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Quality and Safety, always a beginning! (1)

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ROADMAP TO PROMOTE NEPAL'S CONTRIBUTION TO THE SPACE INDUSTRY BY NEPALESE SPACE RESEARCH ASSOCIATION

Abstract

While the world is entering into a new era of space exploration and technology, there are some developing countries that are left underrepresented in the space arena. The Moon Village Association-Participation of Emerging Space Countries initiative gives opportunities to these countries to realize their potential to contribute to the space industry and help them initiate projects that are both relevant and practical within their potential. Nepal is also one of those countries that does not have a strong space program. However, Nepal is making some progress in the space industry with the help of subject matter experts and engineering students. Nepal has some organizations who are willing to advance the space sector of the country. Nepalese Space Research Association (NESRA) is a private non-profit organization dedicated to promoting space sciences and technology in Nepal. NESRA organizes various technical workshops and events like the National Space Meet of Nepal on an annual basis which further emphasizes on how space touches our everyday lives and why should it be incorporated for our nation's development, Analog astronaut missions in collaboration with international organizations to help astronauts from all around the world to come to Nepal and make use of its unique landscape and environmental conditions to advance aerospace science and research. Two of the most prestigious engineering colleges in Nepal have included Aerospace Engineering to their programs. But there are very few tangible projects that can enable the space enthusiasts to implement what they learn in class into real life. We also lack proper outreach programs for both boys and girls in schools to motivate them to pursue a career in the space field. In this research paper, we have outlined research projects which will promote the growth of the space sector in Nepal by utilizing Nepal's unique geographical features and promote its contribution to the New Space industry. Analog astronaut base in Nepal, one among the projects discussed in the paper, will provide a unique opportunity to rigorously test design, and facilitate research and development, which will potentially help improve operations on extra-terrestrial destinations. We have also discussed the possible next steps for the government of Nepal to take in order to develop a policy which holds the potential to help new space actors of the country to flourish and help the country kick off its space program.