

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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EXPERIENCE AND IMPACT OF THE AEROSPACE ENGINEERING GROUP (GIA) OF THE
UNIVERSIDAD DE COSTA RICA FOR THE UNIVERSITY COMMUNITY AS TO THE
DEVELOPMENT OF THE AEROSPACE INDUSTRY IN COSTA RICA

Abstract

Our Aerospace Engineering Group (GIA, for its acronym in Spanish) was founded in 2014. We are a group of professors and students from the Faculty of Engineering at Universidad de Costa Rica; among other programs, mainly from the School of Mechanical Engineering. The group was formed in response to the need of our university community to have a common place to do research, and to share and develop information and experiences related to Aerospace Engineering. In Costa Rica, this is an emerging industry. We believe in the importance of our university being part of this economic and industrial development, and consider that everything related to space naturally represents an inspiration and a very high interest for most of engineering students. At the beginning, we organized two Aerospace Camps, in 2015 and 2016, respectively. Both events were extraordinarily rewarding experiences for both the participants and staff students and professors. For these activities, we invited international speakers, most of them Costa Ricans working at or related to NASA, rocketry experts, and aerospace industry experts. During the whole camp time, participants could attend their presentations and could share closely with our guest speakers. As a result, we achieved to consolidate a group of people working in projects related with aerospace engineering, rocketry, and CubeSats, participating in different competitions, like Mission Idea Contest, developing various undergraduate projects, and participating in IAC, among other things. One of the most valuable experiences is the participation in activities with other national organizations, such as the Ministry of Science and Technology, which aim at motivating elementary school and high school students to engage in STEM areas. Some of the activities were specifically for women in STEM; students of GIA were leaders in that regard. With this paper, I will explain the various activities in which we, as Group, have participated, and the impact that our participation is having in developing the field of Aerospace Engineering and the aerospace industry in Costa Rica, and in the participant's personal and professional development.