REQUEST FOR SPECIAL TEMPORARY AUTHORITY

Gogo LLC ("Gogo") hereby requests special temporary authority ("STA") for a period of 60 days commencing on September 10, 2012, to operate a total of four technically identical transmit/receive earth stations to communicate with the SES-1 satellite in the conventional Ku-band (14-14.5 GHz uplink and 11.7-12.2 GHz downlink). Grant of the requested STA is consistent with Commission precedent and will serve the public interest by enabling Gogo to evaluate the terminals' operational performance prior to full-scale deployment of Gogo's planned Aeronautical Mobile Satellite Service ("AMSS") network.

Gogo has filed an application for a blanket license for AMSS operations.[1] That application includes complete technical information regarding the Gogo AMSS system and fully describes the AeroSat terminals that will be used in this testing. Gogo incorporates that information by reference herein.

Gogo seeks special temporary authority pending Commission action on the Gogo AMSS blanket license application to permit Gogo to operate a limited number of the AeroSat terminals in order to evaluate their operational characteristics. However, the testing proposed in this STA request will not involve placement of the terminals on aircraft.

Instead, Gogo plans to perform testing of two terminals in and near each of two locations: the Gogo building in Itasca, IL, and the AeroSat facility in Amherst, NH.[2] For some of the tests, an AeroSat terminal will be placed in a temporary fixed position on the roof of each building. In addition, mobile testing is planned within a five-mile radius of the two specified locations. Mobile testing will involve placement of a terminal on the roof rack of a vehicle that will be operated at typical street and highway speeds. The terminals will communicate with an existing SES hub earth station in Woodbine, MD, call sign E920698.[3]

Grant of the requested authority will not adversely affect other licensed operations. As noted above, operations under the STA will use the SES-1 spacecraft. Attached is an affidavit confirming that the technical specifications of operation of the AeroSat terminals have been coordinated with operators of the satellites within six degrees on either side of SES-1. In any event, Gogo seeks to operate on an unprotected, non-harmful interference basis, so the authorized operations will not harm other regularly licensed Ku-band spectrum users.

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1 *Gogo LLC*, File No. SES-LIC-20120619-00574, Call Sign E120106 (the "Gogo AMSS Application").

2 The Gogo building is located at 1250 N. Arlington Heights Road, Itasca, IL 60143, and the AeroSat building is located at 62 New Hampshire 101A, Amherst, NH 03031. Coordinates for the Itasca address are provided in the attached STA form. The coordinates for the Amherst address are: 42° 48' 43" N, 71° 35' 18" W.

3 *SES Americom, Inc.*, File No. SES-RWL-20040524-00711, Call Sign E920698.

Grant of the requested authority is consistent with prior Commission actions[4] and will serve the public interest by permitting Gogo to continue developing a competitive AMSS network that will enhance service to air travelers and airline crew members. Testing of the AeroSat terminals is scheduled to begin in the second week of September, and Gogo respectfully requests action on this STA request consistent with that schedule.

[4] The International Bureau has previously granted special temporary authority for other entities to perform testing of AMSS terminals pending regular licensing of AMSS operations. *See, e.g., Row 44, Inc.*, File No. SES-STA-20071121-01610, grant-stamped Dec. 11, 2007 (30-day STA for testing of AMSS terminal).

Federal Communication Commission
International Bureau
445 12th Street SW
Washington, D.C. 20554

July 2, 2012

SES Americom, Inc.
4 Research Way
Princeton, NJ 08540
USA
Tel. +1 609 987 4000
Fax +1 609 987 4517
www.ses.com

Subject: Re: Engineering Certification of SES Americom, Inc.

To Whom It May Concern:

This letter certifies that SES Americom, Inc. (SES) is aware that Gogo LLC ("Gogo") is seeking a blanket authorization, from the Federal Communications Commission ("FCC"), to operate technically identical non-conforming Ku-band transmit/receive earth stations for the provision of Aeronautical Mobile Satellite Service (AMSS), pursuant to ITU RR 5.504A, on domestic and international flights. Gogo also seeks authorization, from FCC, for these non-conforming aeronautical Ku-band earth stations to communicate with (e.g., points of communication) SES-1 at 101 WL.

In its FCC application, Gogo stated that their AMSS aircraft remote terminals use the AeroSat HR6400 antenna model which supports reception and transmission in the 11.7-12.2 GHz and 14.0-14.5 GHz bands respectively, with linear polarized array antennas to and from a geostationary satellite in space. The HR6400 antenna is two rows of 32 element array with each lensed-horn element being 3.4 X .75 inches. The antenna operates under gimbaled motor control to orient the antenna in azimuth, elevation and polarization and achieves better than a ± 0.2 degree rms pointing accuracy during active tracking of the intended satellite. All emissions automatically cease within 100 ms if the pointing error exceeds 0.5^0, and transmission is not resumed until the angle is verified to be less than 0.2°. In its application, Gogo indicated that the AMSS antenna complies with the

off-axis EIRP density level requirements specified in Sections §25.222 and §25.226 of the Commission's Rules, at all off-axis angles up to and including 6 degrees off-axis angle.

Gogo stated in its application and also informed SES that when their AMSS aircraft remote terminals communicate with SES-1 satellite, using the 14.0-14.5 GHZ band, the maximum EIRP equal to 44.4 dBW and the corresponding maximum power density, at the antenna flange, is -16.3 dBW/4kHz. In addition, Gogo also informed SES that when Gogo operates its AMSS antennas within the 11.7-12.2 GHz band, it will maintain the forward downlink EIRP density at beam peak equal to, or less than 13.0 dBW/4 kHz, which is routinely used at 2-degree spacing without causing unacceptable interference to adjacent satellite operators, at the spacecraft downlink-beam peak.

SES acknowledges that the use of the above referenced AMSS transmit/receive antenna by Gogo, installed and operated in accordance with the Gogo application and the above conditions should not cause unacceptable interference into an adjacent satellite operating in accordance with the FCC's 2-degree spacing policy, and is consistent with existing coordination agreements with all adjacent satellite operators, within +/- 6 degrees of SES-1.

In order to prevent unacceptable interference into adjacent satellites, SES has been informed, and Gogo acknowledges, that the AMSS antennas will be installed and operated in accordance with the above conditions and/or any other operational requirements specified in the FCC license ultimately granted to Gogo. If the use of this antenna should cause unacceptable interference into other systems, Gogo has agreed it will terminate transmissions immediately upon notice from the affected parties.

Yours sincerely,

Harold J. Ng
Director, Spectrum Management & Develop.
SES Americom, Inc.

7/3/2012
Date

Acceptance by Gogo, LLC:

Gogo affirms that the information provided to SES and reflected in this coordination letter is true and accurate to the best of Gogo's knowledge, information and belief, and that it shall comply with all relevant SES coordination agreements, as provided herein.

Timothy Joyce
VP of RF Engineering
Gogo LLC

7/6/2012
Date

Acceptance by Intelsat:

Intelsat agrees to the operation of the above Gogo AMSS antenna with the technical parameters described herein with respect to Galaxy 16 at 99.2 WL, Galaxy 19 at 97 WL and Galaxy3C at 95 WL which are operating within 6 degrees of SES-1 at 101 WL.

Alan Yates
Senior Technical Advisor, Spectrum Strategy
Intelsat, LLC

7/9/2012
Date