Vietnam Micro satellite development program

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Since 2006, after [The Strategy for Research and Application of Space Technology towards 2020] was approved by the Prime Minister of Vietnam, space technology especially the development of earth observation satellite in Vietnam has seen a massive change in all aspects. To achieve the most challenging goal - building up capacity in terms of critical infrastructure and human resource to produce satellite domestically by 2020, Vietnam National Satellite Center (VNSC), a national research agency operating under Vietnam Academy of Science and Technology (VAST), was established in 2011 following the Decision of the Prime Minister. VNSC’s mission is to develop satellite technology and applications. VNSC is responsible for managing and implementing the Vietnam Space Center project, the objective of which is to build capacity to self-produce satellites for the benefits of disaster and climate change countermeasure.

To train the young researchers of VNSC to meet the development requirement, 36 researchers of VNSC planned to five Japanese universities (The University of Tokyo, Keio University, Tohoku University, Kyushu Institute of Technology, and Hokkaido University) with 22 researchers are already studied in Japan. They are taking master courses about satellite technology in order to work for Vietnam Space Center when it is completed. During the time in Japan, they also participate in an educational satellite project.

The result of this project will be the first Vietnamese micro satellite called MicroDragon. It is developed by VNSC researchers under instruction of the Japanese professors. The main missions of MicroDragon is assessing coastal water quality of Vietnam to develop aquaculture and locating living resources that are associated with specific thermal features in the oceans by observing ocean colour. MicroDragon weights 50Kg with 50cm cubic size, it is now in design progress which intended to equip with 3 cameras: Space-borne Multispectral Imager (SMI), Triple Polarization Imager (TPI) and Infra-Red Imager (IRI). The development of MDG itself is planned to be finished by the end of 2017.

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