

Request for Extension of Special Temporary Authority

Iridium Satellite LLC (“Iridium”) seeks extension of special temporary authority (“STA”) for a period of one hundred and eighty (180) days, beginning August 31, 2021, and ending February 27, 2022, to transmit from its space stations to the Veery-RL1 low-Earth orbit 1U cubesat operated by Care Weather Technologies (“Care Weather”) in the 1618.725–1626.5 MHz band,¹ in the manner described below.

Care Weather was granted a companion STA for experimental authority for the Veery-RL1 cubesat.² The Veery-RL1 mission performs orbital testing and validation of the custom satellite computing, power, and avionics electronics developed by Care Weather. The experimentation enables Care Weather to develop U.S. weather remote sensing capabilities that will be integrated with its satellite-based wind-sensing radar system.

The Veery-RL1 communications subsystem includes an Iridium 9603 satellite modem that is used to relay communications via the Iridium system to Care Weather mission control. The Veery-RL1 cubesat remains operational and the mission is being extended to continue the experiment. In the interests of continuing the experiment and allowing Care Weather to relay its communications via the Iridium system, Iridium seeks to extend its STA.

There will be no change during the experiment in the operating parameters of Iridium’s space stations. For this reason, no operating parameters, other than effective radiated power and an emission designator, are shown in the form that this exhibit accompanies. The only change for which Iridium seeks an STA extension is adding Veery-RL1 as a point of communication. Iridium’s Part 25 space station license does not cover space-to-space communications.

¹ Iridium’s constellation licensed under Callsign S2110 is comprised of 66 satellites, any one of which may be used as part of the experiment at any point in time.

² Care Weather operates the cubesat under Callsign WR9XNG.