Military Officer Career Preparation: Engineering

Why Engineering?

Engineering is the most in demand career field. Engineering encompasses a broad range of positions. Many JMO candidates do not feel qualified for a position in this field since they have been out of school and "out of practice" for several years. In many cases, it does not matter if you have an engineering degree or not, or how recently you have used it. Companies may take a candidate with a hard science degree, strong technical aptitude and practical experience for some engineering roles. Serving as an Engineering Division Officer on a ship or the Quality Assurance Officer in your squadron may qualify you for an engineering role.

Typical Positions

Below are some of the most common positions available to transitioning military officers in the Engineering field:

Process Engineers

Process Engineers establish and monitor ongoing processes, and look for problems within a company's processes and offer solutions to increase efficiencies where possible. Process Engineering also involves developing new processes and troubleshooting existing procedures. Process Engineers are typically trained or receive training in Six Sigma and other Lean Manufacturing processes.

Quality Engineers

Quality Engineers perform quality inspections and analysis in conjunction with Process Engineering that help to optimize plant layout, improve process flow, and reduce cycle time and costs. Quality Engineers are typically well versed in ISO standards and Six Sigma and other Lean Manufacturing processes. Quality Engineers want to ensure that there is little variation in a product that is produced (QC) or verify that all specifications are met and adhered to (QA).

Application Engineers

An Application Engineer is a liaison position where you will provide information on the selection, application, and performance of company products with a customer. Responsibilities normally include counseling customers on product use and maintenance in addition to keeping current with standards and innovations in product design and development.

Project Engineers

Project Engineers are commonly found in the construction industry, but they can also be found in other fields. The role normally requires strong project management skills and the ability to work in a variety of areas. In the construction industry, it would include possible work on roads, bridges and/or commercial construction. In other industries, it may involve commissioning or installing new equipment. Strong interpersonal skills are a must since you will be negotiating and working with vendors. Project engineers also work to ensure the technical specifications, proper materials, compliance issues and rate of work are being met as you work up to becoming a certified Project Manager.

Test Engineer

Test Engineers are responsible for testing new products prior to full scale manufacturing to ensure they can be profitably manufactured and supported logistically through the field service force of the company.

Power Plant Engineer

There are many engineering and operations roles well suited to those military officers who have been involved with power production in the military. Navy submarine and surface warfare officers who have held engineering roles have the most transferable experiences to the power industry. Some companies will also be interested in those candidates with electrical or mechanical engineering degrees and a desire to begin a career in this field.

Manufacturing Engineer

A Manufacturing Engineer establishes and directs manufacturing practices, processes, procedures, facilities, tools and equipment in order for production to achieve safety, quality, and quantity objectives. Most manufacturing engineers utilize lean manufacturing principles to achieve these goals.

Reliability Engineer

This role focuses on providing maintenance reliability expertise for a wide range of equipment in a wide range of industries. Understanding predictive maintenance and root cause analysis is key, allowing the company to minimize equipment down time, or at least to predict when heavy maintenance needs will occur.

Career Progression

From these roles, you can expect to move into other roles of increasing responsibility to include Engineering Manager, Plant Management and ultimately into executive leadership positions within a company. You will find that companies that are technical in nature (Aerospace & Defense, Construction, Manufacturing, R&D) tend to have leaders that possess a background in engineering. Starting a career in engineering will lead to significant opportunities across the U.S. economy.

Keys to a Successful Interview

- Have a game plan focused on your technical expertise/experience and two other of your best attributes that you feel are important to the company based on your company research.
- Have examples that highlight your technical skills.
- Explain the technical positions you held in the military, so an interviewer understands exactly what those positions consisted of.
- Discuss your ability to learn quickly (for example, held 5 different positions while on Active Duty).
- Review our interview prep modules and practice your questions.