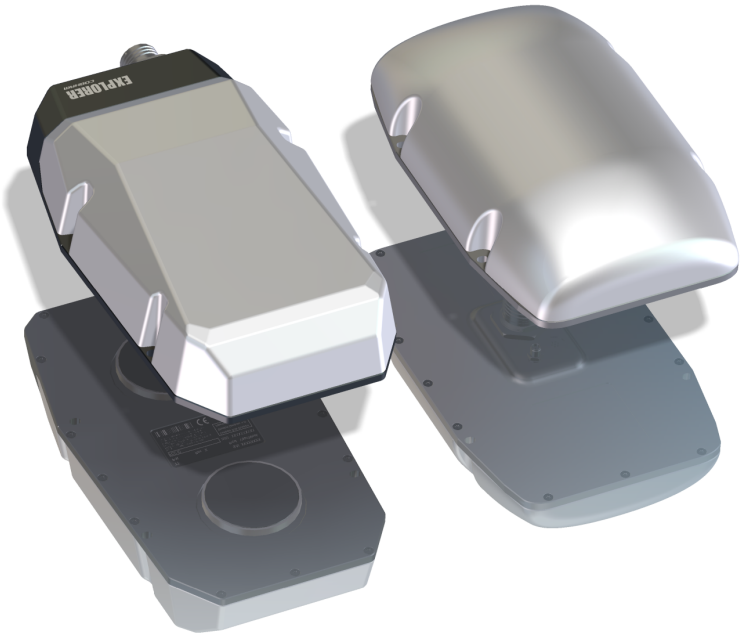
Exhibit A
Description of Application

ViaSat, Inc. ("ViaSat") seeks blanket authority to operate up to 100,000 electrically identical satellite mobile earth terminals ("METs") to communicate with the SkyTerra-1 satellite, utilizing L-Band frequencies at 1525-1559 MHz and 1626.5-1660.5, but excluding the 1544-1545 MHz and 1645.5-1646.5 MHz bands, which are reserved for safety and distress communications services. SkyTerra-1 is operated by LightSquared Subsidiary LLC ("LightSquared"), and is authorized to use these bands to serve the United States. As discussed below, these METs comply with all applicable Commission technical requirements.

A. The ViaSat MT2220 (aka Explore 122) Mobile Earth Terminal

ViaSat is a leading provider of innovative satellite broadband services, and a leading manufacturer of innovative satellite communication products. The MT2220/Explore 122 is an alternate construction of the FCC licensed AT2220 aviation terminal. Both terminals utilize same antenna assembly and modem assembly. The MT2220/Explore 122 is packaged slightly different from the AT2220 to achieve lower cost point suitable for land mobile platforms.

Rendering of MT2220/Explore 122 (left) and AT2220 (right) is shown side by side below.



The MT2220/Explore 122 is a satellite terminal developed for com-on-the-move applications. It is designed to be affixed to vehicle roof tops via magnetic mounts The remote terminals are typically sold to original equipment manufacturers (OEM) that install them on end-user platforms.

The MT2220/Explore 122 Terminal provides dependable real-time IP data connectivity, voice calling including Push-to-Talk and GPS tracking services. This terminal's secure, two-way networking capability enables both real applications such as:

- Fleet management
- Emergency first responders
- Disaster aid workers
- High value asset tracking
- Homeland security
- Mobile workforce management

ViaSat services offer reliable network connectivity, even in harsh weather conditions, and bring dependable performance to locations where existing wireless and terrestrial systems are overloaded or inoperable.

Compliance with Out-of-Band and Spurious Emissions Lists

The level of out-of-band and spurious emissions from all METs that are the subject of this application will conform to the requirements of Sections 25.202(f) and 25.216 of the Commission's rules.[1]

B. Compliance with Section 25.287(a)

The METs covered by this application address the Commission's requirements for ensuring the priority and real-time pre-emption requirements necessary to protect the GMDSS in the following manner:[2]

1. *47 C.F.R. § 25.287(a)(1): All MES transmissions must have a priority assigned to them that preserves the priority and pre-emptive access given to maritime distress and safety communications sharing the band.*

Transmissions to authorized METs are classified as having no priority relative to GMDSS communications. This classification is controlled by ViaSat's Network Operation Center ("NOC"), which is located in Carlsbad, California.

2. *47 C.F.R. § 25.287(a)(2): Each MES with a requirement to handle maritime distress and safety data communications must be capable of either: (i) recognizing messages and call priority identification when transmitted from its associated Land Earth Station (LES); or (ii) accepting message and call priority identification embedded in the message or call when transmitted from its associated LES and passing the identification to shipboard data message processing equipment.*

This requirement does not apply to the proposed mobile METs.

3. *47 C.F.R. § 25.287(a)(3): Each MES shall be assigned a unique terminal identification number that will be transmitted upon any attempt to gain access to a system.*

Each MET will be assigned a unique fixed terminal identifier (FTI) at the time the terminal is manufactured. This unique identifier is transmitted by the transceiver upon every entry to the ArcLight network and is required to gain access to the network. ViaSat's NOC will maintain an authorization database for all subscriber METs, and will grant or deny access accordingly.

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1 *See* 47 C.F.R. §§25.202(f), 25.216. Because this application seeks authority to operate mobile earth stations in the mobile satellite service ("MSS"), questions E15 and E16 in Schedule B of the Form 312, which pertain to FSS terminal compliance with Sections 25.209(a) and (b), are inapplicable.

2 *See* 47 C.F.R. §2.106, n. US315; 47 C.F.R. §25.287(a).

4. *47 C.F.R. § 25.287(a)(4): After an MES has gained access to a system, the mobile terminal must be under control of a LES and shall obtain all channel assignments from it.*

Any MET that has gained access to the network will be subject to the control of ViaSat's NOC. Each MET will receive and act upon commands issued to it by the NOC. The NOC assigns all channel frequencies, including those to be used for signalling-only purposes.

5. *47 C.F.R. § 25.287(a)(5): All MESs that do not continuously monitor a separate signaling channel or signaling within the communications channel must monitor the signaling channel at the end of each transmission.*

The MT2220/EXPLORE 122 is a full-duplex MET and continuously monitors the signalling channel from the NOC.

6. *47 C.F.R. § 25.287(a)(6): Each MES must automatically inhibit its transmissions if it is not correctly receiving separate signaling channel or signaling within the communications channel from its associated LES.*

MET transmissions will be inhibited unless the MET is correctly receiving either a signalling channel or the correct communications channel according to specified criteria. More specifically, if the MT2220/EXPLORE 122 cannot correctly receive the forward link from the NOC, the transceiver automatically terminates transmissions.

7. *47 C.F.R. § 25.287(a)(7): Each MES must automatically inhibit its transmissions on any or all channels upon receiving a channel shut-off command on a signaling or communications channel it is receiving from its associated LES.*

In the event that pre-emption is required, the NOC can shut down transmissions of all MT2220/EXPLORE 122 terminals by disabling the forward link. As noted above, if the MT2220/EXPLORE 122 cannot correctly receive the forward link from the NOC, the transceiver automatically terminates transmissions. In addition, the NOC can also inhibit transmission on any specific terminal or all terminals via an over the air command message.

8. *47 C.F.R. § 25.287(a)(8): Each MES with a requirement to handle maritime distress and safety communications must have the capability within the station to automatically pre-empt lower precedence traffic.*

This requirement does not apply to the proposed terrestrial mobile METs.

C. Compliance with AMS(R)S Pre-emption Requirements

The METs covered by this application address the Commission's requirements for ensuring the priority and real-time pre-emption requirements necessary to protect AMS(R) Service[3] as discussed below:

1. *All MES transmissions shall have a priority assigned to them that preserves the priority and pre-emptive access given to distress and safety communications sharing the band.*

Transmissions to authorized METs are classified as having no priority relative to AMS(R)S communications. This classification is controlled by ViaSat's NOC. In addition, LightSquared, like all other MSS operators, protects AMS(R) Service transmissions in the band by a frequency planning and management process.

2. *Each MES with a requirement to handle distress and safety communications shall be capable of recognizing messages and call priority identification when transmitted from its associated LES.*

This requirement does not apply to the proposed terrestrial mobile METs.

3. *Each MES shall be assigned a unique terminal identification number that will be transmitted upon any attempt to gain access to the system.*

Each MET will be assigned a unique fixed terminal identifier (FTI). This unique identifier is transmitted by the transceiver upon every entry to the network and is required to gain access to the network. ViaSat's NOC will maintain an authorization database for all subscriber METs, and will grant or deny access accordingly.

4. *After an MES has gained access to a system, the mobile terminal shall be under control of a LES and shall obtain all channel assignments from it.*

Any MET that has gained access to the network will be subject to the control of ViaSat's NOC. Each MET will receive and act upon commands issued to it by the NOC. The NOC assigns all channel frequencies, including those to be used for signalling-only purposes.

5. *All MESs that do not continuously monitor a separate signaling channel shall have provision for signaling within the communications channel.*

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[3] *See* 47 C.F.R. §2.106 n. US308; *In re Application of AMSC Subsidiary Corporation,* 10 FCC Rcd 9507, 9511 (IB 1995).

The MT2220/EXPLORE 122 is a full-duplex MET and continuously monitors the signaling channel from the NOC.

6. *Each MES shall automatically inhibit its transmissions if it is not correctly receiving a separate signaling channel or signaling within the communications channel from its associated LES.*

MET transmissions will be inhibited unless the MET is correctly receiving either a signaling channel or the correct communications channel according to specified criteria. More specifically, if the MT2220/EXPLORE 122 cannot correctly receive the forward link from the NOC, the transceiver automatically terminates transmissions.

7. *Each MES shall automatically inhibit its transmissions on any or all channels upon receiving a channel shut-off command on a signaling or communications channel it is receiving from its associated LES.*

In the event that pre-emption is required, the NOC can shut down transmissions of all MT2220/EXPLORE 122 terminals by disabling the forward link. As noted above, if the MT2220/EXPLORE 122 cannot correctly receive the forward link from the NOC, the transceiver automatically terminates transmissions. In addition, the NOC can also inhibit transmission on any specific terminal or all terminals via an over the air command message.

8. *Each MES with a requirement to handle distress and safety communications shall have the capability within the station to automatically pre-empt lower precedence traffic.*

This requirement does not apply to the proposed terrestrial mobile METs.

D. Radiation Hazard Study

A radiation hazard analysis for the proposed MET type is attached hereto as Exhibit B. As demonstrated by the results of the analysis, the maximum permissible exposure limit (MPE) for protection of the General Population/Uncontrolled Exposures, 1 mW/cm^2 averaged over a thirty minute period, is met.[4]

E. Remote Control Point

[4] The MT2220 is not a "portable device," in that it is not designed to be used within 20 centimeters of the operator's body. As such, the equipment authorization requirements set forth in Section 25.129 of the Commission's rules are inapplicable. *See* 47 C.F.R. § 25.129.

ViaSat will remotely control the MT2220/EXPLORE 122 from the NOC facilities located in Carlsbad, California. The control facilities can be reached by telephone at (760) 602-5656 or (866) 659-9702, or by email at NOC-Carlsbad@viasat.com.

F. Public Interest Showing

As noted above, the MT2220/EXPLORE 122 relies on efficient bandwidth allocation, low-latency IP networking, and low required satellite power to enable real-time mobile communications more affordably than ever. This proven technology, based on ViaSat ArcLight technology will bring significant benefits to commercial customers in the U.S. that currently are limited in their ability to run on-the-move applications in real-time. In doing so, the MT2220/EXPLORE 122 will facilitate more robust and efficient operations, including by critical infrastructure providers. More generally, the MT2220/EXPLORE 122 will increase spectral efficiency in the L Band and reduce operating costs, allowing commercial customers to leverage M2M capabilities more fully. For these reasons, grant of this application is in the public interest.

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For the foregoing reasons, ViaSat respectfully requests that this application be granted.