

NATIONAL TRANSPORTATION SAFETY BOARD

NTSB Form 6120.1

PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

The pilot/operator aircraft accident/incident report may be filed by mailing in this form, per instructions on the last page. Copies of this form may be obtained from the NTSB Web site <<http://www.nts.gov>>, the National Transportation Safety Board Regional Offices, and the Federal Aviation Administration Flight Standards District Offices.

Rules pertaining to aircraft accidents/incidents, overdue aircraft, and safety issues are contained in Part 830 of the National Transportation Safety Board's Regulations, 49CFR. These rules state the authority of the Board, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall file a report with the Regional Office of the National Transportation Safety Board nearest the accident or incident for which immediate notification is required by section 830.5(a). **The report shall be filed within ten (10) days after an accident for which notification is required by Section 830.5 or when, after seven (7) days, an overdue aircraft is still missing.** An aircraft accident, as defined in 49CFR 830.2, is determined as an occurrence that involves a fatality, serious injury, or substantial damage. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, National Transportation Safety Board, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

The Pilot/Operator Aircraft Accident/Incident Report Form is used in determining the facts, conditions, and circumstances for aircraft accident prevention activities and for statistical purposes. It is necessary that **ALL** questions be answered completely and accurately to serve the above purposes.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM

**It is necessary that ALL questions on this report be answered completely and accurately.
If more space is needed, continue on a blank sheet.**

Nearest City/Place: Use the name of the nearest community that has a Post Office in the state where the accident/incident occurred.

Date & Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of manufacturer of the kit or plans when appropriate.

Max Gross Weight: Enter the certificated max gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Airworthiness Certificate: For light sport aircraft, if aircraft certificated as "Light Sport - Experimental", check both the "Light Sport" and "Experimental" check boxes.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle,

B. DEFINITIONS

1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined at 49 C.F.R. 830.2.

2. "Substantial Damage" means damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.

3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Engine: Enter engine make and model information as indicated on the engine data plate.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "Doing Business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting **revenue** sightseeing operations under FAR Part 91 at the time of the accident.

Public Use: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Military operations should not be included under public use. If public use, also indicate whether the flight was conducted by Federal, State, or Local government.

Air Medical Flight: Indicate whether accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Purpose of Flight (FAR 91, 103, 133, 137): Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

PERSONAL—Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

BUSINESS—Includes all personal flying **without** a paid, professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE—Company flying **with** a paid, professional crew.

OTHER WORK USE—Miscellaneous flight operations conducted for compensation or hire such as construction work (not FAR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

INSTRUCTIONAL—Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

FERRY—Non-revenue flight under a special flight or “ferry” permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

POSITIONING—Non-revenue flight conducted for the primary purpose of moving the aircraft to a maintenance facility or to load passengers or cargo, etc.

AERIAL APPLICATION—Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION—Aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP—Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW—Includes any flight operations conducted as part of an organized air race or public demonstration.

FLIGHT TEST—Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component, or evaluating an applicant for a pilot certificate or rating.

PUBLIC USE—See definition above.

UNKNOWN—Use only if the primary purpose of flight is not known.

Other Aircraft – Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check “Collision with other aircraft” under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, takeoff, or within 3 miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identification: Provide the official 3 or 4 character airport identifier.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident site.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident (reported as broken or overcast).

NOTAMs ((D), (L) and FDC), AIRMETs, SIGMETs, PIREPs: Describe all NOTAMs, AIRMETs, SIGMETs, PIREPs in effect near the accident/incident. For NOTAMs, state if they were distant (D), local (L), or Flight Data Center (FDC), if known.

Pilot Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators “Pilot A” and “Pilot B” do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the Instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate “none”. If the pilot holds a pilot certificate other than student, and was flying an aircraft requiring an endorsement enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as “Pilot-in-Command (PIC)” and all dual flight instruction given should be included as “Time as Instructor”.

Additional Flight Crew Members: Complete this section if there were more than two required flight crew members on the aircraft. This also includes a check airman performing official duties, but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Please enter identification and injury severity information for all passengers and other personnel involved in the accident. See page 1 of the instructions for the official definition of injury levels. Occupants are considered “Revenue” passengers if they were being carried for compensation or hire. The option “FAA” refers to any FAA personnel performing a flight related function, including flight check, airman practical test, etc.

Several questions throughout the form allow for multiple responses; when appropriate choose all responses that apply.

These instructions only pertain to major issue areas covered by the NTSB Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report. For additional definitions of questions and responses, please refer to <<http://www.nts.gov>>.

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public use aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Pullman State: WA
 ZIP: 99163 Country: U.S.A
 Latitude: N46:44:60 (dd:mm:ss N/S) Longitude: W117:06:60 (ddd:mm:ss E/W)

Date/Time

Date: 12/29/2017 Local Time: 1840
 mm/dd/yyyy Time Zone: PST

Phase of Operation

☐ Standing ☐ Takeoff (incl. initial climb) ☐ Cruise ☐ Hover
☐ Taxi ☐ Climb ☐ Maneuvering ☐ Other
☐ Descent ☒ Landing ☐ Approach ☐ Unknown

Collision with Other Aircraft

☐ Midair
☐ On-ground
☒ None

Altitude of In-Flight Occurrence

0 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Bombardier

Model: DHC8-402 (Q400)

Serial Number: 4059

Registration Number: N412QX

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 65,400 lbs

Weight at Time of Accident/Incident: 55,463 lbs

Location of Center of Gravity at Time of Accident/Incident:

 inches from ☐ nose or ☐ datum
 -or- 31.12 Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft

☒ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyrocraft
☐ Helicopter
☐ Powered lift
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate (Check all that apply)

Standard

☐ Normal
☐ Utility
☐ Acrobatic
☒ Transport

Special

☐ Restricted
☐ Limited
☐ Provisional
☐ Experimental
☐ Special Flight
☐ Light Sport

Number of Seats: 76

If Large Aircraft, how many seats for:

Flight Crew: 2

Cabin Crew: 2

Passengers: 76

Landing Gear ☒ Retractable

Check any additional landing gear configuration that applies:

☒ Tricycle ☐ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Unknown

Type of Maintenance Program

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

Last Inspection Type

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

Date Last Inspection: Not Available

mm/dd/yyyy

Airframe Total Time: 38,496 hrs

hours measured at (check one)

☐ Last Inspection ☒ Time of Accident/Incident

IFR Equipped

☒ Yes ☐ No ☐ Unknown

Stall Warning System Installed

☒ Yes ☐ No ☐ Unknown

Type of Fire Extinguishing System

☐ None
☒ Specify Engine, APU, & Cargo Fire Suppression

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: Kannad Aviation

Model/Series: Kannad 406 AF, Part number S1821502-02

ELT Aided in Locating Accident/Incident

☐ Yes ☒ No

Serial Number: 2622240-0030

Battery Type: three LiMnO2 cells, D type

Battery Exp. Date: Not Available

Engine Type

☐ Reciprocating ☐ Turbo Jet
☐ Turbo Shaft ☐ Turbo Fan
☒ Turbo Prop ☐ Unknown

Reciprocating Fuel System Type

☐ Carburetor
☐ Fuel Injected

Propeller

☐ Fixed Pitch
☒ Controllable Pitch

Manufacturer: Dowty

Model: 697075001

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	P&W Canada	PW150A	PCEFA0118	July 2001	5071	35,381	3,781	3,781
Eng. 2	P&W Canada	PE150A	PCEFA0526	October 2008	5071	20,400	6,782	6,782
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: <u>BCC Equipment Leasing Corp</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: <u>Seattle</u> State: <u>WA</u> ZIP: <u>98124</u> Country: <u>King</u>
Operator of Aircraft ☐ Same As Registered Owner Name: <u>Horizon Air Inc.</u> Doing Business As: <u>Horizon Air / Horizon / Alaska & Horizon Airlines</u> Air Carrier/Operator Designator (4 Character Code): <u>QXEA</u>		Operator Address ☐ Same As Registered Owner City: <u>Seattle</u> State: <u>WA</u> ZIP: <u>98188</u> Country: <u>King</u>
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☒ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces ☐ Public Use (select type) ☐ Federal ☐ State ☐ Local ☐ Unknown		Revenue Sightseeing Flight ☐ Yes ☒ No Air Medical Flight ☐ Yes ☒ No
Purpose of Flight for FAR 91, 103, 133, 137 (Select one) ☐ Personal ☒ Business ☐ Executive/Corporate ☐ Other Work Use ☐ Instructional ☐ Ferry ☐ Positioning ☐ Aerial Application ☐ Aerial Observation ☐ Air Drop ☐ Air Race / Show ☐ Flight Test ☐ Public Use ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 (Select one) ☒ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi Domestic or International ☒ Domestic ☐ International Cargo Operation ☐ Passenger/Cargo ☐ Passenger _____ How many? ☐ Cargo _____ lbs ☐ Mail	Type of Commercial Operating Certificate Held (Check all that apply) ☐ None ☒ Flag Carrier Operating Certificate (121) ☒ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (129) ☐ Commuter Air Carrier (135) ☐ On-Demand Air Taxi (135) ☐ Large Helicopter (127) ☐ Rotorcraft External Load (133) - or - ☐ Agricultural Aircraft (137) ☐ Other Operator of Large Aircraft
OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for <i>other</i> aircraft)		
Aircraft Registration Number _____	Manufacturer: _____ Model: _____	Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☐ None
Registered Owner of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		
MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)		
Was there Mechanical Malfunction/Failure? ☐ Yes ☒ No ☐ Unknown <i>(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)</i> 		Total Time/Cycles On Part _____ Hours _____ Cycles Time Since This Part Inspected/Overhauled _____ Hours
DAMAGE TO AIRCRAFT AND OTHER PROPERTY		
Aircraft Damage ☒ None ☐ Substantial ☐ Minor ☐ Destroyed	Aircraft Fire ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground	Aircraft Explosion ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground

Description of Damage to Aircraft and Other Property (use additional sheet if necessary)

No Damage occurred.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)Airport Identifier: KPUW / PUWDistance From Airport Center: 0 SMAirport Name: Pullman / Moscow RegionalDirection From Airport: 0 degrees MAGProximity to Airport ☐ Off Airport/Airstrip ☒ On Airport ☐ On AirstripAirport Elevation: 2,555 ft. MSL**Approach Segment** (Select one)

☐ On Instrument Approach ☒ Landing ☐ Base leg ☐ Final ☐ Go Around
☐ Crosswind ☐ Downwind ☐ Low Approach ☐ Aborted Landing (after touchdown)

IFR Approach (Check all that apply)

☐ None ☐ PAR ☐ MLS ☐ Practice
☐ ADF/NDB ☐ Sidestep ☐ LDA ☐ GPS
☐ SDF ☐ ILS ☐ ASR ☐ Loran
☐ VOR/TVOR ☐ Localizer Only ☐ Visual ☐ Unknown
☐ VOR/DME ☐ LOC-back course ☐ Contact
☐ TACAN ☒ RNAV ☐ Circling

VFR Approach (Check all that apply)

☒ None ☐ Stop and Go
☐ Traffic Pattern ☐ Touch and Go
☐ Straight-In ☐ Simulated Forced Landing
☐ Valley/Terrain Following ☐ Forced Landing
☐ Go Around ☐ Precautionary Landing
☐ Full Stop ☐ Unknown

Runway InformationRunway ID: 6 (L/R/C) Length: 6,730 ft Width: 100 ft**Runway/Landing Surface** (Check all that apply)

☒ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow

Condition of Runway/Landing Surface (Check all that apply)

☐ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☒ Wet
☐ Rubber Deposits ☐ Soft ☐ Unknown
☐ Slush Covered ☐ Vegetation

FLIGHT ITINERARY INFORMATION**Last Departure Point**Airport ID: KSEA / SEACity: SeattleState: WACountry: USA**Time of Departure**Time: 1748Time Zone: PST**Destination**Airport ID: KPUW / PUWCity: Pullman / MoscowState: WACountry: USA**Type Flight Plan Filed**

☐ None ☐ VFR/IFR
☐ Company VFR ☒ IFR
☐ Military VFR ☐ Unknown
☐ VFR

Activated? ☒ Yes ☐ No**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 E ☐ Prohibited Area ☐ Jet Training Area ☐ Special
☐ Class B ☐ Class G ☐ Restricted Area ☐ TRSA ☐ Air Traffic Control Area
☐ Class C ☐ Demo Area ☐ Military Operations Area (MOA) ☐ FAR 93 ☐ Unknown
☐ Class D ☐ Warning Area ☐ Airport Advisory Area

Aircraft Load Description (Check all that apply)

☐ None ☐ Towing Glider ☐ Parachutists ☐ Livestock
☒ Passengers ☐ Towing Banner ☐ Water ☐ Unknown
☐ Cargo ☐ Other External ☐ Chemical/Fertilizer/Seeds

FUEL & SERVICES INFORMATION**Fuel on Board at Last Takeoff**

(convert from pounds, as necessary)

55,425 Gallons**Fuel Type**

☐ 80/87 ☐ 115/145 ☐ JP3
☐ 100 Low Lead ☒ Jet A ☐ JP4
☐ 100/130 ☐ Automotive ☐ JP5

☐ Other, specify _____**Other Services, if Any, Prior to Departure**

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location

Not Applicable

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**Facility ID: KPUW ASOSObservation Time: 1853Time Zone: PSTDistance from Accident Site: 0 NMDirection from Accident Site: 0 degrees MAG**Source of Weather Information**

(Check all that apply)

- | | |
|---|-----------------------------------|
| ☐ National Weather Service | ☐ Company |
| ☐ Flight Service Station | ☐ Military |
| ☐ TV/Radio | ☐ Internet |
| ☒ Automated Report | ☐ Unknown |
| ☐ Commercial Weather Service (DUATS) | |

Method of Briefing

(Check all that apply)

- | |
|---|
| ☐ In Person |
| ☐ Teletype |
| ☐ Telephone/Computer |
| ☐ Aircraft Radio |
| ☐ TV/Radio |
| ☐ Unknown |

Briefing Type/Completeness

- | | |
|---|---|
| ☐ Full | ☐ Abbreviated |
| ☐ Partial / Limited By Pilot | ☐ Unknown |
| ☐ Partial / Limited By Briefer | ☒ Not Pertinent |

Light Condition

- | | | |
|---------------------------------------|--------------------------------|--|
| ☐ Dawn | ☐ Dusk | ☒ Dark Night |
| ☐ Day | ☐ Night | ☐ Bright Night |
| ☐ Not Reported | | |

Visibility5 miles**Sky/Lowest Cloud Condition**

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

Ceiling

- | | |
|--|-------------------------------------|
| ☐ None (clear) | ☐ Obscured |
| ☒ Broken | ☐ Indefinite |
| ☐ Overcast | ☐ Unknown |

Restriction to Visibility (Check all that apply)

- | | |
|--|-------------------------------------|
| ☐ None | ☐ Fog |
| ☐ Blowing Dust | ☐ Ground Fog |
| ☐ Blowing Sand | ☐ Haze |
| ☐ Blowing Snow | ☐ Ice Fog |
| ☐ Blowing Spray | ☐ Smoke |
| ☐ Dust | ☐ Unknown |

Lowest Cloud Condition Height2,400 ft AGL**Ceiling Height**3,000 ft AGL**Wind Direction**☒ Indicated:
150 degrees MAG☐ Variable**Wind Speed**Velocity: 10 KTS

-or-

- | |
|---|
| ☐ Calm |
| ☐ Light and Variable |

Wind GustsVelocity: 0 KTS

- | |
|---|
| ☐ Gusting |
| ☒ Not Gusting |

Type of Turbulence (Check all that apply)

- | | |
|--|---|
| ☒ None | ☐ In Clouds |
| ☐ Clear Air | ☐ Vicinity of Thunderstorm |

Severity of Turbulence

- | | | |
|----------------------------------|--|--------------------------------|
| ☐ Extreme | ☐ Moderate | ☐ Light |
| ☐ Severe | ☐ Moderate Chop | |

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

!PUW 12/218 PUW RWY 06 FICON 5/5/5 100 PRCT WET OBSERVED AT 1712292349. 1712292349-1712302349

!PUW 12/217 PUW APRON ALL FICON 3IN WATER AND WET OBSERVED AT 1712292349. 1712292349-1712302349

!PUW 12/219 PUW TWY ALL FICON WET OBSERVED AT 1712292350. 1712292350-1712302350

!FDC 7/9274 PUW ODP PULLMAN/MOSCOW RGNL, Pullman/Moscow, WA.

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 4...TAKEOFF MINIMUMS: RWY 24: 300-1 1/4 OR STANDARD WITH MINIMUM CLIMBOF 400 FT PER NM TO 2900. ALL OTHER DATA REMAINS AS PUBLISHED. 1708111919-1803231919EST

!FDC 7/7309 PUW ODP PULLMAN/MOSCOW RGNL, Pullman/Moscow, WA.

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 4...NOTE: RWY 6, CONSTRUCTION TRAILER 488 FT FROM DER, 405 FT LEFT OF CENTERLINE, 14 FT AGL/2572 FT MSL

Temperature: 4 (C)
or _____ (F)Altimeter Setting: 29.86 in. HG
or _____ MBDensity Altitude: 1,895 ftDew Point: 2 (C)
or _____ (F)**Icing Forecast****Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Icing Actual**Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Type of Precipitation (Check all that apply)

- | | |
|--|---|
| ☐ None | ☐ Drizzle |
| ☒ Rain | ☐ Ice Pellets |
| ☐ Snow | ☐ Snow Pellets |
| ☐ Hail | ☐ Snow Grains |
| ☐ Rain Showers | ☐ Ice Crystals |
| ☐ Freezing Rain | ☐ Ice Pellets Shower |
| ☐ Snow Shower | ☐ Freezing Drizzle |

Intensity of Precipitation

- | | | |
|---|-----------------------------------|--------------------------------|
| ☒ Light | ☐ Moderate | ☐ Heavy |
|---|-----------------------------------|--------------------------------|

PILOT "A" INFORMATION

Pilot "A" Responsibilities at the Time of Accident/Incident

☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

Pilot "A" Identification

First Name: David
 Middle Initial: G
 Last Name: Wilcox

City: [REDACTED]
 State: OR ZIP: [REDACTED]
 Country: USA

Age at time of Accident/Incident: _____ Date of Birth: [REDACTED] Certificate Number: [REDACTED]
 mm/dd/yyyy

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Seat Belt Used ☒ Yes ☐ No Available ☒ Yes ☐ No	Shoulder Harness Used ☒ Yes ☐ No Available ☒ Yes ☐ No
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Pilot Certificate(s) (Check all that apply)

☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☒ Airline Transport ☐ U.S. Military

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 ☐ With limitations/waivers ☐ Unknown	Date of Last Medical <u>09/21/2017</u> mm/dd/yyyy
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Medical Certificate Limitations

None

Medical Certificate Waivers

None

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

11/28/2017
 mm/dd/yyyy

Flight Review Aircraft

Make: Bombardier
 Model: DHC8-402 (Q400)

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 ☐ Free 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
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Type Ratings

CL-65
 DHC-8

Student Endorsements (Include dates)

None

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	13,528	5,997								
Pilot in Command (PIC)	8,079	5,957								
Time as Instructor										
This Make/Model										
Last 90 Days	117	117		117						
Last 30 Days	67	67		67						
Last 24 Hours	4	4		4						

PILOT "B" INFORMATION

Pilot "B" Responsibilities at the Time of Accident/Incident

☐ Pilot
 ☒ Co-Pilot
 ☐ Student Pilot
 ☐ Flight Instructor
 ☐ Check Pilot
 ☐ Flight Engineer
 ☐ Other Flight Crew

Pilot "B" Identification

First Name: Derek City: [REDACTED]
 Middle Initial: A State: CA ZIP: [REDACTED]
 Last Name: Mulvihill Country: USA
 Age at time of Accident/Incident: _____ Date of Birth: [REDACTED] Certificate Number: [REDACTED]
mm/dd/yyyy

Degree of Injury

☒ None
 ☐ Fatal
☐ Minor
 ☐ Unknown
☐ Serious

Seat Occupied

☐ Left
 ☐ Front
 ☐ Unknown
☒ Right
 ☐ Rear
☐ Center
 ☐ Single

Seat Belt

Used ☒ Yes ☐ No
 Available ☒ Yes ☐ No

Shoulder Harness

Used ☒ Yes ☐ No
 Available ☒ Yes ☐ No

Pilot Certificate(s) (Check all that apply)

☐ None
 ☐ Student
 ☐ Recreational
 ☐ Commercial
 ☐ Flight Engineer
 ☐ Foreign
☐ Private
 ☐ Flight Instructor
 ☐ Sport
 ☒ Airline Transport
 ☐ U.S. Military

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
☐ With limitations/waivers
☐ Unknown

Date of Last Medical

10/30/2017
mm/dd/yyyy

Medical Certificate Limitations

None

Medical Certificate Waivers

None

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

12/24/2017
mm/dd/yyyy

Flight Review Aircraft

Make: Bombardier

Model: DHC8-402 (Q400)

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
☐ Free 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

DHC-8

Student Endorsements (Include dates)

None

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	1,582	95								
Pilot in Command (PIC)	1,428	0								
Time as Instructor										
This Make/Model										
Last 90 Days	95	95		95						
Last 30 Days	42	42		42						
Last 24 Hours	6	6		6						

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)											
Pilot Name and Address						Degree of Injury					
First Name: <u>NA</u>			City: _____			☐ None		☐ Fatal			
Middle Initial: _____			State: _____			☐ Minor		☐ Unknown			
Last Name: _____			Country: _____			☐ Serious					
Pilot Certificate(s) (Check all that apply)						Seat Occupied					
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer			
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military			
☐ Foreign											
Type Rating/Endorsement for Accident/Incident Aircraft?				☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
Pilot Name and Address						Degree of Injury					
First Name: <u>NA</u>			City: _____			☐ None		☐ Fatal			
Middle Initial: _____			State: _____			☐ Minor		☐ Unknown			
Last Name: _____			Country: _____			☐ Serious					
Pilot Certificate(s) (Check all that apply)						Seat Occupied					
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer			
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military			
☐ Foreign											
Type Rating/Endorsement for Accident/Incident Aircraft?				☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
Pilot Name and Address						Degree of Injury					
First Name: <u>NA</u>			City: _____			☐ None		☐ Fatal			
Middle Initial: _____			State: _____			☐ Minor		☐ Unknown			
Last Name: _____			Country: _____			☐ Serious					
Pilot Certificate(s) (Check all that apply)						Seat Occupied					
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer			
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military			
☐ Foreign											
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 flight attendants; continue on separate sheet if necessary)											
Name and Address	Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown
First Name: <u>Katelyn</u>											
Middle Initial: <u>L</u>											
Last Name: <u>Asaro</u>											
City: _____											
State: <u>OR</u>											
ZIP: _____											
Country: <u>USA</u>											
First Name: <u>Kali</u>											
Middle Initial: <u>A</u>											
Last Name: <u>Botner</u>											
City: _____											
State: <u>OR</u>											
ZIP: _____											
Country: <u>USA</u>											
First Name: _____											
Middle Initial: _____											
Last Name: _____											
City: _____											
State: _____											
ZIP: _____											
Country: _____											
First Name: _____											
Middle Initial: _____											
Last Name: _____											
City: _____											
State: _____											
ZIP: _____											
Country: _____											
First Name: _____											
Middle Initial: _____											
Last Name: _____											
City: _____											
State: _____											
ZIP: _____											
Country: _____											

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 time and point of departure, intended destination, and services obtained.

Flight 2182, Aircraft N412QX Q400

Departed KSEA at 1748 PST

Landed at intended Destination KPUW at 1846 PST

On Friday, December 29th, 2017 flight QX2184, Q-400 SEA-PUW, used RNAV M Rwy 6 instrument approach procedures to line up with runway 6 at the Pullman/Moscow regional airport. Weather at the time of landing was reported as wind from the southeast, light rain, overcast ceiling with 5 miles visibility. The weather forecast was for improving conditions throughout the area as the night progressed.

The Captain reported seeing the airport at approximately 3 miles from the threshold while on final approach; however, he reported difficulty with making out the runway lights. The runway lighting intensity at PUW is controlled by the pilots, and despite the Captain attempts to increase the brightness, he continued to have difficulties. As the flight got closer to landing, the Captain reported seeing lights that were left of his current course (taxiway lights) and having to fly left to align with what he thought was the runway. While looking through the Heads Up Display towards the airport the Captain realized something wasn't correct but by this time they were in the flare, and about to land on the taxiway. The First Officer made no comments about the runway or lighting until the airplane was already on the taxiway after landing. Touchdown was smooth and the Captain rolled the length of taxiway A before turning right onto Runway 24 and right again on Taxiway C to taxi to the gate. Flight Attendants reported to the Captain no adverse passenger reaction, but that one passenger commented on the runway lights not being on. The Captain reported the runway lights were not on at the time of landing or during the taxi operation. Safety has contacted the Pullman airport manager for a report on the condition of the runway lights. The briefing packet used by the crew for preflight planning did not reveal any NOTAMS or comments about runway lights at PUW.

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

Operator/Owner Safety Recommendation

Pilots of Flight 2184 landed on taxiway A at Pullman regional airport due to misidentification of the lights on the airport. At the time of landing the runway lights were inoperative and both pilots focused on the only lights that were damaged by rodents allowing water from recent snow and rain to short the circuit and render the lights inoperative.

An approach briefing which included approach and runway lighting details may have helped the crew anticipate what visual cues they should expect. If those visual cues were not observed, the crew would have more reason to consider a missed approach and or provide an opportunity to determine the runway lighting was inoperative prior to landing.

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**03/22/2018*mm/dd/yyyy***Signature and Name of Pilot/Operator**

Signature: _____

Type or Print Name: _____

Signature and Name of Person Filing Report if Other than Pilot/Operator

Signature: _____

Type or Print Name: Nicholas StoneTitle: Director, Regulatory Compliance and Fleet Technology**FOR NTSB USE ONLY****NTSB Accident/Incident No.****Reviewed by NTSB Regional Office****Name of Investigator****Date Report Received**