Survey of Aerospace Student Attitudes:
Request for Assistance, 2009 Results Highlights

Prof. Annalisa L. Weigel,
Massachusetts Institute of Technology
alweigel@mit.edu, +1.617.253.1207
January 2010
Survey of Aerospace Student Attitudes

**Goals**

- Assess student perceptions about their education and the aerospace industry, motivations for studying aerospace, job and career aspirations, and job offers and acceptance
- Explain why students take job in the aerospace industry
- Over time, create a true longitudinal data set spanning college and early career stages
- Replace anecdotes with real data
Instrument Design and Data Collection

- Data gathered in 6 areas
  - Initial interests in aerospace (pre-college)
  - College experiences
  - Career expectations
  - Desired job attributes
  - Perception of aerospace industry
  - Demographics

- Survey population
  - Sophomores and seniors (or their equivalents)
  - Eventually, students 2 and 5 years out from graduation

- Web-based survey takes 30 minutes

- 2009 response characteristics
  - ~600 students from 23 schools participated in spring of 2009
  - 80% male, 20% female
  - 96% US Citizens, 4% foreign nationals
How ADCA Can Help in 2010

- Email the request to participate in the survey to your Sophomore and Senior students (or their equivalents)
  - A sample email announcement will be sent to all Department Heads via the ADCA email list in late February
  - Forward this email “en masse” to your eligible students
    - Send an announcement to your sophomore and senior email lists
    - Send an announcement to your general student list, asking only sophomores and seniors to participate
    - No need to provide student emails or identifying information
  - Encourage students to participate, circulate follow-up calls to participate (will also send a sample email for this)
  - Consider adding your own incentives for your students to participate
Aerospace is Exciting…Literally!

Using the first one, two, or three words that come to mind, how would you describe the aerospace industry? (n=528)
How old were you when you first became interested in aerospace? (n=426)

- 5-9 years old: 35%
- 10-13 years old: 27%
- 14-17 years old: 30%
- 18-22 years old: 7%
- 22+ years old: 1%
How many family members or close family friends are engineers? 
(n=431)

- 1-2 people: 42%
- 3-4 people: 12%
- 5-6 people: 4%
- 7-10 people: 1%
- 10-15 people: 0%
- 15+ people: 1%
- 0 people: 40%
University Influences

Please indicate whether each of the following has influenced your desire to work in aerospace: (n=515)
Tenure at First Organization

How long would you expect to stay with the first company/organization you work for after graduation?  (n=480)

- At least 10 years: 11%
- At least 6 months: 2%
- At least 1 year: 35%
- At least 5 years: 52%
Please indicate how you feel about the following statements: (n=483)

- I want to work for one company or organization for my whole career.
- I want to work for different companies or organizations over the course of my career.
- I want to work in a technical capacity for my whole career.
- I want to work in a management capacity for at least half of my career.
- I want to work on a different project every year.
- I want to work on one project for many years.

Legend:
- Agree
- Strongly agree
- Disagree
- Strongly disagree
Perception of Aerospace Compared to Other Industries

How does aerospace compare to other industries on the following job attributes? (n=460)

- Salary
- Benefits
- Location
- Job security
- Educational opportunities
- Flexible schedule
- Work/life balance
- Project variety
- Challenge
- Excitement
- Work environment / culture
- Leadership opportunities
- Recognition of personal achievements
- Sense of direct contributions
- Working with hardware
- Other

More favorably
Less favorably
Contrasting Sources of Jobs

**Recruiting Avenues for Aerospace Job Offers.** (n=74)

- Career fair: 60
- Internship: 45
- Knew someone that worked there: 20
- Online application: 20
- College career office: 5
- Other: 10

**Recruiting Avenues for non-Aerospace Job Offers.** (n=48)

- Career fair: 25
- Internship: 15
- Knew someone that worked there: 30
- Online application: 10
- College career office: 5
- Other: 15
Taking Jobs

- Of graduating aerospace engineering students
  - 80% took aerospace-related jobs
  - Leadership opportunities, excitement, challenge, benefits were the top four ranked factors for accepting a job outside aerospace
  - Salary, location, challenge, work environment were the top four factors for accepting a job in aerospace