

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WP2XAH

(Call Sign)

0480-EX-CR-2026

(File Number)

NAME Vast 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(h) of the Commission's Rules

Station Locations

(1) Long Beach, CA - NL 33-48-37; WL 118-10-37

Frequency Information

Long Beach, CA - NL 33-48-37; WL 118-10-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1626.5-1660 MHz	FX	0M20G7D	38.46 W (ERP)	0.001 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) Stop buzzer:
Miguel Lozano
+1 562-751-4822
miguel.lozano@vastspace.com
- (4) Licensee is authorized to conduct ground testing of two inter-satellite data relay system ("IDRS") Addvalue IDRS i100 transceivers (9 dBi directional antenna (222mm x 82mm x 9.6mm) in 1626.5-1660 MHz (Earth-to-space) via Inmarsat Group Holdings Limited and Inmarsat Inc.'s L-band satellites.

This authorization effective September 01, 2026 and
will expire 3:00 A.M. ET September 01, 2028

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (5) Points of Communication:
Inmarsat Group Holdings Limited's INMARSAT I3F5@54W.L. (Call Sign: S2949) (UK-licensed)
Inmarsat Inc.'s INMARSAT I3F5@54W.L. (Call Sign: S2949) (UK-licensed)
Inmarsat Inc.'s INMARSAT 5F2@55W.L. (Call Sign: E120072) (UK-licensed)
Inmarsat Group Holdings Limited's INMARSAT 4F3@98 W.L.; Call Sign: S2932 (UK-licensed)
Inmarsat Inc.'s INMARSAT 5F3@179.6 W.L.; Call Sign: E150028 (UK-licensed)
Inmarsat Inc.'s INMARSAT 4F1@143.5 E.L.; Call Sign: KA25 (UK-licensed)
- (6) Experimental operation must be on an unprotected and non-interference basis (NIB). Licensee must not cause harmful interference to and must not claim protection from interference caused to it by, any other lawfully operating stations.
- (7) Licensee must comply with the terms of any L-band operator-to-operator coordination agreement. In the absence of a continuing L-band operator-to-operator agreement, this experimental operation will be on a non-harmful interference basis until a future operator-to-operator agreement is concluded. In this instance, licensee must notify the other operators in these frequency bands that it will operating on a non-harmful interference basis. Licensee must notify its customers that its operations are on a non-harmful interference basis.
- (8) Communications between authorized experimental stations (Addvalue IDRS i100 transceivers) and INMARSAT I3F5@54W.L., INMARSAT 4F3@98 W.L., INMARSAT 5F2@55W.L., INMARSAT 5F3@179.6 W.L. and INMARSAT 4F1@143.5 E.L. L-band satellites must comport with all existing and future space station coordination agreements reached between the United Kingdom and other administrations. In the absence of a coordination agreement, such communications must comport with applicable provisions of the ITU Radio Regulations.
- (9) This authorization is subject to operation consistent with all conditions, waivers, and findings therein that are required to access the Inmarsat satellites.
- (10) For operations in the 1626.5-1660 MHz frequency band, this authorization is subject to compliance with the provisions of the Agreement between Inmarsat on the one hand and the U.S. Department of Justice (DOJ) and the Department of Homeland Security (DHS) on the other, dated September 23, 2008.
- (11) This authorization is subject to operation of Inmarsat under Section 648 of the ORBIT Act imposing restrictions on exclusive arrangements for the provision of satellite services between the United States and other countries.
- (12) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (13) Operations in the 1626.5-1660 MHz frequency band for communications between the Addvalue IDRS i100 transceivers and INMARSAT I3F5@54W.L., INMARSAT 4F3@98 W.L., INMARSAT 5F2@55W.L., INMARSAT 5F3@179.6 W.L. and INMARSAT 4F1@143.5 E.L. L-band satellites must comply with the terms of any L-band operator-to-operator coordination agreements.

Special Conditions:

- (14) For operations in the 1626.5-1660 MHz frequency band, this authorization is subject to compliance with the provisions of the Agreement between Inmarsat on the one hand and the U.S. Department of Justice (DOJ) and the Department of Homeland Security (DHS) on the other, dated September 23, 2008.
- (15) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station, and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing...

Special Conditions:

- (16) Prior to commencing any operations in the 1626.5-1660 MHz frequency band, 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

E-Mail: John.Fossaceca@comtechmobile.com Attention: John Fossaceca

Name: Joan M. Griffin Phone Number: 202-342-8573 E-Mail: jgriffin@kelleydrye.com

Company: Kelley Drye & Warren LLP Fax Number: 202-342-8451

Attention: Relationship: Legal Counsel

MESs Call Sign: E050249

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

Licensee: Inmarsat Solutions (US) Inc.

Attention: Brennan Price, 703-223-9927, Brennan.Price@inmarsat.com

MESs Call Sign: E090032

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

Licensee: ISAT US Inc. and Inmarsat Solutions (US) Inc.

Attention: Brennan Price, 703-223-9927, 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 703-390-2004 Fax Number 703-390-2778

Contact: Ms. Valerie Green Email: Valerie@Ligado.com

Name: Gerard J. Waldron Phone Number: 202-662-5360

Company: Covington & Burling LLP Fax Number: 202-778-5360

E-Mail: gwaldron@cov.com Relationship: Legal Counsel

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

Contact: Mr. Daryl T Hunter Email: E-Mail: daryl.hunter@viasat.com

Speci:

MESs Call Sign: E020074

Frequency bands: 1525- 1544 MHz, 1626.5 - 1645.5 MHz

Licensee: Honeywell International Inc. Phone Number: 2026267719

Fax Number: 2027832331

E-Mail: balaguer@fr.com

Attention: c/o Donna Balaguer

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

Name: William K. Coulter Phone Number: 202-835-6136 E-Mail: william.k.coulter

Company: Baker & McKenzie LLP Fax Number: 202-416-7138

Relationship: Legal Counsel

MESs Call Sign: E930367

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

Licensee: Ligado Networks Subsidiary LLC Phone Number: 703-390-2797

Fax Number: 703-390-2778

Attention: Maqbool Aliani

Name: Elizabeth Park Phone Number: 202-637-1056 E-Mail: Elizabeth.Park@lw.com

Company: Latham & Watkins LLP

Relationship: Legal Counsel

- (17) Operations of Addvalue IDRS i100 transceivers must comply with the following:
Gain output power ERP Maximum EIRP
14dBi 1.53W 38.46W 15.85dBW
- (18) Operations in the 1544-1545/1645.5-1646.5 MHz frequency bands ARE LIMITED to
distress and safety communications, in accordance with International Footnotes
5.356 and 5.375 of the ITU Radio Regulations.
- (19) The frequencies authorized by this license are strictly limited to 1626.5-1660 MHz.
- (20) Vast Space LLC. is urged to take all practicable steps to minimize unwanted
emission power into the adjacent frequency band 1660.5-1668.4 MHz, which is
solely allocated for passive services per Footnote US246.
- (21) This operation is for experimental purposes only, provision of services is not
permitted. Widely divergent and unrelated experiments must not be conducted under
this license.