

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: Missoula State: MT

ZIP: 59807 Country: U.S.

Latitude: _____ Longitude: _____

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

Accident/Incident Date/Time

Date: 10/13/2016 Local Time: 16:45
mm/dd/yyyy

Time Zone: MDT

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

AIRCRAFT INFORMATION

Registration Number: N148Z

Manufacturer: Short Brothers

Model: C-23B+

Serial Number: SH3428

Year of Manufacture: 1994

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

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

Maximum Gross Weight: 25,700 lbs

Weight at Time of Accident/Incident: _____ lbs

Number of Seats: _____ Flight Crew Seats: _____

Cabin Crew Seats: _____ 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

Special

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

☐ Certificate of Authorization or Waiver (COA)
☒ None ☐ Unknown

Landing Gear

(Check all that apply)

- ☒ Retractable
- ☒ Tricycle
- ☐ Tailwheel
- ☐ Amphibian
- ☐ High Skid
- ☐ Emergency Float
- ☐ Skid
- ☐ Float
- ☐ Ski
- ☐ Hull
- ☐ Ski/Wheel
- ☐ Other Launch/Recovery System
- ☐ None
- ☐ Unknown

Engine Type (Select one)

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

Fuel System Type (Reciprocating)

- ☐ Carburetor
- ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Pratt & Whitney	PT6A-65R	PCE97141		1298	23623.3	7.8	2274.2
Eng. 2	Pratt & Whitney	PT6A-65R	PCE97064		1298	20255.6	7.8	4081.6
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 6/24/2016

mm/dd/yyyy

Airframe Total Time: 5203.6 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: Handheld

Propeller 1

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

Manufacturer: _____

Model: _____

Propeller 2

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

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

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: USDA Forest ServiceCity: BoiseState: IDZIP: 83705Fractional Ownership Aircraft: ☐ Yes ☒ NoCountry: U.S.**Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered Owner

Name: _____

City: _____

Doing Business As: _____

State: _____ ZIP: _____

Air Carrier/Operator Designator (4 Character Code): _____

Country: _____

Operating Certificates Held

(Check all that apply)

- ☒ 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 (Select one)

- ☐ Armed Forces
☒ Federal
☐ State
☐ Local

☐ Unknown**Revenue Operation for FAR 121, 125, 129, 135**

(Select one for each group)

- ☐ Scheduled or Commuter ☐ Domestic
☐ Non-Scheduled or Air Taxi ☐ International

- ☐ Passenger
☐ Cargo
☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137

(Select one)

- ☐ 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

Revenue Sightseeing Flight☐ Yes ☒ No**Air Medical Flight**☐ Yes ☒ No**AIRPORT INFORMATION** (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or while en route to or from airport)Airport Name: Missoula InternationalAirport Identifier: KMSOProximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/A

Distance From Airport Center: _____ sm

Direction From Airport: _____ degrees true

Airport Elevation: 3,206 ft. msl**Runway Information**Runway ID: RWY 29 (L/R/C) Length: 9,501 ft Width: 150 ft**Runway/Landing Surface** (Check all that apply)

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

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
☐ Slush-Covered ☐ Vegetation ☐ Unknown

Approach/Departure Segment (Select one)

- ☐ 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 (Check all that apply)

- ☐ 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

VFR Approach (Check all that apply)

- ☐ 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: Abraham

City of Residence: Clancy

Middle Initial: L.

State: Montana

ZIP: 59634

Last Name: Fandrich

Country: USA

Age at time of Accident/Incident: 58

Date of Birth: /1957

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

11/12/2015
mm/dd/yyyy

Medical Certificate Limitations

Must wear lenses for distance, have glasses for near vision.

Medical Certificate Special Issuance

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

03/06/2015
mm/dd/yyyy

Flight Review Aircraft

Make: Shorts, Simulator Flight Safety LaGuardia

Model: SD-3 60

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

BE-200, SD-3, S-70

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	8,715	148	95	2,638	1,553	820	564	5,984	0	0
Pilot in Command (PIC)	7,755	104	75	1,830	1,450	800	544	5,850	0	0
Time as Instructor	4,610	0	5	703	1,200	257	427	3,902	0	0
This Make/Model					1	3	5			
Last 90 Days	82	64	0	82	0	3	5	0	0	0
Last 30 Days	12	8	0	12	0	0	0	0	0	0
Last 24 Hours	8	8	0	8	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: ROSHANE

City of Residence: Clinton

Middle Initial: A

State: MT

ZIP: 59825

Last Name: BAK

Country: USA

Age at time of Accident/Incident: 49

Date of Birth: 1967 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

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

01/25/2016
mm/dd/yyyy

Medical Certificate Limitations

None

Medical Certificate Special Issuance

N/A

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

03/02/2016
mm/dd/yyyy

Flight Review Aircraft

Make: SD3-60

Model: Simulator Flight Safety LaGuardia

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

SD3

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	6,424	210	1,914	4,507	414	171	401			
Pilot in Command (PIC)	4,921	172	1,856	3,065	260	138	393			
Time as Instructor	455	115	22	433	29	13	0			
This Make/Model					1	1	9			
Last 90 Days	90	86	0	23	1	1	9			
Last 30 Days	8	8	0	0	0	0	0			
Last 24 Hours	8	8	0	0	0	0	0			

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)

Crew Name and Address		Seat Occupied	Injury
First Name: _____	City of Residence: _____	☐ Left ☐ Center ☐ Right	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Middle Initial: _____	State: _____ ZIP: _____	☐ Front ☐ Rear ☐ Single ☐ Unknown	
Last Name: _____	Country: _____		
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign		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 ☐ Center ☐ Right	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Middle Initial: _____	State: _____ ZIP: _____	☐ Front ☐ Rear ☐ Single ☐ Unknown	
Last Name: _____	Country: _____		
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign		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	

PASSENGERS / OTHER PERSONS (Include all persons on board, including children)

Name and Address	Seat	Injury	Restraint Type	Inflatable Restraints	Age
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
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: KIGM

City: Kingman

State: AZ

Country: USA

Time of Departure

Time: 12:53

Time Zone: MT

Destination

Airport ID: KMSO

City: Missoula

State: MT

Country: USA

Type Flight Plan Filed

☐ None ☐ VFR/IFR
☐ Company VFR ☐ IFR
☐ Military VFR ☐ Unknown
☐ VFR
 Activated? ☐ Yes ☐ No ☐ Unknown

Type of ATC Clearance/Service (Check all that apply)

☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise
☐ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA

Airspace where the accident/incident occurred (Check all that apply)

☐ Class A ☐ Class G ☐ Military Operations Area (MOA) ☐ Special
☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area
☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown
☐ Class D ☐ Prohibited Area ☐ TRSA
☐ Class E ☐ Restricted Area ☐ FAR 93

Altitude of In-Flight Occurrence:

_____ ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information

(Check all that apply)

☐ National Weather Service ☐ Company
☐ Flight Service Station ☐ Military
☐ TV/Radio ☐ Internet
☐ Automated Report ☐ None
☐ Commercial Weather Service (DUATS) ☐ Unknown
☐ 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

Ceiling

☒ None (Clear) ☐ Obscured
☐ Broken ☐ Indefinite
☐ Overcast ☐ Unknown

Temperature: _____ (C) or _____ (F)

Dew Point: _____ (C) or _____ (F)

Altimeter Setting: _____ in. Hg
 or _____ MB

Lowest Cloud Condition Height

ft agl

Ceiling Height

ft agl

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 ☐ Drizzle ☐ Freezing Rain
☐ Rain ☐ Ice Pellets ☐ Snow Shower
☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower
☐ Hail ☐ Snow Grains ☐ Freezing Drizzle
☐ Rain Showers ☐ Ice Crystals

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

Icing Forecast

Amount ☒ None ☐ N/A
☐ Trace ☐ Rime
☐ Light ☐ Clear
☐ Moderate ☐ Mixed
☐ Severe ☐ Unknown
☐ Unknown

Icing Actual

Amount ☒ None ☐ N/A
☐ Trace ☐ Rime
☐ Light ☐ Clear
☐ Moderate ☐ Mixed
☐ Severe ☐ Unknown
☐ Unknown

Turbulence

Type (Check all that apply)
☒ None ☐ Light
☐ Clear Air ☐ Moderate
☐ Terrain-Induced ☐ Severe
☐ Convective Turbulence ☐ Extreme

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

None

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)

When nose gear collapsed there was external skin damage and ice detector, gear doors, taxi light assemblies, battery vent tubes need replaced.

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and location, services obtained, and intended destination. Provide as much detail as possible.

Shane Bak statement:

Here is my statement describing the events leading up to, during, and after the landing in N148Z with the failure of the nose gear on Thursday afternoon October 13th around 4:45pm with myself acting as SIC for Abe Fandrich who was PIC.

It may or may not have anything to do with the cause of the nose gear unsafe indication and the ultimate collapse of the landing gear during the landing in Missoula but I think it should be mentioned. Before the flight even began today we noticed during our preflight and runups that the emergency gear accumulator was reading around 1400 psi when it should have been reading the same as main system pressure which is 3000psi. I called Jim Lampos for some insight and direction. After following some trouble shooting instructions we determined that the nitrogen precharge was low. After the mechanic at Staube's serviced the nitrogen back up the recommended pressure of 1400psi we did a second runup which gave us the appropriate 3000psi indication in the cockpit which gave us the green light to go. We departed Kingman 12:53 mountain time.

While Enroute about 1.5 hrs into the flight Abe noticed the pressure in the emergency gear accumulator had bleed off to 1800 psi. It was obvious there is a leak in the emergency gear accumulator so I made a note of in in the 5700 maintenance manual for maintenance personnel to address during the aircraft's certification work. At prior to our decent for Missoula I noticed the pressure was reading 1400psi and made note of that as well.

As we were entering the pattern on a three mile left base to RWY 29 (around 16:15) Abe asked for Gear Down, Flaps 15, Landing checks. As I complied and was making the call to tower reporting our three mile base I noticed the unsafe nose gear indication as tower was clearing us to land. I replied that N148Z would need to remain in the pattern while we addressed an unsafe nose gear indication. Tower had us off set to the north and then cross over midfield to re enter left traffic for RWY 29. As we passed by the tower midfield on the up wind tower reported that from their vantage point the nose gear did appear to be down.

At this point I had the check list turned to the "LANDING GEAR FAILURE" pg.70-71. And was beginning to read through the procedures. Which first called for confirming Main System pressure was between 2900-3000psi which it was reading 3000 psi.

After we crossed over the runway midfield and entered the down wind I continued with the checklist which called for the retraction and lowering of the landing gear a couple of times. Each time we got the unsafe nose gear indication.

I continued with the check list confirming the gear was selected down, then tested the Landing Gear Horn was working followed by selecting the flaps to 35° in order to see if the gear horn sounds. The gear horn did indeed sound verifying that the gear is NOT locked down. Same indication was given when Power Levels were brought to Flight Idle.

At this point the check list called for making a 360° turn at 45° bank so I requested from tower permission make a right 360° rejoin the pattern. Tower approved the request. Abe commenced with the right 360° with no positive results with the nose gear indication. At this point the check list calls for the emergency gear handle to be pulled. Knowing that the Emergency Gear Accumulator had little or no pressure it wasn't a surprise when this had no affect. So we asked the tower if we could do one last fly low fly by for them to get a closer look. We were approved to fly by to the south of the tower in the pattern at 500ft AGL. Tower still reported that the gear appeared to be down.

Next we requested some more time to circle south of the airport for some additional time to sort things out and prepare for landing. Tower approved request. At this point Abe requested I attempt to contact maintenance (John Farro) (@16:28) which I got voice mail and left message. While I was attempting to contact maintenance Abe was giving vitals information requested by tower. (2 Souls on board, and 860 lbs of fuel) After unsuccessfully getting a hold of maintenance Abe requested I inform the RAO (Maggie Doherty)(@16:30) of our situation. After no answer a voice mail was left. I suggested making one more attempt to maintenance by calling Jim Lampos DC but

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

Operator/Owner Safety Recommendation

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)

_____ 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

Emergency gear accumulator serviced

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

mm/dd/yyyy

Name of Pilot/Operator: _____

Signature: _____

– or – ☐ Check here to electronically sign this document

If a Person Other than Pilot/Operator is Filing Report

Name: Robert Roth

Title: RASM

Signature: [REDACTED]

– or – ☐ Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No.
WPR17IA007

Reviewed by NTSB Regional Office
WPR-AS

Name of Investigator
Albert Nixon

Date Report Received
10/26/2016