

**Nicholas P. Isaacson**  
Mechanical Engineer, EIT, State of Washington, No. 32156  
(360) 528-7135  
nickisaacson@hotmail.com

750 Gore Rd.  
Onalaska, WA 98570  
Citizenship: US

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## **QUALIFICATIONS SUMMARY**

Nine years of experience as a Mechanical Engineer; EIT; B.S. in Mechanical Engineering; USAF Veteran; Technical Problem Solver; Product Designer, 3D CAD, FEA Software; Dedicated to my profession. Comfortable in a team environment or solo.

## **CAREER SUMMARY**

### **Project Manager / Mechanical Engineer, EIT**

Mechanical Specialties / NW Helicopters  
1000 85<sup>th</sup> Ave SE  
Olympia, WA 98501

**10/11/18-8/31/21**

Full Time, Hourly Position  
Phone: (360) 273-7604

#### **Primary Projects:** Helicopter Cargo Hooks

- Coordinated, scheduled, and managed multiple ongoing projects simultaneously.
- FAA Liaison; coordinated with FAA for new project certification requirements, priority levels, project schedules.
- Performed duties as Test Engineer for electrical, structural, or fatigue testing.
- Performed structural, electrical, fatigue analyses and finite element analyses.
- Composed technical reports for structural, electrical, fatigue analyses and tests for certification purposes.
- Designed components to: 1. ensure adequate strength, 2. comply with FAA regulations, and 3. be marketable.
- Drafted 3D models, assemblies, installations and technical drawings using Solidworks CAD.
- Worked with machinists to refine R&D and production part designs to simplify manufacturing processes.
- Tracked manufactured components from concept to manufacturing; making design improvements as necessary.
- Established Document Control System.
- Authored / revised AS9100 related departmental procedures.

### **Mechanical Engineer, EIT**

Soloy Aviation Solutions  
450 Pat Kennedy Way Southwest  
Olympia, WA 98501

**7/30/12 – 9/28/18**

Full time, Salaried Position  
Phone: (360) 754-7000

#### **Primary Projects:** Engine conversions in small airplanes and helicopters.

- Performed structural, electrical, and finite element analyses of aircraft systems and equipment.
- Drafted 3D models, assemblies and technical drawings using Unigraphics NX CAD.
- Composed structural, electrical, thermal, and other technical reports for certification of aircraft products.
- Performed duties as Test Engineer for structural or thermal testing.
- Revised manuals and other technical publications.
- Researched new products.

### **Network Engineer (Airborne Systems Engineer)**

United States Air Force  
97<sup>th</sup> Intelligence Squadron  
Offutt Air Force Base, Bellevue, NE

**2002 – 2008**

Full Time, Salaried Position

#### **Technical Environment** – Reconnaissance Aircraft with 20+ workstations, servers, and test equipment, all on a Cisco network.

- Lead team of four technicians in operating diverse computer network. Manage workload for team.
- Set maintenance priorities; delegate tasks for completion.
- Troubleshoot, repaired equipment and developed solutions for long term system stability.
- Established clear, detailed documentation that provides users with procedures to ease future troubleshooting.
- Demonstrated attention to detail, ensuring 100% functionality on supported systems.
- Wrote reports and implemented changes based on system tests.
- Analyzed test results and recommended or performed corrective action to system components to ensure most efficient operation possible.
- Referenced technical manuals, block diagrams, and wiring diagrams to isolate malfunctions.

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**EXPERIENCE**

Mechanical Engineer, EIT. 9 years. Focus in Aviation, modification of small airplanes and helicopters.

Currently capable of, but not limited to:

- 3D CAD Drafting (Unigraphics NX, Solidworks) for new product design, redesign of existing products, digitization of legacy drawings.
- Setup and execution of Finite Element Analysis models using Solidworks Simulation / ANSYS Workbench Software.
- Perform structural, electrical, fatigue, thermal analyses of components, systems, and aircraft.
- Publish substantiation reports for structural and electrical installations, containing test results or analyses.

**EDUCATION****Bachelor of Science in Mechanical Engineering**

2012

Saint Martin's University, Lacey, WA 98503

**Associate of Applied Science in Information Systems Management**

2005

Air University, Maxwell-Gunter Air Force Base, AL 36114

(Formerly Community College of the Air Force)

**JOB RELATED TRAINING**

BSME, Saint Martin's University

2012

Fundamentals of Engineering Exam

2012

**PROFESSIONAL AFFILIATIONS**

American Society of Mechanical Engineers

2009

Society of American Military Engineers

2012

Pi Tau Sigma, Saint Martin's Alpha Tau

2012

Order of the Engineer

2012

**HOBBIES / PROJECTS**

Tinkerer / Mechanic / Builder

Computer Builder

since 1992

Interested in Automotive Design

since 1993

Self-taught Automotive Mechanic / Gearhead

since 2000

Small Engine Repair

since 2012

Soundboard Operator

since 2016

**REFERENCES:**

Roland (Rocky) Poyns, CAD Designer

Centralia, WA

Cell: (360) 878-1295

Jeffrey Fox, FAA Designated Engineering Representative

Medford, OR

Cell: (541) 210-4127

Lars Jorgensen, Mechanical Engineer

Rochester, WA

Cell: (253) 576-1898

Stephen Phoenix, Mechanical Engineer (PE)

Olympia, WA 98501

Cell: (360) 701-6612

Dr. Isaac Jung, Ph.D., P.E.

Professor, Mechanical Engineering

St. Martin's University, Lacey, WA

Office Phone: (360) 688-2740