Explanatory Statement

Global Eagle Telecom Licensing Subsidiary, LLC ("Global Eagle") seeks special temporary authority for a period of 180 days to conduct additional antenna testing using a single 1.2-meter Ku-band antenna at Dallas, Texas. Global Eagle commenced testing pursuant to an STA originally issued for a 30-day period expiring on February 19, 2020 pursuant to Section 25.120(b)(4). *See* FCC File No. SES-STA-20200114-00029. A timely-filed request for extension of that authority for an additional 30-day period was submitted to the FCC on February 12, 2020 and remains pending. *See* FCC File No. SES-STA-20200212-00154. Because Global Eagle anticipates that its antenna testing program could last up to five or six months, it is now requesting a longer-term STA for up to 180 days under Section 25.120(b)(2) of the Commission's Rules.[1]

The purpose of the testing, as described in the accompanying STA Request, Form 312STA, is to evaluate new equipment for possible future use with Global Eagle's existing ESAA network (Call Sign E080100), including assessment of approaches to achieve improved data throughput. Technical parameters for the test are provided on the final page of this exhibit. A separate radiation hazard analysis is attached.

Request for Waiver of U.S. Footnote NG52

In order to permit these operations, Global Eagle respectfully requests a waiver of Footnote NG52 of the U.S. Table of Allocations[2] to permit the earth station to receive signals in the extended Ku-band at 11.45-11.7 GHz that originate from a U.S. domestic earth station located at Holmdel, New Jersey (Call Sign E070218). Such a waiver was granted by the International Bureau in its initial January 17, 2020 grant of the 30-day STA issued to Global Eagle in File No. SES-STA-20200114-00029.[3]

Waiver of the rules is necessary because Footnote NG52 expressly limits "use of the bands 10.7-11.7 GHz (space-to-Earth) ... by geostationary satellites in the fixed-satellite service (FSS) … to international systems, *i.e.*, other than domestic systems."[4] As the planned test

[1] Global Eagle initially filed an application with the FCC's Office of Engineering and Technology seeking a six month STA to continue its antenna testing program pursuant to Part 5 of the FCC's Rules, but that application was dismissed without prejudice on February 25, 2020 with the explanation that the "FCC's International Bureau requires that you file your STA request with them." Letter from Anthony Serafini, Chief, Experimental Licensing Branch, FCC, to Julia Waldron, Global Eagle, FCC ELS File No. 0208-EX-ST-2020, at 1 (dated Feb. 25, 2020). This application responds to that directive.

[2] *See* 47 C.F.R. §2.106, footnote NG52.

[3] *See also* FCC Public Notice, Satellite Communications Services Information, Actions Taken, Report No. SES-02235, at 38 (released January 22, 2020).

[4] 47 C.F.R. §2.106, footnote NG52.

involves downlink transmissions from the AMC-6 satellite located at 83° West longitude in the U.S. domestic geostationary arc, and that space station does not have permission to transmit signals between domestic earth stations under its FCC license (S2347, FCC File No. SAT-MOD-20170628-00102), Global Eagle requires a narrow waiver of the rule to permit the planned operations. As the International Bureau has already granted such a waiver, it is reasonable to expect that it can extend such a waiver for a few additional months on the same grounds.

The requested waiver continues to be in the public interest because it will facilitate the gathering of antenna performance information that is expected to permit enhancement of both international and domestic satellite services offered to small user terminals. Moreover, grant of the requested waiver will not undermine the purpose of the limitation to international operations, which is intended to avoid over-use of the extended Ku-band downlink by excluding domestic-only transmissions. The requested authority is consistent with this objective in that (1) AMC-6 is already authorized to use the requested frequencies for international operations, and therefore has existing transmit operations in the band to U.S. locations, (2) the use is limited to a single antenna location, and (3) the use is of limited duration. Accordingly, Global Eagle requests that Experimental STA be granted expeditiously for a period of 180 days, commencing April 21, 2020 and extending until October 18, 2020.

Antenna Test Technical Parameters

Antenna Specifications

Manufacturer	Model	Size	Antenna Gain
Skyware Global	Type 123, Class II, Ku-Band Tx/Rx Antenna	1.2 meters	Rx: 41.8 dBi @ 12.0 GHz, Tx: 43.2 dBi @ 14.3 GHz

Antenna Location

Geographic Coordinates	AGL (meters)	AMSL (meters)	Building Height	Height Above Rooftop
32°50'51.4"N, 96°51'56.2"W	32.9	145.0	31.7	3 meters

Frequency Use

Band (GHz)	Mode	Polarization	Emission	Max EIRP per carrier	Max EIRP Density Per Carrier
11.45 – 12.2	Receive	Vertical linear	72M0G7W	--	--
14.00– 14.5	Transmit	Horizontal linear	36M0G7W	57.18	-12.78

Point of Communication Data

Satellite	Orbital Location	Azimuth (°)	Elevation (°)
AMC-6	83°W.L.	155.6	48.9