Preparing The Next Generation of Engineers

A University/Industry Partnership

John F. Eash
Director – F/A-18 Production Operations
The Boeing Company
Topics

- My Background
- Expectations of New Engineers
- Boeing University Relations
- Partnering Opportunities
- Closing Thoughts/Q&A
My Background

- McDonnell Douglas Co-op Student
- BS Aerospace Eng, MS Emgt, MBA
- S&T Alumni Association
- Boeing Exec Focal for S&T
- Boeing/S&T Partnership
  - 2300+ Alumni at Boeing
  - Interest Survey
  - 40 Member Campus Team

Engaging Alumni Critical to Success
Expectations of New Engineers

- Strong Technical Foundation
- Leadership Attributes
- Integrity/Ethics
- Practical Experience
- Good Communication Skills
  - Written and Verbal
- Works Well in a Team Environment
  - Sometimes Virtual

Preparation Goes Beyond the Classroom
Boeing University Relations

- University Relations Infrastructure
- Strategic Priorities
  - Recruitment
  - Continuing Education
  - Research & Development
- Tier 1 University Engagement
  - Approx 150 Institutions
  - Exec Focals/Campus Teams
  - Scholarships

Supporting Infrastructure Critical to Success
Partnering Opportunities
Co-op/Internships

- Guides Career Interests
- Provides Work Experience and Financial Assistance
- Increases Student Hiring Opportunities
- Brings Value to the Employer and Student

Relevant Work Experience Beneficial to Students and Industry
Recruiting

- Focus on Interns/Co-ops
- Campus Career Fairs
- Prospective Student Receptions
- Boeing Day on Campus
- Information Sessions
- Partner with Career Opportunities & Employer Relations

Effective Recruiting Programs Ensure Top Talent
Student Mentoring

- Student Focus
  - Scholarship Recipients
  - Co-ops/Interns
  - Campus Leaders
- Company and University Champions
- Mentor/Mentee Orientation
- Flexible Contact Plans

Mentoring Helps Students and Industry Stay Connected
Corporate Development Council

- S&T’s Top Corporate Partners
- Enrich the Student Experience
- Broaden Academic Portfolio
- Expand Research Performance

CDC Facilitates Linkage between Industry and University
Academic Advisory Boards

- Input on Curriculum
- Connectivity between classroom and industry
- Student Project Judging
- Capstone Project Mentors
- Accreditation Activity Support
- Student Discussion Panels

Opportunity to Shape Curriculum and Aid Students
Design Team Support

- Technical Expertise
- Financial Assistance
- Formal Design Reviews
- Team Member Mentoring
  - Former Design Team Participants

Industry Brings Practical Experience to Design Projects
Classroom Presentations/Plant Visits

- Bring Industry Experience to the Classroom
- Establish Presenters Network
- Portfolio of Topics and Experience
- Allow Students to Shadow Employees

Visits Augment Classroom Learning
Research & Development

- Boeing Funded Collaboration on R&D Projects
  - Real Time Location System
  - Fastener Installation Quality
- Center for Advanced Manufacturing Technologies
  - Composites Fabrication
  - Titanium Machining
  - Rapid Prototyping

Three PhD Grads Have Recently Joined Boeing
Closing Thoughts

- We All Play a Role
- University and Industry Champions Critical to Success
- Students Must Seek out Opportunities and be Prepared
- All Stakeholders Benefit
  - Students
  - Universities
  - Industry

Together We Can Prepare the Next Generation of Engineers!