

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WR9XUG

(Call Sign)

0438-EX-ST-2021

(File Number)

NAME Kepler Communications Inc.

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

To conduct preparatory testing and proof-of-concept demonstrations of communications between Keplers satellite network and Earth Stations on Vessels in motion.

Station Locations

(1) MOBILE: Newport, OR. Alaskan coastline and Chuchki Sea.

Frequency Information

MOBILE: Newport, OR. Alaskan coastline and Chuchki Sea.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.1875-14.3125 GHz	MO	125MG7W 40M0G7W	21527.8 W (ERP)	0.001 %

Special Conditions:

- (1) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

This authorization effective May 01, 2021 and
will expire 3:00 A.M. EST November 30, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) Licensee is authorized to operate a 0.65m Cobham Sailor 600 antenna on-board Vessels (ESV) in the 14.1875-14.3125 GHz band.
- (4) Points of Communication: Kepler Communications Inc. ("Kepler")'s non-geostationary orbit ("NGSO") satellite constellation (call sign S2981) using the 14-14.5 GHz frequency band.
- (5) Operations of the authorized antenna on-board Vessels (ESVs) operating in the 14.1875-14.3125 GHz band must comply with the following conditions:
 - a. Licensee's ESV must employ a tracking algorithm that is resistant to capturing and tracking adjacent satellite signals, and each station must be capable of inhibiting its own transmission in the event it detects unintended satellite tracking.
 - b. Licensee's ESV must be monitored and controlled by a ground-based network control and monitoring center. Such stations must be able to receive "enable transmission" and "disable transmission" commands from the network control center and must cease transmission immediately after receiving a "parameter change" command until receiving an "enable transmission" command from the network control center. The network control center must monitor operation of each earth station to determine if it is malfunctioning, and each earth station must self-monitor and automatically cease transmission on detecting an operational fault that could cause harmful interference to a fixed satellite service network.
 - c. Licensee must maintain a point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein, for discussing interference concerns with other licensees, and 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.
- (6) The Power levels (EIRP and EIRP density) transmitting from the experimental 0.65m Cobham Sailor 600 antenna on-board Vessels (ESV) in the 14.1875-14.3125 GHz band must not exceed the power levels (EIRP and EIRP density) authorized and operated by the legally authorized GSO Earth Stations on-board Vessels (ESVs). For operation above/exceeding the power levels, Kepler must coordinate with all satellite operators authorized in Section D (point of communications) of Ku-band GSO ESV's license(s) prior to commencing any operations.

Special Conditions:

- (7) Prior to commencing any operations in the 14.1875-14.3125 GHz frequency band, experimental licensee must notify licensees of Ku-band GSO ESVs. The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test. Please notify the following existing licensees:

ESVs Call Sign: E070114

Licensee: Inmarsat Solutions (US) Inc.

NAME: Stratos Offshore Services Company

Phone Number: 301-968-1938

E-Mail: regan.rishel@inmarsat.com

Attention: Regan Rishel

ESVs Call Sign: E070085, E060335

Licensee: KVH Industries, Inc.

NAME: SES Americom, Inc.

Phone Number: 609-987-4062

Fax Number: 609-987-4260

E-Mail: jim.barker@ses-americom.com

Attention: James Barker

Name: Carlos Nalda Phone Number: 571-332-5626

Company: LMI Advisors

E-Mail: cnalda@lmiadvisors.com

Attention: M r. Carlos Nalda

ESVs Call Sign: E100010

Licensee: UCSD Scripps Institution of Oceanography

Phone Number: 858-534-2889

E-Mail: jberger@ucsd.edu

Attention: Mr Jonathan Berger

ESVs Call Sign: E120041

Licensee: GCI Communication Corp.

Attention: Mr Peter Malcolm

Phone Number: 907-868-5615

E-Mail: gcilicensemanager@gci.com

Name: Cindy Lynch

E-Mail: clynch@gci.com

ESVs Call Sign: E120147

Licensee: Global Data Systems, Inc.

Phone Number: 337-291-6500 x6524

E-Mail: brentb@getgds.com

Attention: Brent Berard

Name: Raul Magallanes Phone Number: 281 317 1397

Company: The Law Office of Raul Magallanes, PLLC

Fax Number: 281 271 8085

E-Mail: raul@rmtelecolaw.com

Attention: Raul Magallanes Relationship: Legal Counsel

Special ESVs Call Sign: E140042

Licensee: Tampnet Inc.
Name: AIRTAP COMMUNICATIONS, LLC
Phone Number: 337-205-8751
Fax Number: 337-205-8761
E-Mail: hex@airtap.com
Attention: Mr David Heximer

ESVs Call Sign: E170213

Licensee: Global Foundation for Ocean Exploration, Inc.
Phone Number: 860-572-7979
E-Mail: david.lovalvo@tgfoe.org
Attention: Mr David Lovalvo
Name: Michael Durbin
Phone Number: 2148017721
Company: Durbin Consulting LLC
E-Mail: mike@k5mjd.us
Attention: Relationship: Engineer

ESVs Call Sign: KA313

Licensee: Comsat, Inc.
Name: Airbus DS SatCom Government, Inc.
Phone Number: 703-466-5873
E-Mail: rob.swanson@airbus.com
Attention: Mr Robert W Swanson
Phone Number: 703-466-5945
E-Mail: james.lovelace@astrium.eads-na.com
Attention: Mr. James G. Lovelace

ESVs Call Sign: E930320

Licensee: Comsat, Inc.
Phone Number: 571-599-3639
E-Mail: sclatworthy@comsat.com
Attention: Ms Sandra M Clatworthy
Phone Number: 571-599-3643
E-Mail: jlovelace.ctr@comsat.com
Attention: James G. Lovelace

ESVs Call Sign: E100084, E090138

Licensee: DATA TECHNOLOGY SOLUTIONS LLC
Name: AIRTAP COMMUNICATIONS, LLC
Phone Number: 337-332-4347
E-Mail: jwittig@dtscom.com
Attention: Mr. JOHN H WITTIG

ESVs Call Sign: E060157

Licensee: Speedcast Communications, Inc., as a debtor-in-possession
Phone Number: 832-668-2753
E-Mail: leanne.young@speedcast.com
Attention: Ms. Leanne Young

ESVs Call Sign: E070239

Licensee: ITC Global

Special Attention: Ms. EllenAnn Sands
Phone Number: 281-501-4733
E-Mail: ellenann.sands@itcglobal.com

ESVs Call Sign: E020205
Licensee: HNS License Sub, LLC
Phone Number: 301-428-5893
E-Mail: jennifer.manner@echostar.com
Attention: Ms. Jennifer Manner

ESVs Call Sign: E080147
Licensee: Intelsat License LLC, as debtor-in-possession
Phone Number: 202-944-7848
Fax Number: 202-944-7870
E-Mail: susan.crandall@intelsat.com
Attention: Susan H Crandall

ESVs Call Sign: E990541
Licensee: Telesat Network Services, Inc.
Phone Number: 908-698-4882
Fax Number: 908-719-0226 Mail: rcondurso@telesat.com
Attention: Mr Robert Condurso

ESVs Call Sign: E010332
Licensee: GEE LICENSING HOLDINGS LLC
Phone Number: 310-437-6000
Attention: Ms Julia Waldron
Name: David S. Keir
Phone Number: 202-416-6742
Company: Lerman Senter PLLC
E-Mail: dkeir@lermansenter.com
Attention: Relationship: Legal Counsel

ESVs Call Sign: E980235
Licensee: RigNet SatCom, Inc.
Phone Number: 281-674-0150
E-Mail: raul.magallanes@rig.net
Attention: Mr. Raul Magallanes

ESVs Call Sign: WB36
Licensee: Marlink, Inc.
Phone Number: 713-910-3352
E-Mail: Tom.Collins@marlink.com
Attention: Tom Collins

ESVs Call Sign: E140087
Licensee: Astronics AeroSat Corporation
Phone Number: 603-879-0205
E-Mail: jonathan.epstein@astronics.com
Attention: Mr. Jonathan Epstein

ESVs Call Sign: E090001
Licensee: KVH Industries, Inc.

Special Phone Number: 4018458148
E-Mail: ffeingold@kvh.com
Attention: Felise Feingold

ESVs Call Sign: E170070
Licensee: Kymeta Corporation
Phone Number: 425-896-3700
E-Mail: ryans@kymetacorp.com
Attention: Mr Ryan Stevenson

- (8) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number to extend the expiration date from November 1, 2021 to November 30, 2021.
- (9) Stop buzzers:
Simon Molgat Laurin
Phone: +1-437-867-5054
Email: smolgatlaurin@keplercommunications.com

Jake Urbanek
Phone: +1 (437) 637-0022
Email: jurbanek@kepler.space