

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: Boulder City Municipal Airport KBVU State: NV
 ZIP: 89005 Country: USA
 Latitude: _____ Longitude: _____
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 05/07/2019 Local Time: 4:02 PM
mm/dd/yyyy
 Time Zone: PDT

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

AIRCRAFT INFORMATION

Registration Number: N423EB

Manufacturer: Flight Design

Model: CTLSi

Serial Number: F-12-07-05

Year of Manufacture: 2013

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

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

Maximum Gross Weight: 1320 lbs

Weight at Time of Accident/Incident: 1230 lbs

Number of Seats: 2 Flight Crew Seats: _____

Cabin Crew Seats: _____ Passenger Seats: _____

Number of Engines: Single

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/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time <i>(hours)</i>	Time Since: Inspection <i>(hours)</i>	Overhaul <i>(hours)</i>
Eng. 1	Rotax	912 iS2	4417158		100	511.9	41.3	n/a
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 12/24/2018
mm/dd/yyyy

Airframe Total Time: 511.9 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: First Alert Tundra Spray

Propeller 1

- ☐ Fixed Pitch
- ☐ Controllable Pitch
- ☒ Ground Adjustable

Manufacturer: Neuform

Model: Composite Propeller

Propeller 2

- ☐ Fixed Pitch
- ☐ Controllable Pitch
- ☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: Kannad

Model or Part No.: AF406

TSO No.: ☐ OC91 (121.5 MHz) ☐ OC91a (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: <u>Miguel Giacaman</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		City: <u>Hendeson</u> State: <u>NV</u> ZIP: <u>89052</u> Country: <u>USA</u>	
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		☒ Same Address as Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Operating Certificates Held <i>(Check all that apply)</i> ☒ 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 <i>(Select one)</i> ☐ Armed Forces ☐ Federal ☐ State ☐ Local ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 <i>(Select one for each group)</i> ☐ Scheduled or Commuter ☐ Domestic ☐ Non-Scheduled or Air Taxi ☐ International ☐ Passenger ☐ Cargo ☐ Mail Contract Only	
Revenue Sightseeing Flight ☐ Yes ☒ No		Air Medical Flight ☐ Yes ☒ No	
AIRPORT INFORMATION <i>(Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)</i>			
Airport Name: <u>Boulder City Municipal Airport</u> Airport Identifier: <u>KBVU</u> Proximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A		Distance From Airport Center: <u>2</u> approx _____ sm Direction From Airport: <u>150 (south of RNY 15)</u> degrees true Airport Elevation: <u>2203</u> ft. msl	
Runway Information Runway ID: <u>15</u> (L/R/C) Length: <u>3852</u> ft Width: <u>75</u> ft		Condition of Runway/Landing Surface <i>(Check all that apply)</i> ☒ 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	
Runway/Landing Surface <i>(Check all that apply)</i> ☒ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water ☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Dirt ☐ Ice ☐ Snow ☐ Unknown		Approach/Departure Segment <i>(Select one)</i> ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach ☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☒ Go Around ☐ Initial Climb ☐ Crosswind ☐ Unknown ☐ Final ☐ Aborted Landing (after touchdown)	
IFR Approach <i>(Check all that apply)</i> ☒ None ☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice ☐ SDF ☐ Sidestep ☐ LDA ☐ GPS ☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Visual ☐ VOR/DME ☐ Localizer Only ☐ Contact ☐ Circling ☐ TACAN ☐ LOC-back course ☐ RNAV ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☒ 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		VFR Approach <i>(Check all that apply)</i> ☐ 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: Miguel

City of Residence: Henderson

Middle Initial: S

State: NV ZIP: 89052

Last Name: Giacaman

Country: USA

Age at time of Accident/Incident: 61 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

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

9/01/2017
 mm/dd/yyyy

Medical Certificate Limitations

none

Medical Certificate Special Issuance

n/a

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

01/04/2019
 mm/dd/yyyy

Flight Review Aircraft

Make: Flight Design

Model: CTL5i

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
☐ 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	480	232	478	2	78					
Pilot in Command (PIC)	480	232	478	2	78					
Time as Instructor										
This Make/Model										
Last 90 Days	15	15	15		4					
Last 30 Days	4	4	4		1					
Last 24 Hours	0	0	0		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: _____ Middle Initial: _____ Last Name: _____ City of Residence: _____ State: _____ ZIP: _____ 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 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) <i>(Check all that apply)</i> ☐ 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			Date of Last Medical _____ mm/dd/yyyy																																																																																											
Principal Occupation ☐ Pilot ☒ Other ☐ Unknown																																																																																																				
Medical Certificate ☒ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown																																																																																																				
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 <i>(Include dates)</i> 																																																																																														
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 5px;">Flight Time <i>(Enter appropriate number of hours in each box)</i></th> <th rowspan="2" style="padding: 5px;">All Aircraft</th> <th rowspan="2" style="padding: 5px;">This Make & Model</th> <th rowspan="2" style="padding: 5px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 5px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 5px;">Night</th> <th colspan="2" style="padding: 5px;">Instrument</th> <th rowspan="2" style="padding: 5px;">Rotorcraft</th> <th rowspan="2" style="padding: 5px;">Glider</th> <th rowspan="2" style="padding: 5px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 5px;">Actual</th> <th style="padding: 5px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 5px;">Total Time</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Pilot in Command (PIC)</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Time as Instructor</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">This Make/Model</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 90 Days</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 30 Days</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 24 Hours</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>											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										
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 ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer		Restraint Type: 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
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 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
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>Guido</u> City: <u>Quito</u> Middle Initial: <u>A</u> State: _____ ZIP: _____ Last Name: <u>Rada</u> Country: <u>Ecuador</u> ☐ Crew ☒ Passenger ☐ Other	☐ Left ☐ Center ☒ Right ☐ Unknown Row: _____	☒ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available Used ☐ None ☐ None ☐ Lap Only ☐ Lap Only ☐ 3-point ☐ 3-point ☒ 4-point ☒ 4-point ☐ 5-point ☐ 5-point ☐ Unknown ☐ 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 Used ☐ None ☐ None ☐ Lap Only ☐ Lap Only ☐ 3-point ☐ 3-point ☐ 4-point ☐ 4-point ☐ 5-point ☐ 5-point ☐ Unknown ☐ 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 Used ☐ None ☐ None ☐ Lap Only ☐ Lap Only ☐ 3-point ☐ 3-point ☐ 4-point ☐ 4-point ☐ 5-point ☐ 5-point ☐ Unknown ☐ 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 Used ☐ None ☐ None ☐ Lap Only ☐ Lap Only ☐ 3-point ☐ 3-point ☐ 4-point ☐ 4-point ☐ 5-point ☐ 5-point ☐ Unknown ☐ 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>KBVU</u> City: <u>Boulder City</u> State: <u>NV</u> Country: <u>USA</u>		Time of Departure Time: <u>15:37</u> Time Zone: <u>PT</u>		Destination Airport ID: <u>KBVU</u> City: <u>Boulder City</u> State: <u>NV</u> Country: <u>USA</u>	
Type Flight Plan Filed ☒ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown 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 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>4000&100</u> ft msl					
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			Weather Observation Facility Facility ID: <u>Boulder City Airport Wheather Sta</u> Observation Time: <u>Windfinder.com</u> Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true		
Basic Conditions ☒ VMC ☐ IMC ☐ Unknown		Light Condition ☐ Dawn ☒ Day ☐ Dusk ☐ Night ☐ Dark Night ☐ Bright Night ☐ Unknown			
Sky/Lowest Cloud Condition ☒ Clear ☐ Few ☐ Partial Obscuration ☐ Scattered ☐ Thin Broken ☐ Thin Overcast ☐ Unknown Lowest Cloud Condition Height _____ ft agl		Ceiling ☒ None (Clear) ☐ Broken ☐ Overcast ☐ Obscured ☐ Indefinite ☐ 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: <u>150</u> degrees true	Wind Speed ☐ Calm ☒ Light and Variable -or- Speed: <u>9</u> kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>10+</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: <u>2400 aprox</u> ft		
Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown		Type of Precipitation (Check all that apply) ☒ None ☐ Rain ☐ Snow ☐ Hail ☐ Rain Showers ☐ Drizzle ☐ Ice Pellets ☐ Snow Pellets ☐ Snow Grains ☐ Ice Crystals ☐ Freezing Rain ☐ Snow Shower ☐ Ice Pellets Shower ☐ Freezing Drizzle		Restriction to Visibility (Check all that apply) ☒ None ☐ Blowing Dust ☐ Blowing Sand ☐ Blowing Snow ☐ Blowing Spray ☐ Dust ☐ Fog ☐ Ground Fog ☐ Haze ☐ Ice Fog ☐ Smoke ☐ Unknown	
Icing Forecast Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Turbulence Type (Check all that apply) ☐ None ☒ Clear Air ☒ Terrain-Induced ☐ Convective Turbulence Severity ☒ Light ☐ Moderate ☐ Severe ☐ Extreme	
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: Some leeward mountain wave light turbulence over Saddle Island					

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)*

Wings and fuel tanks no significant damage. Cabin, engine compartment and fuselage destroyed.

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.

Purpose of flight: Personal sightseeing of Lake Mead and Hoover Dam with a visiting passenger.

I self-announced on CTAF and took off on runway 15 for a left crosswind departure at 15:37 PT approx. Subsequently climbed to 4000 ft. while heading north towards Lake Mead. Flying over Saddle Island on autopilot at 95 knots, 5000 RPM and 4000 ft., the engine spontaneously increased its RPM over the measurable maximum while reaching an IAS of 134 Knots.

I immediately reacted by cutting of the throttle to idle with no observable effect on max RPM. Altitude stayed constant at 3950 ft. while still maintaining the autopilot engaged.

Approximately 8 to 10 seconds after, the engine spontaneously responded to the idle setting and the throttle became responsive again. I set the throttle back to 5000 RPM and immediately noticed (1) a warning message on the lower right corner of the Dynon PFD stating "Rotax: Land airplane" and (2) the ECU Channel B Malfuction light ON.

I immediately discontinued the flight (at 15:50 hr) and headed back to KBVU for landing. Briefed the passenger of the abnormal situation and proceed to verify tightness of his 4 point restraint system. I did the same for my restraints.

Shortly after, at about 5 miles from the airport, I called on CTAF announcing a straight in landing on runway 15. I initiated the descent to 3000 ft. to reach landing pattern altitude and begun the approach on Extended Final.

Once on Extended Final at 3000 ft., I proceeded to set the throttle to idle. However, I observed that I could not get the airplane to slow down to the needed 80 Knots in order to set 15 deg flaps. Neither, I could get the plane to descend with the appropriate nose attitude.

I executed and emergency descent as indicated on the airplane POH (3.4.3). Once I reached the touchdown zone (just after the numbers of the runway) and still with the throttle control in idle, I rotated to a slight nose high attitude to overfly the runway at about 100 ft. AGL.

The plane was still going too fast to safely touch down since speed was still around 90 Knots; hence, I discontinued the landing attempt. I continued trying to regain control over the idle throttle setting as I was overflying the runway.

However, I observed the plane did not slow down enough until I had passed mid length of the runway. It was only while flying over the last third of the runway that the plane speed finally decreased below the maximum touchdown speed of 70 knots. It was still at about 100 ft. over the runway.

Recognizing that the remaining runway was not sufficiently long to land and brake to a full stop, I continued to execute the go around procedure I had decided at the touchdown point on runway 15. I increased the throttle setting from idle to full power and announced my intentions on the CATF.

A short lapse later, while I was about to add 15 deg. flaps and while crossing the end of the runway, I looked out of the windshield and noticed a high rate of descend.

Crash landed 3 seconds later on a municipal pond.

A detailed description of those 3 last seconds follows:

- I realized we were about to crash land and stated to my passenger "nos vamos a estrellar!". ("We are about to crash!")
- I tried to avoid a potential collision with an electric power line tower located straight ahead in my flight path by turning about 5 to 10 deg to the left.
- I had no time to add flaps or to pull the handle to deploy the ballistic parachute.
- I did not hear a stall warning alarm.
- I did hear 3 beeps indicating a slightly high angle of attack almost simultaneous with time of the crash landing.
- A fraction of a second before hitting the ground I noticed the propeller had just stopped while at the same time I hear a "click type" sound, a late indication of engine failure. Apparently, the propeller had been windmilling before reaching a full stop.
- During the crash landing event, all three landing gears collapsed. The slight left turn component induced by the 5 to 10 deg. left turn caused the plane to hit the terrain with the lower left side part of the cabin, by the junction between the left door and the cabin floor at a forward point near the left rudder pedal.

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

Operator/Owner Safety Recommendation

Warning information from the engine manufacturer Rotax about:

- High probability of dual ECU failure on a single flight leg. On the contrary, they claim ECU redundancy as a safety feature of 912 IS engines.
 - Provide a description of the failure mode. In this case, a higher than normal RPM as an indication of ECU failure and imminent ECU disconnection.
 - Alert of automatic ECU disconnection on detection of any functional error. Contrary to allowing the pilot to manually disconnect it or shut down the engine when appropriate.
- Had I be aware of this issues I would not had executed an emergency landing and would have kept a high altitude as long as possible and prepare to glide to a runway or to pull the ballistic parachute when safe to do so.
- Had I be aware of this issues before the flight I would have never fly this airplane.

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.)

ECU channel B and ECU channel A

Total Time/Cycles
On Part511.9 Hours

Cycles

Time Since This Part
Inspected/Overhauled12/24/2018 Hours**FUEL & SERVICES INFORMATION**

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

22.9 Gallons

Fuel Type

- ☐ 80/87 ☐ 115/145 ☐ Jet B ☐ Other, specify 2/3 91 auto & 1/3 100LL
- ☐ 100 Low Lead ☐ Jet A ☐ JP8
- ☐ 100/130 ☐ Jet A-1 ☒ Automotive

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

Crawl under the wreckage, exit via the right side door (which was destroyed).

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.

Additional Observations

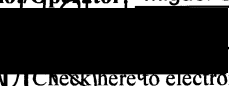
During the time I was overflying the runway at low altitude, the engine was in the idle power setting; hence, the transition from idle to engine power loss was not noticeable by any change in the sound of the engine.

The crash landing impacted the left side of the pilot's body with severe consequences on the left leg that was partially amputated, right leg sustaining multiple fractures, 5 broken ribs on the left side, and a fractured L2 vertebra. The passenger on the right seat was uninjured. Upon crashed landing and before exiting the airplane I set ON the ELT and grabbed my cell phone. Proceeded to call 911 and applied myself a tourniquet using a belt. I attempted to stand on my right leg but it immediately collapsed and I fell to the ground hitting my remaining left leg fully open cut against the terrain's dirt.

Once lying down on the terrain I continue to apply a tourniquet that I improvised with the passenger's belt. I also called using the mobile phone the passenger wife who was waiting at the airport terminal. I asked her to pass the phone to airport personnel; however they failed to take any action upon my urgent request.

The ELT did not help locate the wreckage and it took about 35 minutes for the 911 emergency team to locate the wreckage and assist us at the crash site. Upon their arrival, the emergency team stabilized me on-site, transported me out of the crash site using a specially requested wheeled stretcher (which resulted in a further wait). About 50 minutes after the crash I was finally on an ambulance towards Sunrise hospital arriving there in about another 45 minutes. There, I was provided emergency care which resulted in immediate amputation of the left leg, to be followed about a week later, by extensive surgery on my right leg. I am currently undergoing post-surgery recovery and beginning physical therapy rehabilitation.

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

Date of this Report <u>06/12/2019</u> mm/dd/yyyy	Name of Pilot/Operator <u>Miguel S. Giacaman</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. WPR19LA141	Reviewed by NTSB Regional Office WPR - Federal Way	Name of Investigator S. Stein	Date Report Received June 12, 2019
---	--	---	--