

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: Sterling State: AK
 ZIP: 99672 Country: USA
 Latitude: 60d, 32'23.1" (dd:mm:ss N/S) Longitude: 150d, 52'09.3" (ddd:mm:ss E/W)

Date/Time

Date: 12/4/13 Local Time: approx 12:25
mm/dd/yyyy
 Time Zone: AKST

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

_____ ft MSL

AIRCRAFT INFORMATION

Manufacturer: Bellanca

Model: GCBC

Serial Number: 768-74

Registration Number: N88342

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 1,650 lbs

Weight at Time of Accident/Incident: 1,800 lbs

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

_____ inches from ☐ nose or ☐ datum
 -or- _____ 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: 2

If Large Aircraft, how many seats for:

Flight Crew: _____

Cabin Crew: _____

Passengers: _____

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: 5/23/13

mm/dd/yyyy

Airframe Total Time: 1,848 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 _____

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: Emergency Beacon Corp

Model/Series: EBC-102A

Serial Number: 68173H-A

Battery Type: GS-21

Battery Exp. Date: expired/working

ELT Aided in Locating Accident/Incident

☐ Yes ☒ No

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: McCauley

Model: GMA-8041

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm dd yyyy</i>	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	Lycoring	O-320-A2D	L-39257-27A	1974	150	1,848	8	1,848
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Duncan, David W or Duncan, Sarah R</u> Fractional Ownership Aircraft: ☐ Yes ☐ No		Owner Address City: <u>Sterling</u> State: <u>AK</u> ZIP: <u>99672</u> Country: <u>USA</u>	
Operator of Aircraft ☐ Same As Registered Owner Name: <u>Duncan, David W.</u> Doing Business As: <u>n/a</u> Air Carrier/Operator Designator (4 Character Code): <u>n/a</u>		Operator Address ☒ Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ Public Use (select type) ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ Federal ☐ State ☐ Local ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ Unknown ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces		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 (Select 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 other 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 (If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.) no failure			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 to any property, but aircraft tail bent at approx 90 degrees, right wing spars broken, cowl smashed, windshield cracked, propeller bent, right gear leg collapsed, right tire came off, exhaust tip and carb smashed.

AIRPORT INFORMATION *(If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)*Airport Identifier: n/aDistance From Airport Center: 0 SMAirport Name: Dutch Landing (just off West end of runway)Direction From Airport: West degrees MAGProximity to Airport ☒ Off Airport/Airstrip ☐ On Airport ☐ On AirstripAirport Elevation: 150 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: none (L/R/C) Length: 2,000 ft Width: 150 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: Adkins RdCity: SterlingState: AKCountry: USA**Time of Departure**Time: 1215Time Zone: AKST**Destination**Airport ID: PGMCity: Port GrahamState: AKCountry: 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)*35 Gallons**Fuel Type**

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

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFT											
Was an emergency evacuation of the aircraft performed? ☒ Yes ☐ No											
Method of Exit – Describe how the occupants exited and how many occupants evacuated each location Pilot and passenger exited through the single right hand cockpit door											
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE											
Weather Observation Facility Facility ID: <u>Soldotna AWOS</u> Observation Time: <u>0900 and 1215</u> Time Zone: <u>AKST</u> Distance from Accident Site: <u>13</u> NM Direction from Accident Site: <u>West</u> degrees MAG	Source of Weather Information <i>(Check all that apply)</i> ☒ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☒ Automated Report ☐ Unknown ☐ Commercial Weather Service (DUATS)		Method of Briefing <i>(Check all that apply)</i> ☐ 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		Visibility <u>5</u> 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 <i>(Check all that apply)</i> ☐ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☒ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown								
Lowest Cloud Condition Height <u> </u> ft AGL	Ceiling Height <u> </u> ft AGL										
Wind Direction ☐ Indicated: <u> </u> degrees MAG ☐ Variable	Wind Speed Velocity: <u> </u> KTS -or- ☒ Calm ☐ Light and Variable	Wind Gusts Velocity: <u> </u> KTS ☐ Gusting ☐ Not Gusting	Type of Turbulence <i>(Check all that apply)</i> ☒ 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 no advisory's											
Temperature: <u>-9</u> (C) or <u> </u> (F) Altimeter Setting: <u>30.48</u> in. HG or <u> </u> MB Density Altitude: <u> </u> ft Dew Point: <u> </u> (C) or <u> </u> (F)	Icing Forecast <table style="width: 100%;"> <tr> <th style="text-align: left;">Amount</th> <th style="text-align: left;">Type</th> </tr> <tr> <td> ☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light </td> <td> ☐ Rime ☐ Clear ☐ Mixed </td> </tr> </table> Icing Actual <table style="width: 100%;"> <tr> <th style="text-align: left;">Amount</th> <th style="text-align: left;">Type</th> </tr> <tr> <td> ☐ None ☐ Moderate ☐ Trace ☒ Severe ☐ Light </td> <td> ☐ Rime ☒ Clear ☐ Mixed </td> </tr> </table>		Amount	Type	☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed	Amount	Type	☐ None ☐ Moderate ☐ Trace ☒ Severe ☐ Light	☐ Rime ☒ Clear ☐ Mixed	Type of Precipitation <i>(Check all that apply)</i> ☐ 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
Amount	Type										
☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed										
Amount	Type										
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PILOT "A" INFORMATION																																																																																																				
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Pilot "A" Identification First Name: <u>David</u> Middle Initial: <u>W</u> Last Name: <u>Duncan</u> City: <u>Sterling</u> State: <u>AK</u> ZIP: <u>99672</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>49</u> Date of Birth: <u>mm/dd/yyyy</u> 64 Certificate Number: _____																																																																																																				
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) <i>(Check all that apply)</i> ☒ 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>unknown/expire</u> <u>mm/dd/yyyy</u>																																																																																												
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Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>08/07/12</u> <u>mm/dd/yyyy</u>				Flight Review Aircraft Make: <u>Bellanca</u> Model: <u>7GCBC</u>																																																																																																
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 ☐ Free 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 ☐ Instrument Airplane ☐ Airplane Single-Engine ☐ Instrument Helicopter ☐ Airplane Multi-Engine ☐ Helicopter ☐ Gyroplane ☐ Glider ☐ Powered Lift ☐ Sport																																																																																														
Type Ratings						Student Endorsements <i>(Include dates)</i> Lost logbook, given to my son this spring when told I had 3 types of cancer and would not survive. Unable to locate after massive search. My son is currently going through divorce and lives in Idaho. Flight times listed below are based upon my best recollection at this time.																																																																																														
<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>280</td> <td>265</td> <td>280</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>280</td> <td>265</td> <td>280</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>0</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 colspan="10" style="background-color: black;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 90 Days</td> <td>3</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>0</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>0</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	280	265	280								Pilot in Command (PIC)	280	265	280								Time as Instructor	0										This Make/Model											Last 90 Days	3										Last 30 Days	0										Last 24 Hours	0									
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PILOT "B" INFORMATION																																																																																																				
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Pilot "B" Identification First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ Age at time of Accident/Incident: _____ Date of Birth: _____ Certificate Number: _____ 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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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 ☐ Free 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																																																																																														
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ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)																
Pilot Name and Address First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						Degree of Injury ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious										
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign ☐ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military						Seat Occupied ☐ Left ☐ Front ☐ Right ☐ Rear ☐ Center ☐ Single ☐ Unknown										
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No						Total Flight Time at the Time of this Accident/Incident: _____ hrs										
Pilot Name and Address First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						Degree of Injury ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious										
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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>Dimeana</u> City: <u>Port Graham</u> Middle Initial: _____ State: <u>AK</u> ZIP: <u>99603</u> Last Name: <u>Okegawa</u> Country: <u>USA</u>						rear	☐	☒	☐	☐	☐	☐	☐	☐	☒	☐
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ 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.

I had watched the weather for 3 days waiting for suitable flying conditions, and defrosting and preparing the airplane. On Dec 4th, the below zero temperatures we were previously under finally went above zero at my house. I checked the temperature in early morning, and again around daylight. Although I do not recall the exact temperature at the time I left to go to the airplane, it was in approximately single digits. I checked Soldotna AWOS by telephone after 9 am, and checked the weather on the computer on the Weather Underground.com, which has METAR. I found no advisories. Port Graham weather forecast was for warm weather with possible precipitation a high approaching 40 degrees f. I checked Soldotna AWOS again by radio at takeoff. Soldotna AWOS temp was -9 Celsius, good visibility, overcast at either 6000' or 9000' (I cannot recall exactly which) with some scattered clouds at approx 2300-2400'. I removed wing covers, preheated and thawed airplane, loaded survival gear and all of my passengers clothing and birthday gifts. Preflighted, started and warmed the airplane, and took off at approximately 1215 pm. I took off to the south intending to follow the highway to Homer, and began to climb. At approximately over the Swanson River road, I began to notice tiny specks of ice on my windshield. I had seen no sign of approaching precipitation, so I believed that the source was a small cloud ahead and 100-200 ft below me. I decided to climb above it to see if the ice was being blown upward from the cloud. Above the cloud was gray overcast, and I didn't notice anything ominous approaching. I believe I was around 2500', when the ice suddenly began to accumulate very rapidly, obscuring the windshield. I wanted to turn around and land immediately. I told my passenger that we were going to land and check out the airplane. Below me was Wild Bill's strip which is long and wide, but to get to it I would have to go through the cloud under me, and find it with my windshield covered in ice. Ahead and slightly to my left out the left corner of the windshield I could see the "Dutch Landing" strip, which I knew well and felt certain I could reach easily without turning or descending through the cloud below me. I began to descend rapidly, as the airplane already felt heavy and sluggish with the accumulated ice. I cycled carb heat through the descent. When I was at the approach end (East) of the strip I felt I was going too fast from my rapid descent, and for the first time took my eyes off of the air strip (I was concerned that I could lose sight of it, as my windshield was completely obscured and I had to strain to look out of the left corner to see at all). I glanced at my airspeed: 110, way too fast for this small strip, and I was still too high. (Note that this number is the only number I remember for certain from this flight, the rest of the numbers are my best recollection or what I feel certain are very close to actual speeds based on previous experience.) I went around. In the first turn at this higher speed, the aircraft turned fairly well, although it certainly felt very different than normal. It felt very heavy and sluggish. I began to slow and descend for my second landing attempt. On base at this lower speed the aircraft began to really struggle to fly. I believe the speed to have been 85 or so. I increased throttle and airspeed, shallowed out and widened my turn. On short final I tried to stay just above the speed at which the airplane had previously struggled to fly. I was lined up with the strip but still a little high as I had been afraid to give up too much elevation on my "staggering" base turn. As I slowly decreased the throttle on the approach, the airplane began to lose altitude at an alarming rate (as opposed to a more normal "settling" of the airplane. It did not stall but was on the verge, and felt like a locomotive coming down just above the approach end of the strip. It was sinking TOO fast, and I wanted to go around again and come in flat since I had to maintain such a high airspeed. I hit the throttle and turned off the carb heat to get power for the go around. The engine revved and I lifted the nose for a second, then the engine backfired and quit. I could tell that I did not have enough runway left. At the end of the runway is a small unmaintained dirt trail, I landed on it, managed to go between one tree close to the road and the trees on the other edge. I remember thinking that maybe I could still lift the wing to help clear the tree, then I tried to force the airplane down to the ground to help with my braking. At the end of the short dirt road was a power pole and a big pile of frozen dirt. I knew I would pass under the power line as I was on the ground, but expected to hit the pole with my right wing. My right wing slid up the guy wire for the pole which pulled my right tire out of the packed snow into the unpacked snow and caused the airplane to turn to the right. I was slow enough now that the guy wire did not cut or tear into my fabric wing, but still spun the airplane into the hump of frozen dirt just beyond the pole and also to the right of the airplane. The cowl and engine impacted the frozen dirt. The right tire hit the base of the dirt pile while sliding sideways, and the right tire and wheel came off. The left wheel folded over. The tail of the aircraft swung to the left and hit a metal sign post for a sign which read "End of Borough road maintenance". The tail folded to the right, and the airplane stopped left wing high, facing right, perpendicular to the runway/ dirt road. I checked on my passenger, a friend's daughter (from the "off the road system" village of Port Graham) who had gotten stranded in Anchorage, and needed

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

Operator/Owner Safety Recommendation

1. At the first HINT of icing (especially in those temps) turn back, get on the ground, wait for it to pass, change your plans, etc. In this case (and thereby potentially any subsequent case) a matter of literally less than a minute was the difference between landing at my leisure and a forced emergency landing. Deciding to take a few seconds to see if the initial icing was blowing up from the cloud below me, lead me to the events causing my forced landing! The "frost specks" were not the freezing rain I encountered immediately afterward, but they were the leading edge of it.
2. Pick your emergency landing location carefully! Although I did right in picking one that I could identify although my windshield was obscured, and sticking with it, an additional 200 yards of runway would have allowed a lesson learned with no damage to any thing and with no potential loss of life. I firmly believed that since I could see and had found the strip I chose, (it was close, known to me, and was long enough to at least allow us to survive the landing if things went poorly), that it was better to go there than hope to descend to a better field and hope that I would be able to find it through the cloud and obscured windshield. It is true however; had I been able to get to Wild Bill's strip before the aircraft stalled, I could have landed without incident.
3. In the event you decide to go around during an icing event, do not turn off your carb heat for the go around. As my air cleaner had iced over, I probably choked the engine out when I needed it most. Force of habit from normal flying conditions can lead to disaster in abnormal flying conditions. At tree top level you do not have time to try a restart.
4. Although I did check Soldotna AWOS on takeoff, check your weather again if ANY length of time has expired since the weather (METAR in this case) was read and the flight began. Although there was no advisory until after the incident occurred (as substantiated by the newspaper account) each minute counts and a single advisory can change your plan, thereby preventing the incident in the first place. The morning all this happened, an airplane was flying around my house as I got ready to go. While loading my airplane, a Flying Boxcar or Casa that goes over almost daily (I believe from Homer to Anchorage) flew over at the usual time. Even one of the Troopers said that he was considering going flying that same morning. All of this does not indicate that it is safe for you to fly! Each area has it's own immediate conditions, and your destination can lead to vastly different conditions than those of others who are flying.
5. Know the potential for icing or any other condition that may occur within the temperatures you intend to fly into. Turns out that the "super cooled water droplets" I encountered occur from approximately -6 to -15 Celsius. Although we tend to forget about icing in an area that is 20 or more degrees (f) below freezing, this is the arena where this most severe icing happens. I plan to remind all of my pilot friends about this fact, since I am certain to have "many opportunities" as they all want to ask me what happened, and I may as well accomplish some good in middle of all the embarrassment.
6. Although this item is not about preventing the accident, it is none the less very important: No good deed or intention is worth making an exception to the rule (no passenger for student pilot). Although thankfully no one was hurt, I did place a young lady in a potentially life threatening situation. Had she not been along, I would not have been responsible for potentially hurting her, and no amount of flying, value of aircraft damage, or embarrassment matters compared to this fact. In addition, even if you have been told you are going to die from cancer, and have miraculously survived to date, don't fly until you have caught up any items that may have expired or elapsed while you were sick.

ADDITIONAL INFORMATION *(Please type or print in ink)*

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**Date of this Report**

12/15/2013

*mm/dd/yyyy***Signature and Name of Pilot/Operator**

Signature: _____

Type or Print Name: David W. Duncan

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

Signature: _____

Type or Print Name: _____

Title: _____

FOR NTSB USE ONLY**NTSB Accident/Incident No.**

ANC14CA010

Reviewed by NTSB Regional Office

Anchorage, AK

Name of Investigator

C. Shaver

Date Report Received

12/15/2013