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THE CENTRAL AMERICAN SPACE CONGRESS (CEC) - CONNECTING GOVERNMENTS,
INDUSTRY, AND ACADEMIA IN CENTRAL AMERICA WITH THE WORLD

Abstract

In each of the four industrial revolutions, a handful of countries have taken the technological lead, concentrating most of the benefits from the progress and wealth created. Currently, the initial steps of an expansion of the global economies to in-space operations and research development are following the same pattern. Yet, great minds, innovative solutions to world problems, novel business ideas, and the human thirst for knowledge and space exploration can be found across the globe, including in non-established space actors like Central America. With this in mind, the Central American Space Congress (Congreso Espacial Centroamericano (CEC)) was conceptualized, developed, and its first gathering was held in Costa Rica in 2023. The CEC's overarching objective is to serve as a forum for Central American governments, industries, and academia to meet and establish bridges of collaboration within the region, as well as with the rest of the world. This is done with a long-term vision that these bridges will develop into tangible projects, initiatives, and businesses that can help the Central American region to not only be a participant of the up-and-coming space economy, but to also reap the benefits of being a leader in this new industrial revolution. The first CEC took place in Costa Rica in 2023 and gathered about 400 participants including the United States Department of State, Costa Rican and Guatemalan government officials, national and regional space agencies (NASA, Mexican Space Agency, and the Latin American and Caribbean Space Agency (ALCE)), as well as academics, scientists, engineers, and students from 19 countries in the Americas and Europe. Notably, 45% of the participants identified as women, a promising statistic reflecting the growing interest by Central American women in STEM fields. The second installment of CEC is taking place in Guatemala, with the vision of hosting this forum at alternating Central American countries, to ensure equitable access and visibility throughout the region. Here, from the perspective of the CEC organizing committee, we summarize the challenges that Central America faces in seeding and growing a productive and well established space sector. We also share the difficulties faced during the implementation of its first edition and lessons learned in the process, which may be applicable to executing similar events in other developing regions of the world.