Implementing Collaboration and Structure: Bolstering USC AIAA in the Aerospace Community

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I. Summary

The 2023-2024 academic school year was the most successful year of USC's AIAA student chapter, seeing a dramatic increase in both student membership and club activity. The 2024-2025 school year promises to be just as successful as membership has more than doubled, growing from 40 members to 90 this year and student engagement remains high. While this is a great achievement for any student organization, this rapid growth presents several challenges that need to be addressed to preserve club momentum and ensure that members are receiving adequate value for their investment in the club. These challenges include providing opportunities for student members that are approachable for new members while still engaging more senior members and implementing updated methods of managing a growing organization.

As club membership grows year after year, club resources have become stressed in attempting to provide activities for students that do not feel repetitive to veteran members but are still at an appropriate level for incoming participants. USC has addressed this issue in several different ways. Firstly, this year USC AIAA has collaborated with other likeminded organizations, USC's Rocketry Club and Flight Club, in hosting local events. This effort serves two ends; it distributes the workload amongst the organizations and allows AIAA members a chance to experience topics that fall outside the scope of USC's AIAA Student Branch. Secondly, USC has implemented multiple sessions of specific events. For example, USC hosted a Catia CAD workshop in which an "advanced" and "introduction" session were offered simultaneously, allowing both veteran and incoming members to engage with the topic. A similar structure was implemented for a composite workshop where experienced members could participate in a Vacuum Assisted Resin Transfer Molding (VARTM) layup as opposed to the standard hand layup that was also offered. Events like these allow students to see their skill progression as they invest time in the club while also allowing new students to engage in these career relevant opportunities. USC has also offered more social events this year, which are accessible to all students. Activities like game nights, watch parties, and club travel to conferences and local aerospace manufacturers have been essential for maintaining club engagement this year. Lastly, thanks to the rapid growth of the club, USC has begun the introduction of long-term projects that engage many members without direct involvement from club leadership. This year USC will be participating in Design Build Fly for the first time in almost a decade and will also begin a small satellite program that will requires years of club activity. These projects, along with the other strategies mentioned, have allowed USC to maintain momentum and growth going into the 2025-2026 school year.

Efforts have also been made in "future proofing" the organization of the club, expanding, and creating new leadership positions and updating the structure both digitally and physically. These new positions allow more members to engage with the club in a leadership capacity and further distribute administrative burden amongst the leadership team. These positions include Social Media Manager, Event Coordinator, Mentorship Coordinator, Design Build Fly Committee Head, and Small Sat Committee Head. These positions are appointed and report directly to elected officials within the club. USC has also updated its digital organization: deploying a NAS system to store all files relevant to club operation that allows for better documentation and transfer of knowledge, expanding into discord to communicate with students, and launching a website that promotes the club to the wider aerospace community. These changes, along with securing a dedicated space on campus for the club, have allowed USC to effectively manage the rapid growth of the club.

The University of South Carolina has been fortunate to see a growing community of young aerospace professionals over the past few years. The USC AIAA Student branch aims to continue this momentum and grow the organization by implementing these organizational changes. Ideally, these changes could serve a similar purpose to other organizations and continue growing the aeronautical and astronautical community.

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