

S2134 SAT-STA-20111017-00204 IB2011004607  
SES Americom, Inc.  
AMC-2



File # SAT-STA-20111017-00204

Call Sign S2134 Grant Date 01/31/12  
(or other identifier)

Term Dates period of 60 days  
From 01/31/12 To: 60 days

Approved by OMB  
3060-0678

Approved: Stephen J. Duall  
Stephen J. Duall  
Chief, Satellite Policy Branch

Date & Time Filed: Oct 17 2011 8:47:05:123PM  
File Number: SAT-STA-20111017-00204  
Callsign:

FEDERAL COMMUNICATIONS COMMISSION  
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
AMC-2 (S2134) STA Request for Operations at 5 E.L. Pending Mod

I. Applicant

<b>Name:</b>	SES Americom, Inc.	<b>Phone Number:</b>	202-478-7137
<b>DBA Name:</b>		<b>Fax Number:</b>	202-478-7101
<b>Street:</b>	1129 20th Street NW Suite 1000	<b>E-Mail:</b>	daniel.mah@ses.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20036 -
<b>Attention:</b>	Mr. Daniel C.H. Mah		

**Attachment to Grant  
SES Americom, Inc.  
IBFS File No. SAT-STA-20111017-00204  
Call Sign S2134**

The application of SES Americom, Inc. (SES Americom), IBFS File No. SAT-STA-20111017-00204, for special temporary authority to operate the AMC-2 space station (Call Sign S2134) at the 4.98° E.L. orbital location is GRANTED. Accordingly, SES Americom is authorized for a period of 60 days to provide Fixed-Satellite Service (FSS), including direct-to-home services, via AMC-2 at the 4.98° E.L. orbital location using the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.7-12.2 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. SES Americom is also authorized to operate Telemetry, Tracking and Telecommand (TT&C) operations necessary to maintain AMC-2 at 4.98° E.L. using the following frequencies and polarizations: 6423.5 MHz with horizontal polarization in the Earth-to-space direction; 3700.5 MHz and 4199.5 MHz with vertical polarization in the space-to-Earth direction; and 12198.0 MHz horizontal polarization in the space-to-Earth direction. This authorization is granted in accordance with the terms, conditions, and technical specifications set forth in SES Americom's application, the Commission's rules, and the following conditions:

1. All operations shall be on an unprotected and non-harmful interference basis, *i.e.*, the AMC-2 space station shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station.
2. In the event of any harmful interference, SES Americom shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
3. SES Americom shall maintain full operational control of AMC-2 at all times.
4. SES Americom shall maintain its AMC-2 space station with an east/west longitudinal station-keeping tolerance of  $\pm 0.05$  degrees of the 4.98° E.L. orbital location.
5. This authorization is issued with the understanding that this grant is not an approval of any specific arrangement entered into by SES Americom, its subsidiaries and affiliates, nor of any specific provision of any such arrangement concerning operation of the AMC-2 space station, nor is this grant an approval of an arrangement/agreement concerning any related matter, nor of any specific provision of any such arrangement/agreement concerning any related matter.
6. This authorization is issued with the understanding that the United States remains the licensing Administration of the AMC-2 space station and its communications payloads, for purposes of ITU Radio Regulation 18.1, and that any operations of AMC-2 at the 4.98° E.L. orbital location are pursuant to ITU Radio 4.4.
7. SES Americom shall provide the Commission with all information that may be necessary for submission to the ITU in connection with the operations of the AMC-4 space station at the 4.98° E.L. orbital location.
8. This authorization is issued with the understanding that, with respect to its filings with the International Telecommunication Union (ITU), the Administration of Sweden is not acting pursuant to Article 9 of the Radio Regulations on behalf of the United States Administration.

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SES Americom, Inc.  
IBFS File No. SAT-STA-20111017-00204  
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9. This authorization is issued with the understanding that this grant does not in any way express a view concerning, or agreement as to, the validity or lack of validity of any ITU filing at or in the vicinity of the 4.98° E.L. orbital location.
10. In connection with the provision of service in any particular country, SES Americom is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
11. Grant of this authorization does not convey to SES Americom any authority to operate a space station at the 4.98° E.L. orbital location beyond the term granted herein, nor any priority in the United States satellite licensing process relative to applications for authority to operate a regularly authorized satellite at this orbital position.
12. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at SES Americom's own risk.
13. Grant of this authorization is without prejudice to any determination that the Commission may make regarding SES Americom's pending application to modify the license for the AMC-2 space station to specify operations at the 4.98° E.L. orbital location (IBFS File No. SAT-MOD-20111025-00209).
14. Grant of this authorization is without prejudice to any decision regarding SES Americom's replacement expectancy to operate a space station in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.7-12.2 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands at the 78.95° W.L. orbital location.<sup>1</sup> Grant of this authorization does not constitute an announcement that these frequencies are available for reassignment.
15. SES Americom has 30 days from the date of this grant to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

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<sup>1</sup> On January 12, 2012, the Satellite Division granted, with conditions, special temporary authority for a period of 60 days to conduct TT&C operations necessary to drift the AMC-2 space station from the 78.95° W.L. orbital location to the 4.98° E.L. orbital location. IBFS File No. SAT-STA-20111017-00205 (granted Oct. 20, 2011). AMC-2 departed from 78.95° W.L. on October 26, 2011. *See* Letter from Karis A. Hastings, Counsel for SES Americom, Inc. to Marlene H. Dortch, Secretary, FCC, dated Oct. 31, 2011. SES Americom is also authorized to operate the AMC-5 space station (Call Sign 2156) as an in-orbit spare at 79.10° W.L. orbital location in the 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) frequency bands. IBFS File No. SAT-MOD-20110714-00126 (granted Sept. 14, 2011). On October 20, 2011, the Satellite Division granted, with conditions, special temporary authority for a period of 60 days to conduct TT&C operations necessary to drift AMC-5 from the 79.10° W.L. orbital location to 80.90° W.L. IBFS File No. SAT-STA-20110929-00191 (granted Oct. 20, 2011). AMC-5 departed from 79.10° W.L. on November 21, 2011. *See* Letter from Karis A. Hastings, Counsel for SES Americom, Inc. to Marlene H. Dortch, Secretary, FCC, dated Nov. 21, 2011. Accordingly, as of November 21, 2011, SES Americom no longer operates a space station at the nominal 79° W.L. orbital location in the 11.7-12.2 GHz and 14.0-14.5 GHz frequency bands.

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SES Americom, Inc.  
IBFS File No. SAT-STA-20111017-00204  
Call Sign S2134**

16. This action is issue pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for Reconsideration under Section 1.106 or Applications for Review under Section 1.115 of the Commission's rules, 47 C.F.R. 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

 <b>GRANTED*</b> International Bureau *with conditions	<b>File #</b> <u>SAT-STA-20111017-00204</u>
	<b>Call Sign</b> <u>S2134</u> <b>Grant Date</b> <u>01/31/12</u> (or other identifier)
	<b>From</b> <u>01/31/12</u> <b>Term Dates</b> <u>period of</u> <b>To:</b> <u>60 days</u>
	<b>Approved:</b> <u><i>Stephen J. Duall</i></u> Stephen J. Duall Chief, Satellite Policy Branch

2. Contact

<b>Name:</b>	Karis A. Hastings	<b>Phone Number:</b>	(202) 599-0975
<b>Company:</b>	SatCom Law LLC	<b>Fax Number:</b>	
<b>Street:</b>	1317 F Street, NW, Suite 400	<b>E-Mail:</b>	karis@satcomlaw.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20004 -
<b>Attention:</b>		<b>Relationship:</b>	Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number or Submission ID

4a. Is a fee submitted with this application?

- If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).
- Governmental Entity     Noncommercial educational licensee
- Other (please explain):

4b. Fee Classification    CRY – Space Station (Geostationary)

5. Type Request

- Change Station Location                       Extend Expiration Date                       Other

6. Temporary Orbit Location

7. Requested Extended Expiration Date

8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

SES Americom, Inc. respectfully requests special temporary authority for 60 days to operate AMC-2 (Call Sign S2134) at 4.98 degrees E.L. pending submission of and action on a modification application to reassign AMC-2 to 4.98 degrees E.L.

9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes.  Yes  No

10. Name of Person Signing  
Daniel C. H. Mah

11. Title of Person Signing  
Regulatory Counsel

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2:

Attachment 3:

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT  
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION  
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

**FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT**

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to [PRA@fcc.gov](mailto:PRA@fcc.gov). PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

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**THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.**

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of Application of	)	
	)	
SES AMERICOM, INC.	)	File No. SAT-STA-_____
	)	Call Sign S2134
For Special Temporary Authority to	)	
Operate AMC-2 at 4.98° E.L.	)	

**APPLICATION**

SES Americom, Inc. (“SES Americom,” doing business as “SES”) hereby respectfully requests special temporary authority (“STA”) for a period of sixty days to operate the AMC-2 C/Ku-band hybrid satellite upon its arrival at 4.98° E.L. SES is separately seeking STA to perform Telemetry, Tracking and Control (“TT&C”) in order to relocate AMC-2 from 78.95° W.L. to 4.98° E.L. The instant STA request seeks authority to operate AMC-2’s TT&C and communications payloads once the satellite has reached 4.98° E.L. Grant of the requested authority will serve the public interest by allowing SES to redeploy AMC-2 to a location where it can introduce new service in the C-band and additional Ku-band frequencies ahead of the launch of the SES-5 satellite,<sup>1</sup> which has been delayed.

SES is preparing to file a modification application to reassign AMC-2 to 4.98° E.L. for operations in accordance with the International Telecommunication Union (“ITU”) filings of the Swedish Administration.<sup>2</sup> Pending submission of and action on the modification,

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<sup>1</sup> The SES-5 satellite is also known as ASTRA-4B and was originally named SIRIUS 5. See Press Release, *SES Orders New SIRIUS 5 Satellite from Loral* (Oct. 10, 2008), <http://www.ses-astra.com/business/en/news-events/press-archive/2008/08-10-09/index.php>.

<sup>2</sup> The modification will supersede the request filed earlier this year to transfer AMC-2 from U.S. licensing authority to Swedish licensing authority for operations at the nominal 5° E.L. orbital location, File No. SAT-T/C-20110527-00100. SES has withdrawn the AMC-2 transfer of



SES is seeking authority to allow it to relocate AMC-2 to 4.98° E.L. and operate it there upon arrival. If authorized to redeploy AMC-2, SES will do so at its own risk and understands that such authority would be without prejudice to any action the Commission ultimately may make regarding the application to reassign AMC-2 to 4.98° E.L. As discussed herein, grant of the requested authority is consistent with Commission precedent<sup>3</sup> and will serve the public interest.

AMC-2 is a hybrid C/Ku-band satellite that was launched in 1997 and currently operates pursuant to FCC authority at the nominal 79° W.L. location,<sup>4</sup> where it is collocated with AMC-5, a Ku-band only satellite.<sup>5</sup> SES Americom's commonly-owned affiliate SES ASTRA AB<sup>6</sup> ("ASTRA AB") operates satellites at the nominal 5° E.L. position pursuant to Swedish authority<sup>7</sup> and had planned to augment existing services with the new SES-5 satellite at the end of 2011. Due to delays in manufacturing and launch manifests, however, the launch of SES-5 is

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control application and associated submissions. *See* WTH2011101790738380 (withdrawal of AMC-2 transfer of control application); WTH2011101791252966 (withdrawal of STA request for drift of AMC-2 to 4.98° E.L. pending action on transfer of control application).

<sup>3</sup> The Commission has routinely authorized operators to commence operations at a new location pending a request to reassign the satellite. *See, e.g., SES Americom, Inc., Call Sign S2135*, File No. SAT-STA-20100525-00108 (grant-stamped July 28, 2010) (authorizing SES to commence operations of AMC-4 at 67° W.L. pending action on the related modification application to reassign the satellite from 101° W.L. to 67° W.L.).

<sup>4</sup> *See* File Nos. SAT-MOD-20100324-00056 (grant-stamped June 21, 2010) & SAT-MOD-20101215-00261 (grant-stamped March 8, 2011).

<sup>5</sup> *See* File No. SAT-MOD-20100706-00154, call sign S2156 (grant-stamped Jan. 20, 2011). SES recently requested authority to relocate AMC-5 to 80.9° W.L. for operations pursuant to Argentine ITU filings. *See* File No. SAT-MOD-20110929-00192.

<sup>6</sup> SES ASTRA AB was formerly known as SES SIRIUS AB. *See* Press Release, *SES SIRIUS Becomes SES ASTRA* (Jun. 23, 2010), <http://www.ses-astra.com/business/en/news-events/news-latest/index.php?pressRelease=/pressReleases/pressReleaseList/10-06-22/index.php>.

<sup>7</sup> For example, ASTRA 4A is at the nominal 4.8° E.L. orbital location, and ASTRA 1E is at the nominal 5.0° E.L. orbital location. ASTRA 1E will be relocated prior to the arrival of AMC-2, so there will be no overlap of the two satellites' stationkeeping volume. ASTRA 4A operates in the 11.7-12.75 GHz, 14.0-14.25 GHz, 17.3-18.1 GHz, 18.8-19.3 GHz, 19.7-19.95 GHz, 21.5-21.75 GHz, 29.15-29.4 GHz and 29.5-30.0 GHz bands, and ASTRA 1E operates in the 10.7-11.2 GHz and 11.45-12.1 GHz, 12.75-13.25 GHz, 14.0-14.25 GHz and 17.3-17.7 GHz bands. Both ASTRA 4A and ASTRA 1E operate pursuant to ITU filings submitted by Sweden.

likely to be delayed beyond its planned commencement of service date. The proposed relocation of AMC-2 to the nominal 5° E.L. orbital location will allow expansion of service from that orbital location pending the successful launch of SES-5. No customers of AMC-2 will be adversely affected, as they have been transferred to other satellites in anticipation of the planned relocation.

Grant of the requested authority to operate AMC-2 will serve the public interest and is consistent with Commission precedent. The Commission has repeatedly observed that its policy is to allow “satellite operators to rearrange satellites in their fleet to reflect business and customer considerations where no public interest factors are adversely affected.”<sup>8</sup> As the International Bureau has explained:

the Commission attempts, when possible, to leave spacecraft design decisions to the space station licensee because the licensee is in a better position to determine how to tailor its system to meet the particular needs of its customers. Consequently the Commission will generally grant a licensee’s request to modify its system, provided there are no compelling countervailing public interest considerations.<sup>9</sup>

Pursuant to this policy, the Commission has routinely authorized satellite operators to configure or reconfigure their fleets in order to satisfy customer demand, including demand for capacity outside the U.S. For example, the Commission has authorized U.S.

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<sup>8</sup> *SES Americom, Inc.*, Order and Authorization, DA 06-757 (IB rel. Apr. 7, 2006) at 4, ¶ 8, citing *Amendment of the Commission’s Space Station Licensing Rules and Policies*, Second Report and Order, 18 FCC Rcd 12507, 12509, ¶ 7 (2003).

<sup>9</sup> *AMSC Subsidiary Corp.*, Order and Authorization, DA 98-493, 13 FCC Rcd 12316 (IB 1998) (“*AMSC Modification Order*”) at 12318, ¶ 8 (footnote omitted). Although AMSC never implemented the relocation authorized in this case, the Commission has repeatedly reaffirmed its policy of allowing licensees to change their fleet configurations to accommodate customer requirements. See, e.g., *Space Station Licensing Rules and Policies*, First Reconsideration Order and Fifth Report and Order, FCC 04-147, 19 FCC Rcd 12637, 12653, ¶ 39 (“we generally permit licensees to modify their systems to adapt to changing business and customer needs,” citing *AMSC Modification Order* and other cases).

licensees to relocate satellites from orbital positions over the U.S. to locations without U.S. coverage in order to respond to existing or potential demand for capacity.<sup>10</sup> Similarly, the Commission has granted U.S. licenses to operators for satellites at locations from which no U.S. coverage is planned or possible.<sup>11</sup>

Here, the proposed change will allow SES to make efficient use of AMC-2 in order to expand the available capacity at the nominal 5° E.L. orbital location. Because SES has already transferred customers that had been using AMC-2 at the nominal 79° W.L. orbital location, the relocation of AMC-2 will not have any impact on existing services.

Relocation of AMC-2 to 4.98° E.L. will not adversely affect other operators. The proposed stationkeeping volume will not overlap with that of any other spacecraft. SES will operate only the TT&C frequencies of AMC-2 during the drift.<sup>12</sup> SES will follow standard industry practices for coordination of TT&C transmissions during the relocation process.

Once AMC-2 arrives at 4.98° E.L., SES will operate the satellite pursuant to Swedish ITU filings and in conformance with Sweden's coordination agreements regarding that

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<sup>10</sup> See, e.g., *Intelsat North America LLC*, Call Sign S2159, File No. SAT-T/C-20100112-00009, grant-stamped July 30, 2010 (authorizing Intelsat to relocate Galaxy 27 from 129° W.L. to 45.10° E.L.); *PanAmSat Licensee Corp.*, Call Sign S2253, File No. SAT-MOD-20080225-00051, grant-stamped July 22, 2008 (authorizing relocation of Galaxy 11 from 91° W.L. to 32.80° E.L. in order to supplement service provided there by Intelsat 802, which had suffered an anomaly that reduced its available power); *AMSC Modification Order* (authorizing AMSC to relocate its satellite away from 101° W.L. in order to provide service to southern Africa).

<sup>11</sup> See, e.g., *Afrispace, Inc.*, Order and Authorization, DA 06-4, 21 FCC Rcd 7 (IB 2006) (authorizing launch and operation of AfriStar-2 satellite for service to Africa and Europe from 21° E.L.); *Assignment of Orbital Locations to Space Stations in the Ka-Band*, Order, DA 96-708 (IB 1996) (assigning 33 orbital locations between 62° W.L. and 175.25° E.L. to 13 Ka-band applicants, finding that the public interest would be served by authorizing international operations pending the development of policies for Ka-band satellite service within the U.S.).

<sup>12</sup> The AMC-2 TT&C frequencies are as follows:

Command: 6423.5 MHz (horizontal polarization; uplink)

Telemetry: 3700.5 MHz (horizontal polarization; downlink), 4199.5 MHz (vertical polarization; downlink), and 12198.0 MHz (horizontal polarization; downlink).

location. Attached hereto is a technical appendix that includes beam contour maps for the proposed AMC-2 operations at 4.98° E.L. SES recognizes that any grant of operational authority will be subject to standard conditions imposed by the Commission to ensure compliance with ITU regulations and to prevent harmful interference.

SES hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862. SES waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.

For the foregoing reasons, SES respectfully requests STA to operate AMC-2 upon its arrival at 4.98° E.L.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Daniel C. H. Mah

Daniel C. H. Mah  
Regulatory Counsel  
SES Americom, Inc.  
Four Research Way  
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Of Counsel

Karis A. Hastings  
SatCom Law LLC  
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Washington, D.C. 20004

Dated: October 17, 2011

# TECHNICAL APPENDIX

Figure 1

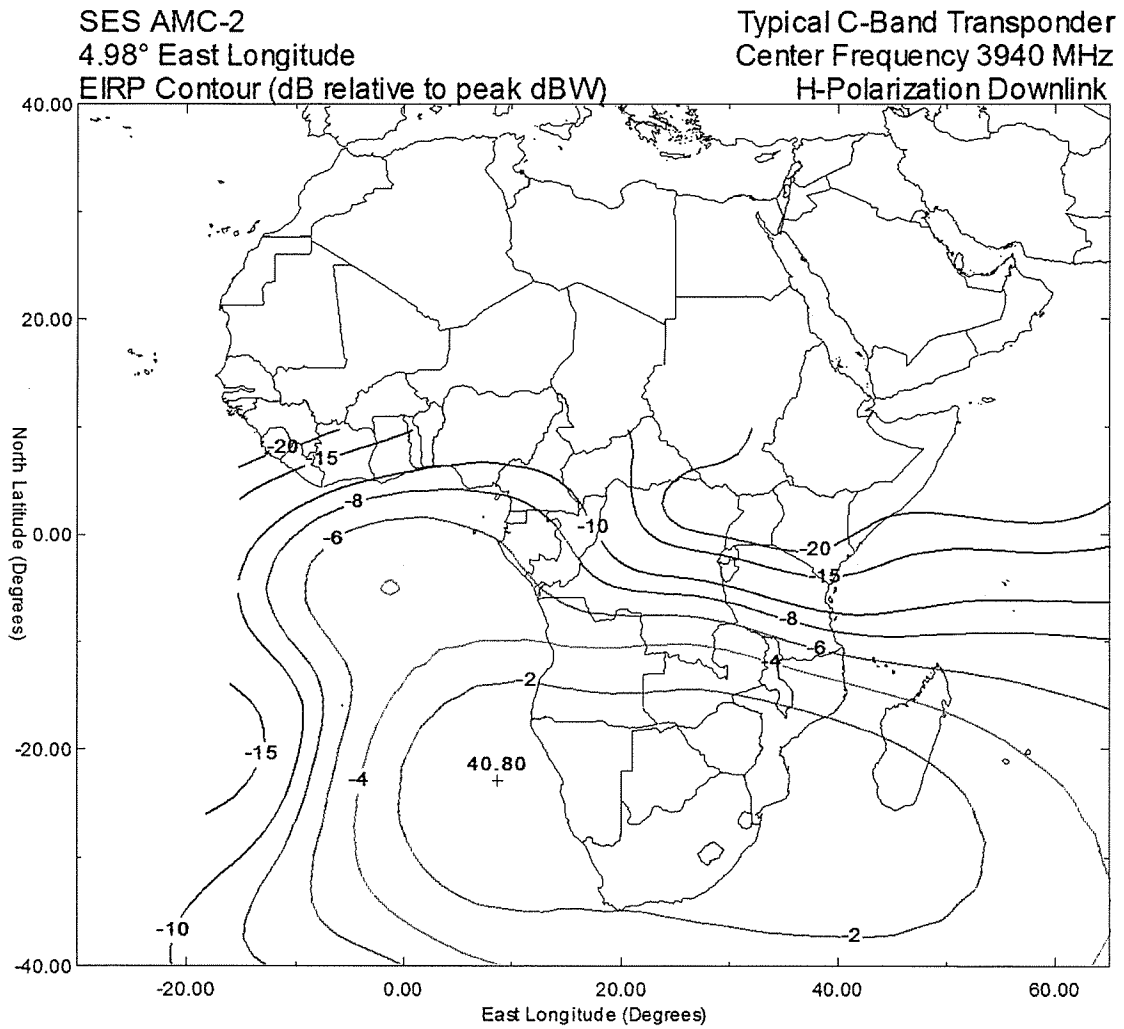


Figure 2

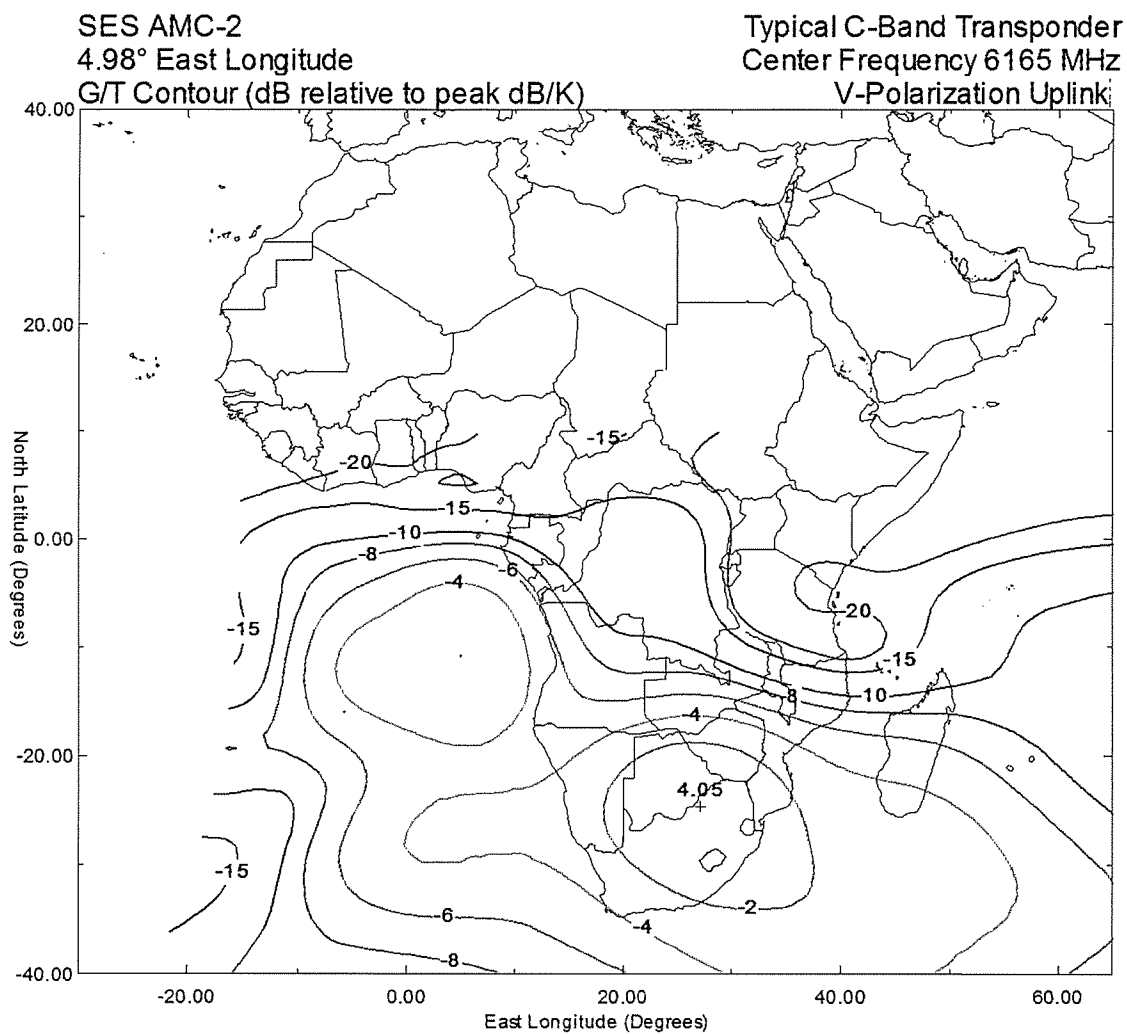


Figure 3

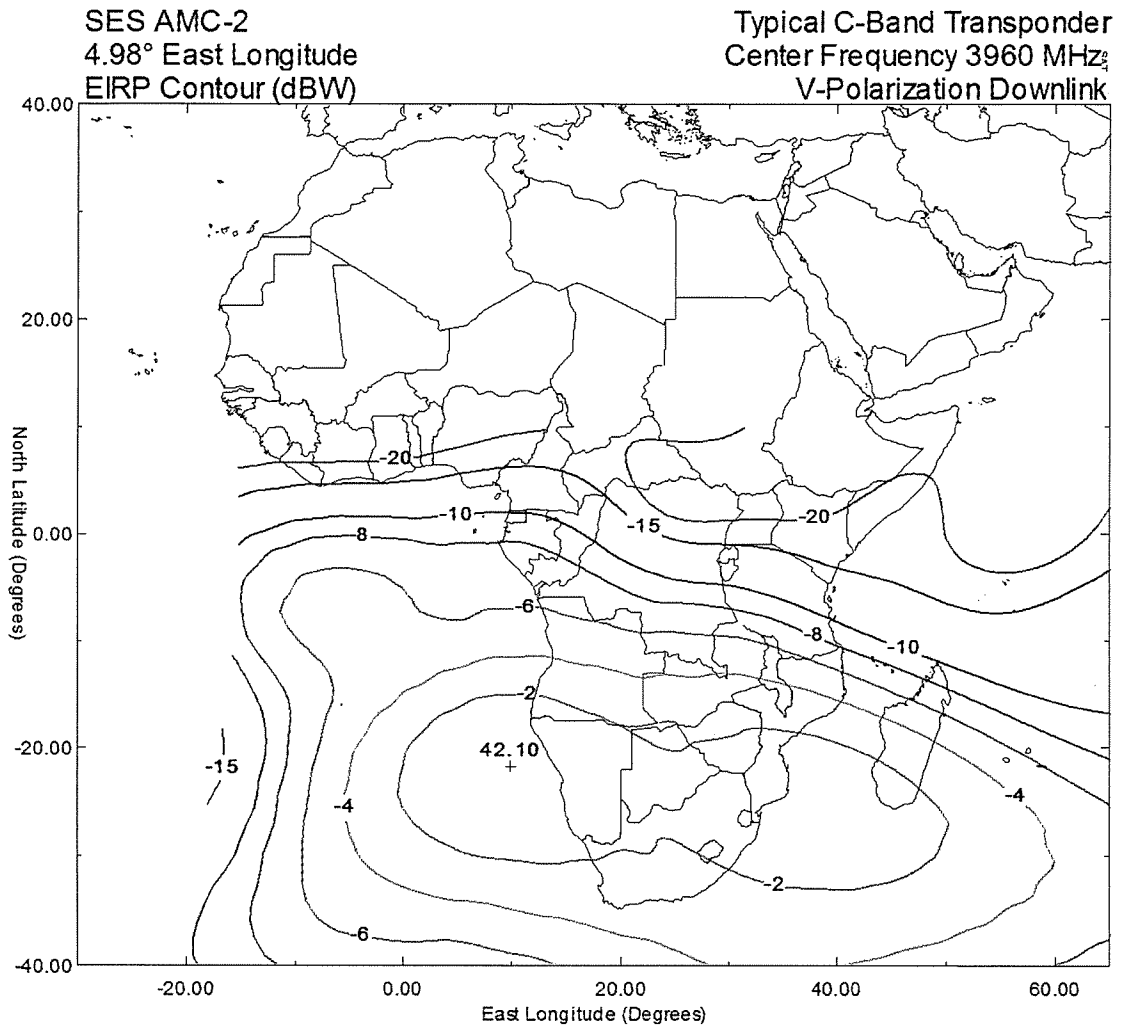


Figure 4

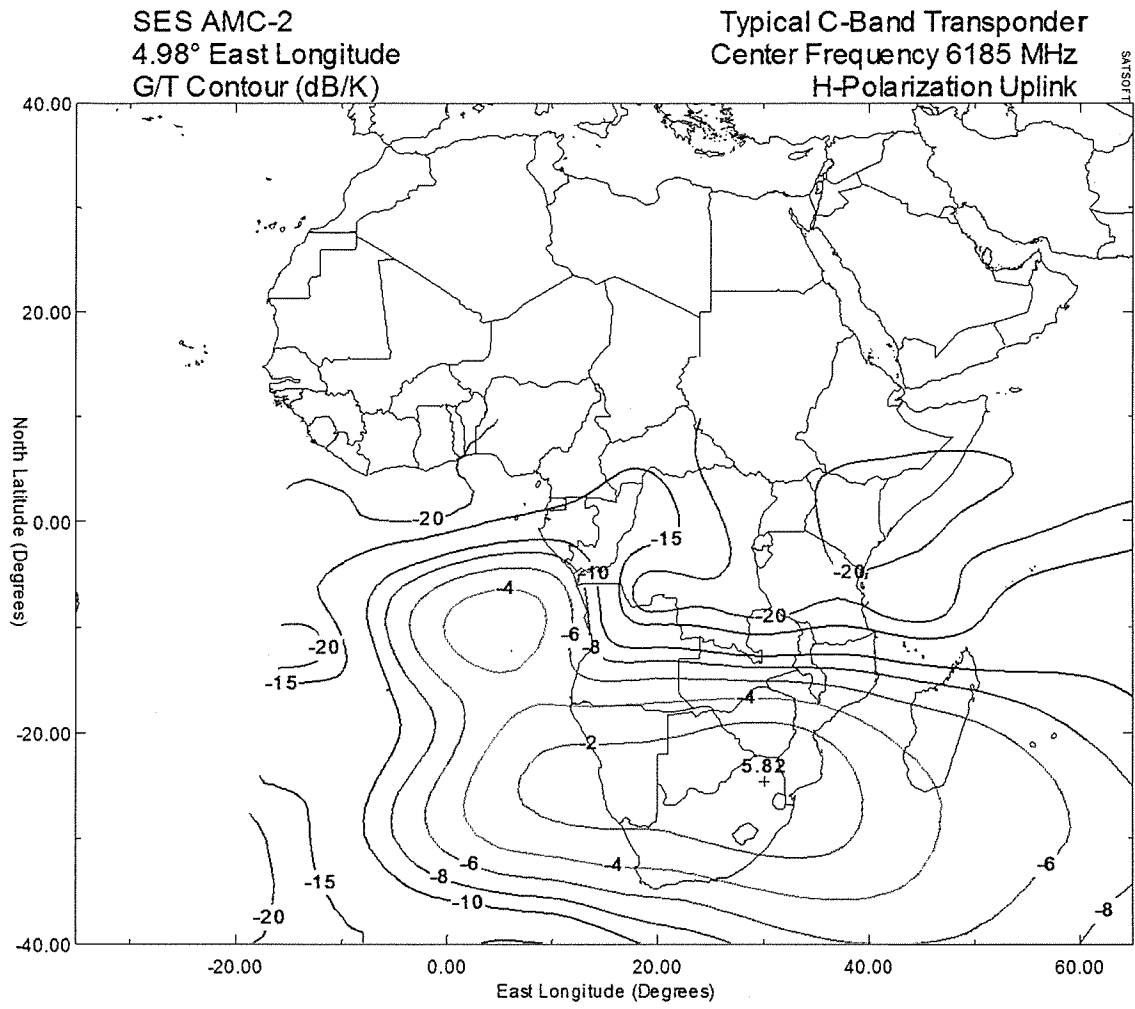




Figure 5

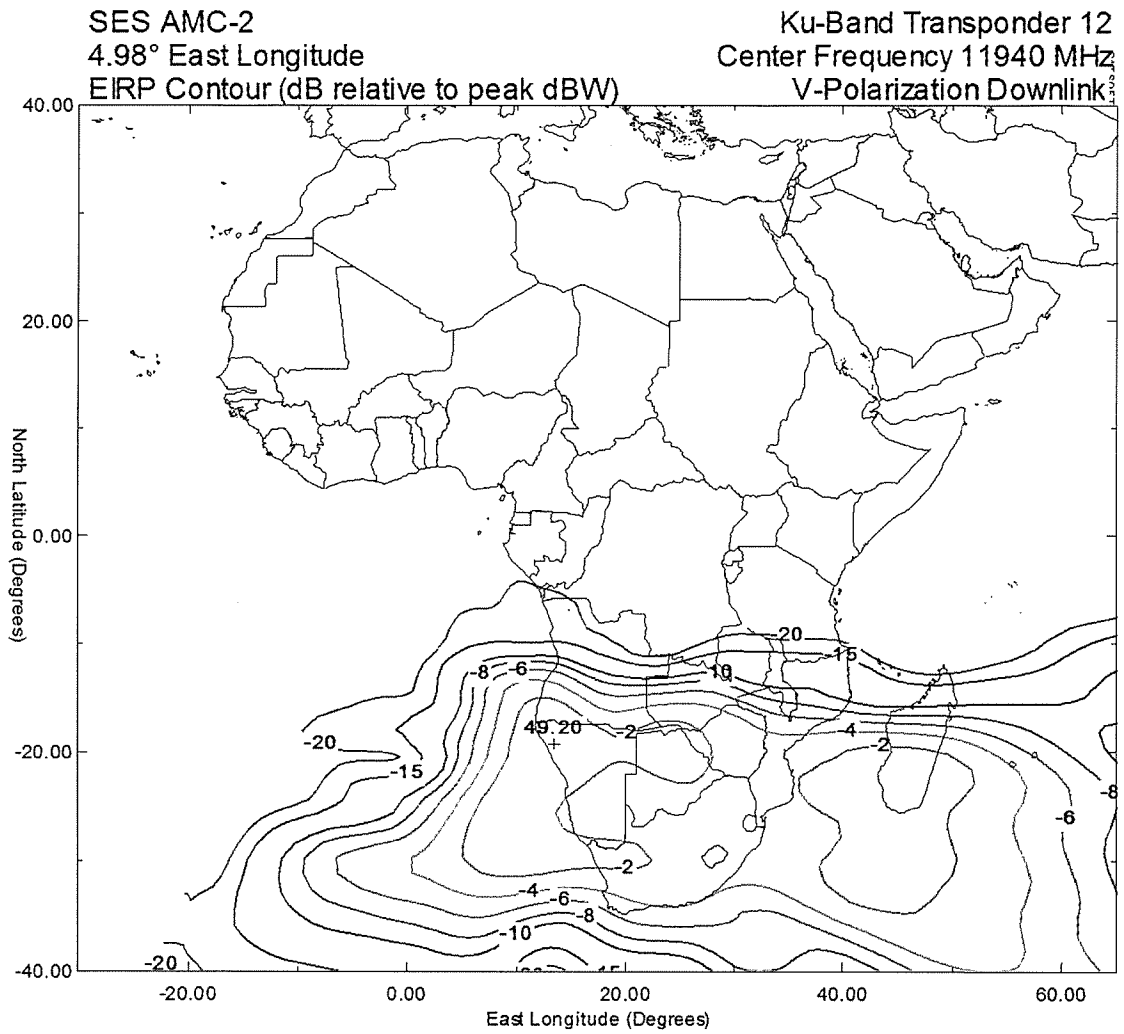


Figure 6

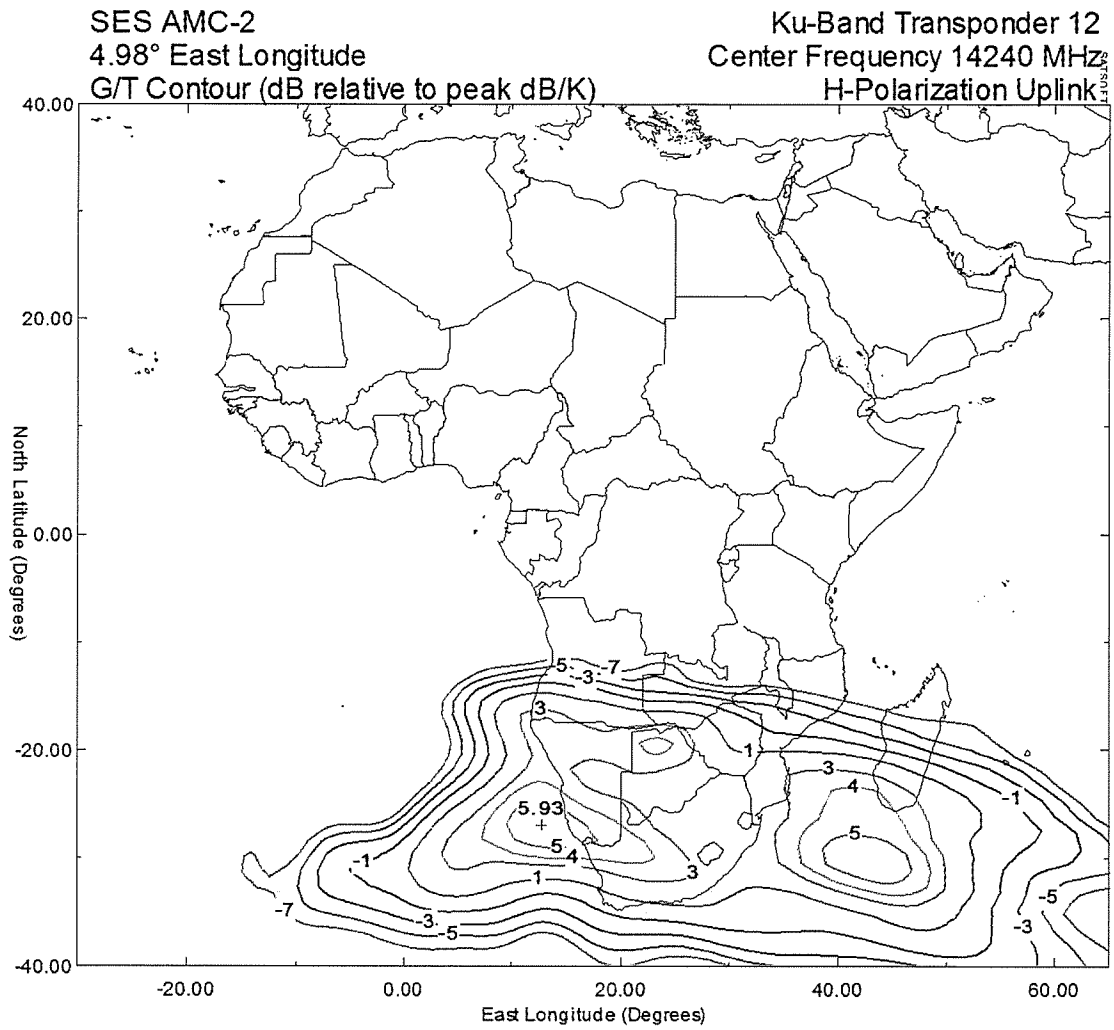


Figure 7

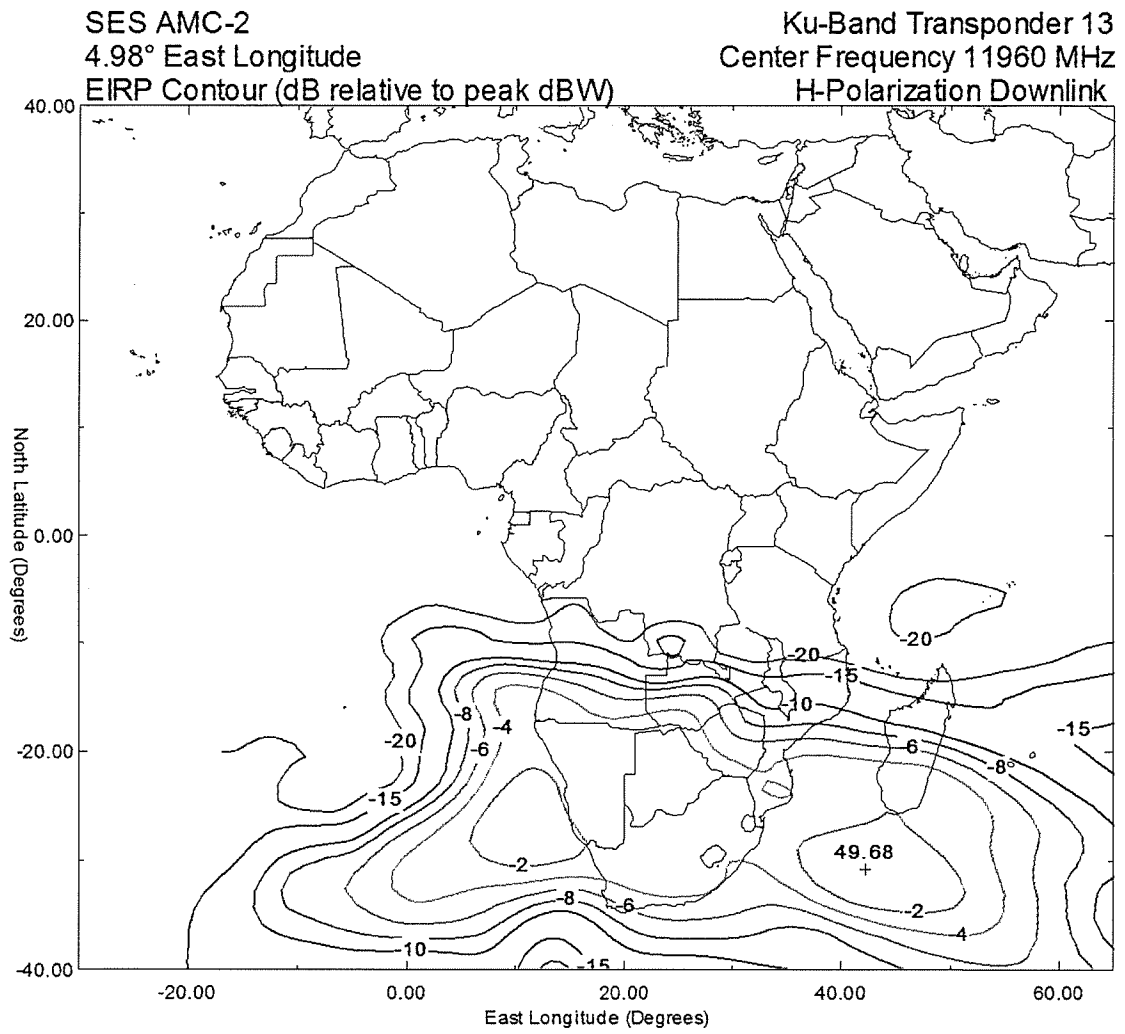
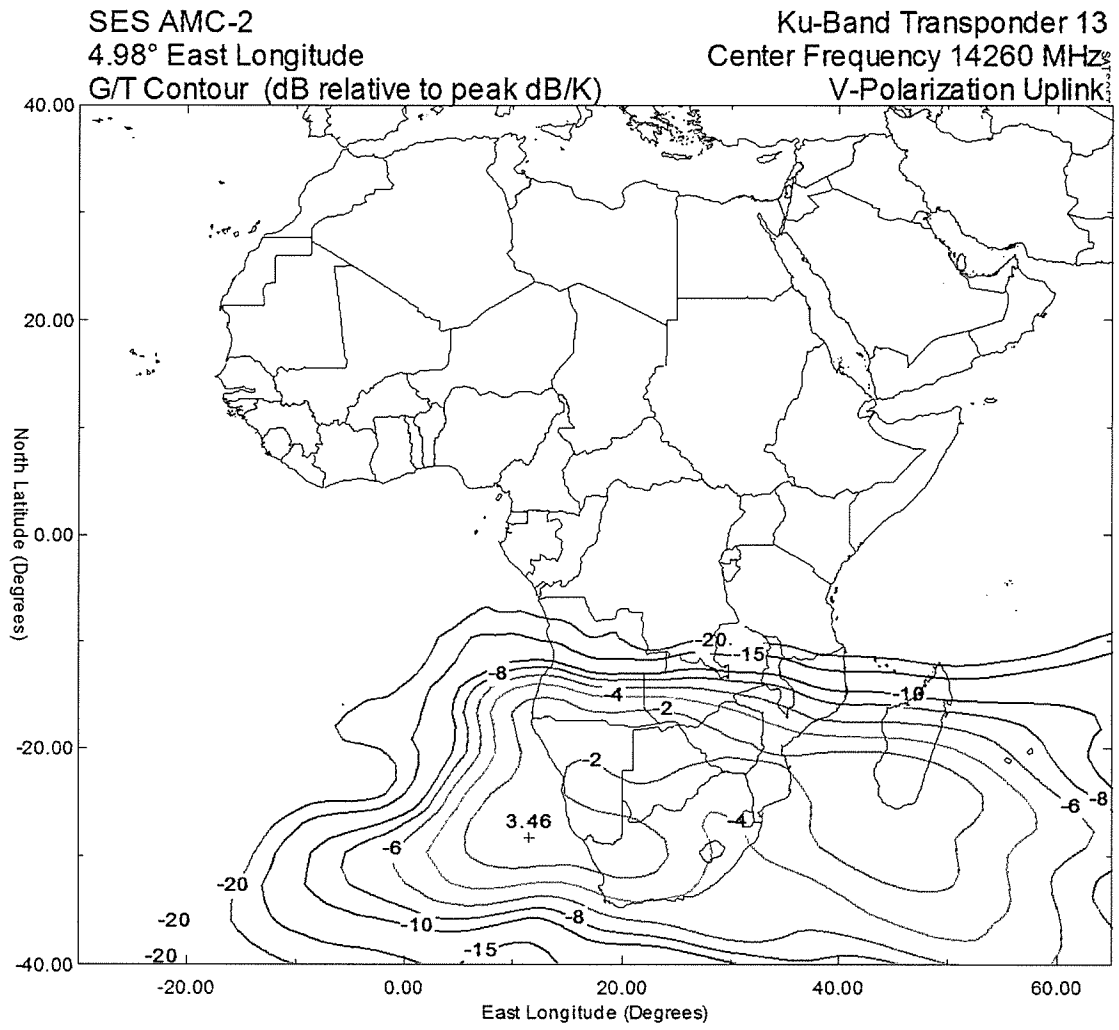


Figure 8



DECLARATION OF KRISH JONNALAGADDA

I, Krish Jonnalagadda, hereby certify under penalty of perjury that I am the technically qualified person responsible for preparation of the technical information contained in the foregoing exhibit; that I am familiar with the technical requirements of Part 25; and that I either prepared or reviewed the technical information contained in the exhibit and that it is complete and accurate to the best of my knowledge, information and belief.

/s/ Krish Jonnalagadda  
SES Americom, Inc.

Dated: October 17, 2011