

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

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SPACE SYSTEMS DESIGN AND MANUFACTURING COMPETITIONS, FROM TRAINING TO  
NEW SOLUTION TO INDUSTRY PROBLEMS

**Abstract**

Many Space Emerging Countries in the world look for an Effective way to train rookies. It is usually a concern in Space Agencies and Large Space Companies to administrate a time optimal and targeted program for educating new employees, and many times the technical blank between university knowledge and the experience needed for getting involved in real space projects may cause to failure. One of the main subjects that collegiate programs do not cover is about System Design and Systematic Point of View in Space Projects. Space Systems Design and Manufacturing Competitions can be a very effective way to train, excite and find interested talents in Space Industry. A competition on any Space System makes the team to know about Requirements, System Design, Manufacturing Notices and Integration and Operation Concerns which any Space Engineer shall be aware of in a real space project. In Iran, it is about 5 years that Space System Design Competitions are held and the results and outcomes are outstanding. The competitions all have been on Design, Manufacturing and Operation of Cansat in Different Missions, and now, the Organization is trying to step forward. The competition will be in two sections and professional competitors from previous rounds will participate in a challenge for Balloonsat Design and Manufacturing. Now, this competition is not only for training the Bachelor and Master students to become ready for space industry, but also, the missions are defined in a way to cover the Space Industry Problems which may be solved with Novel Ideas, resulting to Cheaper and More Simple Products. The competition is now ready to be announced and IAF will be a close comrade.