

## SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Enabling The Future – Developing the Project Management and the Technical Space Workforce (3)

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## UNDERSTANDING THE AEROSPACE WORKFORCE OF TOMORROW: DATA-DRIVEN INSIGHTS

**Abstract**

The aerospace workforce of tomorrow comes from a different generation than the industry's current leaders, and there are important differences in the way this new generation views work and careers. This paper will present recent findings from the Survey of Aerospace Student Attitudes, a data-driven investigation into the motivations and career aspirations of undergraduate aerospace engineering students. The goal of this survey research project is to gain insights into what motivates students to study aerospace engineering, how their experiences influence their career choice, and what their perspectives are on a future career in or outside of the aerospace industry. These insights can be used to identify reasons that students might not stay in the aerospace field, and to help formulate practices to hire and retain workers.

Data was gathered in 2009 and 2010 from over 1200 aerospace engineering sophomore and senior undergraduate students from over 22 colleges and universities in the United States using a web-based survey instrument taking approximately 30 minutes to complete. The survey consisted of six parts: (1) Initial interests in aerospace (pre-college); (2) College experiences; (3) Career expectations; (4) Desired job attributes; (5) Perception of the aerospace industry; and (6) Demographics.

This paper reviews relevant previous literature on aerospace workforce trends, describes the survey approach and methodology, and presents results from the survey that highlight the differences in attitudes towards work and careers that graduating college students hold today. The paper concludes by discussing what might be done to bridge the gap to the new generation of the aerospace workforce and successfully recruit and retain these talented young engineers within the aerospace industry.