

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In re: the Matters of)
)
Revision to Parts 2 and 25 of the Commission’s)
Rules to Govern the Use of Earth Stations Aboard)
Aircraft Communicating with Fixed-Satellite) IB Docket No. 12-376
Service Geostationary-Orbit Space Stations)
Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz,)
11.7-12.2 GHz and 14.0-14.5 GHz Frequency)
Bands)

To: Secretary, Federal Communications Commission
Attn: The Commission

COMMENTS OF ROW 44, INC.

Row 44, Inc. (“Row 44”), by counsel and pursuant to Sections 1.415 and 1.419 of the Commission’s Rules (47 C.F.R. §§ 1.415 & 1.419), hereby comments on the Commission’s proposal in the above-captioned proceeding to amend the Commission’s Rules to specify that terrestrial, maritime and aeronautical services that employ mobile user terminals are all considered applications of the fixed-satellite service (“FSS”) authorized to communicate with geostationary satellites in the 14.0-14.5 GHz band on a primary basis.¹

¹ See *Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary-Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands*, 27 FCC Rcd 16510, 16565 (¶ 142) (2012) (“*NPRM*”). Currently, both terrestrial and maritime mobile-satellite service (“MSS”) implementations are subject to footnotes to the U.S. Table of Allocations that make them primary in the band as applications of the FSS. See 47 C.F.R. § 2.106, Footnotes NG183 (Earth stations on Vessels) and NG187 (Vehicle-Mounted Earth Stations). In the *NPRM*, the Commission stated that it was proposing to consolidate text from these existing footnotes – as well as footnote NG54, governing aeronautical applications – into a new footnote NG55, and to eliminate the existing footnotes, with the effect that all types of MSS applications in the Ku-band would be treated as primary. *NPRM* at 16565 (¶ 142).

Row 44 strongly supports adoption of this proposal, which would have the effect of elevating Earth Stations Aboard Aircraft (“ESAA”) from secondary to primary status in the Ku-band transmit frequencies.² This action is appropriate because ESAA have been operating successfully in the Ku-band for more than a decade and, along with Earth Stations on Vessels (“ESV”) and Vehicle-Mounted Earth Stations (“VMES”), are being deployed more widely each day. The substantial number of mobile terminals in use have enhanced the utility of the Ku-band FSS for the broad variety of services that these applications permit without any adverse interference impact on traditional FSS facilities and users.

I. Statement of Interest

Row 44 is an advanced technology company with offices in Westlake Village, California and Lombard, Illinois that has been providing in-flight broadband connectivity and entertainment services to commercial airline passengers and flight crews using ESAA for almost four years. Row 44 was licensed by the FCC on August 5, 2009,³ and since that date has installed more than 425 transmit/receive units and associated equipment on aircraft operated by Southwest Airlines on U.S. domestic routes. Row 44 has also partnered with other airlines to bring this technology to passengers in Europe, Africa and Asia as well. Passenger use of Row 44’s service allows in-flight, real-time access to email, the Internet and virtual private networks, as well as the ability to stream cached audio and video entertainment, all using passengers’ own mobile, hand-held and lap top devices. Row 44 thus has a strong interest in any modification to the FCC’s allocation table with respect to the Ku-band FSS spectrum.

² The band is currently allocated on a secondary basis to the Mobile-Satellite Service generally. *See* 47 C.F.R. § 2.106.

³ *See Row 44, Inc.*, 24 FCC Rcd 10223 (IB/OET 2009).

II. ESAA Have Been Operating Successfully for Over a Decade without Any Adverse Impact on the FSS.

Operation of mobile earth terminals in the FSS Ku-band on aeronautical as well as terrestrial and maritime platforms is well established, and several licenses have been issued over the past decade to provide such services, including Row 44's 2009 authorization for what is now known as ESAA.⁴ Throughout this period, during which multiple service providers have been meeting the needs of a variety of market segments using aircraft of varying size across an array of both domestic and international routes, Row 44 is aware of no instances of reported harmful interference either to FSS satellite operators or to ESAA licensees, and the Commission itself corroborated the absence of any interference issues in the *NPRM*.⁵ Accordingly, there is ample real world verification that the mobile-satellite ESAA application is fully compatible with traditional FSS facilities and operations.

Companies offering service in this highly competitive and rapidly developing marketplace are endeavoring to satisfy the ever-expanding demand for in-flight communications, information and entertainment as travelers are becoming accustomed to the availability of connectivity from the beginning to the end of their travel day. As then Chairman Genachowski noted in conjunction with the release of the *NPRM*, “[w]hether traveling for work or leisure, Americans increasingly expect broadband access everywhere they go.”⁶ With this increased demand, “providers are moving toward satellite-based systems capable of delivering faster

⁴ See *supra*, at 2 & n.3. See also, e.g., *Panasonic Avionics Corporation*, Order and Authorization, 26 FCC Rcd 12557 (IB/OET 2011); *ViaSat, Inc.*, Order and Authorization, 22 FCC Rcd 19964 (IB/OET 2007); *ARINC Incorporated*, Order and Authorization, 20 FCC Rcd 7553 (IB/OET 2005); *Boeing Company*, Order and Authorization, 16 FCC Rcd 5864 (IB/OET 2001) and *Boeing Company*, Order and Authorization, 16 FCC Rcd 22645 (IB/OET 2001).

⁵ *NPRM* at 16522 (¶ 24) (“ESAA operations in this band ... have been ongoing for years with no reported instances of interference”).

⁶ *NPRM* at 16599, Statement of Chairman Julius Genachowski.

Internet service,” which “also work over oceans, enabling carriers to offer Wi-Fi on international flights.”⁷ Gogo LLC, which has offered terrestrial air-to-ground in-flight connectivity since mid-2008, was just recently authorized to add a satellite-based component to its service using Ku-band FSS capacity.⁸ This step reaffirms that the ESAA application of the FSS is playing an increasingly important role in the delivery of in-flight connectivity and entertainment to airline passengers, and is critical for the availability of this service on trans-oceanic and other international flights.

III. Operators That Are Providing Valuable Services to the Public Require Certainty Regarding Their Operating Status To Continue Growing Their Businesses, And Before Any Further Changes in the Rules Governing the Ku-Band Are Contemplated.

The existing service providers require certainty with regard to the future use and status of Ku-band ESAA in order for the services offered to continue to grow and develop.⁹ As the Commission expressly noted in the *NPRM*, similar maritime and terrestrial MSS applications operating in the FSS have already been recognized as applications of the primary FSS allocation.¹⁰ ESAA operations are no more likely to cause or receive interference than any other VSAT or mobile terminal, and are often made available to users via the same antenna types, control equipment, satellite transponders and/or hub stations as ESV, VMES or fixed

⁷ Susan Stellin, “Craving Wi-Fi, Preferably Free and Really Fast,” *NEW YORK TIMES*, at F5 (May 1, 2013), available at <http://www.nytimes.com/2013/05/01/business/travelers-increasingly-demand-high-quality-wi-fi.html?pagewanted=all> (viewed May 16, 2013).

⁸ See Gogo LLC, FCC File No. SES-LIC-20120619-00574 (Int’l Bur., granted May 1, 2013).

⁹ An important step in this regard was made just recently, when the Commission appropriately rejected a 2008 Petition for Rule Making that had sought an additional secondary allocation in the 14.0-14.5 GHz band for a widely-deployed terrestrial wireless service. See *Utilities Telecom Council and Winchester Cator, LLC*, Order, RM-11429, DA 13-1093, slip op. (OET/WTB/IB, released May 15, 2013).

¹⁰ See *NPRM* at 16565 (¶ 142); 47 C.F.R. § 2.106, Footnotes NG183 (Earth stations on Vessels) and NG187 (Vehicle-Mounted Earth Stations).

VSAT services. Moreover, as the Commission observed in the context of adopting its initial ESV rules, “inter-system coordination among FSS operators can be more readily accomplished if each service within the allocation is afforded primary status.”¹¹ Accordingly, ESAA licensees should be afforded the same status as other providers of small terminal satellite services, a change that will establish regulatory parity and promote the continued growth and future stability of the services now being offered.

Almost as important as taking the formal step to clarify the status of ESAA is the timing of this reform. The Commission has very recently released two new notices of proposed rulemaking which, if acted upon favorably, would significantly affect the Ku-band FSS by adding new primary or secondary spectrum allocations in the band.¹² In order to avoid confusion regarding the potential impact of the changes now being contemplated in those proceedings on the services currently operated in the band, the Commission should resolve the status of ESAA in the 14.0-14.5 GHz band sooner rather than later, and before proceeding further with consideration of these additional modifications of the allocation table.

¹¹ *Procedures to Govern the Use of Satellite Earth Stations on Board Vessels in the 5925-6425 MHz/3700-4200 MHz Bands and 14.0-14.5 GHz Bands*, Report and Order in IB Docket No. 02-10, 20 FCC Rcd 674, 706 (¶ 78) (2005).

¹² *See Amendment of Part 2 of the Commission’s Rules for Federal Earth Stations Communicating with Non-Federal Fixed Satellite Service Space Stations*, Notice of Proposed Rulemaking and Notice of Inquiry in ET Dkt. No. 13-115, RM-11341, FCC 13-65 (released May 9, 2013) (proposing to elevate the status of federal earth stations communicating with non-federal FSS space stations to primary status); *Expanding Access to Broadband and Encouraging Innovation through Establishment of an Air-Ground Mobile Broadband Secondary Service for Passengers Aboard Aircraft in the 14.0-14.5 GHz Band*, Notice of Proposes Rulemaking in GN Dkt. No. 13-114, RM-11640, FCC 13-66 (released May 9, 2013) (proposing to allocate the 14.0-14.5 GHz band on a secondary basis for an air-to-ground mobile broadband service).

IV. Conclusion

As an existing provider of Ku-band ESAA service that is benefitting substantial numbers of air travelers each day, Row 44 is keenly interested in timely action settling its operating rights and obligations, and those of other already-licensed ESAA services, through recognition of the service in the Commission's Rules as an application of the primary FSS in the 14.0-14.5 GHz transmit band. Row 44 urges the Commission to adopt this proposed rule change expeditiously and in advance of further consideration of other regulatory changes proposed for the Ku-band FSS spectrum bands.

Respectfully submitted,

ROW 44, INC.

By: *s/ David S. Keir*
David S. Keir

Lerman Senter PLLC
2000 K Street, NW, Suite 600
Washington, DC 20006-1809
(202) 429-8970

May 22, 2013

Its Attorneys