Paper ID: 48872
oral

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

Author: Dr. Avid Roman-Gonzalez
Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

Ms. Natalia Indira Vargas-Cuentas
Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

PROGRESS IN THE FORMATION OF PROFESSIONALS WITH KNOWLEDGE IN AEROSPACE TECHNOLOGY IN PERU: AN OVERVIEW

Abstract

The Peruvian Space Agency (CONIDA) has more than 40 years of creation during which different aerospace initiatives have been carried out, such as the development of sounding rockets, although they have not yet reached 100 km. Since 2013, there are already three universities that have managed to send their nanosatellites to space. These nanosatellites had primarily educational objectives. In April 2014, Peru signed a contract for the purchase of an Earth observation satellite with Airbus Defence Space. The satellite was finally put into orbit in September 2016 and delivered to Peru for its complete operation on December 7, 2016. As part of this contract, 23 Peruvian professionals went to training in Toulouse - France. However, 23 trained professionals is a very small number, so more training channels are needed to take full advantage of all the benefits of having an Earth observation satellite. Since the signing of the contract for the purchase of the satellite, we proposed to start the professionals training since it was not necessary to wait until the satellite is in orbit to start training. Currently, despite the fact that the creation of a professional aerospace engineering undergraduate program in Peru has not yet materialized, a mastery program has been implemented in the signal and image processing that includes remote sensing topics. However, the Universidad Alas Peruanas already has the Aeronautical Engineering undergraduate program. Likewise, in several Peruvian universities in professional programs like electronic engineering, systems engineering, mechatronics engineering, mechanical engineering, electrical engineering, among others, touch some topics related to aerospace technology, as well as the development of some capstone projects. The Universidad de Ciencias y Humanidades has implemented the INCA (Research in Aerospace Sciences) program by its acronym in Spanish (INvestigacion en Ciencias Aeroespaciales), this program implies the beginning of the design of a CubeSat and a ground station. On the other hand, in 2017 the Aerospace and Electronics System Society of the IEEE in the Peru Section was created. Through this organization, one organized the First International Congress on Aerospace and Signals (INCAS 2017) that was held in Lima from 8 to 10 November 2017. As can be seen, although there is not yet an aerospace engineering undergraduate program in Peru, there are already several initiatives for training Peruvian professionals in aerospace technology.