

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: Boise State: Idaho

ZIP: 83705 Country: USA

Latitude: 43-33-51.7000W Longitude: 116-13-22.3000W

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

Accident/Incident Date/Time

Date: 03/20/2017 Local Time: 0405
mm/dd/yyyy

Time Zone: MT

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

AIRCRAFT INFORMATION

Registration Number: N158WA

Manufacturer: Fairchild

Model: SA226-TC

Serial Number: TC411

Year of Manufacture: 1981

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

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

Maximum Gross Weight: 13230 lbs

Weight at Time of Accident/Incident: 9997 lbs

Number of Seats: 3 Flight Crew Seats: 2

Cabin Crew Seats: 1 Passenger Seats:

Number of Engines: 2

Category of Aircraft

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

Type of Airworthiness Certificate (Check all that apply)

- Standard**
☒ Normal
☐ Aerobatic
☐ Balloon
☐ Commuter
☐ Transport
☐ Utility
☐ 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 ☐ 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. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Inspection (hours)	Time Since: Overhaul (hours)
Eng. 1	Honeywell	TPE331-10UA-5116	P54187		940	30407	181.7	3251.0
Eng. 2	Honeywell	TPE331-10UA-5116	P54014RC		940	20367.9	1357.3	6178.7
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 03/04/2017
mm/dd/yyyy

Airframe Total Time: 28602.9 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: Onboard integrated system.

Propeller 1

- ☐ Fixed Pitch
☒ Controllable Pitch
☐ Ground Adjustable

Manufacturer: Hartzell

Model: HC-B3TN-5M

Propeller 2

- ☐ Fixed Pitch
☒ Controllable Pitch
☐ Ground Adjustable

Manufacturer: Hartzell

Model: HC-B3TN-5G

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: AKC Technologies

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>Western Airlines LC</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		City: <u>Boise</u> State: <u>Idaho</u> ZIP: <u>83705-5089</u> Country: <u>USA</u>	
Operator of Aircraft ☐ Same As Registered Owner Name: <u>Western Airlines LC</u> Doing Business As: <u>Western Air Express</u> Air Carrier/Operator Designator (4 Character Code): <u>QTVA</u>		☐ Same Address as Registered Owner City: <u>Boise</u> State: <u>Idaho</u> ZIP: <u>83705</u> Country: <u>USA</u>	
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 103 ☐ FAR 121 ☐ FAR 125 ☐ FAR 129 ☐ FAR 133 ☐ FAR 135 ☐ FAR 137 ☐ FAR 415 ☐ FAR 431 ☐ FAR 435 ☐ 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 ☒ Non-Scheduled or Air Taxi ☐ Domestic ☐ 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 ☐ Aerial Observation ☐ Air Drop ☐ Air Race/Show ☐ Banner Tow ☐ Business ☐ Executive/Corporate ☐ External Load ☐ Ferry ☐ Firefighting ☐ Flight Test ☐ Glider Tow ☐ Instructional ☐ Other Work Use ☐ Personal ☒ Positioning ☐ Skydiving ☐ Unknown			
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>Boise</u> Airport Identifier: <u>KBOI</u> Proximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/A		Distance From Airport Center: <u>0</u> sm Direction From Airport: <u>100</u> degrees true Airport Elevation: <u>2871.4</u> ft. msl	
Runway Information Runway ID: <u>10L</u> (L/R/C) Length: <u>10000</u> ft Width: <u>150</u> ft		Condition of Runway/Landing Surface <i>(Check all that apply)</i> ☐ Dry ☐ Holes ☐ Ice Covered ☐ Rough ☐ Rubber Deposits ☐ Slush-Covered ☐ Snow-Compacted ☐ Snow-Crusted ☐ Snow-Dry ☐ Snow-Wet ☐ Soft ☐ Vegetation ☐ Water-Calm ☐ Water-Choppy ☐ Water-Glassy ☒ Wet ☐ Unknown	
Runway/Landing Surface <i>(Check all that apply)</i> ☐ Asphalt ☒ Concrete ☐ Dirt ☐ Grass/Turf ☐ Gravel ☐ Ice ☐ Macadam ☐ Metal/Wood ☐ Snow ☐ Water ☐ Unknown			
Approach/Departure Segment <i>(Select one)</i> ☐ Taxi ☒ Takeoff ☐ Initial Climb ☐ VFR Departure ☐ IFR Departure Procedure/Clearance ☐ On Instrument Approach ☐ Landing ☐ Downwind ☐ Base ☐ Final ☐ Crosswind ☐ Low Approach ☐ Go Around ☐ Aborted Landing (after touchdown) ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☐ None ☐ ADF/NDB ☐ SDF ☐ VOR/TVOR ☐ VOR/DME ☐ TACAN ☐ PAR ☐ Sidestep ☐ ILS ☐ Localizer Only ☐ LOC-back course ☐ RNAV ☐ MLS ☐ LDA ☐ ASR ☐ Visual ☐ Contact ☐ Circling ☐ Practice ☐ GPS ☐ Unknown		VFR Approach <i>(Check all that apply)</i> ☐ None ☐ Traffic Pattern ☐ Straight-In ☐ Valley/Terrain Following ☐ Go Around ☐ Full Stop ☐ Stop and Go ☐ Touch and Go ☐ Simulated Forced Landing ☐ Forced Landing ☐ 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: <u>Dean</u> Middle Initial: <u>T</u> Last Name: <u>Anderson</u> City of Residence: <u>Boise</u> State: <u>Idaho</u> ZIP: <u>83709</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>62</u> Date of Birth: [REDACTED] mm/dd/yyyy Certificate Number: [REDACTED]																																																																																																			
Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious		Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single		Restraint Type Available ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown			Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown																																																																																												
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☒ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer				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 <u>10/31/2016</u> mm/dd/yyyy																																																																																										
Medical Certificate Limitations <u>Not valid for any class after 10/31/2017</u>																																																																																																			
Medical Certificate Special Issuance																																																																																																			
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>01/31/2017</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Fairchild</u> Model: <u>SA226-TC</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>SA227</u>					Student Endorsements (Include dates)																																																																																														
<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 (Enter appropriate number of hours in each box)</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 style="padding: 5px;">10,700</td> <td style="padding: 5px;">3,161</td> <td style="padding: 5px;">1,475</td> <td style="padding: 5px;">7,880</td> <td style="padding: 5px;">4,550</td> <td style="padding: 5px;">1,072</td> <td style="padding: 5px;">162</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Pilot in Command (PIC)</td> <td style="padding: 5px;">7,919</td> <td style="padding: 5px;">2,861</td> <td style="padding: 5px;">1,475</td> <td style="padding: 5px;">7,880</td> <td style="padding: 5px;">1,769</td> <td style="padding: 5px;">750</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Time as Instructor</td> <td style="padding: 5px;">431</td> <td style="padding: 5px;">220</td> <td style="padding: 5px;">211</td> <td style="padding: 5px;">220</td> <td style="padding: 5px;">20</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 style="padding: 5px;">37</td> <td style="padding: 5px;">20</td> <td></td> <td style="padding: 5px;">37</td> <td style="padding: 5px;">15</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 style="padding: 5px;">31</td> <td style="padding: 5px;">18</td> <td></td> <td></td> <td style="padding: 5px;">8</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 style="padding: 5px;">0</td> <td style="padding: 5px;">0</td> <td></td> <td></td> <td style="padding: 5px;">0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										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	10,700	3,161	1,475	7,880	4,550	1,072	162				Pilot in Command (PIC)	7,919	2,861	1,475	7,880	1,769	750					Time as Instructor	431	220	211	220	20						This Make/Model											Last 90 Days	37	20		37	15						Last 30 Days	31	18			8						Last 24 Hours	0	0			0					
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	10,700	3,161	1,475	7,880	4,550	1,072	162																																																																																												
Pilot in Command (PIC)	7,919	2,861	1,475	7,880	1,769	750																																																																																													
Time as Instructor	431	220	211	220	20																																																																																														
This Make/Model																																																																																																			
Last 90 Days	37	20		37	15																																																																																														
Last 30 Days	31	18			8																																																																																														
Last 24 Hours	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 ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs				
Crew Name and Address			Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ 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
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 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 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 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 If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION				
Last Departure Point Airport ID: <u>KBOI</u> City: <u>Boise</u> State: <u>Idaho</u> Country: <u>USA</u>		Time of Departure Time: <u>0407</u> Time Zone: <u>MTN</u>		Destination Airport ID: <u>KSLC</u> City: <u>Salt Lake City</u> State: <u>Ut</u> Country: <u>USA</u>
Type Flight Plan Filed ☐ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☒ IFR ☐ Unknown ☐ 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 ☐ Special ☐ Air Traffic Control Area ☐ Unknown Altitude of In-Flight Occurrence: <u>10</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>KBOI</u> Observation Time: <u>03:53</u> Time Zone: <u>MTN</u> Distance from Accident Site: <u>0</u> nm Direction from Accident Site: <u>100</u> 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 <u>065</u> ft agl		Ceiling ☐ None (Clear) ☐ Broken ☒ Overcast ☐ Obscured ☐ Indefinite ☐ Unknown Ceiling Height <u>120</u> ft agl		
Wind Direction ☐ Variable -or- Direction: <u>180</u> degrees true		Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>8</u> kts		Wind Gusts ☒ Not Gusting -or- Speed: _____ kts
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: 				

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)*

One blade of the Number one Prop missing 4 inches from the tip. Three holes in fuselage. Damage to the jump seat arm rest.

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.

On the morning of March 20th, 2017, I arrived at the KBOI airport at 3:20 am local. My flight was a repositioning flight from KBOI to KSLC. I proceeded to get the current weather which was obtained from Flight Plan.com. Then proceeded to the hangar to get the "Can". The "Can" checked out as being up to date and ready to go. I then proceeded to the ramp where the plane was parked and initiated my preflight inspection. Finding no abnormalities on the exterior inspection, I unlocked the airplane and performed the cockpit checks and set up via the checklist. Everything checked normal so I went to the ready room to obtain my clearance and to get my flight bag. At about 04:00 I called Ground control to obtain taxi clearance and was instructed to taxi via "A" to "W" for takeoff on Runway 10L. Upon reaching Runway 10L hold short line, I call for Takeoff Clearance. After Clearance was issued, I lined up on the center line. At about 0405, Initiated "Speeds High" and proceeded the Takeoff Roll. Everything checked out normal to the 105 KT rotate speed so I rotated. I heard a "Pop" followed by a vibration. My first thought was that I had blown a tire and suspected the vibration came from there. I waited for a few seconds to see if the frequency of the vibration would change as the tire rotation slowed down. The vibration remained constant therefore I suspected a prop. I notified the Tower of my intentions to return to the field. They instructed a right turn for runway 10L. During the Down Wind Leg I inspected both Prop spinners to determine which Prop might be damaged but both were running smooth. Where as I had no solid indication as to which Prop was damaged, and the vibration was light and not changing, I elected to not shut either engine down. The following Pattern and Landing were normal. After parking, I shut down the Right Engine first as I suspected it of having the damage. The vibration continued. I then shut down the Left Engine and observed. During the last few rotations of the prop, the spinner wobbled slightly. I could then see the tip of one of the blades was missing. I called the Tower and indicated I had Prop damage from possible FOD on the runway and asked them to do a runway sweep. I heard them initiate the sweep. I then exited the airplane and inspected the damage. About four inches of the Prop Tip were missing along with two holes in the fuselage. The arm rest on the Jump seat was also damaged. I found a piece of the prop inside the fuselage. I then wrote up the Prop Damage in the A&E Log. After about ten minutes, Airport Ops stopped by with another piece of the Prop and what looked like a screwdriver blade. Also two pieces of what looked like a screwdriver handle. I received a call about thirty minutes later from Airport Ops and was requested to not touch anything as the NTSB would be doing an investigation. Shortly after eight AM, four people showed up from the NTSB and conducted an inspection. At that time we noticed there was a third hole in the fuselage further back by the wing root just below the window and the master cylinder cap was missing.

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

Operator/Owner Safety Recommendation

In addition to attaching an "Aircraft out of Service" flag to the "Data Can", An "Aircraft out of Service" flag will be attached to the aircraft and a thorough tool search and inventory will be conducted before release.

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 INFORMATIONFuel on Board at Last Takeoff
(Convert from pounds, as necessary)209 Gallons

Fuel Type

☐ 80/87☐ 100 Low Lead☐ 100/130☐ 115/145☒ Jet A☐ Jet A-1☐ Jet B☐ JP8☐ Automotive☐ Other, specify _____

Other Services, if Any, Prior to Departure

MCN: 2400-0060 Inspect 4H& R/H Essential & J Box buss wire terminations 7 MCN: 2400-0050

MCN: 2430-1050 #1 Start Generator Change

MCN: 2730-0110 B AD 85-22-06 R1 & 5B 225-27-038 500 hr SAS Inspection 2B 2C

+

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: _____

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

03/22/2017

mm/dd/yyyy

Name of Pilot/Operator: Dean T. Anderson

Signature: [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.

WPRU7LA078

Reviewed by NTSB Regional Office

WPR/Federal Way, WA

Name of Investigator

Tom Little

Date Report Received

3/27/2017