

Request for Special Temporary Authority

Iridium Satellite LLC (“Iridium”) seeks special temporary authority (“STA”) for the six-month period between August 1, 2020 and February 1, 2021, to operate in the manner described below.

Iridium was granted an STA for these operations previously, under call sign WO9XGV, that has expired.¹ The STA had authorized Iridium to add the PAN project satellites (Pan A and PAN B) operated by Cornell University (“Cornell”) as points of communication for the Iridium satellite system. The launch for these satellites, however, has been delayed. To accommodate the new launch schedule, Iridium is seeking an STA for the six-month period beginning on August 1.

Cornell has been granted an STA under FCC call sign WO9XPU for the same six-month period covered by Iridium’s STA request.² As set forth in Cornell’s application, it will operate a Quake QLOCATE short burst date (“SBD”) transceiver installed on PAN A and PAN B to communicate with mission operations via the Iridium constellation.³ Iridium requires an STA to add the PAN project satellites as points of communication because Iridium’s Part 25 space station license does not cover space-to-space communications.

As explained in Iridium’s original application, the QLOCATE SBD modem is based on the Iridium 9602 chipset and will transmit from the PAN A and B space stations to space stations in Iridium’s “Big LEO” constellation. Iridium seeks an STA to transmit in the reverse direction, from its Big LEO constellation to the modems on the PAN project satellites. The technical characteristics of these transmissions will be identical to the technical characteristics of Iridium’s already-licensed space station transmissions in the 1618.725–1626.5 MHz band.⁴

Iridium will operate under the requested STA in accordance with the parameters of its Part 25 license. Accordingly, no operating parameters other than effective radiated power and emission designator were used in the form that this exhibit accompanies. The only change from Iridium’s licensed operations is to add Cornell’s PAN project satellites as points of communication.

¹ See FCC File No. 0415-EX-ST-2019.

² See FCC File No. 2342-EX-ST-2019.

³ See File No. 2127-EX-ST-2018.

⁴ Iridium’s constellation is licensed under Call sign S2110 and is comprised of 66 satellites, any one of which may be used as part of the experiment at any point in time.