

Explanation of Request for STAs – VCC Cubesats

Three Virginia universities each have launched a 1U Cubesat. They were carried to the International Space Station (ISS) on NG-11 resupply mission, launched April 17, 2019. They were deployed from the ISS on July 3.

Since then, despite ongoing attempts, there has been no communication established between the ground stations and the satellites. The current concept of operation is for each university ground station to communicate with the cubesat from that university.

We request Special Temporary Authority to enable each of the three university ground stations to transmit to each of the cubesats, and enable each of the cubesats to transmit to each of the ground stations.

Also, we request Special Temporary Authority for the cubesats to communicate with the Wallops Flight Facility 11 meter diameter antenna. It is thought that a larger antenna may have a better chance of communicating if performance of the cubesats is somehow impaired.

All of this is expected to take place only for a limited time. One of the cubesats will deorbit in the next two months.

The following table summarizes the cubesats, the ground stations, the issued Experimental License numbers, and the STA application file numbers.

File Number Table

Operator	Cubesat Name	Cubesat Frequency Up/Down	Experimental License Number	STA File Number
U of VA	Libertas	401.04 MHz	0263-EX-CM-2018	1644-EX-ST-2019
VA Tech	Ceres VT	401.12 MHz	0252-EX-CN-2018	TBD
Old Dominion U	Aeternitas	401.08 MHz	0255-EX-CN-2018	TBD
Wallops Ground	None	None	None	Licensed by Wallops