

REGARDING MODIFICATION OF LICENSE TO ADD EARTH STATION ON
VESSELS AUTHORITY TO COMMUNICATE WITH SEATEL ANTENNAS

I. Introduction

Telesat Network Services, Inc. (“Telesat”) is filing the instant application to modify its existing authorization for a Ku-band transmit/receive earth station under Call Sign E990541, in order to add earth stations on vessels (“ESV”) operations using the following antenna types previously licensed to another Telesat earth station for ESV purposes: SeaTel 2406, USAT24, 4003, 4006, 4009, 6006, and 6009.

As discussed in detail below, Telesat also hereby notifies the Commission that it has begun the process of coordinating the use of certain transmit frequencies with NASA in order to protect NASA’s TDRSS Space Network operations. Furthermore, Telesat hereby respectfully requests the waivers discussed below.

II. Previous Licensing of the Subject Antennas

Telesat is herein seeking authority to operate the above-referenced SeaTel antennas, for which it has previously sought and been granted authority to operate under Call Sign KA399. In all instances, Telesat either sought authority to add the antennas by way of routine license modification processing or, in one case, by notification.¹

The above-referenced ESV units do not conform to the antenna pattern specified in Section 25.209 of the Commission’s Rules. However, pursuant to Section 25.218 of the Commission’s Rules, an applicant may request routine processing of an application if it can provide documentation indicating that the proposed antenna operations would meet the applicable off-axis EIRP envelope. It is under this rule that Telesat sought authority to add its SeaTel antennas under Call Sign KA399, and now Telesat is relying upon the same approach to add its SeaTel antennas under Call Sign E990541.

Pursuant to the Part 25 Earth Station *Fifth Report and Order*, the International Bureau was directed to maintain a list of approved non-conforming earth station antennas. Earth station applicants, like Telesat, proposing to use antennas on this list no longer need to attach antenna radiation plots as an exhibit to their applications, as required by section 25.132(b)(3) of the Commission’s Rules, 47 C.F.R. § 25.132(b)(3). Rather, applicants need only provide an attachment to their applications citing the

¹ Telesat added the SeaTel USAT24, SeaTel 4009, and SeaTel 6009 antennas, which are technically identical to the SeaTel 2406, 4006, and 6006 antennas, respectively, by submitting a notification pursuant to Section 25.118(a)(2) of the Commission’s Rules. See File No. SES-MOD-20110415-00459.

particular antennas they plan to use, and an application file number and call sign of a license in which those antennas have been approved. Barring any countervailing considerations, the Bureau will consider granting the application for the non-conforming antennas, providing the applicant proposes the same kinds of services as the operator of the previously authorized antennas under the same or substantially similar operating conditions.

As stated previously, Telesat is herein providing the specific application references upon which it relied for adding its SeaTel antennas to its KA399 license. Telesat respectfully requests that the Commission's staff rely upon the same application materials in the instant request for ESV authority:

- (1) *SeaTel 2406* - SES-LIC-20080623-00834, Call Sign E080147, Intelsat LLC
- (2) *SeaTel USAT24* - see fn. 1 to the instant request.
- (3) *SeaTel 4003* - SES-MOD-20070316-00368, Call Sign WB36, Vizada, Inc.
- (4) *SeaTel 4006* - SES-MOD-20070316-00368, Call Sign WB36, Vizada, Inc.
- (5) *SeaTel 4009* - see fn. 1 to the instant request.
- (6) *SeaTel 6006* - SES-MOD-20080310-00256, Call Sign KA313, Vizada, Inc.
- (7) *SeaTel 6009* - see fn. 1 to the instant request.

Also submitted with the instant request is a declaration provided to Telesat by Cobham SATCOM, manufacturer of the SeaTel series of antennas, attesting that the antennas meet the spectral density envelope set forth in Section 25.222(a)(1)-(4) of the Commission's Rules, when the devices are limited to input power levels equal to or less than those identified in Schedule B to the instant application.

III. Coordination with NASA for use of 14000-14200 MHz frequencies

Telesat herein proposes ESVs to transmit in the 14000-14200 MHz band. Pursuant to Sections 25.222(c) of the Commission's rules, Telesat's proposed AOR beam operations in those frequencies requires coordination with NASA's TDRSS facilities. Telesat hereby notifies the Commission that it has informed NASA of its proposed operations and that, on June 15, 2011, Telesat received communication from NASA that it had begun analysis of the technical details. Telesat is submitting herewith a copy of that correspondence. Telesat will notify the Commission when coordination has been completed.

Telesat also notes that it does not propose ESVs to transmit in the 14470-14500 MHz band, and thus its operations are not subject to the coordination procedures called for by Section 25.222(d) of the Commission's rules.

IV. Request for Waiver: Waiver of the Use of Bureau's database of non-conforming antennas

The Part 25 Earth Station *Fifth Report and Order* established that the International Bureau would maintain a list of approved non-conforming earth station antennas upon which applicants should rely for using the procedure under Section 25.218. However, the International Bureau's website listing approved non-routine earth station antennas has not been updated to include the referenced antennas and the applications identified above that the Commission granted previously to authorize use of the antennas. Accordingly, Telesat hereby respectfully requests a waiver to accept its use of materials submitted by various applicants that is not reflected in the Bureau's database of non-conforming antennas.

V. Summary and Certifications

The antenna patterns associated with the above-referenced applications exceed the sidelobe specification established in Section 25.209.

Telesat certifies that it will limit its pointing error to 0.5°.

Telesat further certifies that, pursuant to Section 25.222(b)(3) of the Commission's rules, the ESV antennas conform to the gain pattern criteria of 25.209(a) and (b) and that, combined with the input power density entered in Schedule B, the off-axis EIRP spectral density envelope in 25.222(a)(1) through (a)(4) will be met.

Telesat acknowledges that its proposed antenna will be protected from radio interference caused by other space stations only to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the referenced patterns defined in Section 25.209.

For the foregoing reasons, Telesat respectfully requests that the modification application for new ESV authority be granted.