

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

EXPERIMENTAL

(Nature of Service)

WS9XOQ

(Call Sign)

XT MO

(Class of Station)

1293-EX-ST-2021

(File Number)

NAME Rockwell Collins, 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:

Independent research and development for the OneWeb communications system.

Station Locations

(1) MOBILE: Cedar Rapids, IA, within 80 km, centered around NL 42-01-55; WL 91-38-53

Frequency Information

MOBILE: Cedar Rapids, IA, within 80 km, centered around NL 42-01-55; WL 91-38-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10000-10600 MHz	MO	250MD1D	6 W (ERP)	0.0001 %
10700-15000 MHz	MO	250MD1D	6 W (ERP)	0.0001 %
14000-14500 MHz	MO	20M0D1D	2.2 kW (ERP)	0.0001 %

This authorization effective September 01, 2021 and
will expire 3:00 A.M. EST March 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Cedar Rapids, IA, within 80 km, centered around NL 42-01-55; WL 91-38-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14500 MHz	MO	OH00N0N	3.6 kW (ERP)	0.0001 %

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.
- (3) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/wp-content/uploads/freqcoor.pdf> to find the appropriate coordinator.
- (4) Prior to commencing any in the 10.7 -12.7 GHz band, experimental licensee must notify licensees of SpaceX Services, Inc. (Attention: Ms Patricia Cooper Phone Number: 202-649-2700 E-Mail: patricia.cooper@spacex.com). 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 pattern, antenna height(s), antenna orientation, eirp density) and day and times of each test.

Special Conditions:

- (5) Prior to commencing any operations in the 11.7-12.2 (s-E) and 14-14.5 GHz frequency bands, experimental licensee must notify licensees of earth stations. 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 licensees:

Call Sign: E970014

Frequency bands: 11700-12200 MHz

Licensee: KGAN Licensee, LLC

ATTN: Kathryn R Schmeltzer Esq

Phone: 202-663-8000 x8217 Fax: 202-663-8007 E-Mail:

Kathryn.Schmeltzer@Pillsburylaw.com

Call Sign: E950239

Frequency bands: 11700-12200 MHz

Licensee: Cedar-Rapids TV License Company, LLC

ATTN: Mr Jeffrey W Mayes

Phone: 310-277-3500 Fax: E-Mail: JeffreyM@es.tv

Call Sign: E7700

Frequency bands: 11700-12200 MHz

Licensee: NBC Telemundo License LLC

ATTN: Margaret L Tobey

Phone: 202-524-6401 Fax: 202-524-6411 E-Mail: margaret.tobey@nbcuni.com

Site Contact: MICHELE TULLY 321-721-5395

VSAT Call Sign: E000329

Frequency bands: 11700-12200 MHz

Licensee: iHeartMedia + Entertainment, Inc.

Name: Clear Channel Satellite Services Phone Number: 210-822-2828

E-Mail: allanbrace@iheartmedia.com

Attention: Allan Brace

TFE Call Sign: E010214

Frequency bands: 11700-12200 MHz

Licensee: Gray Television Licensee, LLC

Name: Cedar Rapids Television Company Phone Number: 319-398-8422

Name: John M Burgett Esq. Phone Number: 202-719-4239

Company: Wiley Rein LLP Fax Number: 202-719-7049

E-Mail: jburgett@wileyrein.com

Attention: Relationship: Legal Counsel

MES/MSS Call Sign: E060390

Frequency bands: 11700-12200 MHz, 14-14.5 GHz

Licensee: L-3 Communications Corporation Linkabit Division

Phone Number: 858-552-9944

E-Mail: Mark.Monte@L-3com.com

Name: Mark S. Lawless Phone Number: 801-594-2808

Company: L3 Technologies, Inc.

E-Mail: mark.s.lawless@L3T.com

Speci:

MES/MSS Call Sign: E060449, E060450, E060451, E060101, E060447, E060448
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: Gilat North America, L.L.C. Phone Number: 703-848-1000
E-Mail: lesley.cooper@spacenet.com
Attention: Lesley Cooper

MES/MSS Call Sign: E960474
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: Omnitrac, LLC. Phone Number: 469-801-6180
Fax Number: 469-801-6431
E-Mail: darnold@omnitrac.com
Attention: David Arnold
Name: Paul C. Besozzi Phone Number: 202-457-5292
Company: Squire Patton Boggs (US) LLP Fax Number: 202-457-6315
E-Mail: paul.besozzi@squirepb.com

MES/MSS Call Sign: E880423, E040139
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: Omnitrac, Inc. Phone Number: 858-651-8838
Fax Number: 858-658-1576
E-Mail: ruelv@omnitrac.com
Attention: Mr. Ruel Valenzuela
Name: Daniel H. Kahn Phone Number: 202-662-5539
Company: Covington & Burling LLP Fax Number: 202-778-5539
E-Mail: dkahn@cov.com

VMES Call Sign: E120174
Frequency bands: 11700-12200 MHz
Licensee: ThinKom Solutions Inc. Phone Number: 310-896-3903
Fax Number: 310-214-1066
E-Mail: JorgeR@thin-kom.com
Attention: Mr Jorge S Raphael
Name: Paul Moller Phone Number: 480.993.2220
Company: Intellicom Technologies Inc
E-Mail: PMoller@ITCcom.net
Relationship: Engineer

VMES Call Sign: E170191
Frequency bands: 11700-12200 MHz
Licensee: NBC Telemundo License LLC
Phone Number: 202-524-6401
Fax Number: 202-524-6411
E-Mail: margaret.tobey@nbcuni.com
Attention: Margaret L Tobey

NGSO BES Call Sign: E190555
Frequency band(s): 11700-12200 MHz
Licensee: Kepler Communications Inc.
Phone Number: 437-537-5371
E-Mail: nspina@keplercommunications.
Attention: Mr Nickolas G Spina

Special Receive-Only Blanket Earth Station Call Sign: E040344

Direct to Home Fixed Satellite
Frequency band(s): 11700-12200 MHz
Licensee: DISH Operating L.L.C.
Name: EchoStar Satellite L.L.C.
Phone Number: 303-723-1000
Attention: David K Moskowitz
Name: Pantelis Michalopoulos
Phone Number: 202-429-6494
Company: Steptoe & Johnson LLP
E-Mail: pmichalo@steptoe.com
Relationship: Legal Counsel

VMES Call Sign: E170121
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: Intelsat License LLC Phone Number: 703-559-7848
Fax Number: 703-559-8539
E-Mail: Cynthia.Grady@intelsat.com
Attention: Cynthia Grady
Name: Richard Cameron Phone Number: 202-230-4962
Company: LMI Advisors
E-Mail: rcameron@lmiadvisors.com

VMES Call Sign: E140087
Frequency bands: 11700-12200 MHz
Licensee: Astronics AeroSat Corporation Phone Number: 603-879-0205
E-Mail: jonathan.epstein@astronics.com Name: Carlos Nalda Phone Number:
5713325626
Company: LMI Advisors
E-Mail: cnalda@lmiadvisors.com

VMES Call Sign: E170070
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: Kymeta Corporation Phone Number: 425-896-3700
E-Mail: ryans@kymetacorp.com
Attention: Mr Ryan Stevenson
Name: Robert Koppel Phone Number: 703-584-8669
Company: Lukas, LaFuria, Gutierrez & Sachs, LLP
E-Mail: bkoppel@fcclaw.com

VMES Call Sign: E100099
Frequency bands: 11700-12200 MHz, 14-14.5 GHz
Licensee: L3harris Technologies
Phone Number: 805-584-1717 x3179
E-Mail: peter.richardson@l3harris.com
Attention: Mr Peter A Richardson

VMES Call Sign: E110078
Frequency bands: 11700-12200 MHz
Licensee: KVH Industries, Inc. Phone Number: 401-845-8148
Fax Number: 401-845-8116
E-Mail: ffeingold@kvh.com
Attention: Ms. Felise Feingold

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

Company: LMI Advisors

E-Mail: cnalda@lmiadvisors.com

Attention: Mr. Carlos Nalda

NGSO BES (Blanket earth station) Call Sign: E190066

Frequency bands: 10700- 12700 MHz

Licensee: SpaceX Services, Inc. Phone Number: 202-649-2700

E-Mail: David.Goldman@spacex.com

Attention: David Goldman

- (6) Prior to commencing any in the 12.2 -12.7 GHz band, experimental licensee must notify licensees of Dish Network (Mr. Mariam Sorond, Email: Mariam.sorond@dish.com Charles Ergen, Email: charlie.ergen@dish.com) EchoStar (Mr. Jaime Londono Email: Jaime.londono@echostar.com), and DirecTV/AT&T (Mr. Raquel Noriega Email: raquel.noriega@att.com). 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 pattern, antenna height(s), antenna orientation, eirp density) and day and times of each test.
- (7) Prior to commencing any in the 12.2 -12.7 GHz band, experimental licensee must notify licensees of DISH Operating L.L.C. (Blanket Earth Stations call sign: E090020), DISH Broadcasting Corporation (Blanket Earth Stations call sign: E080107) and EchoStar 77 Corp. (Blanket Earth Stations call sign: E050196). Phone Number: 202-463-3709 or 202-293-0981, E-Mail: Alison.Minea@dish.com Attention: Alison Minea). 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 pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (8) Coordinate with Fixed Microwave Service licensees in the proposed venue in accordance with 47 C.F.R, Part 101.103(d) prior to commencing experimental operations.
- (9) Rockwell Collins, Inc. coordinate operations with the VLBA point of contact prior to operation: Dan "Mert" Mertely nrao-rfi@nrao.edu phone: (575) 835-7128
- (10) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.
- (11) The designated point-of-contact to terminate transmissions if interference occurs is Jiwon Moran at (319) 558-6082.