

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

AC BidCo LLC (“AC BidCo”), which holds a license to operate an earth station aboard aircraft (“ESAA”) network,¹ hereby requests special temporary authority (“STA”) for a period of 60 days commencing no later than December 5, 2017, to permit up to 20 AeroSat model HR6400 ESAA terminals to communicate in the conventional Ku-band with the U.S.-licensed AMC-1 satellite during and after its relocation from 129.15° W.L. to 130.9° W.L. The AC BidCo ESAA License authorizes communications with AMC-1 at its current location,² but STA is needed to allow continuing use of the satellite as it is relocated.

Grant of the requested STA will serve the public interest by allowing AC BidCo to meet customer demand for continuing coverage of North America and the Pacific Ocean until SES-15, the satellite replacing AMC-1’s Ku-band capacity at 129.15° W.L., begins operations and traffic has been transferred to SES-15. AC BidCo is preparing a modification application to reflect the change in orbital location of AMC-1, and seeks STA pending submission of and action on that application.

Background

AC BidCo is authorized to operate Ku-band terminals with specified satellites for ESAA service in U.S. airspace, foreign airspace, and the airspace over international waters. AC BidCo’s license was issued based on demonstration that the proposed network would enhance competition in the provision of in-flight broadband service to air travelers and airline crew members and that the planned operations were fully consistent with technical standards designed to ensure protection of other authorized communications networks.

As discussed above, the AC BidCo ESAA License authorizes use of the AMC-1 satellite at 129.15° W.L. The SES-15 satellite, which was launched in May, has been granted U.S. market access as a replacement for the Ku-band operations of AMC-1 at 129.15° W.L.³ AC BidCo understands that SES-15 is expected to arrive at its operational orbital location by January 1, 2018, once in-orbit testing is complete. However, in order to facilitate the unusually complicated transfer of traffic from the wide-beam AMC-1 spacecraft to SES-15, a high throughput satellite with multiple spot beams, SES has indicated that it will need to provide

¹ See Call Sign E120106, File No. SES-MFS-201700725-00793, granted Oct. 4, 2017 (the “AC BidCo ESAA License”).

² See *id.*, Section D. The AC BidCo ESAA License authorizes communications with AMC-1 by both the AeroSat terminals designated as AES1 and the ThinKom terminals designated as AES2, but AC BidCo is seeking STA only for the AeroSat terminals.

³ See *SES Satellites (Gibraltar) Ltd.*, File Nos. SAT-PPL-20160126-00007, granted July 12, 2016, & SAT-MPL-20160718-00063, granted Dec. 14, 2016.

overlapping services to customers from both satellites for an interim period. Because the satellites cannot be co-located with one another during this transition, SES has requested and recently received authority to move AMC-1 from 129.15° W.L. to 130.9° W.L. prior to SES-15's arrival and to operate the AMC-1 satellite's Ku-band payload during this drift to ensure service continuity for AC BidCo and other AMC-1 customers.⁴

STA Request

AC BidCo seeks STA to permit a limited number of its ESAA terminals to communicate with AMC-1 during and after its relocation from 129.15° W.L. to 130.9° W.L. As discussed above, AMC-1 is a U.S.-licensed satellite, and full technical data regarding the satellite and the relocation is already on file with the Commission and was reviewed prior to issuing the AMC-1 Modification Grant. AC BidCo incorporates that information by reference herein. AC BidCo is in the process of obtaining a letter confirming that its proposed ESAA operations are consistent with SES's coordination agreements with operators of the satellites within six degrees on either side of AMC-1 during and after its relocation and will supplement this STA with the coordination letter as soon as it is received.⁵ The technical parameters of AC BidCo's proposed operations with AMC-1 are consistent with those specified in the AC BidCo ESAA License.⁶

AC BidCo seeks authority to use AMC-1 Ku-band capacity for ESAA operations in the 14-14.5 GHz uplink spectrum and in the 11.7-12.2 GHz downlink spectrum, consistent with the AMC-1 Modification Grant. AMC-1 will provide coverage of North America and the Pacific Ocean. AC BidCo requires access to this capacity to ensure continuity for existing operations being carried by AMC-1 until transfer of traffic to SES-15 has been completed.

AC BidCo emphasizes that the scope of this STA request is limited. AC BidCo is only seeking authority for a limited number of ESAA terminals to communicate with AMC-1 during and after the satellite's relocation. AC BidCo is otherwise prepared to operate consistently with the terms and conditions set forth in the existing AC BidCo ESAA License. In addition, AC

⁴ See *SES Americom, Inc.*, File No. SAT-MOD-20170810-00115, granted Nov. 22, 2017 (the "AMC-1 Modification Grant").

⁵ AC BidCo notes that relocating AMC-1 less than two degrees toward the west, from 129.15° W.L. to 130.9° W.L., will not require coordination with additional satellites. The relocation will increase the orbital separation between AMC-1 and the closest Ku-band satellite, which is to the east of AMC-1 at 127° W.L. There are no Ku-band satellites within six degrees of 130.9° W.L. on the western side.

⁶ Operations of the AC BidCo ESAA terminals with AMC-1 during and after its relocation will not involve any increase in the maximum off-axis EIRP density levels previously described to the Commission for the terminals.

BidCo is willing to operate pursuant to the STA on an unprotected, non-harmful interference basis.

Grant of the requested STA is consistent with Commission policy and will not adversely affect other authorized operations. AC BidCo's proposed operations with AMC-1 will conform to SES's coordination agreements with adjacent satellite operators and with the terms of AC BidCo's agreements with the National Science Foundation and the National Aeronautics and Space Administration. In addition, AC BidCo will comply with power flux density limits to protect terrestrial services outside the U.S.

Grant of the proposed STA will allow AC BidCo to provide service continuity on important air transport routes in U.S. airspace and in the remainder of North America, promoting competition in the provision of aeronautical services and expanding the availability of in-flight broadband to air travelers and crew members.