

**SES Americom
Application for Experimental License**

Narrative Statement

(1) Name, address, phone number (also e-mail address and facsimile number, if available) of the applicant.

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(2) Description of why an experimental license is needed.

SES Americom, Inc. ("SES")¹ respectfully requests an experimental license to test and demonstrate the capabilities of a 1.2m Skyware Global terminal. The Skyware Global terminal will perform on-the-ground tests for fixed operations, using the 14.0-14.5 GHz (uplink) and 12.06-12.07 GHz (downlink) bands. The tests will be conducted at two different SES operational facilities in Manassas, VA and Port St. Lucie, Florida. The Skyware Global terminal will communicate with SES's GSO satellite SES-1 and may also communicate with other satellites on the Commission's Permitted List. The demonstrations will enable SES and its customers to evaluate the performance characteristics of the earth stations and associated applications.

(3) Time and Date of Proposed Operation

SES requests a temporary authority for two years, from March 26, 2020 through March 25, 2022.

(4) Class(es) of station (fixed, mobile, fixed and mobile) and call sign of station (if applicable).

The transmitting station will operate in fixed mode.

(5) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.

SES will operate the Skyware Global terminal in fixed mode at SES's ground operations centers in Manassas, VA, and Port St. Lucie, FL.

Manassas, VA coordinates:

38° 46' 58.8" N, 77° 34' 22.7994" W

Port St. Lucie, FL coordinates:

27° 16' 55" N, 80° 28' 59" W

¹ SES operates a fleet of over 50 geostationary orbit ("GSO") commercial satellites.

(6) Maximum effective radiated power (ERP) or equivalent isotropically radiated power (EIRP).

The maximum transmitted EIRP will be 48 dBW.

(7) Emission Designator

128KG7D

1M00G7D

(8) Overall height of antenna of antenna structure above the ground (if greater than 6 meters above the ground or an existing structure, see part 17 of this Chapter concerning notification to the FAA).

The height of the antenna is 1.2 meters.

Application for Experimental License Annex A

- I. Is a directional antenna (other than radar) used? Yes.
 - a. If yes, provide the following information
 - i. Width of the beam in degrees at the half power point: 1.2 degrees
 - ii. Orientation in horizontal plane (degrees): 220 degrees
 - iii. Orientation in vertical plane (degrees): 39 degrees