Attachment

Description of Application for Modification of License

1.0 OVERVIEW

This application seeks to modify the current Row 44, Inc. ("Row 44")[1] Ku-band Earth Stations Aboard Aircraft ("ESAA") license to increase EIRP for transmit conditions with 25° skew or less to the receiving satellite, add new emission designators, and to transmit at lower EIRP than is presently authorized at skew angles ranging up to 55°, angles of arrival at which Row 44 does not currently operate. In addition, Row 44 seeks authority to add two additional satellites as points of communication – AMC-2 at 80.85° W.L. and SES-6 at 40.5° W.L. These additional points of communication are both space stations licensed to and operated by SES, S.A. SES-6 is a non-U.S. satellite, but is already included on the FCC's Ku-band Permitted List.

All of the requested changes relate solely to the 0.62 meter TECOM Ku-Stream antenna, which is identified as Remote Terminal #2 in the existing Row 44 license (Call Sign E080100). No other changes in the technical parameters contained in the current ESAA license are proposed except as set forth herein, in Form 312 and Schedule B thereto, and in the Technical Appendix, Exhibit A to this application. To the extent practicable, the Form 312 includes only information that is changing due to the requested modification (e.g., it includes both the new satellite points of communication and those previously-authorized satellites for which changes in operating parameters are requested, but not the other satellites included as points of communication under Row 44's current license for which no operational modification is sought herein).

The proposed modifications to Row 44's existing authority apply only to certain satellite points of communication that are currently part of the Row 44 license – specifically AMC-9 and SES-1, operated by SES – as well as to the newly-requested satellites identified above. The requested changes in operating parameters will provide enhanced service to airline passengers on flights operating over North American airspace and in the Atlantic and Pacific Ocean regions by allowing increased system capacity and service availability. Except as specifically set forth herein, Row 44 seeks these modifications subject to all terms and conditions set forth in its current license.[2]

---

[1] The in-flight connectivity business established by Row 44 now operates under the name Global Eagle Entertainment, which is the parent company of Row 44 (*see* IBFS File No. SES-T/C-20121203-01063). As Row 44 remains the name of the FCC licensee, that designation is used in this application.

[2] *See* Row 44 Inc., Radio Station Authorization, Call Sign E080100, File No. SES-MOD-20121023-00963, as amended by SES-AFS-20130920-00833 & SES-AFS-20140203-00029 (Sat. Div., granted Aug. 29, 2014).

Row 44 seeks to implement service on one or more of the satellites subject to its amended modification application as soon as practicable, and respectfully requests that this modification application be placed on public notice as quickly as possible in order to facilitate this projected implementation schedule. To the extent necessary, Row 44 will seek Special Temporary Authority to permit modified service using certain satellites in advance of final action on the entirety of the current request for modification.

2.0 TECHNICAL DESCRIPTION, LINK BUDGETS AND PREDICTED COVERAGE AREA

Exhibit A includes a technical description of the proposed changes, a depiction of the coverage contours in relation to combinations of EIRP and skew angle (skew angle ranging from 25° to 55°), as well as representative link budgets. *See* 47 C.F.R. § 25.227(b)(4).

3.0 COORDINATION LETTER

Row 44's intended operations are within the scope that SES has coordinated with the adjacent satellite operators, and should not cause harmful interference into adjacent satellites operating in accordance with FCC's two-degree spacing policy. A copy of a supplemental coordination letter covering Row 44's proposed new operations with the identified SES satellites is attached hereto as Exhibit B. *See* 47 C.F.R. §25.227(b)(2).

Row 44's operations, as modified, will continue to conform to the terms of its existing coordination agreements with the National Aeronautics and Space Administration ("NASA") and the National Science Foundation ("NSF"), as required under Condition 90057 its current ESAA license.[3]

[3] Row 44's coordination agreements with NASA and NSF pre-date the adoption of current rule Sections 25.227(c)(1) & (d)(1), which provide for Public Notice to allow comment on coordination agreements governing operations of ESAA networks in frequency bands shared with NASA and NSF facilities. Accordingly, to the extent necessary, Row 44 requests that the Public Notice issued announcing acceptance of this modification application include the referenced notifications concerning Row 44's existing coordination agreements with NASA and NSF.

4.0 RADIATION HAZARD STUDY

Exhibit C to this application is a revised radiation hazard assessment, submitted pursuant to Section 25.227(b)(8) of the Commission's Rules, reflecting the changed operating parameters requested for the TECOM antenna.

5.0 SPACECRAFT, FREQUENCY & BEAM COVERAGE

See chart on next page

Spacecraft, Frequency & Beam Coverage Table
(All Provide Some Coverage to U.S. Locations)

Satellite	Location	Beam Coverage Area	Tx (GHz)	Rx (GHz)	Satellite Operator
AMC-2	80.85W	North America, Central America, Caribbean and North Atlantic	14.05-14.47	11.7-12.2	**SES**
AMC-9	83.0W	North America, Caribbean and North Atlantic	14.05-14.47	11.7-12.2	
SES-1	101.0W	North America, Central America, and Caribbean	14.05-14.47	11.7–12.2	
SES-6*	40.5W	Atlantic Ocean	14.05-14.47	10.95-11.2; 11.45-11.7	
IS-19	166.0E	Pacific Ocean	14.05-14.47	12.25-12.75	**Intelsat**
Eutelsat 115WA (Satmex 5)*	114.9W	North America and Pacific Ocean	14.05-14.47	11.7-12.2	**Eutelsat**
Eutelsat 117WA (Satmex 8)*	116.8 W	North America and Caribbean	14.05-14.47	11.7-12.2	
T11N†	37.5W	North Atlantic Ocean	14.05-14.47	11.45-11.7; 11.7-12.2	**Telesat**
Estrella do Sul (T14R)*	63.0W	North Atlantic Ocean, Canada and Caribbean	14.05-14.47	11.7–12.2	
Horizons 1*	127.0W	North America and Pacific Ocean	14.05-14.47	11.7–12.2	**JSAT**

* = Non-U.S.-licensed satellites included on Ku-band Permitted List

† = T11N is a U.S.-licensed satellite (Call Sign S2357) operated by Telesat Canada

= New Points of Communication requested in this modification application

= Existing Points of Communication, changed operating parameters requested

6.0 LICENSEE CERTIFICATION

I, Simon McLellan, VP Engineering of Row 44, Inc., hereby certify as follows:

1. The target space station operator for the satellites subject to this modification application has confirmed that proposed Earth Stations Aboard Aircraft operations are within coordinated parameters for adjacent satellites up to 6 degrees away on the geostationary arc; and

2. The licensee will continue to comply with the requirements of paragraphs (a)(6), (a)(9), (a)(10), and (a)(11) of Section 25.227 of the Commission's Rules and the conditions of its existing license.

Simon McLellan
VP Engineering
Row 44, Inc.

March 17, 2015