

E010074 SES-STA-20170131-00106  
Orbital Media Networks, Inc.

IB2017000246

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:  
Adding 3.7m dish to E010074 to support operations due to failing satellite

**I. Applicant**

<b>Name:</b>	Orbital Media Networks, Inc.	<b>Phone Number:</b>	303-925-1708
<b>DBA Name:</b>		<b>Fax Number:</b>	
<b>Street:</b>	76 Inverness Dr. East Suite C Englewood	<b>E-Mail:</b>	LizKarr@orbitalmedianetworks.com
<b>City:</b>	Englewood	<b>State:</b>	CO
<b>Country:</b>	USA	<b>Zipcode:</b>	80112
<b>Attention:</b>	Ms Liz Karr		



File # SES-STA-20170131-00106  
2010074  
Call Sign Grant Date 2-2-17  
(or other identifier)  
Term Dates From: 2-2-17 To: 3-4-17  
Approved: [Signature]

Applicant: Orbital Media Networks, Inc.  
Call Sign: E010074  
File No.: SES-STA-20170131-00106  
Special Temporary Authority



File # SES-STA-20170131-00106  
Call Sign E010074 Grant Date 2-2-17  
(or other identifier)  
From: 2-2-17 Term Dates To: 2-4-17  
Approved: Paul E. Blair

Orbital Media Networks, Inc. is granted a 30-day Special Temporary Authority to operate a Suman 3.7 meter antenna at fixed earth station, Call Sign E010074, in Englewood, Colorado to communicate with the Permitted List satellite AMC-18 at the 104.95° W.L. orbital location on frequency bands 5925-6425 MHz (Earth-to-space) and 3700-4200 MHz (space-to-Earth) under the following conditions:

1. Operations will not exceed the operational power levels and parameters requested and coordinated under previously filed license application SES-LIC-20111019-01241.
2. Operations, shall not cause harmful interference to, and shall not claim protection from interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing that it has received such a notification within 14 days of receipt..
3. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at Orbital Media Networks, Inc's risk.
4. Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the earth station's power flux density levels exceed the specified guidelines.
5. The licensee shall take all necessary measures to ensure that the antenna does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. The FCC's OET Bulletin 65 (available on-line at [www.fcc.gov/oet/rfsafety](http://www.fcc.gov/oet/rfsafety)) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
6. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future Orbital Media Networks, Inc applications.

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

<b>2. Contact</b>	
<b>Name:</b>	Orbital Media Networks, Inc. <b>Phone Number:</b> 303-925-1708
<b>Company:</b>	
<b>Street:</b>	76 Inverness Dr. East <b>Fax Number:</b> LizKarr@orbitalmedianetworks.com
	Suite C
<b>City:</b>	Englewood <b>State:</b> CO
<b>Country:</b>	USA <b>Zipcode:</b> 80112 -
<b>Attention:</b>	<b>Relationship:</b>
(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    CGS - Fixed Satellite Small 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	
02/01/2017	

7. City Englewood	8. Latitude (dd mm ss.s h) 39 34 47.0 N
9. State CA	10. Longitude (dd mm ss.s h) 104 51 35.0 W
11. Please supply any need attachments. Attachment 1: STA request                      Attachment 2: Small antenna                      Attachment 3:	
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;">Due to AMC8's age and failing health, we are required to migrate to AMC18 to continue service. However one of our streams cannot be turned-around by the carrier due to technical constraints so we forced to uplink the stream directly through this additional dish to maintain operations.</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. <p style="text-align: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></p>	
14. Name of Person Signing Mikg Hagans	15. Title of Person Signing President
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**

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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.**

Orbital Media Networks believes granting this Special Temporary Authority is in the public's best interest because of the peculiar situation arising from the mass migration of commercial radio networks from distribution over AMC8 (139 degrees West) to AMC18 (105 degrees West) due to the age and failing health of AMC8.

- 1) Most commercial radio stations take syndicated programming from one or more of the major syndicators moving from AMC8 to AMC18. This migration begins February 1st.
- 2) Since most commercial radio stations have only one C-Band receive earth station, usually shared between multiple radio stations at their studio / office location, and since the vast majority of stations that do use syndicated programming also take programs from more than one of the major syndicators, it is important that all of the syndicators a) become available at the same time on AMC18, and b) provide programming on both satellites for some period of time (the "dual illumination period") so there is plenty of time for stations to repoint, repair, or replace their antennas.
- 3) Orbital Media Networks operates two receiver platforms to serve affiliates of Orbital Media Networks programming and programming that we distribute for third party syndicators. We made arrangements for our satellite fleet operator, SES, to provide dual-illumination services at one of their earth stations, receiving our two carriers, which we transmit to the new satellite from our Englewood, CO earth station, decoding them to ASI streams, and re-modulating, upconverting, and transmitting them to the other satellite.
- 4) Unfortunately our older receiver platform is not fully DVB compliant and SES has been unable to successfully dual-illuminate a carrier for that platform, a problem which would leave hundreds of stations without the syndicated programming they count on, if left unsolved.

The STA we seek will allow us to dual-illuminate our older Starguide carrier locally in Englewood, transmitting them using the 3.7m Suman antenna that was previously licensed at our site, thereby eliminating an excessive burden on the radio stations depending on that platform. As we have indicated elsewhere, Micronet is currently performing the required coordination study and preparing the engineering exhibits necessary to show compliance with FCC rules and / or justify an appropriate waiver to make re-licensing the 3.7m antenna in question practical. Our proposed operation falls within the off-axis emissions envelope of the 6.1m antenna already on our E010074 license.

### Routine Licensing for Antennas with Low Power Densities

Pursuant to 25.134(a)(2) of the Rules and Regulations ("Regulations") of the Federal Communications Commission ("Commission"), the operator of an antenna smaller than 4.5m in the 4/6 GHz frequency bands must demonstrate the unacceptable interference will not be caused to any and all affected adjacent satellites. The proposed antenna in this application is smaller than 4.5m. Hence, a demonstration that interference will not be cause to adjacent satellites is now presented.

Pursuant to 25.134(a) of the Regulation, the maximum digital uplink transmitter power density at the antenna flange permitted is -2.7dBW/4kHz. Based on the performance of the dish and the input power this dish will have a maximum EIRP density at the antenna flange of -15.7 dBW/4kHz, a margin of 13 dB below the requirement.

While this 3.7m dish does not strictly comply with 25.209 of the Regulations, it will meet the power density requirements of 25.134, specifically the power and power density levels will be reduced by the amount it exceeds the required pattern.