

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Application for STA to Operate 25 VMES Terminals and 5 ESV Terminals for 60 Days for Commercial Trials

1. Applicant

Name: Kymeta Corporation Phone Number: 425-896-3700
DBA Name: Fax Number: 866-230-9790
Street: 12277 134th Court, NE E-Mail: ryan@kymetacorp.com
City: Redmond State: WA
Country: USA Zipcode: 98052
Attention: Ryan Stevenson



File # SES - STA - 20170614 - 00648

Call Sign E170070 Grant Date 07/11/2017
(or other identifier)

Term Dates
From 07/12/2017 To 09/10/2017

Approved: Mul E blue

with conditions attached.

Applicant: Kymeta Corporation
Call Sign: E170070
File No.: SES-STA-20170614-00648



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Kymeta Corporation ("Kymeta") is granted special temporary authority for ~~60 days~~, beginning July 12, 2017, to operate 25 VMES and 5 ESV earth stations with the: IS14 (S2785) satellite operating at the 45° W. L. orbital location; Intelsat IS-29e (S2913) satellite operating at the 50° W. L. orbital location at 50 WL; Intelsat IS-34 (S2915) satellite operating at the 55.5° W. L. orbital location; Intelsat IS-21 (S2863) satellite operating at the 58° W. L. orbital location; Galaxy-18 (S2733) satellite operating at the 123° W. L. orbital location; Galaxy 13 (S2386) satellite operating at the 127° W. L. orbital location; Intelsat-18 (S2817) satellite operating at the 180° W. L. orbital location; and Intelsat 19 (S2850) satellite operating at the 166 ° E. L. orbital location in the 14.0-14.5 GHz (Earth-to-space) and 10.95-11.2 GHz, 11.45-11.7 GHz and 11.7-12.2 GHz (space-to-Earth) frequency bands subject the following conditions:

1. Operations are on an unprotected and non-harmful interference basis. Kymeta must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
- 2.. Kymeta must take all necessary measures to ensure that the operation authorized does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR Sections 1.1307(b) and 1.1310. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Requirements for restrictions can be determined by predictions based on calculations, modeling or by field measurements. The FCC's OET Bulletin 65 (available on-line at [ww.fcc.gov/oet/rfsafety](http://www.fcc.gov/oet/rfsafety)) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
3. Kymeta must maintain a U.S. point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein. Kymeta must submit a letter to be included in its license file with the name and telephone number of the point of contact prior to commencing operation.
4. For each transmitter, Kymeta shall maintain records of the following data: a record of the location (i.e., latitude/longitude/altitude), transmit frequency, channel bandwidth, and satellite used. These records shall be time annotated and maintained for a period of not less than one year. The ESAA operator shall make this data available, in the form of a comma delimited electronic spreadsheet, within 24 hours of a request from the Commission, NTIA, or a frequency coordinator for purposes of resolving harmful interference events. A description of the units (i.e., degrees, minutes, MHz) in which the records values are recorded will be supplied along with the records.
5. Antenna elevation for all operations must be at least 5 degrees above the geographic horizon.

6. In connection with the provision of service for ESV operations in any region adjacent to foreign countries, Kymeta is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.

7. Grant of this authorization is without prejudice to any determination that the Commission may make regarding the pending license application and amendments in IBFS File Nos. SES-LIC-20170223-00195, SES-AMD-20170330-00345 and SES-AMD-20170614-00647.

8. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Kymeta's risk.

9. Operations of ESVs in the 14.0-14.2 GHz (Earth-to-space) frequency band within 125 km of the NASA TDRSS facilities on Guam (located at latitude: 13 ° 36' 55" N, longitude 144 ° 51' 22" E) or White Sands, New Mexico (latitude: 32 ° 20' 59" N, longitude 106 ° 36' 31" W and latitude: 32 ° 32' 40" N, longitude 106 ° 36' 48" W) are subject to coordination through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC). When NTIA seeks to provide similar protection to future TDRSS sites that have been coordinated through the IRAC Frequency Assignment Subcommittee process, NTIA will notify the Commission that the site is nearing operational status. Upon public notice from the Commission, all Ku-band ESV operators must cease operations in the 14.0-14.2 GHz band within 125 km of the new TDRSS site until after NTIA/IRAC coordination for the new TDRSS facility is complete. ESV operations will then again be permitted to operate in the 14.0-14.2 GHz band within 125 km of the new TDRSS site, subject to any operational constraints developed in the coordination process.

10. Operations of ESVs in the 14.47-14.5 GHz (Earth-to-space) frequency band within a) 45 km of the radio observatory on St. Croix, Virgin Islands (latitude 17 ° 46' N, longitude 64 ° 35' W); b) 125 km of the radio observatory on Mauna Kea, Hawaii (at latitude 19 ° 48' N, longitude 155 ° 28' W); and c) 90 km of the Arecibo Observatory on Puerto Rico (latitude 18 ° 20' 46" W, longitude 66 ° 45' 11" N) are subject to coordination through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC).

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective July 12, 2017. Petitions for reconsideration under Section 1.106 or applications for review under Sections 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within thirty days of the date of the public notice indicating that this action was taken.

2. Contact

Name: Robert S. Koppel **Phone Number:** 7035848669
Company: Lukas LaFuria Gutierrez & Sachs, LLC **Fax Number:**
Street: 8300 Greensboro Drive E-Mail: bkoppel@fcclaw.com
Suite 1200
City: Tysons **State:** VA
Country: USA **Zipcode:** 22102 -
Attention: **Relationship:** Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number or Submission ID

4a. Is a fee submitted with this application?

If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).

Governmental Entity Noncommercial educational licensee
 Other (please explain):

4b. Fee Classification CGV – Fixed Satellite VSAT System

5. Type Request

Use Prior to Grant Change Station Location Other

6. Requested Use Prior Date
07/01/2017

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 7. City/N/A | 8. Latitude (dd mm ss.s h) 0 0 0.0 |
| 9. State | 10. Longitude (dd mm ss.s h) 0 0 0.0 |
| 11. Please supply any need attachments. Attachment 1: Narrative Statement Attachment 2: Attachment 3: | |
| 12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) Application for STA to operate a limited number of earth station terminals for 60 days for commercial trials. | |
| 13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; party to the application; for these purposes. Yes <input checked="" type="radio"/> No <input type="radio"/> | |
| 14. Name of Person Signing Ryan A. Stevenson | 15. Title of Person Signing Vice President and Chief Scientist |
| WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503). | |

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**Before the
Federal Communications Commission
Washington, DC 20554**

| | | |
|--------------------------------------------|---|-----------------------------------|
| In the Matter of |) | |
| |) | |
| Kymeta Corporation Application for Special |) | File No. SES-STA-2017 ____ - ____ |
| Temporary Authority for 60 Days to Operate |) | Call Sign: E170070 |
| Up to 25 Ku-Band Transmit/Receive Vehicle |) | |
| Mounted Earth Stations (VMESs”) and Up to |) | |
| 5 Ku-Band Transmit/Receive Earth Stations |) | |
| on Vessels (“ESVs”) |) | |

APPLICATION FOR SPECIAL TEMPORARY AUTHORITY

Kymeta Corporation (“Kymeta”), pursuant to Section 25.120(b)(3) of the Commission’s Rules, 47 C.F.R. §25.120(b)(3), respectfully requests that the Commission grant it special temporary authority (“STA”) for a period of 60 days, beginning July 1, 2017, to permit the operation of up to 25 Ku-band transmit/receive vehicle mounted earth stations (“VMES”) and up to 5 Ku-band transmit/receive earth stations on vessels (“ESV”) during the pendency of Kymeta’s application for blanket authorization to operate 5,000 Ku-band VMESs and 1,000 ESVs. *See* File No. SES-LIC-20170223-00195, as amended on June 14, 2017 (the “Application”).

Kymeta seeks this STA so that it can commence limited commercial trials of its innovative 70 centimeter KyWay1 satellite earth station terminal (the “Terminal”), which incorporates a next-generation flat panel antenna that uses software and metamaterials technology to electronically and dynamically steer the antenna beam from a flat thin film transistor (“TFT”) panel to track the target satellite.

Kymeta will conduct operations under the STA on a non-interference basis only. Further, Kymeta acknowledges that grant of the STA, and operations under the STA, will be without prejudice to the Commission's consideration of Kymeta's application for blanket authorization.

The Terminal complies with all relevant provisions of Sections 25.222 and 25.226 of the Commission's Rules. Kymeta has provided a detailed description of the Terminal, together with detailed exhibits demonstrating compliance with the Commission's Rules, in the Application.

The Terminal will operate with a maximum input power of 8 watts, and a maximum EIRP of 43 dBW.

Kymeta requests that the Commission expeditiously grant this application for special temporary authority.

Respectfully submitted,

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June 14, 2017