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SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Enabling the Future - Developing the Space Workforce (5)

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HUMAN RESOURCE PROGRAMS FOR SPACE TECHNOLOGY AND APPLICATION IN VIETNAM

Abstract

Due to geographic location and climatic conditions. Vietnam is one of the most vulnerable countries in the world because of global warming and climate change. This leads to the need to have an effective tool to monitor, forecast, and evaluate the impacts of disaster and climate change in Vietnam. Earth observation from satellite has become a rather commonly used instrument in scientific research and a number of management and production domains. "The Strategy for Research and Application of Space Technology towards 2020" of the Government of Vietnam has been serving as the guiding light for space technology development. Follow this strategy, Vietnam-made satellite technology development is a key roadmap, especially for earth observation satellite development in order to collect images as soon as possible when urgently required to minimize the damages from disaster and climate change. To build up capacity in terms of critical infrastructure and human resource to produce satellite domestically by 2020, Vietnam National Satellite Center (VNSC) was established in 2011. VNSC's mission is to develop satellite technology and applications. A roadmap for satellite producing has also been identified for progress measurement. To achieve these goals, VNSC itself needs more than 350 researchers and engineers working full time in 2020. Since space technology is still a new field and big satellite projects have just been established in Vietnam, there is a shortage of high-quality human resources capable of handling the projects. To tackle the issue, some human resource training programs have been proposed. Within the framework of the Vietnam Space Center project, VNSC has been sending engineers to five Japanese universities to pursue master's program in space technology, to attend the advanced course to satellite makers and to study about space application in short term. Vietnam also needs to train aerospace engineers by ourself. VNSC has cooperated with the Vietnam National University since 2010, the University of Science and Technology of Hanoi since 2012 and Ho Chi Minh City International University since 2015, for undergraduate and graduate education in space technology and application. In the near future, a education center for space technology and application human resource is planned to establish by VNSC. These educational collaborations and activities are expected to serve as the motivation and catalyst for satellite technology and application developments in Vietnam.