Request for Special Temporary Authority

Iridium Satellite LLC ("Iridium") seeks special temporary authority ("STA") for the six-month period between March 1, 2021 and August 31, 2021, to operate in the manner described below.

Cornell University ("Cornell") has requested special temporary authority ("STA") to operate a RockBlock MK II transceiver installed on its ALPHA experimental satellite to communicate with mission operations via the Iridium constellation.¹ Iridium seeks this STA to add the ALPHA experimental satellite as a point of communication since Iridium's Part 25 space station license does not cover space-to-space communications.

The RockBlock MK II modem is based on the Iridium 9602 chipset and will transmit from the ALPHA experimental space station 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 ALPHA experimental satellite. 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.²

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 ALPHA project satellite as a point of communication.

¹ See File No. 1984-EX-ST-2019.

² 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.