

William Duncan

1685 Goosehaven Rd.
Saint Maries, ID 83861
(208) 691-5804
billduncan.weebly.com
ke7ove@gmail.com

Education and Qualifications:

University of Idaho – Moscow, ID (Expected May 2017)
• Bachelors of Science - Mechanical Engineering

North Idaho College – Coeur d'Alene, ID (2008)
• Associate of Science - Forestry (3.43 GPA)
• Technical Certificate - Welding Technology

Technical Certifications

- Certified Solidworks Professional
- Class A CDL with tanker endorsement
- SMAW, FCAW welding certified all position
- Certified small engine mechanic

Skills:

Leadership skills:

- Managed Silviculture crew for United States Forest Service: managed crew assignments, oversaw time-cards, kept track of fleet maintenance, and chose work area based on environmental factors.
- President of the Amateur Radio Club at University of Idaho.
- RF Communications team lead for NASA/Ames sponsored Research Involving Student Engineers and Educators (RISE) high altitude balloon team.

Equipment Operation:

- Valid commercial drivers license and can operate: excavators, bulldozers, skidders, forklifts, tractors, off-road vehicles, and boats.

Mechanical skills:

- Complete restoration of cars, trucks, and heavy equipment including: engine, transmission, suspension, hydraulic, and electrical systems.

Machining/Fabrication:

- Proficient with lathes, milling machines, welders, and other shop tools.
- Familiar with design and fabrication of complex parts.

Electronics:

- Experienced in using amateur radio equipment, Arduino microcontrollers, and designing/building both analog and digital circuits.

Computer skills:

- Experienced with Matlab, Simulink, Solidworks, EES, TkSolver, Ansys Fluent, modeFRONTIER, and GT-Suite.
- Familiar with Linux and Android programming.

Coursework:

- Advanced solid-modeling, simulation, and manufacturing capstone
- Computational fluid dynamics
- Fatigue fracture mechanics
- Research in luminescent materials lab
- Near-Space engineering leadership

Employment History:

Mechanical Engineering Intern: (May 2016- Present)
Schweitzer Engineering Laboratories – Pullman, WA

- Designed and prototyped fixtures for product testing.
- Created equipment to simplify manufacturing tasks.
- Generated drawing packages for complex assemblies.
- Participated in design reviews.
- Collaborated with test lab and machine shop to streamline manufacturing and assembly.

Manufacturing Engineering Intern: (June 2015- August 2015)
Colmac Coil Manufacturing – Colville, WA

- Modeled parts for both in-house and externally designed equipment.
- Requested quotes from local machine shops.
- Compared test data for newly designed parts and reported findings.
- Collaborated with a team to create procedures for field testing of products.
- Helped implement company-wide lean manufacturing and Toyota Kata principals.
- Constructed company-wide value stream map populated by background data sheets for all production processes and feeder cells.

Welder/Fabricator/Machinist (February 2011- August 2013)
Idaho Department of Lands – Coeur d'Alene, ID

- Fabricated wildland fire engines and water tenders.
- Conducted research and development to improve usability and reduce manufacturing costs.
- Maintained vehicle fleet for the Idaho Department of Lands Fire Cache.
- Distributed fleet vehicles to individual areas.
- Rebuilt wildland firefighting pumps, chainsaws, and generators.

Volunteer work:

Saint Joe Valley Search and Rescue

- Assist with fund-raisers
- Operate off road vehicles during searches
- Manage emergency resources
- Coordinate emergency communications

Civic volunteering:

- Repaired fire department communications repeater along with other amateur radio operators.
- Built emergency radio station for KOFE AM 1240 during flooding in the St. Joe Valley.

William Duncan
