <table border="0"> <tr> <th>Available</th> <th>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 ☐ 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 <u>11/19/2024</u> 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:

07/29/2024
mm/dd/yyyy

Flight Review Aircraft

Make: Diamond

Model: DA-40

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

High Performance / Complex SEL

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	766	9	696	31	125	37	10					
Pilot in Command (PIC)	645	9	644	1	113	30	10					
Time as Instructor	204	0	204	0								
This Make/Model												
Last 90 Days	124	9	124	0								
Last 30 Days	9	9	9	0								
Last 24 Hours	0	0	0	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 the apply)		Restraint Type	Inflatable Restraints
☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer	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
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs.	Supplemental Restraint, specify: _____	

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 the apply)		Restraint Type	Inflatable Restraints
☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer	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
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs.	Supplemental Restraint, specify: _____	

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

Number of Passengers <u>1</u>					
Passenger Information	Seat	Injury	Restraint Type	Inflatable Restraints	Age
First Name: <u>John</u> City: <u>Myrtle Beach</u> Middle Initial: _____ State: <u>SC</u> Zip: <u>29579</u> Last name: <u>Helm</u> Country: <u>US</u> ☐ Crew ☒ Passenger ☐ 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
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: _____					

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>KGRD</u> City: <u>Greenwood</u> State: <u>SC</u> Country: <u>US</u>	Time: <u>04:30</u> HH:MM Time Zone: _____	Flight Number: _____ Operating as Flight _____	Airport ID: <u>KHYW</u> City: <u>Conway</u> State: <u>SC</u> Country: <u>US</u>	☒ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown Activated? ☐ Yes ☐ No ☐ Unknown

Type of ATC Clearance/Service (Check all that apply)

- ☐ 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 (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: 1500 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
☒ Electronic Flight Bag-Application: ☐ Unknown
 ForeFlight
☐ On-Board Weather

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

Lowest Cloud Condition**Height**

_____ ft. AGL

Light Condition

- ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown
☐ Day ☐ Night ☒ Bright Night

Sky/Lowest Cloud Condition

- ☒ Clear ☐ Thin Broken
☐ Few ☐ Thin Overcast
☐ Partial ☐ Unknown
☐ Obscuration
☐ Scattered

Ceiling

- ☒ None (Clear)
☐ Broken
☐ Overcast
☐ Obscured
☐ Indefinite
☐ Unknown

Ceiling Height

_____ ft. AGL

Temperature: _____ (°C) or 28.0 (°F)

Dewpoint: _____ (°C) or _____ (°F)

Altimeter Setting:

_____ (Hg), or _____ (mb)

Wind Direction

☐ Variable or
 Direction: 270.00
 degrees true

Wind Speed

☐ Calm
☐ Light and Variable
 or
 Speed: 30.0 kts

Wind Gusts

☐ Not Gusting
 or
 Speed: _____ kts

Visibility

10.0 miles
 RVR: _____ feet
 RVV: _____ miles
 Density Altitude: _____ ft.

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

Intensity of Precipitation

- ☐ Light
☐ Moderate
☐ Heavy
☐ N/A
☐ Unknown

Icing Actual

Amount **Type**
☒ None ☐ N/A
☐ Trace ☐ Rime
☐ Light ☐ Clear
☐ Moderate ☐ Mixed
☐ Severe ☐ Unknown
☐ Unknown

Turbulence (Check all that apply)

Type **Severity**
☐ None ☐ Light
☒ Clean Air ☐ Moderate
☒ Terrain-Induced ☐ Severe
☐ Convective ☐ Extreme
 Turbulence

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

Do not recall

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.)

Damage to aircraft spurred from the impact with the barn roof. Landing gear sheered off and airframe warped.

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.

At approximately 4:30 AM, we departed from KGRD en route to Conway, South Carolina. Using ForeFlight and winds aloft data from the Aviation Weather Center (AWC), we estimated a flight time of around two hours, expecting a significant tailwind. I had created a performance model in my Foreflight, which I believed to be reasonably accurate. Given that we had encountered a right crosswind on the previous leg and our data had been consistent with actual conditions, I had confidence in my fuel calculations.

As the aircraft does not have a fuel gauge, I relied on past experience to estimate fuel consumption. Fuel burn had been accurate on previous legs, and I had no reason to believe we would not have enough fuel for this flight. The initial portion of the flight was uneventful, with smooth winds and clear skies. However, I observed that the expected tailwind had shifted, and our groundspeed was lower than anticipated. In response, I reduced throttle slightly to minimize fuel burn and adjusted altitude in search of more favorable winds. These changes did not yield a significant improvement in ground speed.

Upon having the airfield in sight, I descended to 1,500 feet and prepared for landing. Approximately 4–6 miles from the airport, the engine sputtered and then lost power completely. Initially, I suspected carburetor clogging as the cause. The Challenger II's published performance data suggests a relatively high glide ratio, so I immediately pitched for best glide speed and selected an open field for landing. The field was straight ahead, just beyond a field of trees.

As I descended, it became evident that the aircraft's actual glide performance was not as expected, and I would not clear the trees ahead. I initiated a right turn to avoid them and identified an alternate landing site. As I approached the field, I noticed power lines in my path. To avoid the risk of a power-off stall, I elected to pass below the lines rather than attempting to clear them.

The aircraft subsequently impacted a barn and came to rest. After the aircraft came to a stop, I assisted my passenger in exiting and ensured he was uninjured. We located a local resident, who then contacted the authorities.

At this time, I do not have a definitive explanation for the higher-than-expected fuel burn. Our estimated endurance should have provided an additional hour of flight time beyond our planned route, yet the engine failure occurred approximately 2.5 hours into the flight.

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

To prevent future accidents like this, I would suggest that if a fuel gage is not present, pilots should limit flight legs to no more than two hours at normal power settings to maintain an adequate fuel reserve. I also believe that I should have practiced a lot more before taking this aircraft on a cross country. My knowledge of the Challenger II's glide ratio and general performance characteristics was limited to available documentation and personal observations. More extensive practice, including simulated engine-out procedures, would have improved my ability to anticipate and manage an emergency landing in this specific aircraft. Given the discrepancy between expected and actual glide performance, I believe that pilots should consider more conservative assumptions when selecting emergency landing sites.

This experience has taught me more than I ever could have learned from a textbook or a simulator. I've always drilled emergency procedures, risk management, and ADM into my students, but now I truly understand what it feels like when things go wrong. Going forward, I'll use this firsthand experience to make sure my students are even better prepared than I was. I want them to not just know the right decisions to make, but to feel the weight of those decisions before they ever find themselves in a real emergency.

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.)

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)

10.0 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:

02/10/2025

mm/dd/yyyy

Name of Pilot/Operator: Kyle Rivera

Signature: _____

-or- ☒ Check here to electronically sign this document

If a person other than Pilot/Operator is filing this report

Name: _____

Title: _____

Signature: _____

-or- ☐ Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No.	Reviewed by NTSB AS Division	Name of Investigator	Date Report Received
ERA25LA097	Eastern Region	Lucas Winn	02/10/2025