

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: Kelso State: WA
 ZIP: 98626 Country: United States
 Latitude: 46:6:15 Longitude: 122:52:52
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 08/18/2018 Local Time: 9:30PM
mm/dd/yyyy Time Zone: Pacific

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

AIRCRAFT INFORMATION

Registration Number: N9038K

Manufacturer: Beechcraft

Model: 36 Bonanza

Serial Number: E-117

Year of Manufacture: 1968

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

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

Maximum Gross Weight: 3600 lbs

Weight at Time of Accident/Incident: 2800 lbs

Number of Seats: 4 Flight Crew Seats: 2

Cabin Crew Seats: _____ Passenger Seats: 2

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 | Special |
|---|---|
| ☒ Normal | ☐ Restricted |
| ☐ Aerobatic | ☐ Limited |
| ☐ Balloon | ☐ Provisional |
| ☐ Commuter | ☐ Special Flight |
| ☐ Transport | ☐ Experimental |
| ☐ Utility | ☐ 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 (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Continental	IO-550-B75B	1008645		280-350	471	4 (IRAN)	
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: _____
mm/dd/yyyy

Airframe Total Time: _____ 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: Hartzell

Model: PHC C3YF-IRF/F8648A-6R

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: ACK

Model or Part No.: E-04

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: <u>Alki FLYers, LLC</u> Fractional Ownership Aircraft: ☐ Yes ☐ No		City: <u>Seattle</u> State: <u>WA</u> ZIP: <u>98116</u> Country: <u>United States</u>	
Operator of Aircraft ☒ <i>Same As Registered Owner</i> Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		☒ <i>Same Address as Registered Owner</i> 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	Purpose of Flight for FAR 91, 103, 133, 137 <i>(Select one)</i> ☐ 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	
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>Southwest Washington Regional Airport</u> Airport Identifier: <u>KKLS</u> Proximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A		Distance From Airport Center: <u>1</u> sm Direction From Airport: <u>300</u> degrees true Airport Elevation: <u>19.9</u> ft. msl	
Runway Information Runway ID: <u>30</u> (L/R/C) Length: <u>4391</u> ft Width: <u>100</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 ☐ ☐ ☐ Final ☐ Aborted Landing (after touchdown) ☐ ☐ ☐ ☐ Crosswind ☒ Unknown	
IFR Approach <i>(Check all that apply)</i> ☒ 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			
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			

"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: Stephen

City of Residence: Kirkland

Middle Initial: M

State: WA

ZIP: 98033

Last Name: Haas

Country: United States

Age at time of Accident/Incident: 48

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

10/04/2016
mm/dd/yyyy

Medical Certificate Limitations

Must wear corrective lenses

Medical Certificate Special Issuance

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

10/9/2016
mm/dd/yyyy

Flight Review Aircraft

Make: Piper

Model: PA28-161

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
☐ Instrument Helicopter
☐ Airplane Single-Engine
☐ Helicopter
☐ Airplane Multi-Engine
☐ Glider
☐ Gyroplane
☐ Powered Lift
☐ 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	559	135	559	0	99	8	46	0	0	0
Pilot in Command (PIC)	478	135	478	0	99	8	46	0	0	0
Time as Instructor	0	0	0	0	0	0	0	0	0	0
This Make/Model					31	4	35			
Last 90 Days	64	0	64	0	11	0	0	0	0	0
Last 30 Days	9	2	9	0	5	0	0	0	0	0
Last 24 Hours	0	0	0	0	0	0	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: _____ 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

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

mm/dd/yyyy

Medical Certificate Limitations

Medical Certificate Special Issuance

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

mm/dd/yyyy

Flight Review Aircraft

Make: _____
 Model: _____

Airplane Rating(s) (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

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)

	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time										
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)							
Crew Name and Address				Seat Occupied		Injury	
First Name: _____		City of Residence: _____		☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Middle Initial: _____		State: _____ ZIP: _____					
Last Name: _____		Country: _____					
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
Crew Name and Address				Seat Occupied		Injury	
First Name: _____		City of Residence: _____		☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Middle Initial: _____		State: _____ ZIP: _____					
Last Name: _____		Country: _____					
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet if necessary)							
Name and Address		Seat	Injury	Restraint Type		Inflatable Restraints	Age
First Name: <u>Melissa</u> City: <u>Redmond</u> Middle Initial: _____ State: <u>WA</u> ZIP: <u>98052</u> Last Name: <u>Rogers</u> Country: <u>USA</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	Used ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION				
Last Departure Point Airport ID: <u>KTIW</u> City: <u>Gig Harbor</u> State: <u>WA</u> Country: <u>United States</u>		Time of Departure Time: <u>8:45PM</u> Time Zone: <u>Pacific</u>		Destination Airport ID: <u>KPDX</u> City: <u>Portland</u> State: <u>OR</u> Country: <u>United States</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 ☐ 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) ☐ 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				Altitude of In-Flight Occurrence: <u>0</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 (DUALTS) ☐ 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		Light Condition ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☐ Day ☒ Night ☐ Bright Night		
Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered Lowest Cloud Condition Height _____ ft agl		Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl		Temperature: _____ (C) or _____ (F) Dew Point: _____ (C) or _____ (F) Altimeter Setting: _____ in. Hg or _____ MB
Wind Direction ☐ Variable -or- Direction: _____ degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: _____ kts	Wind Gusts ☐ Not Gusting -or- Speed: _____ kts	Visibility _____ 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 ☐ 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
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: <u>N/A</u>				

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 <i>(Use additional sheet if necessary)</i> Damage to forward side skins, lower forward keels and doublers, nose bug and bulkhead, nose gear doors. Left wing damaged. Nose landing gear damaged.		
NARRATIVE HISTORY OF FLIGHT <i>(Please type or print in ink)</i>		
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.		
I departed KBFI (Boeing Field) around 8:00PM on the evening of Saturday, August 18th, 2018. I had originally intended to remain at KTIW (Tacoma Narrows), but their restaurant was about to close. Since I had topped off both tanks the previous evening at Tacoma Narrows (KTIW), I estimated that I had well over three hours' fuel remaining and chose to fly to KPDX (Portland). The flight was uneventful until several minutes after passing KKLS (Kelso) when the aircraft's engine lost power. Since I was in the process of contacting Portland Approach, I declared an emergency on that frequency and began a left turn back toward KKLS (Kelso). While in my turn, I entered the assigned squawk code and attempted the in-flight engine failure procedure. To save time, I requested the frequency for KKLS (Kelso) from ATC in order to activate the runway lights. When it became clear that I would not be able to reach the runway, I instructed my passenger to tighten safety belts as securely as possible. I opened the cabin door, set the fuel selector handle to the "off" position, and set the fuel mixture to full full lean/ice cutoff. I chose the best available landing point and steered the plane toward it. After skidding to a stop, I switched off master electrical switches, fully opened the cabin door, and evacuated the aircraft, assessing my passenger and I for injuries.		

RECOMMENDATION (How could this accident/incident have been prevented?)**Operator/Owner Safety Recommendation**

After learning that the evidence collected strongly suggests fuel starvation as the most likely cause, it becomes clear that this event was caused by poor timing and frequency of fuel tank changes, and that switching the active fuel tank based on the quantity of fuel consumed will need to be undertaken on all flights – even those of a relatively short duration. In contrast, procedures involving switching fuel tanks on a timed basis (e.g., switching tanks at the “bottom of the hour”) should be discouraged as these may cause pilots to overlook time spent on the ground and are largely inaccurate depending on power/flow settings. In addition, ensuring that accurate running totals of fuel consumed and total fuel remaining in each tank needs to be undertaken on all flights – even on those flights terminating at airports estimated to be well within range. Maintaining more accurate and consistent records of fuel tank changes on a knee-board or scratch paper is also recommended. Pilots should also never consider any flight to be “routine”, as this may lead to complacency which can also contribute to inefficiencies in the face of an emergency, costing the pilot valuable seconds which ultimately may make the difference between reaching the safety of an airport and performing an off-airport landing. Knee-boards should always be secured and within easy reach; a list of airports and their radio frequencies en route to the destination should also be maintained and kept within reach. Finally, consider flying at the highest feasible altitude to provide adequate time to cope with unforeseen circumstances.

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)*68 _____ Gallons**Fuel Type**☐ 80/87☐ 115/145☐ Jet B☐ Other, specify _____☒ 100 Low Lead☐ Jet A☐ JP8☐ 100/130☐ Jet A-1☐ Automotive**Other Services, if Any, Prior to Departure****EVACUATION OF AIRCRAFT****Was an emergency evacuation of the aircraft performed?** ☒ Yes ☐ No**Method of Exit** – Describe how the occupants exited and how many occupants evacuated each location

All passengers exited the main 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

09/04/2018

mm/dd/yyyy

Name of Pilot/Operator: Stephen Haas

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.

WPR 18 TA 243

Reviewed by NTSB Regional Office

WPR/Federal Way, WA

Name of Investigator

Tom Little

Date Report Received

9-7-2018