Request for Special Temporary Authority

The National Telecommunications and Information Administration ("NTIA") has authorized the National Aeronautics and Space Administration ("NASA") to conduct experiments with the Technical Educational Satellite -13 ("TechEdSat-13") low earth orbit nanosatellite.[1]

In connection with these experiments, NASA will operate an Iridium satellite phone that it will host on TechEdSat-13. The satellite phone will transmit from TechEdSat-13 to space stations in Iridium's "Big LEO" constellation.[2] The transmissions will, among other goals, utilize Iridium's constellation as a tracking and data relay satellite ("TDRS") for nanosatellites.

Iridium hereby requests special temporary authority ("STA") commencing on September 15, 2021, and continuing for a period of one hundred and eighty (180) days, to transmit from its space stations to TechEdSat-13 in the 1618.725–1626.5 MHz band.[3]

There will be no change during the experiment in the operating parameters of Iridium's space stations, which are licensed as Part 25 space stations under Call Sign S2110. For this reason, no operating parameters, other than effective radiated power and emission designator, are used in the form that this exhibit accompanies. The only change for which Iridium seeks an STA is adding TechEdSat-13 as a point of communication. Iridium's Part 25 space station license does not cover space-to-space communications.

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[1] *See* SPS-24376/2 — NASA Replacement Request for Spectrum Support: Technical Education Satellite-11, 12, 13, 14 (TechEdSat-11, 12, 13, 14) Missions, Stage 2. The SPS serial number shown is an NTIA SPS Committee action/agenda assigned number. Once finalized, the NTIA Stage 2 certification serial number will be SPS- SPS-24540/2.

[2] The form that this narrative accompanies states that two satellite phone units will be used. This statement reflects the fact that there will be a primary unit and a back-up unit. But only a single unit will be operational at any given time.

[3] Iridium's constellation is comprised of 66 satellites, any one of which may be used as part of the experiment at any point in time.