

**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: <u>Monroe</u> State: <u>WA</u> ZIP: _____ Country: <u>USA</u> Latitude: <u>47 52.28</u> (dd:mm:ss N/S) Longitude: <u>121 59.72</u> (ddd:mm:ss E/W)		Date/Time Date: <u>08/28/2012</u> Local Time: <u>1300</u> <i>mm/dd/yyyy</i> Time Zone: <u>Pacific</u>	
Phase of Operation <input type="checkbox"/> Standing <input type="checkbox"/> Takeoff (incl. initial climb) <input type="checkbox"/> Cruise <input type="checkbox"/> Hover <input type="checkbox"/> Taxi <input type="checkbox"/> Climb <input type="checkbox"/> Maneuvering <input type="checkbox"/> Other <input type="checkbox"/> Descent <input checked="" type="checkbox"/> Landing <input type="checkbox"/> Approach <input type="checkbox"/> Unknown		Collision with Other Aircraft <input type="checkbox"/> Midair <input type="checkbox"/> On-ground <input checked="" type="checkbox"/> None	Altitude of In-Flight Occurrence <div style="text-align: right;">50 ft MSL</div>

AIRCRAFT INFORMATION

Manufacturer: PIPER
 Model: PA28-R200
 Serial Number: _____
 Registration Number: N4922T

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 2,650 lbs
 Weight at Time of Accident/Incident: 2,100 lbs
 Location of Center of Gravity at Time of Accident/Incident:
84.3 inches from ☐ nose or ☒ datum
 -or- _____ Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft <input checked="" type="checkbox"/> Airplane <input type="checkbox"/> Balloon <input type="checkbox"/> Blimp/Dirigible <input type="checkbox"/> Glider <input type="checkbox"/> Gyrocraft <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered lift <input type="checkbox"/> Ultralight <input type="checkbox"/> Unknown	Type of Airworthiness Certificate <i>(Check all that apply)</i> <div> Standard <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Utility <input type="checkbox"/> Acrobatic <input type="checkbox"/> Transport </div> <div> Special <input type="checkbox"/> Restricted <input type="checkbox"/> Limited <input type="checkbox"/> Provisional <input type="checkbox"/> Experimental <input type="checkbox"/> Special Flight <input type="checkbox"/> Light Sport </div>	Number of Seats: <u>4</u> If Large Aircraft, how many seats for: Flight Crew: _____ Cabin Crew: _____ Passengers: _____	Landing Gear <input checked="" type="checkbox"/> Retractable Check any additional landing gear configuration that applies: <div> <input checked="" type="checkbox"/> Tricycle <input type="checkbox"/> Tailwheel </div> <div> <input type="checkbox"/> Amphibian <input type="checkbox"/> High Skid <input type="checkbox"/> Emergency Float <input type="checkbox"/> Skid <input type="checkbox"/> Float <input type="checkbox"/> Ski <input type="checkbox"/> Hull <input type="checkbox"/> Ski/Wheel <input type="checkbox"/> Unknown </div>
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Type of Maintenance Program <input type="checkbox"/> Annual <input type="checkbox"/> Conditional (Amateur-built only) <input type="checkbox"/> Manufacturer's Inspection Program <input type="checkbox"/> Other Approved Inspection Program (AAIP) <input checked="" type="checkbox"/> Continuous Airworthiness <input type="checkbox"/> Other, specify: _____	Last Inspection Type <input checked="" type="checkbox"/> 100 Hour <input type="checkbox"/> Continuous Airworthiness <input type="checkbox"/> AAIP <input type="checkbox"/> Conditional Inspection <input type="checkbox"/> Annual <input type="checkbox"/> Unknown	Date Last Inspection: _____ <div style="text-align: right;"><i>mm/dd/yyyy</i></div>
		Airframe Total Time: <u>4,307</u> hrs hours measured at (check one) <input type="checkbox"/> Last Inspection <input type="checkbox"/> Time of Accident/Incident

IFR Equipped <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Stall Warning System Installed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Type of Fire Extinguishing System <input type="checkbox"/> None <input type="checkbox"/> Specify _____
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ELT Installed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ELT Activated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ELT Manufacturer: _____
ELT Aided in Locating Accident/Incident <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Model/Series: _____ Serial Number: _____ Battery Type: _____ Battery Exp. Date: _____

Engine Type <input checked="" type="checkbox"/> Reciprocating <input type="checkbox"/> Turbo Jet <input type="checkbox"/> Turbo Shaft <input type="checkbox"/> Turbo Fan <input type="checkbox"/> Turbo Prop <input type="checkbox"/> Unknown	Reciprocating Fuel System Type <input type="checkbox"/> Carburetor <input checked="" type="checkbox"/> Fuel Injected	Propeller <input type="checkbox"/> Fixed Pitch <input checked="" type="checkbox"/> Controllable Pitch	Manufacturer: _____ Model: _____
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Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Engine Rated Power Measured as <i>(check one)</i> <input checked="" type="checkbox"/> Horsepower or <input type="checkbox"/> lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	LYCOMING	IO360-C1C	L-8954-51A		200	4,307		534
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: <u>Morcom Aviation Services Inc.</u> Fractional Ownership Aircraft: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Owner Address City: <u>Everett</u> State: <u>WA</u> ZIP: <u>98204</u> Country: <u>USA</u>
Operator of Aircraft <input checked="" type="checkbox"/> Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		Operator Address <input checked="" type="checkbox"/> Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____
Regulation Flight Conducted Under <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input checked="" type="checkbox"/> FAR 91 <input type="checkbox"/> FAR 129 <input type="checkbox"/> FAR 91 Special Flight <input type="checkbox"/> FAR 103 <input type="checkbox"/> FAR 133 <input type="checkbox"/> Non-US, Commercial <input type="checkbox"/> FAR 121 <input type="checkbox"/> FAR 135 <input type="checkbox"/> Non-US, Non-commercial <input type="checkbox"/> FAR 125 <input type="checkbox"/> FAR 137 <input type="checkbox"/> Armed Forces </div> <div style="width: 50%;"> <input type="checkbox"/> Public Use (select type) <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Unknown </div> </div>		Revenue Sightseeing Flight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Medical Flight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Purpose of Flight for FAR 91, 103, 133, 137 (Select one) <input type="checkbox"/> Personal <input type="checkbox"/> Business <input type="checkbox"/> Executive/Corporate <input type="checkbox"/> Other Work Use <input checked="" type="checkbox"/> Instructional <input type="checkbox"/> Ferry <input type="checkbox"/> Positioning <input type="checkbox"/> Aerial Application <input type="checkbox"/> Aerial Observation <input type="checkbox"/> Air Drop <input type="checkbox"/> Air Race / Show <input type="checkbox"/> Flight Test <input type="checkbox"/> Public Use <input type="checkbox"/> Unknown	Revenue Operation for FAR 121, 125, 129, 135 (Select one) <input type="checkbox"/> Scheduled or Commuter <input type="checkbox"/> Non-Scheduled or Air Taxi Domestic or International <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> International Cargo Operation <input type="checkbox"/> Passenger/Cargo <input type="checkbox"/> Passenger _____ How many? <input type="checkbox"/> Cargo _____ lbs <input type="checkbox"/> Mail	Type of Commercial Operating Certificate Held (Check all that apply) <input checked="" type="checkbox"/> None <input type="checkbox"/> Flag Carrier Operating Certificate (121) <input type="checkbox"/> Supplemental <input type="checkbox"/> Air Cargo <input type="checkbox"/> Foreign Air Carriers (129) <input type="checkbox"/> Commuter Air Carrier (135) <input type="checkbox"/> On-Demand Air Taxi (135) <input type="checkbox"/> Large Helicopter (127) <input type="checkbox"/> Rotorcraft External Load (133) - or - <input type="checkbox"/> Agricultural Aircraft (137) <input type="checkbox"/> 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 <input type="checkbox"/> Destroyed <input type="checkbox"/> Minor <input type="checkbox"/> Substantial <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> None <input checked="" type="checkbox"/> Substantial <input type="checkbox"/> Minor <input type="checkbox"/> Destroyed	Aircraft Fire <input checked="" type="checkbox"/> None <input type="checkbox"/> Both Ground and In-Flight <input type="checkbox"/> In-Flight <input type="checkbox"/> Unknown Origin <input type="checkbox"/> On-Ground	Aircraft Explosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Both Ground and In-Flight <input type="checkbox"/> In-Flight <input type="checkbox"/> Unknown Origin <input type="checkbox"/> On-Ground

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

LEFT WING DAMAGE IN AND AROUND MAIN LANDING GEAR ATTACH AREA. WRINKLED TOP AND BOTTOM OF LEFT WING OUTBOARD OF GEAR ATTACH POINT APPROXIMATELY THREE FEET IN LENGTH. BROKEN WING RIBS, SHEARED RIVETS IN MULTIPLE AREAS.

RIGHT WING UPPER SKIN INBOARD OF MAIN LANDING GEAR AREA SHOWS SIGNS OF STRESS AND SLIGHT BUCKLING. PAINT CHIPPED OFF RIVET. CRACK IN ONE WING RIB IN MAIN GEAR WELL AREA.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)

Airport Identifier: W16 **Distance From Airport Center:** _____ SM
Airport Name: Firstair Field **Direction From Airport:** _____ degrees MAG
Proximity to Airport ☐ Off Airport/Airstrip ☒ On Airport ☐ On Airstrip **Airport Elevation:** _____ 50 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 Information

Runway ID: 07 (L/R/C) Length: 2,087 ft Width: 34 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: KPAE
 City: Everett
 State: Washington
 Country: USA

Time of Departure

Time: 1200
 Time Zone: PST

Destination

Airport ID: W16
 City: Monroe
 State: Washington
 Country: 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)

30 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

Left the airplane in a normal manner after landing at Paine Field.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**

Facility ID: _____

Observation Time: _____

Time Zone: _____

Distance from Accident Site: _____ NM

Direction from Accident Site: _____ degrees MAG

Source of Weather Information

(Check all that apply)

☒ National Weather Service

☐ Flight Service Station

☐ TV/Radio

☐ Automated Report

☐ Commercial Weather Service (DUATS)

☐ Company

☐ Military

☐ Internet

☐ Unknown

Method of Briefing

(Check all that apply)

☐ In Person

☐ Teletype

☒ Telephone/Computer

☐ Aircraft Radio

☐ TV/Radio

☐ Unknown

Briefing Type/Completeness

☐ Full

☒ Partial / Limited By Pilot

☐ Partial / Limited By Briefer

☐ Abbreviated

☐ Unknown

☐ Not Pertinent

Light Condition

☐ Dawn

☒ Day

☐ Dusk

☐ Night

☐ Dark Night

☐ Bright Night

☐ Not Reported

Visibility

_____ 10 miles

Sky/Lowest Cloud Condition

☐ Clear

☐ Few

☐ Partial Obscuration

☒ Scattered

☐ Thin Broken

☐ Thin Overcast

☐ Unknown

Ceiling

☐ None (clear)

☒ Broken

☐ Overcast

☐ Obscured

☐ Indefinite

☐ Unknown

Restriction to Visibility (Check all that apply)

☒ None

☐ Blowing Dust

☐ Blowing Sand

☐ Blowing Snow

☐ Blowing Spray

☐ Dust

☐ Fog

☐ Ground Fog

☐ Haze

☐ Ice Fog

☐ Smoke

☐ Unknown

Lowest Cloud Condition Height

5,000 ft AGL

Ceiling Height

5,000 ft AGL

Wind Direction

☒ Indicated:

_____ 70 degrees MAG

☐ Variable

Wind Speed

Velocity: _____ KTS

-or-

☐ Calm

☒ Light and Variable

Wind Gusts

Velocity: _____ KTS

☐ Gusting

☒ Not Gusting

Type of Turbulence (Check all that apply)

☒ None

☐ Clear Air

☐ In Clouds

☐ Vicinity of Thunderstorm

Severity of Turbulence

☐ Extreme

☐ Severe

☐ Moderate

☐ Moderate Chop

☐ Light

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

Temperature: _____ (C)
or _____ (F)

Altimeter Setting: _____ in. HG
or _____ MB

Density Altitude: _____ ft

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

Icing Forecast

Amount

☒ None

☐ Trace

☐ Light

☐ Moderate

☐ Severe

Type

☐ Rime

☐ Clear

☐ Mixed

Icing Actual

Amount

☒ None

☐ Trace

☐ Light

☐ Moderate

☐ Severe

Type

☐ Rime

☐ Clear

☐ Mixed

Type of Precipitation (Check all that apply)

☒ None

☐ Rain

☐ Snow

☐ Hail

☐ Rain Showers

☐ Freezing Rain

☐ Snow Shower

☐ Drizzle

☐ Ice Pellets

☐ Snow Pellets

☐ Snow Grains

☐ Ice Crystals

☐ Ice Pellets Shower

☐ Freezing Drizzle

Intensity of Precipitation

☐ Light

☐ Moderate

☐ Heavy

PILOT "A" INFORMATION																																																																																																				
Pilot "A" Responsibilities at the Time of Accident/Incident <input checked="" type="checkbox"/> Pilot <input type="checkbox"/> Co-Pilot <input type="checkbox"/> Student Pilot <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Check Pilot <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Other Flight Crew																																																																																																				
Pilot "A" Identification First Name: <u>Junichi</u> City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: <u>Sato</u> Country: _____ Age at time of Accident/Incident: _____ Date of Birth: _____ Certificate Number: _____ <div style="text-align: center; font-size: small;">mm/dd/yyyy</div>																																																																																																				
Degree of Injury <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Minor <input type="checkbox"/> Unknown <input type="checkbox"/> Serious			Seat Occupied <input checked="" type="checkbox"/> Left <input type="checkbox"/> Front <input type="checkbox"/> Unknown <input type="checkbox"/> Right <input type="checkbox"/> Rear <input type="checkbox"/> Center <input type="checkbox"/> Single			Seat Belt Used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Shoulder Harness Used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																																																											
Pilot Certificate(s) (Check all that apply) <input type="checkbox"/> None <input type="checkbox"/> Student <input type="checkbox"/> Recreational <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Foreign <input checked="" type="checkbox"/> Private <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Sport <input type="checkbox"/> Airline Transport <input type="checkbox"/> U.S. Military																																																																																																				
Principal Occupation <input checked="" type="checkbox"/> Pilot <input type="checkbox"/> Other <input type="checkbox"/> Unknown		Medical Certificate <input type="checkbox"/> None <input checked="" type="checkbox"/> Class 3 <input type="checkbox"/> Class 1 <input type="checkbox"/> Driver's License (Sport Pilot only) <input type="checkbox"/> Class 2 <input type="checkbox"/> Unknown			Medical Certificate Validity <input type="checkbox"/> Without limitations/waivers <input checked="" type="checkbox"/> With limitations/waivers <input type="checkbox"/> Unknown			Date of Last Medical <u>07/10/2009</u> <div style="text-align: center; font-size: small;">mm/dd/yyyy</div>																																																																																												
Medical Certificate Limitations MUST WEAR CORRECTIVE LENSES.																																																																																																				
Medical Certificate Waivers																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>08/29/2012</u> <div style="text-align: center; font-size: small;">mm/dd/yyyy</div>			Flight Review Aircraft Make: <u>CESSNA</u> Model: <u>172</u>																																																																																																	
Airplane Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input checked="" type="checkbox"/> Single-Engine Land <input checked="" type="checkbox"/> Single-Engine Sea <input checked="" type="checkbox"/> Multiengine Land <input type="checkbox"/> Multiengine Sea		Other Aircraft Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airship <input type="checkbox"/> Free Balloon <input checked="" type="checkbox"/> Glider <input type="checkbox"/> Gyroplane <input checked="" type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift		Instrument Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input checked="" type="checkbox"/> Airplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift		Instructor Rating(s) <i>(Check all that apply)</i> <input checked="" type="checkbox"/> None <input type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Instrument Airplane <input type="checkbox"/> Airplane Multi-Engine <input type="checkbox"/> Instrument Helicopter <input type="checkbox"/> Gyroplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift <input type="checkbox"/> Glider <input type="checkbox"/> Sport																																																																																														
Type Ratings						Student Endorsements (Include dates)																																																																																														
<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 2px;">Flight Time (enter appropriate number of hours in each box)</th> <th rowspan="2" style="text-align: center; padding: 2px;">All Aircraft</th> <th rowspan="2" style="text-align: center; padding: 2px;">This Make & Model</th> <th rowspan="2" style="text-align: center; padding: 2px;">Airplane Single Engine</th> <th rowspan="2" style="text-align: center; padding: 2px;">Airplane Multiengine</th> <th rowspan="2" style="text-align: center; padding: 2px;">Night</th> <th colspan="2" style="text-align: center; padding: 2px;">Instrument</th> <th rowspan="2" style="text-align: center; padding: 2px;">Rotorcraft</th> <th rowspan="2" style="text-align: center; padding: 2px;">Glider</th> <th rowspan="2" style="text-align: center; padding: 2px;">Lighter Than Air</th> </tr> <tr> <th style="text-align: center; padding: 2px;">Actual</th> <th style="text-align: center; padding: 2px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Total Time</td> <td style="text-align: center; padding: 2px;">269</td> <td style="text-align: center; padding: 2px;">90</td> <td style="text-align: center; padding: 2px;">200</td> <td style="text-align: center; padding: 2px;">25</td> <td style="text-align: center; padding: 2px;">10</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Pilot in Command (PIC)</td> <td style="text-align: center; padding: 2px;">269</td> <td style="text-align: center; padding: 2px;">88</td> <td style="text-align: center; padding: 2px;">200</td> <td style="text-align: center; padding: 2px;">25</td> <td style="text-align: center; padding: 2px;">10</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Time as Instructor</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">This Make/Model</td> <td style="background-color: black; padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> <td style="text-align: center; padding: 2px;">0</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> <td style="background-color: black; padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Last 90 Days</td> <td style="text-align: center; padding: 2px;">43</td> <td style="text-align: center; padding: 2px;">48</td> <td style="text-align: center; padding: 2px;">48</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Last 30 Days</td> <td style="text-align: center; padding: 2px;">33</td> <td style="text-align: center; padding: 2px;">33</td> <td style="text-align: center; padding: 2px;">33</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Last 24 Hours</td> <td style="text-align: center; padding: 2px;">4</td> <td style="text-align: center; padding: 2px;">4</td> <td style="text-align: center; padding: 2px;">4</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">0</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> </tbody> </table>											Flight Time (enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	269	90	200	25	10						Pilot in Command (PIC)	269	88	200	25	10						Time as Instructor	0	0	0	0	0						This Make/Model					0						Last 90 Days	43	48	48	0	0						Last 30 Days	33	33	33	0	0						Last 24 Hours	4	4	4	0	0					
Flight Time (enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air																																																																																										
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Time as Instructor	0	0	0	0	0																																																																																															
This Make/Model					0																																																																																															
Last 90 Days	43	48	48	0	0																																																																																															
Last 30 Days	33	33	33	0	0																																																																																															
Last 24 Hours	4	4	4	0	0																																																																																															

PILOT "B" INFORMATION											
Pilot "B" Responsibilities at the Time of Accident/Incident											
<input type="checkbox"/> Pilot <input type="checkbox"/> Co-Pilot <input type="checkbox"/> Student Pilot <input checked="" type="checkbox"/> Flight Instructor <input type="checkbox"/> Check Pilot <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Other Flight Crew											
Pilot "B" Identification											
First Name: Ryan					City: ██████████						
Middle Initial: A					State: WA			ZIP: 98391			
Last Name: Kramer					Country: USA						
Age at time of Accident/Incident: 25					Date of Birth: ████████ 1987			Certificate Number: ██████████			
					mm/dd/yyyy						
Degree of Injury			Seat Occupied			Seat Belt			Shoulder Harness		
<input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Minor <input type="checkbox"/> Unknown <input type="checkbox"/> Serious			<input type="checkbox"/> Left <input type="checkbox"/> Front <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Right <input type="checkbox"/> Rear <input type="checkbox"/> Center <input type="checkbox"/> Single			Used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Pilot Certificate(s) (Check all that apply)											
<input type="checkbox"/> None <input type="checkbox"/> Student <input type="checkbox"/> Recreational <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Foreign <input type="checkbox"/> Private <input checked="" type="checkbox"/> Flight Instructor <input type="checkbox"/> Sport <input type="checkbox"/> Airline Transport <input type="checkbox"/> U.S. Military											
Principal Occupation		Medical Certificate				Medical Certificate Validity			Date of Last Medical		
<input type="checkbox"/> Pilot <input checked="" type="checkbox"/> Other <input type="checkbox"/> Unknown		<input type="checkbox"/> None <input type="checkbox"/> Class 3 <input type="checkbox"/> Class 1 <input type="checkbox"/> Driver's License (Sport Pilot only) <input checked="" type="checkbox"/> Class 2 <input type="checkbox"/> Unknown				<input checked="" type="checkbox"/> Without limitations/waivers <input type="checkbox"/> With limitations/waivers <input type="checkbox"/> Unknown			02/16/2012 mm/dd/yyyy		
Medical Certificate Limitations											
None											
Medical Certificate Waivers											
None											
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 03/12/11 mm/dd/yyyy					Flight Review Aircraft						
					Make: Cessna						
					Model: 172						
Airplane Rating(s) (Check all that apply)		Other Aircraft Rating(s) (Check all that apply)		Instrument Rating(s) (Check all that apply)		Instructor Rating(s) (Check all that apply)					
<input type="checkbox"/> None <input checked="" type="checkbox"/> Single-Engine Land <input type="checkbox"/> Single-Engine Sea <input checked="" type="checkbox"/> Multiengine Land <input type="checkbox"/> Multiengine Sea		<input checked="" type="checkbox"/> None <input type="checkbox"/> Airship <input type="checkbox"/> Free Balloon <input type="checkbox"/> Glider <input type="checkbox"/> Gyroplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift		<input type="checkbox"/> None <input checked="" type="checkbox"/> Airplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift		<input type="checkbox"/> None <input checked="" type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Airplane Multi-Engine <input type="checkbox"/> Gyroplane <input type="checkbox"/> Powered Lift <input type="checkbox"/> Instrument Airplane <input type="checkbox"/> Instrument Helicopter <input type="checkbox"/> Helicopter <input type="checkbox"/> Glider <input type="checkbox"/> Sport					
Type Ratings						Student Endorsements (Include dates)					
Flight Time (enter appropriate number of hours in each box)		All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
							Actual	Simulated			
Total Time		1,350	112	1,300	27	86	3	55	0	0	0
Pilot in Command (PIC)		1,270	112	1,280	27		3	55	0	0	0
Time as Instructor		1,060	92	1,060	0	60	0	0	0	0	0
This Make/Model						0	0	0			
Last 90 Days		200	48	200	0	7	0	2	0	0	0
Last 30 Days		60	36	60	0	4	0	0	0	0	0
Last 24 Hours		1	3	1	0	0	0	0	0	0	0

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)										
Pilot Name and Address		Degree of Injury								
First Name: _____ City: _____		<input type="checkbox"/> None <input type="checkbox"/> Fatal								
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/> Minor <input type="checkbox"/> Unknown								
Last Name: _____ Country: _____		<input type="checkbox"/> Serious								
Pilot Certificate(s) (Check all that apply)		Seat Occupied								
<input type="checkbox"/> None <input type="checkbox"/> Student <input type="checkbox"/> Recreational <input type="checkbox"/> Commercial <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Foreign		<input type="checkbox"/> Left <input type="checkbox"/> Front								
<input type="checkbox"/> Private <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Sport <input type="checkbox"/> Airline Transport <input type="checkbox"/> U.S. Military		<input type="checkbox"/> Right <input type="checkbox"/> Rear								
Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Center <input type="checkbox"/> Single								
Total Flight Time at the Time of this Accident/Incident: _____ hrs		<input type="checkbox"/> Unknown								
Pilot Name and Address		Degree of Injury								
First Name: _____ City: _____		<input type="checkbox"/> None <input type="checkbox"/> Fatal								
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/> Minor <input type="checkbox"/> Unknown								
Last Name: _____ Country: _____		<input type="checkbox"/> Serious								
Pilot Certificate(s) (Check all that apply)		Seat Occupied								
<input type="checkbox"/> None <input type="checkbox"/> Student <input type="checkbox"/> Recreational <input type="checkbox"/> Commercial <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Foreign		<input type="checkbox"/> Left <input type="checkbox"/> Front								
<input type="checkbox"/> Private <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Sport <input type="checkbox"/> Airline Transport <input type="checkbox"/> U.S. Military		<input type="checkbox"/> Right <input type="checkbox"/> Rear								
Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Center <input type="checkbox"/> Single								
Total Flight Time at the Time of this Accident/Incident: _____ hrs		<input type="checkbox"/> Unknown								
Pilot Name and Address		Degree of Injury								
First Name: _____ City: _____		<input type="checkbox"/> None <input type="checkbox"/> Fatal								
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/> Minor <input type="checkbox"/> Unknown								
Last Name: _____ Country: _____		<input type="checkbox"/> Serious								
Pilot Certificate(s) (Check all that apply)		Seat Occupied								
<input type="checkbox"/> None <input type="checkbox"/> Student <input type="checkbox"/> Recreational <input type="checkbox"/> Commercial <input type="checkbox"/> Flight Engineer <input type="checkbox"/> Foreign		<input type="checkbox"/> Left <input type="checkbox"/> Front								
<input type="checkbox"/> Private <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Sport <input type="checkbox"/> Airline Transport <input type="checkbox"/> U.S. Military		<input type="checkbox"/> Right <input type="checkbox"/> Rear								
Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Center <input type="checkbox"/> Single								
Total Flight Time at the Time of this Accident/Incident: _____ hrs		<input type="checkbox"/> Unknown								
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 Injury	Serious Injury	Minor Injury	No Injury	Unknown
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name: _____ Country: _____										
First Name: _____ City: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Middle Initial: _____ State: _____ ZIP: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.

During the afternoon of August 28, 2012, I Ryan Allan Kramer was flying with my Commercial applicant Junichi Sato. We were performing this flight due to the fact that Junichi had failed the Commercial Pilot Practical Test the previous day, and we needed to go up to accomplish the required training for a possible retest the following day.

We departed from runway 16L at Paine Field. On the upwind, with no runway remaining, Junichi retracted the landing gear in the Arrow, following normal operating procedures. While climbing out on the upwind and about to turn crosswind, I noticed that the yellow gear "in transit" light was still illuminated. This is odd, because within the time frame that Junichi initiated the gear up cycle, it should have already been up by that point (I would say a good 15-20 seconds had passed from gear selected UP, to light off and gear actually up). I asked Junichi about the gear not coming up at a normal rate and he did concur that the gear took reasonably longer to retract.

We then proceeded to go out to the practice area to do our air work, and then decided to land at Monroe (W16) to practice short-field accuracy landings. Junichi determined that the winds were out of the east, so we set up to land on runway 07. When coming up on the numbers, Junichi reduced the power to idle over the numbers and landed the airplane on the numbers like a normal short-field landing. I have been flying the Arrow a lot recently (about 50 hours in the past 90 days), and this landing was not out of the norm for some of the firm landings that I have seen from other renters I have flown with in that airplane.

On the upwind out of Monroe, the gear again was taking a long time to come up. After we realized that the gear indeed was not coming up, we decided to leave the gear down and locked and head back to Paine Field. I have had a few problems with the gear coming up in the past in this plane, so I had thought that this malfunction was due to problems with the squat switch like before. Neither of us had suspected any damage to the wing, and thus had not noticed the damage to the wing until we were inside at Regal Air debriefing and Ron had informed us of the damage he noticed while refueling N4922T.

Possible Cause(s) - It is possible that this damage is of cumulative nature. It is impossible to know of any damage caused by renters and multiple hard landings with resulting weakening structure. Then one last firm landing causes structure to finally fail.

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

Operator/Owner Safety Recommendation

ADDITIONAL INFORMATION (Please type or print in ink)

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

The last flight N4922T had before our flight, was the previous night when Junichi had gone solo to practice short-field landings and power-off 180 accuracy landings. He later stated that he had a few firm landings that night. This could have been the reason that the gear took so long to come up on the first takeoff the following day when departing KPAE.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**Date of this Report** **Signature and Name of Pilot/Operator**9/6/2012
mh/dahjyy

Signature: [Redacted]

Type or Print Name: Ryan Kramer

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

Signature: _____

Type or Print Name: Ryan Kramer

Title: Certified Flight Instructor

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

WP4294377

Reviewed by NTSB Regional Office

WFL

Name of Investigator

MICHAEL HURT

Date Report Received

9/6/12