

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

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SPACE INDUSTRY WORKFORCE DEVELOPMENT: LESSONS LEARNED AND CASE STUDY
WITH THE ANGOLAN NATIONAL SPACE PROGRAM MANAGEMENT OFFICE (GGPEN)

Abstract

Developing and sustainment a trained and experienced workforce that can tackle the technical issues faced by any space mission is a challenge for every organization. This is especially true for developing space nations who may not have a ready pool of engineering graduates or other specialties to draw upon from their general populace. This paper is a collaborative effort between Teaching Science and Technology Inc. (TSTI), a US-based workforce development company and the Angolan National Space Program Management Office (GGPEN). The paper begins by summarizing the the nearly 30 years of lessons learned by TSTI providing space systems engineering training to dozens of organizations around the world including NASA, ESA, JAXA, and other organizations. Best practices for both on-boarding and cross training new entrance into the industry are described as well as approaches to nurturing and sustaining that workforce as they mature into greater positions of technical responsibility. Following this background, the specific example of the challenge faced by GGPEN is described as they had to select and train 35 space mission operators from a pool of over 800. This case study describes the initial screening process followed by the focused training received by the recruits. Individual success stories are highlighted. The paper concludes with ongoing efforts to innovate and expand space training opportunities using the latest technologies.