

SES-STA-20100426-00474
Universal Space Network, Inc.

IB2010001290

Approved by OMB
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Satcom BW2 Hawaii

1. Applicant

Name:	Universal Space Network, Inc.	Phone Number:	215-328-9130
DBA Name:		Fax Number:	215-328-9132
Street:	417 Caredean Drive Suite A	E-Mail:	jswank@uspacenet.com
City:	Horsham	State:	PA
Country:	USA	Zipcode:	19044 -
Attention:	Joanne Swank		



File # SES-STA-20100426-00474

Call Sign _____ Grant Date 5/21/10
(or other identifier)

Term Dates 5-21-10 to 6-21-10
From Launch To: +30 days

Approved: [Signature]

Attachment

SES-STA-20100426-00474

Conditions:

1. All operations shall be on an unprotected, non harmful interference basis to government operations
2. All operations shall expire no later than 30-days from the date of launch.
3. All operations shall be limited to telemetry, tracking, and control (TT&C) during launch and early orbit.
4. Universal Space Networks will inform AFFMA (robert.lando@pentagon.af.mil, 703-428-1513) at least 24 hours prior to the planned launch and commencement of operations if the launch is delayed beyond May 21, 2010.

Under Conditions



File # SES-STA-20100426-00474

Call Sign _____ Grant Date 5-21-10
(or other identifier)

From Launch To +30 days
Term Dates

Approved: *[Signature]*

2. Contact	
Name:	Universal Space Network, Inc.
Company:	
Street:	417 Caredean Drive Suite A
City:	Horsham
Country:	USA
Attention:	
Phone Number:	215-328-9130
Fax Number:	215-328-9132
E-Mail:	jswank@uspacenet.com
State:	PA
Zipcode:	19044 -
Relationship:	
(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?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other (please explain):	
4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other	
6. Requested Use Prior Date 05/20/2010	
7. City Naalehu	8. Latitude (dd mm ss.s h) 19 0 50.3 N

9. State HI	10. Longitude (dd mm ss.s h) 155 39 46.6 W
11. Please supply any need attachments. Attachment 1: FCC 312 Attachment 2: Coordination Study Attachment 3: Waiver-Analysis	
12. 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.) <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> STA request for Satcom BW2 support from Hawaii. Current launch date of May 21, 2010. Support is required for launch + 3 days. Requesting a 30 days STA to support launch slips </div>	
13. 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. <input checked="" type="radio"/> Yes <input type="radio"/> No	
14. Name of Person Signing Joanne Greet-Swank	15. Title of Person Signing Manager, Compliance
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).	

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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.

Exhibit C
PETITION FOR WAIVER OF SECTION 25.137 AND 25.114 AND OF
THE U.S. TABLE OF FREQUENCY ALLOCATIONS

**I. TO THE EXTENT THEY APPLY, GOOD CAUSE EXISTS FOR A WAIVER OF
CERTAIN PORTIONS OF SECTIONS 25.137 AND 25.114**

Universal Space Network, Inc. (USN) is provided limited legal and technical information for the Comsat-BW2 Satellite.¹ Pursuant to Section 25.137 of the Federal Communications Commission's ("Commission" or "FCC") rules, the same technical information required by Section 25.114 for U.S.-licensed space station, and certain legal information, must be submitted by earth station applicants "requesting authority to operate with a non-U.S. licensed space station to serve the United States..."² USN seeks authority to support the needed Telemetry, Tracking, and Control ("TT&C") during launch and early orbit support ("LEOP") of the Comsat-BW2 spacecraft from launch to geostationary parking, not commercial service to the United States, and thus believes that Section 25.137 does not apply.

To the extent the Commission determines, however, that USN's request for authority to provide LEOP on a special temporary basis is a request to serve the United States with a non-U.S.-licensed satellite, USN respectfully requests a waiver of Sections 25.137 and 25.114 of the Commission's rules, to the extent that USN has not herein provided the information required by these rules.³ The Commission may grant a waiver for good cause shown.⁴ A waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause for a waiver of portions of Section 25.114 exists. USN seeks authority only to conduct LEOP support for Comsat-BW2. Thus, any information sought by Section 25.114 that is not relevant to the LEOP – e.g., antenna patterns, energy and propulsion and orbital debris - USN does not have. In addition, USN would not easily be able to obtain such information because USN is not the operator of the Comsat-BW2 satellite, nor is USN in contractual privity with that operator. Rather, USN has contracted with DLR (German Space Agency), the satellite owner and the spacecraft is launched by CNES from French Guiana, to support the GEO transfer portion in S-Band of the satellite prior to its commercial operation.

As evidenced by the Comsearch report attached to this request, USN has coordinated the LEOP of the Comsat-BW2 satellite with potentially affected terrestrial operators. Moreover, as with any STA, USN will conduct the LEOP on an unprotected, non-interference basis to government operations.

¹ FCC Form 312 Section B

² 47 C.F.R. § 25.137(a)

³ 47 C.F.R. §§25.137 and 25.114

⁴ 47 C.F.R. §1.3

Because it is not relevant to the service for which USN seeks authorization, and because obtaining the information would be a hardship, USN seeks a waiver of all the technical and legal information required by Section 25.114, to the extent it is not provided herein. As noted above, USN has provided the required information to the extent that it is relevant to the LEOP service for which USN seeks authorization.

Good cause also exists to waive portions of Section 25.137, to the extent the information required is not herein provided. Section 25.137 is designed to ensure that “U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services” in other countries. Here, there is no service being provided by the satellite; USN is providing TT&C while the satellite is on the way to it’s geosynchronous parking orbit. Thus, the purpose of the information required by Section 25.137 is not implicated here. For example, Section 25.137(d) requires earth station applicants requesting authority to operate with a non-U.S.-licensed space station that is not in orbit and operating to post a bond.⁵ The underlying purpose in having to post a bond – i.e., to prevent warehousing of orbital locations by operators seeking to serve the United States – would not be served by requiring USN to post a bond in order to conduct 3 days of LEOP support of the Comsat-BW2 satellite.

It is USN’s understanding that Comsat-BW2 is licensed by DLR. Comsat-BW2 is a German Armed Forces communications satellite, and is not intended to serve the United States. Thus, the purpose of Section 25.137 – to ensure that U.S. satellite operators enjoy “effective competitive opportunities” to serve foreign markets and to prevent warehousing of orbital locations service the United States – will not be undermined by grant of this waiver request.

Finally, USN notes that it expects to communicate with the Comsat-BW2 satellite using its U.S. earth station for a period of only 3 days. Requiring USN to obtain technical and legal information from an unrelated party, where there is no risk of interference and the operation will cease within 3 days would pose undue hardship without serving underlying policy objectives. Given these particular facts, the waiver sought herein is appropriate.

⁵ 47 C.F.R. §25.137(d)(4)

II. GOOD CAUSE EXISTS FOR A WAIVER OF THE UNITED STATES TABLE OF FREQUENCY ALLOCATIONS

USN further requests a waiver of the United States Table of Frequency Allocations ("U.S. Table") as described in section 2.106 of the rules for the frequency bands 2025 – 2110 MHz (Earth-to-Space) and 2200 – 2290 MHz (Space-to-Earth).⁶ Section footnotes allow for non-federal Government use of these bands in the United States on a case-by-case non-interference basis. Such use by USN necessitates a waiver of the U.S. Table.

Good cause exists to grant USN a limited waiver of the U.S. Table to allow LEOP of the Comsat-BW2 satellite. In considering request for case-by-case spectrum uses, the Commission has indicated that is would generally grant such waivers "where there is little potential for interference into any service authorized under the Table of Frequency Allocations and when the case-by-case operator accepts any interference from authorized services."⁷ USN will coordinate with other parties operating communication systems in compliance with the Table of Frequency Allocations to ensure that no harmful interference is caused. USN seeks to operate only pursuant to special temporary authorization and thus agrees to accept any interference from authorized services. In summary, USN's operation on a non-interference, non-protected basis support waiver of the U.S. Table.

⁶ 47 C.F.R. §2.106

⁷ Previously approved STA's for Universal Space Network SES-STA-20020725-01174; SES-STA-20021112-02008; SES-STA-20040315-00475

USN support of Comsat-BW2 from Hawaii

Comsat-BW2 launches from the Centre Spatial Guyanais (CSG), Kourou in French Guyana on the ARIANE 5 launch vehicle. Nominal lift-off time schedule is: May 21st, 2010 at 22:01:00 UTC. USN will only support the Launch and Early Orbit (LEOP) phase of the mission.

Sequence of events for support of Comsat-BW2 from USN-Hawaii:

Event	Date	Time
Launch	21-May	22:01:00 UTC
Separation	21-May	22:34:01 UTC
Hawaii AOS (pass#1)	23- May	05:29:19 UTC
Hawaii LOS	23- May	05:57:32 UTC
Orbital maneuver burn #1	23- May	11:10:10 UTC
Hawaii AOS (pass#2)	23- May	19:09:58 UTC
Hawaii LOS	24- May	07:20:21 UTC
Hawaii End of Mission	24- May	07:20:21 UTC

Detailed pass support

USN will support Comsat-BW2 for a total of 2 passes starting 22-May thru 24-May. Not all possible visibility times will be supported. Actual support details and times for each pass are shown below.