

**Exhibit B**  
**Viacom International Inc.**  
**Call Sign E2707**  
**Request for Special Temporary Authority**  
**September 2016**

**Radiation Hazard Analysis**

**DOCUMENT HISTORY**

REV	DESCRIPTION	DATE	APPROVED
1	RESULTS SUBMITTAL	8/30/16	Gerard Johnston


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ENGINEER Ken Wieland	DATE 8/30/16		
APPROVED Ken Wieland	DATE 8/30/16	TITLE <b>Test Procedure/Results – Viacom Radiation Analysis – ANT 1</b>	
DO NOT SCALE DRAWING WORK FROM DIMENSIONS			
THIS DOCUMENT, OR PARTS THEREOF MAY NOT BE USED OR REPRODUCED IN ANY FORM, BY ANY METHOD, WITHOUT THE WRITTEN AUTHORIZATION OF GLOBECOMM SYSTEMS, INC.	CAGE CODE <b>02MQ7</b>	DWG NO. 11081-04103	REV 1
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## 1. GENERAL

### 1.1 Scope

This document establishes the test procedures and documents the results for the onsite RF radiation hazard testing provided by Globecomm Systems Inc. (Globecomm).

### 1.2 Purpose

This document is submitted as required in accordance with the requirements of the contract, and testing was implemented to record measured data by the Globecomm engineering team.

### 1.3 Conditions of Test

#### 1.3.1 General

The tests described herein are designed for testing of ground segment systems on-site at Viacom earth station facility. Antenna systems to be tested for RF radiation should be RF transmitting at nominal levels consistent with the FCC license assigned to such terminal.

#### 1.3.2 Test Methods

The test methods prescribed in this procedure shall be mandatory in the conductance of the test, except for those cases in which special conditions existing at the time of test dictate certain modifications or changes. In such cases, full documentation of the conditions and the nature of the changes shall be provided and recorded on the test data sheets.

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1.3.3 Environmental

In general, the tests described herein are designed to be conducted under the normal environmental conditions at Viacom.

1.3.4 Equipment Calibration

Test equipment calibration data must be recorded prior to each test. Within each test procedure, a reminder prompts the test engineer to record all calibration information for each piece of equipment used to perform the test. Record all applicable test equipment calibration data in the following table. (Note: If the same unit is used repeatedly, only record the data once.)

<u>Description (Manufacturer)</u>	<u>Model Number</u>	<u>Serial Number</u>	<u>Calibration Date</u>
Narda – Electromagnetic Survey Meter	8718	01243	6/2/17
Isotropic Probe	8721	16008	6/2/17

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## 2. APPLICABLE DOCUMENTS

The following documents of the specified or current applicable issue apply to the extent as specified herein.

### Globecomm Documents

11081-01000      System Block Diagram  
11081-04103      Test Procedure/Results

### Reference Documents

Bulletin No. 65      FCC Office of Engineering and Technology (latest version)  
ANSI                  Applicable ANSI regulations as required for Viacom  
SSOG210              Intelsat Antenna Verification Tests  
25.209                FCC Standard for ground segment antennas

### Manufacturer Documents

Narda                 RF Survey Meter, NAR/NBM-520:A

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## 2.1 Radiation Hazard Test

### 2.1.1 Purpose

This procedure outlines the steps to ensure that measured RF radiation does not exceed specified levels.

### 2.1.2 Specification

+5mW/cm<sup>2</sup> per FCC Office of Engineering and Technology Bulletin No. 65, 1997.

### 2.1.3 Test Equipment

The following test equipment, or equivalent, is required to perform the tests described herein.

Radiation Monitor and Probe, Narda Model NAR/NBM-520:A

### 2.1.4 Procedure

This section outlines the proper step-by-step test procedure. Verify or record each step that is indicated on the Test Data Sheet.

1. Before starting, insure that the test equipment is calibrated and is set to measure the appropriate radiation levels expected. Refer to the Narda Operation Manual.
2. Test in conjunction with the Viacom operations team. With the antenna pointed on the spacecraft, confirm all applicable carriers are operating through the uplink paths at nominal operating levels.
3. Take measurements at the specified locations indicated on the Test Data Sheet. All measurements must be less than the specification listed agreed to with Viacom based on their FCC licenses and safety levels in a controlled environment.
4. Report immediately and levels that exceed the requirements of the Test Plan, turn off the transmitters to verify that the source is external to the earth station.

**Note: Charge Radiation Monitor's battery for 8-12hrs prior to testing.**


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**Test Data Sheet – Record highest value read (all values in  $mW/cm^2$ ).**

<u>Measurement Location</u>	<u>Ant1</u> 11M, SA8016B		
<u>30' behind antenna</u>	0.008		
<u>Each corner of Antenna Pad</u>	.010	.010	
	.009	.008	
<u>On antenna Hub Platform</u>	0.012		
<u>Outside Rear Antenna Hub</u> (approx. 3' from feed flange)	0.013		
<u>Bottom rear (beneath) reflector</u> (6' high, 6' back from edge)	0.012		
<u>30' in front of reflector (6'high)</u>	0.020		

Comments:

- 1)  Pass /  Fail (circle one)
- 2) Comments/Observations (record here): Conclusion: Based on the above analysis, it is concluded that harmful levels of radiation will not exist in regions normally occupied by the public or the earth station's operating personnel.

Test Performed By:   
 Date: 8/30/16

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