

Douglas Young

From: Douglas Young
Sent: Thursday, August 17, 2023 10:07 AM
To: FCC-Licensing
Subject: Request for Info - File # 0461-EX-CN-2021
Attachments: 461cn21pre-grant.pdf

Importance: High

Attached is what your license would look like now, if granted. The Wireless Telecommunications Bureau (WTB) has questions below that still need to be answered. I assume WTB will place more restrictions on the license after these questions have been answered, the very least being consent from AWS licensees. Let us know if you still want this license, and if you do, respond to the questions below.

1. Detailed technical information on antenna actual characteristics such as antenna patterns, the direction that the antenna will point at.
2. Configuration and description on the proposed experimental operation.
3. An engineering analysis and explanation of how it would specifically avoid causing harmful interference to incumbent the Advanced Wireless Service operations.
4. Any stop buzzer information in the event that interference occurs?

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of August 17, 2023 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WN2XJE

(Call Sign)

XC MO

(Class of Station)

0461-EX-CN-2021

(File Number)

NAME General Atomics Aeronautical Systems Inc

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

(1) MOBILE: El Mirage, CA: Airborne Max Altitude 30,000 ft. AGL, within 45.00 km, centered around ↑ **New!**

Frequency Information

MOBILE: El Mirage, CA: Airborne Max Altitude 30,000 ft. AGL, within 45 km, centered around NL 34-37-30; WL 117-36-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1535 MHz	MO	14M6G1D	88 W (ERP)	0.00001 %
1615-1660.5 MHz	MO	14M6G1D	88 W (ERP)	0.00001 %
1668.4-2025 MHz	MO	14M6G1D	88 W (ERP)	0.00001 %

Special Conditions:

(1) Operation in the 1850-1910 or 1930-1990 MHz band requires prior frequency coordination with 2 GHz microwave users and consent of PCS licensees to avoid interference.

This authorization effective _____ and
will expire 3:00 A.M. EST February 01, 2024

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (2) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to authorization with the Western Area Frequency Coordinator (WAFC) who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with the WAFC as necessary to ensure compatibility with existing uses.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) The occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) In the band 1435-1452 MHz, operators of aeronautical telemetry stations are encouraged to take all reasonable steps to ensure that the unwanted emissions power does not exceed -28 dBW/27 MHz in the band 1400-1427 MHz. Operators of aeronautical telemetry stations that do not meet this limit shall first attempt to operate in the band 1452-1525 MHz prior to operating in the band 1435-1452 MHz.
- (6) All operations are on a non-interference basis to authorized federal users and long-term use of the requested frequency bands may not be possible. General Atomics Aeronautical Systems Inc. should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee will be subject to immediate shut down.
- (7) Airborne emissions in the 1390-1400 MHz frequency band are not permitted in accordance with Footnote US79.
- (8) All operations in the 1390-1395 MHz band shall ensure the unwanted emissions power does not exceed -60 dBW in the 27 MHz of the 1400-1427 MHz band for mobile stations as specified in Footnote NG338A.
- (9) The 1560-1590 MHz, 1660.5-1668.4 MHz, and 2025-2110 MHz bands shall be excluded from operation.
- (10) All operations in the 1435-1452 MHz band shall ensure the unwanted emissions power does not exceed -28 dBW in the 27 MHz of the 1400-1427 MHz band or shall first attempt to operate in the band 1452-1525 MHz prior to operating in the band 1435-1452 MHz band as specified in Footnote US338A.
- (11) Licensee must provide a stop buzzer POC.

Special Conditions:

- (12) Prior to commencing any operations at the 1525-1559 MHz and 1626.5-1660.5 MHz (E-S) frequency bands, experimental licensee must notify licensees of earth stations (Mobile Earth Stations (MESs)). 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:

MESs Call Sign: E100192, E030055

Frequency bands: 1525- 1544 MHz, 1545- 1559 MHz, 1626.5 - 1645.5 MHz, 1646.5 - 1660.5 MHz

Licensee: ORBCOMM License Corp.

ATTN: Mr. Walter H. Sonnenfeldt,

Phone Number: 585-461-3018, E-Mail: sonnenfeldt.walter@orbcomm.com)

MESs Call Sign: E090029

Frequency bands: 1530 – 1544 MHz, 1545- 1559 MHz, 1631.5 - 1645.5 MHz, 1646.5 - 1660.5 MHz

Licensee: COMTECH MOBILE DATACOM CORP.

Phone Number: 240-686-3300

Fax Number: 240-686-3301

E-Mail: John.Fossaceca@comtechmobile.com

Attention: John Fossaceca

MESs Call Sign: E050249

Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz

Licensee: Inmarsat Solutions (US) Inc. Phone Number: 703-223-3327

Attention: Mr Brennan Price. E-Mail: brennan.price@inmarsat.com

MESs Call Sign: E090032

Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz

Licensee: ISAT US Inc. and Inmarsat Solutions (US) Inc. Phone Number: 703-223-3327

Attention: Mr Brennan Price. E-Mail: brennan.price@inmarsat.com

MESs Call Sign: E980179

Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz

Licensee: Ligado Networks Subsidiary LLC Phone Number: 703-390-2748

Fax Number: 703-390-2771

E-Mail: Sachin@ligado.com

Attention: Sachin Chhibber

MESs Call Sign: E130033

Frequency bands: 1525 – 1544 MHz, 1545- 1559 MHz, 1625.5 - 1645.5 MHz and 1646.5 - 1660.5 MHz

Licensee: ViaSat, Inc. Phone Number: 760-476-2583

Fax Number: 760-929-3941

E-Mail: daryl.hunter@viasat.com

Attention: Mr Daryl T Hunter

Speci MESs Call Sign: E000180, E010047, E010048, E010049, E010050
Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz
Licensee: Inmarsat Solutions (US) Inc. Phone Number: 703-223-3327
Attention: Mr Brennan Price. E-Mail: brennan.price@inmarsat.com

MESs Call Sign: E980159
Frequency bands: 1530- 1559 MHz, 1631.5 - 1660.5 MHz, 1646.5 - 1660.5 MHz
Licensee: Satcom Systems, Incorporated Phone Number: 818-775-9740
Fax Number: 818-885-1882
Attention: Mr Tom D Soumas Jr

MESs Call Sign: E020074
Frequency bands: 1525- 1544 MHz, 1626.5 - 1645.5 MHz
Licensee: Honeywell International Inc. Phone Number: 704-627-6011
E-Mail: carrie.sindelar@honeywell.com
Attention: Ms Carrie Sindelar

MESs Call Sign: E930367
Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz
Licensee: Ligado Networks Subsidiary LLC Phone Number: 703-390-2748
Fax Number: 703-390-2771
Attention: Sachin Chhibber E-Mail: Sachin@ligado.com

CA Call Sign: KA31, E980136, E980137, E990027, KA305, Ka249, KB34
Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz
Name: Comsat, Inc. Phone Number: 321-525-4504
Attention: Ms. Cara Cassavoy E-Mail: ccassavoy@satcomdirect.com

CA Call Sign: E100051, E080030
Frequency bands: 1525- 1559 MHz, 1626.5 - 1660.5 MHz
Licensee: Ligado Networks Subsidiary LLC Phone Number: 703-390-2748
Fax Number: 703-390-2771
Attention: Sachin Chhibber E-Mail: Sachin@ligado.com

- (13) Prior to commencing any operations in the 1610 - 1618.725 MHz frequency band, experimental licensee must notify licensee of GUSA Licensee LLC. (Call sign E970381, S2115. Name: Mr. L. Barbee Ponder IV Phone Number: 985-335-1503 E-Mail: Barbee.Ponder@Globalstar.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 height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (14) Prior to commencing any operations in the 1618.725- 1626.5 MHz frequency band, experimental licensee must notify licensee of Iridium Satellite LLC (Call sign E960132, E960622, POC/Satellite: S2110. Name: Ms Maureen C. McLaughlin, Phone Number: 703-287-7518, E-Mail: maureen.mclaughlin@iridium.co). 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.

Special Conditions:

- (15) Prior to commencing any operations in the 2000-2010 MHz frequency band, experimental licensee must notify licensee of GAMMA ACQUISITION L.L.C. (Call sign E060430, POC/Satellite: S2633. Name: Ms. Allison Minea, Phone Number: 202-293-1216, E-Mail: alison.minea@dish.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 height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (16) Prior to commencing any operations in the 2010-2020 MHz frequency band, experimental licensee must notify licensee of DBSD Services Limited. (Call sign E070272, POC/Satellite: S2651. Name: Ms. Allison Minea, Phone Number: 202-293-1216, E-Mail: alison.minea@dish.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 height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (17) Prior to commencing any operations in the 1910-1915 MHz and 1990-1995 MHz Bands, the applicant must obtain consent from T-Mobile, the licensee in this band.
- (18) Airborne operations are not permitted in 1390-1393 MHz and 1670-1675 MHz bands due to explicit airborne prohibition in FCC rules.