## Attachment 1 REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION (Response to Question 12)

## I. DESCRIPTION OF STA REQUEST TO TEST AERONAUTICAL TERMINALS

ISAT US, Inc. ("ISAT US") hereby requests special temporary authorization ("STA") to operate for static testing and demonstration purposes one unit of the ThinKom Ka2517 antenna to communicate with the Inmarsat 5F2 (I5F2), EchoStar XVII, and Jupiter 2 satellites for a thirty-day period beginning March 10, 2021. STA is sought in the 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space) bands.

ISAT US is already licensed by the Commission to operate aeronautical earth stations in the 19.7-20.2 GHz and 29.5-30.0 GHz bands under its existing aeronautical blanket earth station license (call sign E140114, File No. SES-MOD-20200605-00595). Further, the ThinKom Ka2517 antenna is authorized for use on another active FCC license, appearing as Site ID "AES2" on the aeronautical earth station in motion license issued to Thales Avionics, Inc. ("Thales") (call sign E170068, File No. SES-MOD-20200818-00888).

ISAT US incorporates herein by reference the technical specifications for the ThinKom Ka2517 antenna contained in the Thales license and seeks STA for the input power and EIRP levels contained therein (18.1 watts total input power at the flange; 47.1 dBW maximum aggregate output EIRP for all carriers). ISAT US has been granted STA to operate another unit of this antenna type under these conditions at another location (File No. SES-STA-20210224-00391, granted March 1, 2021).

The location of the antenna under test is the Fort Worth, Texas, facility of GDC Technics, 2060 Eagle Parkway, Fort Worth, Texas 76177, at the NAD84 coordinates specified on the application form.

The terminal will communicate with the Inmarsat Global Xpress I5F2 space station (licensed by the United Kingdom and granted market access in the United States), located at the 55° W.L. orbital location, the EchoStar XVII space station (licensed by the United States), located at the 107.1 W.L. orbital location, and the Jupiter 2 space station (licensed by the United States) at the 97.1° W.L. orbital location. ISAT US will be responsible for all technical aspects of the system during testing and demonstration. The user terminal operations will be closely monitored by the Inmarsat Network Operations Center and the engineering team associated with the demonstration. ISAT US acknowledges this operation will be conducted on a non-interference and non-protected basis.

The ISAT US 24/7 Point of Contact during the STA is Ananda Mishra, telephone +1 808 638-5820. Further, the Inmarsat Network Operations Control in London can be reached at any time at +44 207 728 1616.

## II. GRANT OF THE STA WILL SERVE THE PUBLIC INTEREST

Grant of the requested STA will serve the public interest, convenience, and necessity because it will enable ISAT US to test and demonstrate a new terminal using the IF2 and I5F3 space stations, facilitating the further deployment of broadband communication to Inmarsat customers, including commercial aeronautical and United States Government customers with

evolving operational needs. The operation will be consistent with the technical parameters of the licenses specified above, which are sufficient to avoid risk of harmful interference. ISAT US therefore respectfully requests that the Commission grant STA beginning March 10, 2021, for a period of thirty days.