

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: Willow Springs State: MO.

ZIP: 65793 Country: USA

Latitude: 36°59.38 N Longitude: 91°52.25 W

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

Accident/Incident Date/Time

Date: 12/08/2019 Local Time: 1515

mm/dd/yyyy

Time Zone: +5

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

AIRCRAFT INFORMATION

Registration Number: n914AR

Manufacturer: Ronald Hook

Model: ZENITH 650

Serial Number: _____

Year of Manufacture: _____

Amateur-Built: ☒ Yes ☐ No If Yes: ☒ Kit/Plans ☐ Original Design Make: ZENITH 650

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

Maximum Gross Weight: 1635 lbs 1457

Weight at Time of Accident/Incident: 1341 lbs

Number of Seats: 2 Flight Crew Seats: _____

Cabin Crew Seats: _____ Passenger Seats: _____

Number of Engines: 1

Category of Aircraft

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

Type of Airworthiness Certificate (Check all that apply)

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

Landing Gear

- (Check all that apply)
☐ Retractable
☒ Tricycle
☐ Tailwheel
☐ Amphibian
☐ High Skid
☐ Emergency Float
☐ Skid
☐ Float
☐ Ski
☐ Hull
☐ Ski/Wheel
☐ Other Launch/Recovery System
☐ None
☐ Unknown

Engine Type (Select one)

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

Fuel System Type (Reciprocating)

- ☒ Carburetor ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Serial	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power Horsepower or lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	<u>Lycoming 280D2</u>	<u>Lycoming</u>			<u>150</u>	<u>304</u>		<u>304</u>
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: _____

Airframe Total Time: 86 hrs

hours measured at (Select one)

☐ Last Inspection ☒ Time of Accident/Incident

Type of Maintenance Program (Select one)

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

Description of Fire Extinguishing System

- ☒ None
☐ Specify: _____

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☒ Ground Adjustable

Manufacturer: ACK

Model: E-04 ELT

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: Lycoming

Model: GA280L-616

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: ACK Technologies

Model or Part No.: E-04 ELT

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
I do not know
Went off

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: _____

"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: <u>Ronald Hook</u> City of Residence: <u>GAINESVILLE</u> Middle Initial: <u>E</u> State: <u>MO</u> ZIP: <u>65655</u> Last Name: <u>Hook</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>78</u> Date of Birth: <u> </u> mm/dd/yyyy Certificate Number: <u> </u>																						
Degree of Injury ☐ None ☐ Fatal ☒ Minor ☐ Unknown ☐ Serious		Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single		Restraint Type <table border="0"> <tr> <th>Available</th> <th>Used</th> </tr> <tr> <td>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☐ Lap only</td> <td>☐ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☐ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☒ 5-point</td> <td>☒ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>			Available	Used	☐ None	☐ None	☐ Lap only	☐ Lap only	☐ 3-point	☐ 3-point	☐ 4-point	☐ 4-point	☒ 5-point	☒ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Available	Used																					
☐ None	☐ None																					
☐ Lap only	☐ Lap only																					
☐ 3-point	☐ 3-point																					
☐ 4-point	☐ 4-point																					
☒ 5-point	☒ 5-point																					
☐ Unknown	☐ Unknown																					
Pilot Certificate(s) (Check all that apply) ☐ None ☒ Flight Instructor ☒ Commercial ☐ US Military ☐ Private ☐ Recreational ☒ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer																						
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown		Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown <u>BASIC MED</u>		Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☒ N/A ☐ Special Issuance			Date of Last Medical <u>01/09/2018</u> mm/dd/yyyy															
Medical Certificate Limitations <u> </u>																						
Medical Certificate Special Issuance																						
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>01/05/2019</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Cessna</u> Model: <u>C-172</u>																		
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 <u>BA-205, BH206, CE500, FA-1100</u>						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											
Total Time		14,461.5	8.6	2199.1	15655	341	589	81	10,728													
Pilot in Command (PIC)		9,701																				
Time as Instructor		4586																				
This Make/Model																						
Last 90 Days		3.9																				
Last 30 Days		3.9																				
Last 24 Hours																						

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>LHS</u> City: <u>Willow Springs</u> State: <u>IL</u> Country: <u>USA</u>	Time of Departure Time: <u>1520</u> Time Zone: <u>-5</u>	Destination Airport ID: <u>LHS</u> City: _____ State: _____ Country: _____	Type Flight Plan Filed ☒ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown Activated? ☐ Yes ☐ No ☐ Unknown
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Type of ATC Clearance/Service (Check all that apply)			
☒ None ☐ VFR	☐ Special VFR ☐ IFR	☐ Special IFR ☐ VFR On Top	☐ VFR Flight Following ☐ Traffic Advisory ☐ Cruise ☐ Unknown / NA
Airspace where the accident/incident occurred (Check all that apply)			Altitude of In-Flight Occurrence: _____ ft msl
☐ 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

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply)		Weather Observation Facility	
☐ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☐ Automated Report ☐ Commercial Weather Service (DUATS) ☐ On-Board Weather	☐ Company ☐ Military ☐ Internet ☐ None ☐ Unknown	Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true	
Basic Conditions	Light Condition		
☒ VMC ☐ IMC ☐ Unknown	☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night		
Sky/Lowest Cloud Condition	Ceiling	Temperature: _____ (C) or <u>50.1</u> (F)	
☐ Clear ☐ Few ☐ Partial Obscuration ☐ Scattered ☐ Thin Broken ☐ Thin Overcast ☐ Unknown	☐ None (Clear) ☐ Broken ☒ Overcast ☐ Obscured ☐ Indefinite ☐ Unknown	Dew Point: _____ (C) or _____ (F) Altimeter Setting: <u>29.91</u> in. Hg or _____ MB	
Lowest Cloud Condition Height <u>2800</u> ft agl	Ceiling Height <u>2200</u> ft agl		
Wind Direction	Wind Speed	Wind Gusts	Visibility: <u>10</u> miles
☐ Variable -or- Direction: <u>170</u> degrees true	☐ Calm ☒ Light and Variable -or- Speed: _____ kts	☐ Not Gusting -or- Speed: _____ kts	RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft
Intensity of Precipitation	Type of Precipitation (Check all that apply)		Restriction to Visibility (Check all that apply)
☐ Light ☐ Moderate ☐ Heavy ☐ N/A ☐ Unknown	☒ None ☐ Rain ☐ Snow ☐ Hail ☐ Rain Showers ☐ Drizzle ☐ Ice Pellets ☐ Snow Pellets ☐ Snow Grains ☐ Ice Crystals ☐ Freezing Rain ☐ Snow Shower ☐ Ice Pellets Shower ☐ Freezing Drizzle		☒ None ☐ Blowing Dust ☐ Blowing Sand ☐ Blowing Snow ☐ Blowing Spray ☐ Dust ☐ Fog ☐ Ground Fog ☐ Haze ☐ Ice Fog ☐ Smoke ☐ Unknown
Icing Forecast	Icing Actual		Turbulence
Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		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:

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) Both wings, ENGINE AND INSTRUMENT PANEL departed THE AIRPLANE. TAIL boom HAS A twist in it		
NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)		
Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and and location, services obtained, and intended destination. Provide as much detail as possible. ENGINE STOP RUNNING AND THEN STARTED AGAIN. I HAVE POWER LINES AND TRIED TO KEEP CLEAR OF POWER LINES AND FARM STORE. LANDED HARD AND CAME TO REST NEXT TO SOME ONE'S HOME.		

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**12/13/2019
mm/dd/yyyy**Name of Pilot/Operator:** Ronald Heck**Signature:** [Redacted]- 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.**
ERA20LA050**Reviewed by NTSB Regional Office**
ERA**Name of Investigator**
D. Boggs**Date Report Received**
12/13/19