

**DATE:** December 24, 2016

**TO:** Mary Kaye Bredeson, Executive Director,  
COE for Aerospace and Advanced  
Manufacturing



**FROM:** Richard N. Strand, Industry Analyst/Educational Consultant

**SUBJECT:** Boeing Internship Program(s)

## 1. **BACKGROUND:**

- a. **Boeing's Internship Programs:** For the past several months the COE staff, with the support of an AIA Grant, has been surveying pre-employment and pre-apprenticeship programs across the State of Washington. The goal has been to focus on best practices worthy of note and perhaps replication, as well as identify any gaps that might exist that may serve to limit the potential of such programs. The most recent program examined is Boeing's summer intern program. Nationally, Boeing supports a variety of internship programs; including programs tailored for college students focused on careers in engineering, business, information technology, and manufacturing. While the company provides positions for up to 1,700 students in these various areas of study (Susan Adams, *Forbes*, November 24, 2016), the particular program of interest to the COE study in Washington focuses more specifically on one involving recent high school grads, age 18 or greater, and provides up to 30 spaces each summer for a 12-week paid internship experience.
- b. **Value of Internships:** The National Association for Colleges and Employers (**NACE**) conducted an extensive survey between 2010 and 2013 involving more than 9,200 college seniors. The study itself was centered around the value of completing an unpaid VS paid internship as it relates to securing an entry-level position in a field of interest. The study concluded that overwhelmingly the students who successfully completed a paid internship (63%) received at least one job offer, compared to only 37% who may have completed an unpaid internship and 35% who had no internship experience at all. Employers seek applicants who have proven their worth in an actual work environment and the credibility of the paid internship appears to rise far above the other alternatives in the job search process (Jordan Weissman, June 19, 2013, *The Atlantic*).

## 2. **Boeing's Summer Internship Program in Washington.**

- a. **General:** Boeing started its summer internship program for students interested in manufacturing positions in 2011-2012. Since the program's inception, between 40-100 applications are received annually to fill one of 30 available positions. Originally the

program placed interns exclusively in “utility” trade positions. However, over time, the program has been expanded to offer placements in electronics, mechanical, carpentry, utility, millwright, HVAC and automotive. As noted, applicants must be at least 18 years of age at the start of their internship. While the program attracts mostly high school seniors from across the state and/or recent high school graduates, the Company will consider military veterans and more senior individuals who demonstrate the interest and have the background for entry into the program.

- b. **Application Process and Schedule.** Applicants from across the state submit a one page letter of interest in which they clarify their educational goals and area of career interest. Those specifying an interest in robotics, machining and/or engineering may be of particular interest to those who review and judge the merits of each application.
  - i. **DEC-FEB**—applications received
  - ii. **MAR**—applications reviewed and rated
  - iii. **APR**—select applicants interviewed, selected
  - iv. **JUN-SEP**—12-week internship period
- c. **Key Provisions of the Program.** The 12-week internship pays approximately \$11.50 per hour for a 40-hour work week. Generally, interns are placed in a day shift position, however, other shift placements may be made based on the needs of the company and the availability of the individual intern. No other benefits are included in the program.
- d. **Assessment.** At the conclusion of the internship period, interns are required to complete a NOCTI (National Occupational Competency Testing Institute) assessment. NOCTI is reportedly the largest provider of industry-based credentials and partner industry certifications for career and technical education (CTE) programs across the nation. Among the tests NOCTI offers is the Manufacturing Technology industry-based credential. NOCTI job ready assessments measure technical skills at the occupational level and include items which gauge factual and theoretical knowledge. Such assessments typically offer both a written and performance component and can be used at the secondary and post-secondary levels.
- e. **Program Outcomes.** It is estimated that 95% of the interns who enter the summer program will successfully complete it. Approximately 8-9 of these will apply for and secure a full-time entry-level position in the company. The remainder may continue with their schooling at the college level, use the experience to secure a position with one of the many suppliers associated with the industry, or simply apply the experience towards some entirely different endeavor that may be of greater interest to them. Those who complete the program and are successful at securing an entry-level position with the company, may earn from \$22-33.00 per hour plus benefits depending on their experience.