DESCRIPTION OF MODIFICATION APPLICATION

Stratos Offshore Services Company ("Stratos")[1] requests authority to modify its license call sign E980235 to add a Seatel 9797 C Band ESV antenna. This application also includes the coordination information for the deployment of one of the proposed ESV antennas at a particular site. In addition, this application seeks to (i) clarify that this license authorizes both fixed terminals and as ESVs; and (ii) provide a map updating the record regarding the geographic area of the operations for the ESVs in Stratos's network.

Stratos provides critical broadband satellite communications services to a wide array of users on marine vessels and oil drilling platforms that may be unable to obtain communications services through alternative facilities. The new remote terminal type will allow Stratos to meet the service requirements of its commercial users. Therefore, expeditious grant of this application is in the public interest.

Addition of New ESV Terminal Type

This application proposes to operate up to 50 Seatel 9797 ESV antennas in the 3.7-4.2 GHz and 5.925-6.425 GHz bands in U.S. and international waters. Exhibit 3 contains the radiation hazard study for this proposed antenna. Prior frequency coordination will be provided for all C Band ESV antennas operating within 200 km of the U.S. shoreline or within 200 km of an FCC licensed fixed terrestrial microwave system operating in the shared C Band, in accordance with §25.221(a)(12). Moreover, in accordance with the requirements of Section 25.221(a)(9) of the Commission's rules, Stratos will not operate the proposed terminals on vessels smaller than 300 gross tons. Stratos files with this application the coordination notification for an initial deployment site of the proposed antenna. The details of coordination are included herein as Exhibit 5.

Compliance with Off-Axis EIRP Spectral Density Limits

This proposed antennas complies with the requirements of Section 25.221 of the Commission's rules, and the following information is being provided to demonstrate compliance. As demonstrated by the certification provided as Exhibit 2, this antenna type complies with the off-axis EIRP spectral density limits set forth in Section 25.221(a)(1) of the Commission rules when operated at a reduced input power density level of -7 dBW/4 kHz. Stratos will operate the proposed antennas in compliance with these limits. Accordingly, the terminals are eligible for authorization to communicate with ALSAT/Permitted List[2] satellites as authorized points of communications. However, in accordance with Section 25.221(a)(8), Stratos will not seek to coordinate, in any geographic location, more than 36 MHz of uplink bandwidth on each of no more than two GSO FSS satellites.

The proposed antenna type has been reviewed and approved by the Commission for operations at substantially similar operating parameters to Harris CapRock Communications,

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1 Ownership information for Stratos is provided in the attached Exhibit 1.

2 *See Comprehensive Review of Licensing and Operating Rules for Satellite Services*, IB Docket No. 12-267, Report and Order, FCC 13-111 ¶ 14 (rel. Aug. 9, 2013).

Inc. ("CapRock").[3] CapRock's authorization for this antenna is included on the Commission's NRESA list of previously authorized antennas.[4] Because the Commission is familiar with the operations of this antenna, Stratos respectfully requests expedited processing of this application.

U.S. Point of Contact

Pursuant to Section 25.221(a)(4), Stratos has provided a point of contact in the U.S., available 24 hours a day, seven days a week, with authority and ability to cease all emissions from the proposed C-band ESV antennas directly through the Stratos's network control facility in Lafayette Louisiana, pursuant to Section 25.221(a)(7).

Each of the proposed terminals may operate with various hub antennas, including those licensed to Stratos and others. The terminals may operate with other hubs located outside of the United States when operating in international waters. However, the ESV terminals will be controlled at all times by Stratos through the control point in Lafayette Louisiana.

Data Logging

Pursuant to the requirements in Section 25.221(a)(5), Stratos's ESV network is capable of recording for each ESV a record of the terminal's location (*i.e.*, latitude/longitude), transmit frequency, channel bandwidth and target satellite. This data will be recorded at time intervals no greater than every 20 minutes while the ESV is transmitting and will be maintained for one year.

Antenna Pointing Accuracy

As required by Section 25.221(b)(1)(iii) of the Commission's rules, Stratos provides in the exhibit indicated above for this antenna, declarations from antenna manufacturer, stating that the proposed ESV antennas will maintain a stabilization pointing accuracy of better than 0.2 degrees under specified ship motion conditions. The antenna controller can detect and automatically cease transmission within 100 milliseconds if the pointing error should ever exceed 0.5 degrees.

Geographic Areas of Operation

The proposed antenna will operate in the Atlantic Ocean region, Gulf of Mexico Region and Pacific Ocean Region. Exhibit 4 attached shows the entire area of operation for these terminals.

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3 *See* Harris CapRock Communications, Inc., Call Sign E070030; File No. SES-LIC-20070216-00237 (granted Apr. 25, 2007).

4 *See 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations*, Fifth Report and Order, 20 FCC Rcd 5666 (2005); *see also* Public Notice, *International Bureau Establishes Website for List of Previously Approved Non-Routine Earth Station Antennas,* FCC DA 09-425 (rel. Feb. 23, 2009).

FAA Notification Not Required

The ESV antenna type proposed in this application satisfies the exemption set forth in the Commission's rules for antenna structures requiring FAA notification. *See* 47 C.F.R. § 17.14(b). Stratos does not expect ESV terminals mounted on vessels or other structures to meet the requirements for FAA notification pursuant to the Commission's rules. *See* 47 C.F.R. §§ 17.7, 17.14. In typical cases, either the height requirements will not be exceeded or the ESV will be mounted in such a manner that it will be shielded by permanent or existing structures. To the extent that an ESV will be mounted in such a manner that requires FAA notification, Stratos will provide such notification at that time.

Clarifications

Stratos respectfully requests the addition of a condition to the license clarifying that the license includes authority to operate both fixed VSAT and ESV terminals, as the Commission has provided in other licenses.[5]

In addition, Stratos seeks to identify the area of operation of the currently authorized ESV terminals to include the Pacific Ocean region and international waters, in addition to the inland waterways, the Atlantic Ocean and the Gulf of Mexico regions identified in the previous modification application adding these ESV antennas. *See* File No. SES-MOD-20060609-00965. All ESV terminals are controlled at all times by Stratos through its control point in Lafayette, Louisiana, as identified on the license. The map contained in Exhibit 4 hereto illustrates the area of operations for these terminals.

In addition, Stratos clarifies that the remote ESV terminals in the network may operate with different hub antennas depending on the location of the vessel. When operating in international waters, the terminals may operate with other hubs located outside of the United States.[6] However, all ESV terminals are controlled at all times by Stratos through its control point in Lafayette, Louisiana, as identified on the license.

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5 *See, e.g.,* Rignet Satcom, Inc., Call Sign E070104; File No. SES-MOD-20100409-00428 (granted May 18, 2010) (Section 8, Condition 249: "This license is granted authority to provide services for both Earth Stations on-board Vessels (ESV) and VSAT Network.")

6 *See* 47 C.F.R. § 25.222(a)(7) (allowing ESVs on U.S.-registered vessels to operate under control of a hub earth station located outside the United States provided that the ESV operator maintains a point of contact within the United States that will have the capability and authority to cause an ESV on a U.S.-registered vessel to cease transmitting if necessary).