MICROSATELLITE TECHNOLOGY DEVELOPMENT STATUS IN MONGOLIA BASED ON ITS NEEDS

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The National University of Mongolia is one of the main players on space technology development in Mongolia. The Laboratory of National University of Mongolia successfully launched Mongolian very first satellite (1U cubesat) in 2017 under BIRDS project. The project outcome was to prepare experienced initial engineers in the satellite engineering field. After the project, country had to make next steps toward to space technology. One step is Microsatellite technology development in Mongolia collaborating with the Hokkaido University of Japan. In the framework of this collaboration, some universities, including National University of Mongolia, have enrolled to the Asian Microsatellite Consortium (AMC). In January of 2018, National University of Mongolia organized a Microsatellite mission and needs definition workshop at first time. The low population density, wide land, rich natural resources and nomadic life culture make unique needs of space technology and its application for Mongolia. Also, Hyperspectral imagery of the Microsatellite could be the best suitable solution of the Mongolian Space Technology field. Applications of the hyperspectral imagery of the Microsatellite shall be well-developed. Researches and development of applications are being conducted on imagery of LCTF camera which is the main payload of the Microsatellite with the cutting-edge technology and the Unmanned Airborne Vehicle measurement method. In this presentation, Mongolian current status of the Microsatellite technology development and needs will be presented.

Keywords: Microsatellite, Hyper-spectral imagery, Space Collaboration

