

**Harris Corporation**  
**Request For Extension of Special Temporary Authority**  
**2.4m C Band Temporary Transportable Earth Station**  
**Tyndall AFB, FL; Lat. 30-04-34.0 N, Long. 085-36-38.9 W**

**REQUEST FOR EXTENSION OF SPECIAL TEMPORARY AUTHORITY**

Harris Corporation ("Harris") hereby requests an extension of the FCC Special Temporary Authority ("STA") originally granted to Harris on October 22, 2018 under FCC File No. SES-STA-20181023-03077. Harris requests an extension of **thirty days** from the existing STA expiration date of November 21, 2018.

As noted in the original STA request, Harris<sup>1</sup> has deployed a temporary fixed Patriot 2.4m C-Band terminal to a location at Tyndall Air Force Base in order to support FAA Air Traffic Control operations. Specifically, owing to Hurricane Michael, existing FAA terrestrial communications transmitting voice and data traffic to the FAA Jacksonville Air Route Control Center were rendered inoperable, requiring Harris to temporarily deploy a Patriot 2.4m C Band Flyaway antenna system at Tyndall Air Force Base to carry voice and data traffic back to the FAA Jacksonville Air Route Control Center. Deployment of the 2.4m Flyaway C-Band terminal at Tyndall Air Force Base is allowing critical air traffic communications to be uplinked via the Harris satellite network back to the FAA Jacksonville Air Route Control Center until the existing terrestrial system can be repaired and/or replaced.

At the present time not all of the FAA terrestrial communications have been fully restored, necessitating this thirty day STA extension request.

Harris submits that a grant of this STA extension request will serve the public interest because it will assist the FAA's mission of ensuring flight safety.



File # SES-STA-20181119-03270  
Call Sign N/A Grant Date 11/30/2018  
(or other identifier)  
Term Dates  
From 11/30/2018 To: 12/29/2018  
Approved: Paul E. Haas

<sup>1</sup> Harris Corporation, serves as the current FAA Telecommunications Infrastructure contractor

Company: Harris Corporation

File Number: SES-STA-20181119-03270

Harris Corporation is granted emergency special temporary authority for 30 days, beginning November 30, 2018, to operate a 2.4-meter Patriot antenna at the Tyndall AFB, FL with the SES 12 satellite at the 87° W.L. orbital location in the 5925-6425 MHz (Earth-to-space) and 3700-4200 MHz (space-to-Earth) frequency bands under the following conditions:

1. All operations under this STA are on an unprotected and non-harmful interference basis.
2. Analog earth station operation in the conventional or extended C-bands. (1) For co-polarized transmissions in the plane tangent to the GSO arc, as defined in §25.103:

$29.5-25\log_{10}\theta$	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$ .
8.5	dBW/4 kHz	for $7^\circ < \theta \leq 9.2^\circ$ .
$32.5-25\log_{10}\theta$	dBW/4 kHz	for $9.2^\circ < \theta \leq 48^\circ$ .
-9.5	dBW/4 kHz	for $48^\circ < \theta \leq 180^\circ$ .

Where  $\theta$  is the angle in degrees from a line from the earth station antenna to the assigned orbital location of the target satellite. The EIRP density levels specified for  $\theta > 7^\circ$  may be exceeded by up to 3 dB in up to 10% of the range of theta ( $\theta$ ) angles from  $\pm 7$ -180°, and by up to 6 dB in the region of main reflector spillover energy.

For co-polarized transmissions in the plane perpendicular to the GSO arc, as defined in §25.103:

$32.5-25\log_{10}\theta$	dBW/4 kHz	for $3^\circ \leq \theta \leq 48^\circ$ .
-9.5	dBW/4 kHz	for $48^\circ < \theta \leq 180^\circ$ .

Where  $\theta$  is as defined in paragraph (c)(1) of this section. These EIRP density levels may be exceeded by up to 6 dB in the region of main reflector spillover energy and in up to 10% of the range of  $\theta$  angles not included in that region, on each side of the line from the earth station to the target satellite.

For cross-polarized transmissions in the plane tangent to the GSO arc and in the plane perpendicular to the GSO arc:

$19.5-25\log_{10}\theta$	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$ .
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Where  $\theta$  is as defined in paragraph (c)(1) of this section.

**3. Digital earth station operation in the conventional or extended C-bands. (1) For co-polarized transmissions in the plane tangent to the GSO arc:**

26.3-25log10 $\theta$	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$ .
5.3	dBW/4 kHz	for $7^\circ < \theta \leq 9.2^\circ$ .
29.3-25log10 $\theta$	dBW/4 kHz	for $9.2^\circ < \theta \leq 48^\circ$ .
-12.7	dBW/4 kHz	for $48^\circ < \theta \leq 180^\circ$ .

Where  $\theta$  is as defined in paragraph (c)(1) of this section. The EIRP density levels specified for  $\theta > 7^\circ$  may be exceeded by up to 3 dB in up to 10% of the range of theta ( $\theta$ ) angles from  $\pm 7$ -180°, and by up to 6 dB in the region of main reflector spillover energy.

For co-polarized transmissions in the plane perpendicular to the GSO arc:

29.3-25log10 $\theta$	dBW/4 kHz	for $3^\circ \leq \theta \leq 48^\circ$ .
-12.7	dBW/4 kHz	for $48^\circ < \theta \leq 180^\circ$ .

Where  $\theta$  is as defined in paragraph (c)(1) of this section. These EIRP density levels may be exceeded by up to 6 dB in the region of main reflector spillover energy and in up to 10% of the range of  $\theta$  angles not included in that region, on each side of the line from the earth station to the target satellite.

For cross-polarized transmissions in the plane tangent to the GSO arc and in the plane perpendicular to the GSO arc:

16.3-25log10 $\theta$	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$ .
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Where  $\theta$  is as defined in paragraph (c)(1) of this section.

4. Harris Corporation is not authorized to transmit on the earth station while in motion.
5. Harris Corporation shall cease operations immediately upon notification of such interference and inform the Commission in writing immediately of such an event.
6. Harris Corporation must take all reasonable and customary measures to ensure that the earth station(s) do(es) not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the earth station when it is in operation. At a minimum, permanent warning labels shall be fixed to the earth station and its housing warning of the radiation hazard and including a diagram showing the regions around the earth station where radiation levels could exceed 1.0mW/cm<sup>2</sup>. The earth station operator shall be responsible for assuring that individuals do not stray into the regions around the earth station where there is a potential for exceeding the maximum permissible exposure limits required by 47 C.F.R. § 1.1310.
7. Any action taken or expense incurred as a result of operations pursuant to this special authority is solely at Harris Corporation own risk.
8. The grant of the verbal STA request was issued in accordance with emergency procedures put in place to provide communications in areas affected by Hurricane Michael. To ensure that the Commission has a complete record of the request and action taken, Harris Corporation is

directed to file an electronic version of its STA request submitted through IBFS as soon as possible. Go to <http://licensing.fcc.gov/myibfs/> to file the STA and request an extension of this STA.

9. This STA may be terminated at the International Bureau's discretion, without a hearing, if conditions warrant. Under no circumstances may the facility(ies) authorized violate the terms of an international agreement or treaty. If an application for permanent authority is on file with the Commission, this action is taken without prejudice to that application. The applicant is required to post and/or retain a copy of this authorization as required by the Commission's Rules.
10. Operations during the period of November 21, 2018 to the grant of this authorization were authorized pursuant to Section 1.62 of the Commission's rules, 47 CFR §1.62.
11. This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.



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