

KATHLEEN PEHL
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CAREER OBJECTIVE: Engineer / Web Developer

SUMMARY OF QUALIFICATIONS

Award winning engineer with demonstrated leadership skills. Fifteen years of experience across the engineering life cycle: requirements definition, computer aided design, stress, computational fluid dynamics, and acoustic analysis, systems integration, writing and executing test plans, analyzing test data, documenting results. Collaborated successfully with cross-functional teams and suppliers to troubleshoot in-service issues. Recognized for seeking out process improvements, cost savings and exceeding expectations.

PROFESSIONAL EXPERIENCE

Engineer, Boeing Company, Everett, Washington, 2003-2017

777X Fuel Equipment Design Engineer, January 2015 – March 2017

- Served as equipment manager for the 777X fuels design team. Major responsibilities included: writing requirements definition documents; coordinating with suppliers from part design through qualification and certification; collaborating with other functional teams within Boeing to review and approve documents supporting the qualification and certification of parts; project management and troubleshooting test issues.
 - Acted as equipment manager for two suppliers, managing 3 individual designed part work statements and schedules. Coordinated the design and qualification efforts, troubleshooting issues, and collaborating with suppliers and requirement stakeholders for all changes. Negotiated schedule changes in conjunction with supplier management team. *Results: Design completed on schedule and qualification test program started on time to support the master project schedule delivering parts in a fully qualified and certified state.*
 - Wrote three specification control documents, documenting the functional and physical interfaces, performance and safety requirements, quality assurance requirements, and validation and verification requirements for parts used in the fuel system. *Results: suppliers brought online, on schedule and on budget*

Wide Body Aircraft Fuel System Design Engineer, November 2012 – January 2015

- Served as system design engineer. Responsibilities included: team lead for value stream analysis and flow and process improvements, equipment manager-in-training for the 777 fuel quantity indicating system, resolving problem reports from airline customers and collaborating with suppliers to coordinate engineering changes.

- Led cross-Atlantic team of Boeing and supplier engineers for the urgent redesign, qualification, certification, and production of a new LED display following obsolescence of old display. *Results: Display was qualified and certified for use with no impacts to the production lines.*
- Led team efforts for value stream improvements. Worked with engineers, factory counterparts, suppliers, and customers to solve in service issues, to improve current engineering and manufacturing processes, and to innovate. *Results: Cost savings from completed projects total approximately \$23,300,000.*

787 Fuel System Design Engineer, Everett, Washington, January 2010 – November 2012

- Served as system design engineer and team lead for center fuel tank activities. Responsibilities included: Fuel Quantity Indicating System wire routing design, wire support redesign, single + latent failure analysis, and system integration with the structures and other systems in the fuel tank and the surrounding structure.
- Conducted extensive work with Fuji Heavy Industries, reviewing engineering data, coordinating system design, and facilitating the integration of supplier work packages and engineering.
- Supported wing fuel tank engineering activities. Responsibilities included wire routing trade studies, wire support redesign, and single + latent failure analysis. Worked with Mitsubishi Heavy Industries (MHI).

787 Composite Structural Design Engineer, Everett, WA, March 2008 – January 2010

- Worked on various tasks including composite layup of test panels using traditional and HuSTLE manufacturing methods, slat can drain part design and location integration, wing panel inside mold line surface definition, vent stringer studies, stringer runout studies, and composite stress checks and gage modifications using CATIA outputs and Visual Basic to create detailed maps of panels

Engineer, Space and Naval Warfare Systems Center, San Diego, CA, January 2005 – September 2007

- Worked on an active sonar system carried onboard an unmanned surface vehicle (USV). Responsibilities included structural modeling and analysis (ANSYS, NASTRAN) of transducers, writing and executing code to perform acoustic modeling and analysis of a single transducer and of array behavior (MATLAB and FORTRAN), testing of the transducers, and systems engineering and integration of the array onto the USV. Held Secret Clearance.

Engineer, Naval Air Warfare Center, Weapons Division, China Lake, CA, July 2003 – January 2005

- Worked on structural modeling and analysis (Modeling and analysis with Pro-Engineer, ANSYS, NASTRAN) of composite and metal structures for aircraft and missiles.

- Worked on materials investigations, including failure testing and analysis, crack propagation analysis using UV dye testing, coupon testing, and scanning electron microscope work.
- Worked on atmospheric testing and research. Created real-time atmospheric profiles to support projects. Wrote MATLAB, Visual Basic, PYTHON, and Perl scripts to compile various weather station data into conglomerated maps.
- Wrote standard operating procedures for range tracking operators and assisted in day to day range operations.
- DAWIA Level II (SPRD&E) Certified
- Held Secret Clearance

TECHNICAL SKILLS

Programming: HTML, CSS, MATLAB, Visual Basic, FORTRAN, PYTHON, PERL, C++

Computer Aided Design and Analysis Tools: CATIA (Generative Shape Design, Part Design, Assembly Design, Electrical Harness Installation and Assembly, Functional Tolerancing and Annotation, and Composite Workbenches)

Applications: Expert user with Microsoft Office and Project

Technical Writing: Requirements documents, test documents, coordination memorandums, standard operating procedures, change management documents

HONORS AND AWARDS

Boeing Pride in Excellence Achievement Award: 2011, 2013, 2014

Boeing Pride in Excellence Accomplishment Award: 2009-2017

FOREIGN LANGUAGES: Conversational French

LEADERSHIP + COMMUNITY SERVICE

- Member of Propulsion Systems Division Diversity Council. Leader of newsletter team, responsible for publishing monthly newsletter with articles by Boeing leadership, activities promoting diversity within Boeing and within the community
- National Engineering Week site leader. Coordinated all National Engineers Week activities at Everett BOMARC location for the Puget Sound in 2017, and Bellevue/Eastgate location in 2016.
- Puget Sound area lead for Construction Challenges.
- Lead of the 787 Peer Council. Organized and executed team and morale building activities.
- Co-lead a project organizing a career shadow day, matching 35 experienced career professionals, including executives, at Boeing with new engineers for a day of shadowing and career coaching. Successful project has become an annual event.

EDUCATION

Full Stack Web Development Certificate. University of Central Florida. Anticipated completion: January 2021.

Masters of Science, Aerospace Engineering with Certificate in Atmospheric and Oceanic Science, University of Colorado at Boulder, Boulder, Colorado, 2003

Bachelors of Science, Aerospace Engineering with Certificate in Atmospheric and Oceanic Science, University of Colorado at Boulder, Boulder, Colorado, 2003