

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of Application by	)	
	)	
SES AMERICOM, INC.	)	Call Signs E120055 & E202170
	)	
For Special Temporary Authority to	)	
Communicate with SES-22 to Perform	)	
In-Orbit Testing at 142.0° W.L.	)	

Expedited Action Requested

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

SES Americom, Inc. (“SES”), respectfully requests a 30-day special temporary authority (“STA”) to use its C-band earth stations with call signs E120055 and E202170 for a period of up to 30 days to perform in-orbit testing (“IOT”) with the SES-22 spacecraft at 142.0° W.L. (+/- 0.1 degrees). SES requests that the STA period begin nine days following the launch of SES-22, which is currently scheduled for June 28, 2022. A full description of the SES-22 satellite can be found in the pending application to launch, test, and operate the satellite.¹ SES seeks expedited action on this STA request to accommodate the scheduled June 28 date for launch of SES-22.

Grant of STAs Will Serve the Public Interest. Grant of SES’s request to test SES-22 at 142.0° W.L. is in the public interest. As discussed in the SES-22 Application, by

¹ See Call Sign S3138, File No. SAT-LOA-20220315-00030 (“SES-22 Application”). The Commission placed the SES-22 Application on Public Notice as acceptable for filing, and no comments were filed.

testing SES-22 at this location, SES will minimize the risk of interference and be able to ensure that SES-22 is fully operational before the satellite commences providing commercial services.²

No Harmful Interference to Other Spacecraft. Transmissions associated with IOT of SES-22 will not cause harmful interference to the operations of any other spacecraft. Except for SES's AMC-6 spacecraft, there are no satellites within +/- 6 degrees of 142° W.L. operating in the C-band – the closest non-SES C-band satellite to 142.0° W.L. is nine degrees away at 133° W.L. SES will manage the operations of its satellites to prevent interference.

No Harmful Interference to C-band Terrestrial Services. The C-band earth stations to be used for SES-22 in-orbit testing have been coordinated to communicate with satellites in an arc that includes 142.0° W.L. The earth stations will comply with the coordinated and authorized power levels specified in their respective licenses, except in the case of certain tests involving high-powered continuous wave (“CW”) transmissions for a short duration of time lasting about 20 minutes each day of testing.

In any event, as with all operations under special temporary authority, SES will conduct all IOT on a non-harmful interference basis and will cease transmissions promptly in the event SES is notified of any harmful interference resulting from its operations.

Protective Conditions. SES seeks authority to communicate with SES-22 for purposes of C-band IOT at 142.0° W.L. subject to the following (or similar) conditions:

(a) SES will coordinate its test operations with all potentially affected operating satellite networks.

(c) No harmful interference will be caused to any lawfully operating satellite network or radio communication system, and SES's operations will cease immediately upon notification of harmful interference. Further, SES shall immediately notify the Commission in writing that it has received such a notification.

² See *id.*, Narrative at 6.

(d) SES will accept interference from any lawfully operating satellite network or radio communication system.

(e) Testing authority is limited to the conventional C-band frequencies at the 142.0° W.L. orbital location.

(f) Communications with the SES-22 space station at 142.0° W.L. are limited to in-orbit testing and shall not include any provision of commercial services.

(g) The authorization is subject to change in any of its terms or cancellation in its entirety at any time upon reasonable notice, but without hearing, if in the opinion of the Commission, circumstances require.

(h) The temporary authority will commence nine days after the SES-22 launch and terminate 30 days from that date.

(i) The 24/7 point of contact for SES during IOT and drift maneuvers is Mike Pritchard, +1 609 987 4377, mike.pritchard@ses.com.

SES hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

For the foregoing reasons, SES respectfully requests an STA to communicate with SES-22 for a period of up to 30 days, commencing nine days after the launch of SES-22, in order to perform in-orbit testing as described herein. Grant of the requested authority will permit testing of the spacecraft prior to commercial operation.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Daniel C.H. Mah

Daniel C. H. Mah
Vice President, Legal & Regulatory Affairs
SES Americom, Inc.

Dated: June 15, 2022

ATTACHMENT 1

This attachment provides information in support of SES's request for earth station special temporary authority in connection with the proposed IOT of the SES-22 spacecraft at 142.0° W.L. The proposed IOT of SES-22 will involve verifying the performance characteristics of the C-band transponders and antenna patterns and will utilize in some cases saturating CW carriers in those bands. The IOT will include the following tests: satellite power amplifier transfer characteristics; satellite transponder characteristics; antenna mapping; and EIRP and SFD, amplitude linearity, group delay amplitude response, polarization isolation, and attenuator checks.

The transmissions for IOT will conform to the licenses of the relevant earth stations and the Commission's technical rules with one exception. The use of a CW carrier during C-band IOT will involve earth station transmissions with a maximum EIRP density per carrier of up to 85 dBW and will result in satellite emissions in the 3700-4200 MHz frequency band that exceed the Commission's PFD limits on the earth's surface in Section 25.208(a). However, the duration of the test involving CW carriers is very short (about 20 minutes per day) and SES will cease transmissions in the event of any report of harmful interference.