

COMSAT, Inc.

Request for Special Temporary Authority to
Operate Santa Paula Teleport 12.8 Meter Hub Antennas to
Communicate with Inmarsat CARABINER Constellation Satellites

File Number SES-MFS-20211108-01799 (Call Sign KB34)

File Number SES-MFS-20200331-00335 (Call Sign KA31)

COMSAT, Inc. (“COMSAT”) respectfully requests a grant of Special Temporary Authority (“STA”) for a period of 60 days, effective November 19, 2021, to allow COMSAT to operate its Santa Paula, California Teleport 12.8 Meter Hub Antennas (SAPA 12.8M) to communicate with the INMARSAT CARABINER Constellation Satellites (“CARABINER”) using L-band and C-band frequencies. CARABINER is currently made up of three former Inmarsat 3F satellites – I3F1, I3F2 and I3F3. The 3F satellites were previously authorized as geosynchronous orbits space stations but Inmarsat advised that they have now placed them in a controlled westerly drift it describes as a super synchronous orbit as specified in the CARABINER filings¹ submitted to the ITU by the UK administration.

Inmarsat has contracted with COMSAT to provide the ground/satellite link to communicate with CARABINER during that part of the drift arc in which the satellites can be seen from COMSAT’s Santa Paula teleport. The SAPA 12.8M antennas to be used for these communications (one as the primary and the second as the back-up) are currently authorized per COMSAT’s KB34 (the primary) and KA31 (the back-up) licenses to communicate in the L-band and C-band with ISAT list satellites generally as well as specifically named Inmarsat satellites within the view of the Santa Paula teleport. The antennas have been successfully coordinated for C-band transmissions across the entire satellite arc (46.0 W.L. – 190.0 W.L. and 48.0 W.L. – 190.0 W.L., respectively). The power levels and other particulars used will be well within the levels authorized by the licenses.

Inmarsat advises that they have notified other operators of the ongoing drifts and that transmissions will only be utilized for testing and telemetry, telecommand, and control operations. Inmarsat further advises that they will observe a one degree

¹ Inmarsat advises that the API and CR/C filings may be found utilizing the following public links:

<https://www.itu.int/ITU-R/space/asreceived/Publication/DisplayPublication/13073>

<https://www.itu.int/ITU-R/space/asreceived/Publication/DisplayPublication/13074>

<https://www.itu.int/ITU-R/space/asreceived/Publication/DisplayPublication/26282>

<https://www.itu.int/ITU-R/space/asreceived/Publication/DisplayPublication/26502>

command hinder silence to affected satellites and will endeavor to notify and coordinate if any commanding or ranging is needed within this one degree window.

The STA that is needed for this purpose is to operate the SAPA12.8M antennas to communicate with CARABINER utilizing the following emissions:

Frequency (MHz)	Tx/Rx	Emission	Polarization	Max EIRP /Carrier (dBW)	Max EIRP Density (dBW/4kHz)	Modulation & Services
1626.5-1660.5	T	NON	RHC	33	33	Pilot
1626.5-1660.5	T	10K0G1E	RHC	42	38	PSK; Test Carriers
1525-1559	R	5K00G1E	RHC	---	---	PSK; Test Carriers
5925-6456.6	T	800KFXD	RHC	80	57	FSK; Omni TT&C
5925-6456.6	T	800KFXD	LHC	80	57	FSK; Omni TT&C
5925-6456.6	T	800KFXD	LHC	73	50	FSK; Global TT&C
3700-4200	R	800KFXD	RHC	---	---	FSK; TM1
3700-4200	R	800KFXD	LHC	---	---	FSK; AUX TM

Grant of the STA is in the public interest because Inmarsat services which could potentially be supported by CARABINER include maritime services used for Safety at Sea as well as services used by various U.S. agencies. It is therefore respectfully requested that STA as described above be granted for a period of 60 days, effective November 19, 2021 while the Commission processes COMSAT's application for permanent authority for SAPA 12.8M to communicate with CARABINER.

Any questions with respect to this matter may be directed to James G. Lovelace at 571-599-3643.