

Florida Tech AIAA: Expanding Student Opportunity on the Space Coast and Beyond

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I. Summary

Over the past year, the Florida Institute of Technology student branch of the American Institute of Aeronautics and Astronautics (AIAA) implemented initiatives to expand student opportunities through industry engagement, hands-on engineering experience, and structured professional development. Located on the Space Coast, our branch intentionally leveraged regional partnerships and campus resources to create an environment where students can see how their education directly connects to real-world applications, producing graduates who are technically prepared, inspired, and confident to pursue careers that make a meaningful contribution to the aerospace industry.

A notable example of commitment to this goal is exposing student members to major aerospace operations. Thanks to the support of the AIAA Cape Canaveral Section, students visited the NASA Kennedy Space Center, including the Vehicle Assembly Building, Launch Control Center, Launch Complex 39B, and the Prototype Development Lab. Interacting directly with engineers who discussed missions, systems integration, and technical challenges helped students connect classroom theory to engineering practice and clarified career goals for many new undergraduates. These visits were complemented by regular guest speaker events, providing mentorship from leaders in academia, industry, and entrepreneurship. A highlight was hosting Carol Craig, CEO and founder of Sidus Space, as the keynote speaker at the branch's Formal Dinner. As the first female founder of a space-based company to go public, she offered students a powerful perspective on resilience and innovation. Additional speakers included researchers, engineers, and pilots who shared career lessons and technical insights, giving members a realistic understanding of the many professional paths within aerospace. The branch also demonstrated commitment to inclusivity by supporting Reinvented Magazine's annual Space Gala, a fundraising event advancing opportunities for women in STEM. Supporting this initiative reflected AIAA Florida Tech's belief that the future of aerospace depends on cultivating diverse perspectives and empowering talented students from all backgrounds.

Hands-on engineering remained a key part of the club's mission. At the L3Harris Student Design Center, Panther Rocket Lab (PRL) offers rocketry experience modeled on industry programs. This year, PRL enabled 34 National Association of Rocketry (NAR) Level 1 and 1 Level 2 certifications, 7 static fires, and a school-record-breaking launch to 10,228 ft with a student-built motor. Students gained practical leadership and technical skills from leading requirements development, integration, and testing. Similarly, the RC Aircraft Team advanced from no operational aircraft to seven builds and prepared for the SAE Aero Design competition—its first in nearly a decade. Organized into subsystems, students conducted iterative design, manufacturing, and flight testing while learning trade studies and structural considerations. To help students translate these experiences into career success, the branch holds a Career Fair Readiness Event each semester with resume reviews, mock interviews, and guidance panels. Students also represent the branch at various conferences, presenting research and engaging regionally and nationally. Members and alumni serve on the AIAA Cape Canaveral Section board, reflecting the branch's impact on the local community.

These initiatives show a commitment to opportunity, mentorship, and education beyond the classroom. By combining industry exposure and hands-on engineering, the Florida Tech AIAA Student Branch empowers students to pursue meaningful careers in aerospace and beyond.

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