



Citizen Advisory Board Application - Parking Committee

Complete and submit this application to be considered for a seat on the Sandpoint Parking Committee

Thank you for your interest in serving on the Sandpoint Parking Committee, a City of Sandpoint volunteer citizen advisory board. We appreciate your desire to serve our city in this capacity and look forward to reviewing your application. For more information, including qualifications for serving on the Parking Committee, please visit [Chapter 8 of Title 2, Sandpoint City Code](#).

Applicant Information

First Name*

Brynn

Last Name*

Williams-Woodruff

Phone Number*

Format: 000-000-0000

Email Address*

Home Address*

Street Address

Address Line 2

City

Sandpoint

State / Province / Region

Idaho

Postal / Zip Code

83864

Country

United States

My home and mailing address are the same*

☒ Yes

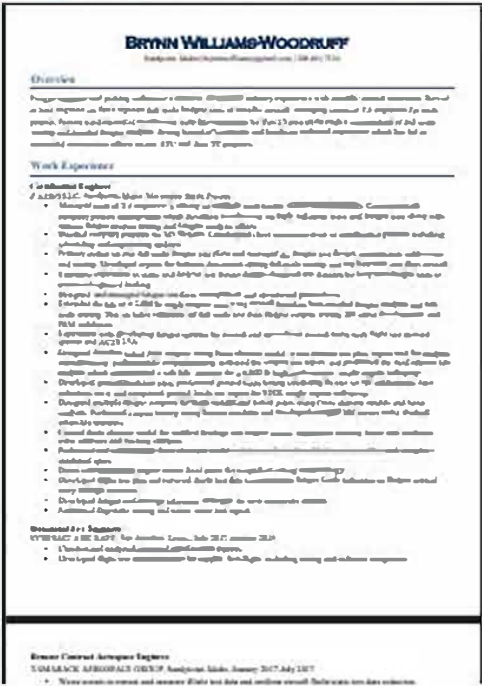
☐ No

Employment & Volunteer History

Please upload a copy of your resume, curriculum vitae, and/or any additional information relevant to your application

Upload Attachments*

Brynn.H.Williams.Woodruff Resume Parking Committe...152.24KB



Please provide any additional information regarding your experience or background and the reason(s) you wish to serve in this capacity*

Parking has clearly become a hot button topic in this town over the last 6 months. As a citizen who lives in town, pays city taxes, and extensively uses both the downtown and waterfront parking I think I have a viewpoint that represents the average citizen with the ability to advocate for all.

I have watched the public discussions on parking with concern and occasional amusement and believe I can provide a rational and objective viewpoint on the topic. I was born and raised in Sandpoint, and currently work in town as a mechanical engineer. I understand the numbers behind these types of decision and as a lifelong local I also understand the human factor.

I am an enthusiastic participant in city surveys and think this committee is an excellent way to engage the residents in the parking question. Parking decisions must be data driven but also consider the best interests and wishes of the residents. I cannot say that I support all of the recent city decisions on parking but I am able to objectively understand data and I would like to be part of this committee to help us make decisions for a better future for Sandpoint.

BRYNN WILLIAMS-WOODRUFF

Sandpoint, Idaho

Overview

Fatigue engineer and parking enthusiast with over 10 years of industry experience with metallic aircraft structures. Served as lead engineer on three separate full-scale fatigue tests of metallic aircraft, managing teams of 3-5 engineers for each project. Proven track record of establishing safe-life extensions for Part 23 aircraft through a combination of full-scale testing and detailed fatigue analysis. Strong blend of leadership and hands-on technical experience which has led to successful certification efforts on one STC and four TC projects.

Work Experience

Certification Engineer

Z-AERO LLC, Sandpoint, Idaho, November 2019-Present

- Managed team of 3-5 engineers working on multiple certification efforts simultaneously. Coordinated all company project management which involved coordinating multiple full-scale static and fatigue tests along with various fatigue coupon testing and fatigue analysis efforts.
- Tracked company projects via MS Project. Coordinated client communication on certification projects including scheduling and engineering updates.
- Primary author on two full-scale fatigue test plans and managed the fatigue test design, construction, calibration, and startup. Developed repairs for failures discovered during full-scale testing and implemented into fleet aircraft.
- Extensive experience in static and fatigue test fixture design; designed test fixtures for long term fatigue tests to withstand repeated loading.
- Designed and managed fatigue test data management and operational procedures.
- Extended the life of a 2,000 lb single engine strut wing aircraft based on both detailed fatigue analysis and full-scale testing. This included reduction of full-scale test data, fatigue coupon testing, SN curve development, and FEM validation.
- Experience with developing fatigue spectra for normal and agricultural aircraft using both flight test derived spectra and AC23-13A.
- Designed complex bolted joint coupon using finite element model, wrote coupon test plan, supervised the coupon manufacturing, performed the coupon testing, authored the coupon test report, and performed the final relative life analysis which substantiated a safe life increase for a 6,000 lb high-performance, single-engine turboprop.
- Developed ground loads test plan, performed ground loads testing (including fixture set up, calibrations, data reduction, etc.), and completed ground loads test report for STOL single engine turboprop.
- Designed multiple fatigue coupons for both welded and bolted joints using finite element models and hand analysis. Performed coupon testing using Instron machine and developed accepted SN curves using Weibull reliability statistics.
- Created finite element model for welded fuselage and engine mount; experience running linear and nonlinear static analyses and bucking analysis.
- Performed and substantiated finite element model validations for both welded truss assemblies and complex machined spars.
- Down-selected critical engine mount load cases for simplified testing methodology
- Developed flight test plan and reduced flight test data to substantiate fatigue loads reduction on fatigue critical carry through structure.
- Developed fatigue and damage tolerance strategies for new composite aircraft.
- Performed flap static testing and wrote static test report.

Structural Test Engineer

SYBERJET AIRCRAFT, San Antonio, Texas, July 2017-January 2018

- Checked and analyzed structural certification reports.
- Developed flight test instrumentation to support first flight, including wiring and software integration.

Remote Contract Aerospace Engineer

TAMARACK AEROSPACE GROUP, Sandpoint, Idaho, January 2017-July 2017

- Wrote scripts to extract and organize flight test data and perform aircraft flight/static test data reduction.
- Developed Aircraft Flight Manual Supplement for aircraft modification.
- Coordinated with lead stress engineer to reduce data for wing stress FEM nodal deflection and rotation. Performed deflection analysis for aircraft wing to contribute to certification stress report.
- Worked with Loads & Aeroelasticity Engineer to produce Nastran FEM Aeroelastic model of Cessna 525A aircraft.

Engineering Intern

TAMARACK AEROSPACE GROUP, Sandpoint, Idaho, Summers 2014, 2015 and 2016

- Performed aircraft instrument calibration for devices used in flight testing, collected instrument data using Dewetron DAQ and documented data and results (i.e., AOA, AOS, strain gauges and string potentiometers). Performed reduction and interpretation aircraft test data for flight characteristics and performance.
- Performed reduction and interpretation aircraft test data for flight characteristics and performance. Helped in design and execution of static testing on aircraft modification parts.
- Assisted in the planning of flight testing, helped prepare aircraft for flight and ground testing.

Education

Bachelor of Science, Mechanical Engineering

University of Nevada, Reno, 2017

Professional Development

Practical Stress Analysis Course, Jean-Claude Flabel, January 2022

Fatigue and Damage Tolerance Analyses Course, Dr. Patrick Safarian, June 2021

Specialized Experience

Tools & Software

Paid Parking Systems, FEMAP, NASTRAN, SolidWorks, NASGRO, Visual Basic, MS Excel, MS Word, MS Project, DASyLab, DeweSoft, Weibull SuperSmith

Interests & Skills

Downtown Parking, Waterfront Parking, Windbag Parking, Parallel Parking, Part 23 Certification, Project Management, Detailed Fatigue Analysis, Crack Growth Analysis, Full-Scale Fatigue Testing, Full-Scale Static Testing, Fatigue Coupon Testing, Flight Testing, Finite Element Modeling, FEM Validation, Instrumentation, Fatigue Spectrum Selection & Development, Classical Stress Analysis