Approved by OMB
3060-0678

Date & Time Filed: Jul 17 2014 2:44:55:740PM
File Number: SES-MOD-INTR2014-01467

| FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM<br>FCC 312 MAIN FORM FOR OFFICIAL USE ONLY | FCC Use Only |
|---|---|

## APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Wyoming Earth Station Modification (July 2014)

1-8. Legal Name of Applicant

| | | | |
|---|---|---|---|
| Name: | DG Consents Sub, Inc. | Phone Number: | 703-480-6338 |
| DBA Name: | | Fax Number: | 703-480-8174 |
| Street: | 2325 Dulles Corner Boulevard | E-Mail: | demitrius.anthony@digitalglobe.com |
| City: | Herdon | State: | VA |
| Country: | USA | Zipcode: | 20171 - |
| Attention: | Mr Demitrius M Anthony | | |

9-16. Name of Contact Representative

| | | | |
|---|---|---|---|
| Name: | Philip A. Bonomo | Phone Number: | 202-416-6773 |
| Company: | Lerman Senter PLLC | Fax Number: | 202-293-7783 |
| Street: | 2000 K Street, NW<br>Suite 600 | E-Mail: | pbonomo@lermansenter.com |
| City: | Washington | State: | DC |
| Country: | USA | Zipcode: | 20006- |
| Attention: | | Relationship: | Legal Counsel |

## CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- (●) a1. Earth Station
- ( ) a2. Space Station

(N/A) b1. Application for License of New Station
(N/A) b2. Application for Registration of New Domestic Receive-Only Station
( ) b3. Amendment to a Pending Application
(●) b4. Modification of License or Registration
b5. Assignment of License or Registration
b6. Transfer of Control of License or Registration
( ) b7. Notification of Minor Modification
(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
(N/A) b10. Other (Please specify)
(N/A) b11. Application for Earth Station to Access a Non-U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States.

17c. 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):

17d.
Fee Classification CGX - Fixed Satellite Transmit/Receive Earth Station

| 18. If this filing is in reference to an existing station, enter: | 19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number: |
|---|---|
| (a) Call sign of station:<br>E120040 | (a) Date pending application was filed:<br><br>(b) File number:<br>SESLIC2012022700218 |

## TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:

- ☐ a. Fixed Satellite
- ☐ b. Mobile Satellite
- ☐ c. Radiodetermination Satellite
- ☒ d. Earth Exploration Satellite
- ☐ e. Direct to Home Fixed Satellite
- ☐ f. Digital Audio Radio Service
- ☐ g. Other (please specify)

| 21. STATUS: Choose the button next to the applicable status. Choose only one. | 22. If earth station applicant, check all that apply. |
|---|---|
| ○ Common Carrier ◉ Non-Common Carrier | ☒ Using U.S. licensed satellites<br>☐ Using Non-U.S. licensed satellites |

23. If applicant is providng INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

○ Connected to a Public Switched Network ○ Not connected to a Public Switched Network ◉ N/A

24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).

☐ a. C-Band (4/6 GHz) ☐ b. Ku-Band (12/14 GHz)

☒ c.Other (Please specify upper and lower frequencies in MHz.)

Frequency Lower: 2042 Frequency Upper: 8400 (Please specify additional frequencies in an attachment)

## TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- ◉ a. Fixed Earth Station
- ○ b. Temporary-Fixed Earth Station
- ○ c. 12/14 GHz VSAT Network
- ○ d. Mobile Earth Station
- ○ e. Geostationary Space Station
- ○ f. Non-Geostationary Space Station
- ○ g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

◉ Transmit/Receive ○ Transmit-Only ○ Receive-Only ○ N/A

"For Space Station applications, select N/A."

## PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- ☒ a -- authorization to add new emission designator and related service
- ☐ b -- authorization to change emission designator and related service
- ☒ c -- authorization to increase EIRP and EIRP density
- ☐ d -- authorization to replace antenna
- ☐ e -- authorization to add antenna
- ☐ f -- authorization to relocate fixed station
- ☐ g -- authorization to change frequency(ies)
- ☒ h -- authorization to add frequency
- ☒ i -- authorization to add Points of Communication (satellites & countries)
- ☐ j -- authorization to change Points of Communication (satellites & countries)
- ☐ k -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- ☐ l -- authorization to change orbit location
- ☐ m -- authorization to perform fleet management

☐ n -- authorization to extend milestones
☒ o -- Other (Please specify)

## ENVIRONMENTAL POLICY

| | |
|---|---|
| 28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments. | ○ Yes ◉ No<br>**B - RadHaz** |

## ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.

| | |
|---|---|
| 29. Is the applicant a foreign government or the representative of any foreign government? | ○ Yes ◉ No |
| 30. Is the applicant an alien or the representative of an alien? | ○ Yes ○ No ◉ N/A |
| 31. Is the applicant a corporation organized under the laws of any foreign government? | ○ Yes ○ No ◉ N/A |
| 32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? | ○ Yes ○ No ◉ N/A |
| 33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? | ○ Yes ○ No ◉ N/A |
| 34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote. | |

## BASIC QUALIFICATIONS

| | |
|---|---|
| 35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules?<br>If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents. | ○ Yes ◉ No |
| 36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances. | ○ Yes ◉ No |
| 37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances. | ○ Yes ◉ No |
| 38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition?If Yes, attach as an exhibit, an explanation of circumstances | ○ Yes ◉ No |
| 39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances. | ○ Yes ◉ No |
| 40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer. | |
| 41. 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 |
| 42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in *47 C.F.R. 25.137, as appropriate*. If No, proceed to question 43. | ○ Yes ◉ No |
| 42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? | |

43. Description. (Summarize the nature of the application and the services to be provided). Applicant seeks authority to add new Points of Communication, new frequencies and emissions, to increase EIRP and EIRP density, and to change the location of the remote control

point. See Attachment A.A - Description

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25. (●) **A**

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements. ( ) **B**

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached. ( ) **C**

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CERTIFICATION

The Applicant 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. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

- ( ) Individual
- ( ) Unincorporated Association
- ( ) Partnership
- (●) Corporation
- ( ) Governmental Entity
- ( ) Other (please specify)

| 45. Name of Person Signing | 46. Title of Person Signing |
|---|---|
| Yancey L. Spruill | Treasurer |

**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).**

# SATELLITE EARTH STATION AUTHORIZATIONS
# FCC Form 312 - Schedule B:(Technical and Operational Description)

**FOR OFFICIAL USE ONLY**

Location of Earth Station Site

| | | | | | |
|---|---|---|---|---|---|
| E1: Site Identifier: | Wyoming ES | E5. Call Sign: | E120040 | | |
| E2: Contact Name | Remote Control Point | E6. Phone Number: | 303-684-4587 | | |
| E3. Street: | 213 Purple Sage Road | E7. City: | Rock Springs | | |
| | | E8. County: | Sweetwater | | |
| E4. State | WY | E9. Zip Code | 82901 | | |
| E10. Area of Operation: | | N/A | | | |
| E11. Latitude: | 41 ° 32 ' 12.0 " N | | | | |
| E12. Longitude: | 109 ° 21 ' 11.0 " W | | | | |
| E13. Lat/Lon Coordinates are: | | ( ) NAD-27 | (●) NAD-83 | ( ) N/A | |
| E14. Site Elevation (AMSL): | | 1889.76 meters | | | |

| | |
|---|---|
| E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy. | ○ Yes ○ No ◉ N/A |
| E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements? | ◉ Yes ○ No ○ N/A |
| E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point. | ◉ Yes ○ No |
| E18. Is frequency coordination required? If YES, attach a frequency coordination report as C - Coordination | ◉ Yes ○ No |
| E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as | ○ Yes ◉ No |
| **E20. FAA Notification - (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.** | ○ Yes ◉ No |

**POINTS OF COMMUNICATION**

| Satellite Name:GeoEye 1 \| GeoEye 1 \| NGSO If you selected OTHER, please enter the following: | |
|---|---|
| E21. Common Name: | E22. ITU Name: |
| E23. Orbit Location: | E24. Country: |

| Satellite Name:OTHER \| OTHER \| If you selected OTHER, please enter the following: | |
|---|---|
| E21. Common Name: WORLDVIEW-3 | E22. ITU Name: |
| E23. Orbit Location: NGSO | E24. Country: USA |

| Satellite Name:QUICKBIRD 1 \| USASAT 30A \| NGSO If you selected OTHER, please enter the following: | |
|---|---|
| E21. Common Name: | E22. ITU Name: |
| E23. Orbit Location: | E24. Country: |

| Satellite Name:OTHER \| OTHER \| If you selected OTHER, please enter the following: | |
|---|---|
| E21. Common Name: IKONOS | E22. ITU Name: |
| E23. Orbit Location: NGSO | E24. Country: USA |

| Satellite Name:GeoEye 2 \| GeoEye 2 \| NGSO If you selected OTHER, please enter the following: | |
|---|---|
| E21. Common Name: | E22. ITU Name: |
| E23. Orbit Location: | E24. Country: |

**POINTS OF COMMUNICATION (Destination Points)**

| E25. Site Identifier: | |
|---|---|
| E26. Common Name: | E27. Country: |

**ANTENNA**

| Site ID | E28. Antenna Id | E29. Quantity | E30. Manufacturer | E31. Model | E32. Antenna Size | E41/42. Antenna Gain Transmint and/or Recieve(____dBi at _____GHz) |
|---|---|---|---|---|---|---|
| Wyoming ES | 1 | 1 | ViaSat | 3420 | 7.3 | 41.0 dBi at 2.085 |
| Wyoming ES | 1 | 1 | ViaSat | 3420 | 7.3 | 53.5 dBi at 8.200 |

| E28. Antenna | E33/34. Diameter | E35. Above Ground | E36. Above Sea | E37. Building Height Above | E38. Total Input Power | E39. Maximum Antenna Height | E40. Total EIRP for al |
|---|---|---|---|---|---|---|---|

| Id | Minor/Major(meters) | Level(meters) | Level(meters) | Ground Level(meters) | at antenna flange(Watts) | Above Rooftop(meters) | carriers(dBW) |
|---|---|---|---|---|---|---|---|
| 1 | 0.0/0.0 | 5.0 | 1894.0 | 0.0 | 12.0 | 0.0 | 51.8 |

**FREQUENCY**

| E28. Antenna Id | E43/44. Frequency Bands(MHz) | E45. T/R Mode | E46. Antenna Polarization(H,V,L,R) | E47. Emission Designator | E48. Maximum EIRP per Carrier(dBW) | E49. Maximum ERIP Density per Carrier(dBW/4kHz) |
|---|---|---|---|---|---|---|
| 1 | 8025.0000<br>8345.0000 | R | Right Hand Circular | 320MG7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 8025.0000<br>8375.0000 | R | Left and Right Circular | 350MG7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 8025.0000<br>8395.0000 | R | Left and Right Circular | 370MG7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 8025.0000<br>8400.0000 | R | Left and Right Circular | 375MG7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 8135.0000<br>8285.0000 | R | Left and Right Circular | 150MG7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 8345.6800<br>8346.3200 | R | Right Hand Circular | 64K0G1D | 0.0 | 0.0 |
| E50. Modulation and Services PSK, Telemetry | | | | | | |
| 1 | 8393.7015<br>8394.2985 | R | Right Hand Circular | 59K7G1D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Telemetry | | | | | | |
| 1 | 8377.1000<br>8382.9000 | R | Left Hand Circular | 5M80G7D | 0.0 | 0.0 |
| E50. Modulation and Services Digital Telemetry (TT&C) | | | | | | |
| 1 | 8028.0000<br>8032.0000 | R | Right Hand Circular | 4M00G7D | 0.0 | 0.0 |
| E50. Modulation and Services QPSK, Data | | | | | | |
| 1 | 2041.6600<br>2042.3400 | T | Right Hand Circular | 68K0G2D | 61.0 | 61.0 |
| E50. Modulation and Services BPSK (TT&C) | | | | | | |
| 1 | 2051.3400<br>2052.6600 | T | Right Hand Circular | 1M32G1D | 61.0 | 49.0 |
| E50. Modulation and Services BPSK (TT&C) | | | | | | |
| 1 | 2051.6600<br>2052.3400 | T | Right Hand Circular | 68K0G2D | 61.0 | 61.0 |
| E50. Modulation and Services BPSK (TT&C) | | | | | | |
| 1 | 2085.0275<br>2086.3475 | T | Right Hand Circular | 1M32G1S | 61.0 | 49.0 |
| E50. Modulation and Services BPSK (TT&C) | | | | | | |
| 1 | 2091.9400 | T | Right Hand Circular | 1M32G1D | 61.0 | 49.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 2093.2600 | | | | | |
| E50. Modulation and Services BPSK (TT&C) | | | | | | |
| 1 | 2042.0000<br>2042.0000 | T | Right Hand Circular | NON | 61.0 | 61.0 |
| E50. Modulation and Services Unmodulated Carrier | | | | | | |
| 1 | 2052.0000<br>2052.0000 | T | Right Hand Circular | NON | 61.0 | 61.0 |
| E50. Modulation and Services Unmodulated Carrier | | | | | | |
| 1 | 2092.6000<br>2092.6000 | T | Right Hand Circular | NON | 61.0 | 61.0 |
| E50. Modulation and Services Unmodulated Carrier | | | | | | |

**FREQUENCY COORDINATION**

| E28. Antenna Id | E51. Satellite Orbit Type | E52/53. Frequency Limits(MHz) | E54/55. Range of Satellite Arc Eastern/Western Limit | E56. Earth Station Azimuth Angle Eastern Limit | E57. Antenna Elevation Angle Eastern Limit | E58. Earth Station Azimuth Angle Western Limit | E59. Antenna Elevation Angle Western Limit | E60. Maximum EIRP Density toward the Horizon(dBW/4kHz) |
|---|---|---|---|---|---|---|---|---|
| 1 | Non-Geostationary | 8025.0000<br>8400.000 | 0.0/0.0 | 0.0 | 5.0 | 360.0 | 5.0 | 0.0 |
| | Non-Geostationary | 0000.0000<br>0000.0000 | 0.0/0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Non-Geostationary | 2041.6600<br>2093.2600 | 0.0/0.0 | 0.0 | 5.0 | 360.0 | 5.0 | -4.3 |

**REMOTE CONTROL POINT LOCATION**

| E61. Call Sign<br><br>NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed. | E66. Phone Number<br>303-684-4587 |
|---|---|
| E62. Street Address<br>1601 Dry Creek Drive<br>Suite 260 | |

| E63. City | E68. County | E67/68. State/Country | E64. Zip Code |
|---|---|---|---|
| Longmont | Boulder | CO/ USA | 80503 |

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.

## Description of Request

With this application, DG Consents Sub, Inc. ("DG Consents") requests modification of its earth station located in Rock Springs, Wyoming (Call Sign E120040) in two respects.

First, DG Consents seeks to modify its authority to permit communications with its Quickbird-1, GeoEye-1, GeoEye-2 and IKONOS space stations. The frequencies requested in the attached FCC Form 312, Schedule B will be added to the frequencies already authorized for operations from Rock Springs. In addition, the Rock Springs earth station will continue to be used to communicate with other satellites comprising DG Consents' Earth Exploration Satellite Service ("EESS") system (i.e., WorldView-1 and WorldView-2), as well as with the WorldView-3 satellite authorized for addition to DG Consents' fleet of EESS space stations. *See* FCC File No. SAT-MOD-20120710-00111 (granted Jan. 24, 2013).

Second, DG Consents seeks to modify its authority to change the Rock Spring earth station's remote control location from the current site in Horsham, Pennsylvania, to the new site in Longmont, Colorado, as detailed in Schedule B to this application.

# RADIATION HAZARD STUDY
## DIGITALGLOBE, ROCK SPRINGS EARTH STATION

When applying for a license to construct and operate, modify, or renew an earth station, it is understood that licensees must certify whether grant of the application will have significant environmental impact as defined in the Federal Communications Commission's (FCC) rules, 47 C.F.R., Section 1.1307.

In this report DigitalGlobe, Inc. analyzes the maximum radiofrequency (RF) levels emitted from the satellite communications antenna described below. The reference document for this study is OET Bulletin No. 65, Edition 97-01, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, August 1997.

### ANTENNA NEAR-FIELD POWER DENSITY CALCULATION

The extent of the near-field is defined by the following equation:

$$R_{near} = (D_{ant})^2 / (4 \lambda)$$

where: $R_{near}$ = extent of the near-field (in meters)
$D_{ant}$ = diameter of the antenna main reflector (in meters)
$\lambda$ = wavelength of the RF transmit frequency (in meters)

The maximum on-axis power density within near-field is defined by the following equation:

$$S_{near} = \{(16 \eta P_{feed}) / [\pi (D_{ant})^2]\} / 10$$

where: $S_{near}$ = maximum on-axis power density within the near-field (in milliwatts per square centimeter)
$\eta$ = antenna aperature efficiency
$P_{feed}$ = maximum power into antenna feed flange (in watts)
$D_{ant}$ = diameter of the antenna main reflector (in meters)

### ANTENNA FAR-FIELD POWER DENSITY CALCULATION

The distance to the beginning of the far-field region is defined by the following equation:

$$R_{far} = [0.6(D_{ant})^2] / \lambda$$

where: $R_{far}$ = distance to beginning of far-field (in meters)
$D_{ant}$ = diameter of the antenna main reflector (in meters)
$\lambda$ = wavelength of the RF transmit frequency in (meters)

The maximum on-axis power density within the far-field is defined by the following equation:

$$S_{far} = [(P_{feed} G_{ant}) / 4 \pi (R_{far})^2] / 10$$

where: $S_{far}$ = maximum on-axis power density in the far-field (in milliwatts per square centimeter)
$P_{feed}$ = maximum power into antenna feed flange (in watts)
$G_{ant}$ = antenna main beam gain at RF transmit frequency (in watts)
$R_{far}$ = distance to beginning of far-field (in meters)

## Antenna Transition Region Power Density Calculation

By definition, the maximum on-axis power densitiy in the transition region will never be greater than the maximum on-axis power densities in the near-field:

$$S_{tr} \leq S_{near}$$

where: $S_{tr}$ = maximum on-axis power density in the transition region (in milliwatts per square centimeter)
$S_{near}$ = maximum on-axis power density in the near-field (in milliwatts per square centimeter)

## Antenna Feed-Flange (or Subreflector) Power Density Calculation

The maximum power density at the antenna feed-flange (or subreflector surface) is defined by the following equation:

$$S_{feed(sub)} = 1000 \{[2(P_{feed})] / \{[\pi (D_{feed(sub)})^2] / 4\}\}$$

where: $S_{feed(sub)}$ = maximum power density at the antenna feed-flange or subreflector surface (in milliwatts per square centimeter)
$P_{feed}$ = maximum power into antenna feed flange (in watts)
$D_{feed(sub)}$ = diameter of the antenna feed-flange or subreflector (in centimeters)

## Antenna Main Reflector Power Density Calculation

The maximum power density in the main reflector region of the antenna is defined by the following equation:

$$S_{ant} = \{[2(P_{feed})] / \{[\pi (D_{ant})^2] / 4\}\} / 10$$

where: $S_{ant}$ = maximum power density in the antenna main reflector region (in milliwatts per square centimeter)
$P_{feed}$ = maximum power into antenna feed flange (in watts)
$D_{ant}$ = diameter of the antenna main reflector (in meters)

## Power Density Calculation between the Antenna Main Reflector and the Ground

The maximum power density between the antenna main reflector and the ground is defined by the following equation:

$$S_{ground} = \{P_{feed} / \{[\pi (D_{ant})^2] / 4\}\} / 10$$

where: $S_{ground}$ = maximum power density between the antenna main reflector and the ground (in milliwatts per square centimeter)
$P_{feed}$ = maximum power into antenna feed flange (in watts)
$D_{ant}$ = diameter of the antenna main reflector (in meters)

## Summary of Calculated Radiation Levels

DigitalGlobe, Inc. understands the licensee must ensure people are not exposed to harmful levels of radiation.

Maximum permissible exposure (MPE) limits for general population/uncontrolled exposure were not considered in this analysis for several reasons. The main-beam height above ground, minimum 5 degree elevation above horizon transmit inhibit mask and tracking motion of this highly directional antenna significantly limit exposure to the general population. Furthermore, access to DigitalGlobe earth stations is limited to authorized personnel who have been appropriately briefed and advised.

MPE limits for occupational/controlled exposure, however, were considered in this analysis. It is standard practice for our technical staff to cease transmissions whenever maintenance is performed in close proximity to antenna reflector regions with potentially hazardous power density levels. Based on the results (see attached page entitled "Radiation Hazard Calculations") and our standard practices within our controlled antenna environment, the earth station operators / technicians should not be exposed to radiation levels exceeding 5 $mW/cm^2$ power density over a six minute averaging time.

## Certification

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this radiation hazard assessment, that I have reviewed the engineering information submitted, and that it is complete and accurate to the best of my knowledge.

David D. Greenidge
Mgr. Remote Ground Systems
DigitalGlobe, Inc.

# Radiation Hazard Calculations

## DigitalGlobe Rock Springs Wyoming Earth Station

| | | |
|---|---|---|
| Antenna Diameter | 7.3 | m |
| Feed-Flange or subreflector diameter | 8.25 | cm |
| Transmit Frequency | 2025 | Mhz |
| Maximum power into antenna feed-flange (watts) | 100 | W |
| Antenna Gain | 41 | dBi |
| Antenna aperture efficiency | 0.55 | |
| Maximum power into antenna feed (dBm) | 50.00 | dBm |
| EIRP (dBm) | 91.00 | dBm |
| EIRP (watts) | 1258925.41 | W |
| Wave length | 0.15 | m |
| Near field extent | 89.93 | m |
| Beginning of far field | 215.82 | m |

| | | | |
|---|---|---|---|
| **Maximum on-axis power density far field** | **0.22** | **mW/cm^2** | **Satisfies MPE Limits** |
| **Maximum on-axis power density near field** | **0.53** | **mW/cm^2** | **Satisfies MPE Limits** |
| **Maximum on-axis power density transition region** | **0.53** | **mW/cm^2** | **Satisfies MPE Limits** |
| **Maximum power density feed-flange** | **3741.38** | **mW/cm^2** | **Potential Hazard** |
| **Maximum power density main reflector region** | **0.48** | **mW/cm^2** | **Satisfies MPE Limits** |
| **Maximum power density between main reflector and ground** | **0.24** | **mW/cm^2** | **Satisfies MPE Limits** |

Attachment C

# FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

**DG Consents Sub, Inc.**
**Rock Springs, Wyoming**

**Satellite Earth Station**

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
July 15, 2014

# TABLE OF CONTENTS

# 1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

# 2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-only earth station.

| Company |
| --- |
| None |

No carriers reported potential interference cases.

# 3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was emailed and sent to the below listed carriers with a letter dated May 14, 2014.

Company

3G Wireless, LLC
AERIAL VIDEO SYSTEMS
AIRWAVES, INC
America's Cup Event Authority, LLC
AT&T California
Alascom Inc
Ascent Media Network Services, LLC
Bellsouth Telecommunications, Inc.
Bonneville Holding Company
Bonneville International Corporation
Borgeson, Tom R.
Brigham Young University
Broadcast Sports Inc.
CBS Television Stations
CENTRAL WYOMING COLLEGE/PUBLIC TELEVISIO
CNG Communications, Inc.
Carolina Telephone and Telegraph Co
Casper, John
CenturyTel of the Southwest, Inc.
Chicago Comnet Corp
Cincinnati Bell Wireless LLC
Circuit of the Americas, LLC
Citywide News Network, Inc.
Cohen, Elana
Compass Communications of Idaho, Inc.
Cowboys Stadium LP
CP Communications, LLC
DCI II, INC.
Direct Broadcast Services, Inc.
Entravision Holdings, LLC
Excalibur Grand Junction LLC
Express Lane Traffic LLC
Fishman Brothers Enterprises
GOODYEAR TIRE AND RUBBER COMPANY
GRAY TELEVISION LICENSEE, INC. (KKCO)

Company (Continued)

GSN New, Inc
Global Microwave Systems Inc
Gray Television Licensee LLC (Gray TV)
Gray Television Licensee, LLC
HF Enterprises, Inc
Hallco Unlimited, Inc.
Hawaiian Telcom, Inc.
Heiden, William
IRON COUNTY UTAH
Idaho Broadcast Partners, LLC
Illinois Bell Telephone Company
Indiana Bell Telephone Company
Information & Display Systems, Inc.
Information Super Station, LLC
International Communications Group, Inc.
KRCA License LLC
KSTU License, LLC
KUTV Licensee, LLC
Kentucky RSA #3 Cellular General Partner
Kentucky RSA #4 Cellular General Partner
Lancellotti, Inc
Loop Inc.
MERCURY COMMUNICATIONS
Metro Networks Communications, Inc.
Metrosat Communications Inc.
Michigan Bell Telephone Company
Microwave Video Systems, LLC
Mission Broadcasting, Inc.
Moreen, Steven K
Multimedia Holdings Corporation
NEW ENGLAND DIGITAL DISTRIBUTION, INC.
NEW ENGLAND SATELLITE SYSTEMS INC
NEXSTAR BROADCASTING, INC.
NPG OF IDAHO, INC.
NSM Surveillance
Navajo Communications Company
Neuhoff Family Limited Partnership
New Rushmore Radio, Inc.
NorthWest Suburbs Community Access Corp
Ohio Bell Telephone Company
On Scene Video Production
Onboard Images
Pacific Television Center
Penn Service Microwave Co., Inc.
Pikes Peak Radio, LLC
Pikes Peak Television, Inc.
Plateau Telecommunications, Inc.
Plum Media, LLC
Plum TV, LLC
Production & Satellite Services, Inc.
Public Television Communications Center

Company (Continued)

QUICK LINK CONNECTIONS INC
Qwest Corporation
RCC Minnesota Inc. - MN NE ND SD
REMOTE FACILITIES CONSULTING SERVICES
RF Central, LLC
RF Film, Inc
RF Technology, LLC
Radiofone, Inc.
Randy Hermes Production
Regulus Media Services, Inc.
Remote Broadcasts, Inc.
Rocky Mountain Public Broadcasting Netwo
Rushmore Media Company, Inc
SILVERTON BROADCASTING COMPANY, LLC
SILVERTON BROADCASTING COMPANY, LLC
Scripps Media, Inc. - KMGH TV
Southwestern Bell Telephone L.P.
Speedshotz, Inc
Steinert, Christine
Telemovil del Caribe Inc.
Total RF Marketing Inc
Tribune Broadcasting Denver License, LLC
Unisat, Inc.
United Telephone - Southeast
VERIZON SOUTH INC.
Verizon California Inc.
Verizon Maryland, Inc.
Verizon New England Inc.
Verizon New Jersey, Inc.
Verizon New York, Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania, Inc.
Verizon Virginia, Inc.
Verizon Washington DC, Inc.
Village Video Productions Inc
Vistawest Media, LLC
Vyvx, LLC
Westar Satellite Services LP
Western Technical Services
Wexler Video, Inc.
Winged Vision Inc
Wisconsin Bell, Inc.
Wolfe Air Aviation
Yellowstone Licenseco LLC

Society of Broadcast Engineers (SBE)

Utah – SLC Region (Mr. John Dehnel)
Wyoming – Entire State (Mr. Robert Spain)
Idaho - SW Region (Mr. Jeff Hoffert)
Idaho – SE Region (Mr. David Turnmire)
Idaho – So. Central Region (Mr. Thomas Lowther)
Colorado – Front Range (Mr. James Schoedler)
Colorado – Western Slope (Mr. Robert Bowe)
Nevada – Reno Region (Mr. Steve Weber)
Montana – Billings Area (Mr. Randall Rocks)

# 4. EARTH STATION COORDINATION DATA

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

Date: 07/15/2014
Job Number: 140514COMSJC06

### Administrative Information

| | |
|---|---|
| Status | ENGINEER PROPOSAL |
| Call Sign | E120040 |
| Licensee Code | DBCONS |
| Licensee Name | DG Consents Sub, Inc. |

### Site Information — ROCK SPRINGS, WYOMING

| | |
|---|---|
| Venue Name | |
| Latitude (NAD 83) | 41° 32' 12.0" N |
| Longitude (NAD 83) | 109° 21' 11.0" W |
| Climate Zone | A |
| Rain Zone | 5 |
| Ground Elevation (AMSL) | 1889.76 m / 6200.0 ft |

### Link Information

| | |
|---|---|
| Satellite Type | Low Earth Orbit |
| Mode | TO - Transmit-Only |
| Modulation | Analog and Digital |
| Minimum Elevation Angle | 5.0° |
| Azimuth Range | 0.0° to 360° |
| Antenna Centerline (AGL) | 4.88 m / 16.0 ft |

### Antenna Information — Transmit

| | |
|---|---|
| Manufacturer | ViaSat |
| Model | 3420 |
| Gain / Diameter | 41.0 dBi / 7.3 m |
| 3-dB / 15-dB Beamwidth | 1.54° / 2.90° |

| | | N0N | 68K0G2D | 1M32G1D |
|---|---|---|---|---|
| Max Available RF Power | (dBW/4 kHz) | 20.0 | 7.7 | -5.2 |
| | (dBW/MHz) | 44.0 | 31.7 | 18.8 |
| Maximum EIRP | (dBW/4 kHz) | 61.0 | 48.7 | 35.8 |
| | (dBW/MHz) | 85.0 | 72.7 | 59.8 |
| | (dBW) | 61.0 | 61.0 | 61.0 |

| | | | | |
|---|---|---|---|---|
| Interference Objectives: | Long Term | -154.0 | dBW/4 kHz | 20% |
| | Short Term | -131.0 | dBW/4 kHz | 0.0025% |

### Frequency Information — Transmit 2.0 GHz

Emission / Frequency Range (MHz)

N0N / 2042.0
68K0G2D / 2042.0
N0N / 2052.0
68K0G2D / 2052.0
1M32G1D / 2052.0
1M32G1D / 2085.6875
N0N / 2092.6
1M32G1D / 2092.6

| | |
|---|---|
| Max Great Circle Coordination Distance | 470.8 km / 292.5 mi |
| Precipitation Scatter Contour Radius | 319.6 km / 198.6 mi |

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

| **Coordination Values** | **ROCK SPRINGS, WY** |
|---|---|
| Licensee Name | DG Consents Sub, Inc. |
| Latitude (NAD 83) | 41° 32' 12.0" N |
| Longitude (NAD 83) | 109° 21' 11.0" W |
| Ground Elevation (AMSL) | 1889.76 m / 6200.0 ft |
| Antenna Centerline (AGL) | 4.88 m / 16.0 ft |
| Antenna Model | ViaSat 3420 |
| Antenna Mode | Transmit 2.0 GHz |
| Interference Objectives: Long Term | -154.0 dBW/4 kHz 20% |
| Short Term | -131.0 dBW/4 kHz 0.0025% |
| Max Available RF Power | 20.0 (dBW/4 kHz) |

| | | | Transmit 2.0 GHz | |
|---|---|---|---|---|
| Azimuth (°) | Horizon Elevation (°) | Antenna Discrimination (°) | Horizon Gain (dBi) | Coordination Distance (km) |
| 0 | 0.00 | 77.90 | 9.00 | 470.80 |
| 5 | 0.00 | 73.30 | 9.00 | 470.80 |
| 10 | 0.00 | 68.72 | 9.00 | 470.80 |
| 15 | 0.00 | 64.18 | 9.00 | 470.80 |
| 20 | 0.00 | 59.67 | 9.00 | 470.80 |
| 25 | 0.00 | 55.21 | 9.00 | 470.80 |
| 30 | 0.00 | 50.82 | 9.00 | 470.80 |
| 35 | 0.00 | 46.51 | 9.00 | 470.80 |
| 40 | 0.00 | 42.32 | 9.00 | 470.80 |
| 45 | 0.00 | 38.28 | 9.00 | 470.80 |
| 50 | 0.00 | 34.46 | 9.00 | 470.80 |
| 55 | 0.00 | 30.92 | 9.00 | 470.80 |
| 60 | 0.00 | 27.79 | 9.00 | 470.80 |
| 65 | 0.00 | 25.22 | 9.00 | 470.80 |
| 70 | 0.00 | 23.39 | 9.00 | 470.80 |
| 75 | 0.00 | 22.48 | 9.00 | 470.80 |
| 80 | 0.00 | 22.60 | 9.00 | 470.80 |
| 85 | 0.00 | 23.75 | 9.00 | 470.80 |
| 90 | 0.00 | 25.78 | 9.00 | 470.80 |
| 95 | 0.00 | 28.51 | 9.00 | 470.80 |
| 100 | 0.00 | 31.75 | 9.00 | 470.80 |
| 105 | 0.00 | 35.36 | 9.00 | 470.80 |
| 110 | 0.00 | 39.25 | 9.00 | 470.80 |
| 115 | 0.00 | 43.33 | 9.00 | 470.80 |
| 120 | 0.00 | 47.55 | 9.00 | 470.80 |
| 125 | 0.00 | 51.88 | 9.00 | 470.80 |
| 130 | 0.00 | 56.29 | 9.00 | 470.80 |
| 135 | 0.00 | 60.76 | 9.00 | 470.80 |
| 140 | 0.00 | 65.28 | 9.00 | 470.80 |
| 145 | 0.00 | 69.84 | 9.00 | 470.80 |
| 150 | 0.00 | 74.42 | 9.00 | 470.80 |
| 155 | 0.00 | 79.02 | 9.00 | 470.80 |
| 160 | 0.00 | 83.63 | 9.00 | 470.80 |
| 165 | 0.00 | 88.25 | 9.00 | 470.80 |
| 170 | 0.00 | 92.87 | 9.00 | 470.80 |
| 175 | 0.00 | 97.49 | 9.00 | 470.80 |
| 180 | 0.00 | 102.10 | 9.00 | 470.80 |

# COMSEARCH

## Earth Station Data Sheet

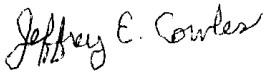
19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

| **Coordination Values** | **ROCK SPRINGS, WY** |
|---|---|
| Licensee Name | DG Consents Sub, Inc. |
| Latitude (NAD 83) | 41° 32' 12.0" N |
| Longitude (NAD 83) | 109° 21' 11.0" W |
| Ground Elevation (AMSL) | 1889.76 m / 6200.0 ft |
| Antenna Centerline (AGL) | 4.88 m / 16.0 ft |
| Antenna Model | ViaSat 3420 |
| Antenna Mode | Transmit 2.0 GHz |
| Interference Objectives: Long Term | -154.0 dBW/4 kHz 20% |
| Short Term | -131.0 dBW/4 kHz 0.0025% |
| Max Available RF Power | 20.0 (dBW/4 kHz) |

| | | Transmit 2.0 GHz | | |
|---|---|---|---|---|
| Azimuth (°) | Horizon Elevation (°) | Antenna Discrimination (°) | Horizon Gain (dBi) | Coordination Distance (km) |
| 185 | 0.00 | 106.70 | 9.00 | 470.80 |
| 190 | 0.00 | 111.28 | 9.00 | 470.80 |
| 195 | 0.00 | 115.82 | 9.00 | 470.80 |
| 200 | 0.00 | 120.33 | 9.00 | 470.80 |
| 205 | 0.00 | 124.79 | 9.00 | 470.80 |
| 210 | 0.00 | 129.18 | 9.00 | 470.80 |
| 215 | 0.00 | 133.49 | 9.00 | 470.80 |
| 220 | 0.00 | 137.68 | 9.00 | 470.80 |
| 225 | 0.00 | 141.72 | 9.00 | 470.80 |
| 230 | 0.00 | 145.54 | 9.00 | 470.80 |
| 235 | 0.00 | 149.08 | 9.00 | 470.80 |
| 240 | 0.00 | 152.21 | 9.00 | 470.80 |
| 245 | 0.00 | 154.78 | 9.00 | 470.80 |
| 250 | 0.00 | 156.62 | 9.00 | 470.80 |
| 255 | 0.00 | 157.52 | 9.00 | 470.80 |
| 260 | 0.00 | 157.40 | 9.00 | 470.80 |
| 265 | 0.00 | 156.25 | 9.00 | 470.80 |
| 270 | 0.00 | 154.22 | 9.00 | 470.80 |
| 275 | 0.00 | 151.49 | 9.00 | 470.80 |
| 280 | 0.00 | 148.25 | 9.00 | 470.80 |
| 285 | 0.00 | 144.64 | 9.00 | 470.80 |
| 290 | 0.00 | 140.75 | 9.00 | 470.80 |
| 295 | 0.00 | 136.68 | 9.00 | 470.80 |
| 300 | 0.00 | 132.45 | 9.00 | 470.80 |
| 305 | 0.00 | 128.12 | 9.00 | 470.80 |
| 310 | 0.00 | 123.71 | 9.00 | 470.80 |
| 315 | 0.00 | 119.24 | 9.00 | 470.80 |
| 320 | 0.00 | 114.72 | 9.00 | 470.80 |
| 325 | 0.00 | 110.16 | 9.00 | 470.80 |
| 330 | 0.00 | 105.58 | 9.00 | 470.80 |
| 335 | 0.00 | 100.98 | 9.00 | 470.80 |
| 340 | 0.00 | 96.37 | 9.00 | 470.80 |
| 345 | 0.00 | 91.75 | 9.00 | 470.80 |
| 350 | 0.00 | 87.13 | 9.00 | 470.80 |
| 355 | 0.00 | 82.51 | 9.00 | 470.80 |

# 5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Jeffrey E. Cowles
Engineer III, Telecommunications
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Va. 20147

DATED: July 15, 2014

# FCC IBFS - Electronic Filing

## Submission_id :IB2014001467
## Successfully filed on :Jul 17 2014 2:44:55:740PM

The current authorization of Call Sign E120040 expires on Jun 5 2027 2:40:38:143PM. The filing of a modification application does not automatically extend the expiration date of an authorization. In addition, grant of a modification will not extend the expiration date unless that is the modification sought. In general, an application for renewal of the authorization must be filed separately in order to extend the expiration date.

Return to Main Menu

FCC Federal Communications Commission

## Online Payment

**Step 3: Confirm Payment** 1 | 2 | **3**

**Thank you.**
**Your transaction has been successfully completed.**

### Pay.gov Tracking Information

**Application Name:** Remittance Advice
**Pay.gov Tracking ID:** 25GN2BR8
**Agency Tracking ID:** PGC2537456
**Transaction Date and Time:** 07/17/2014 14:51 EDT

### Payment Summary

| Address Information | Account Information | Payment Information |
|---|---|---|
| **Account Holder Name:** Lerman Senter PLLC | **Card Type:** American Express | **Payment Amount:** $180.00 |
| **Billing Address:** 2000 K Street, N.W. | **Card Number:** **********1008 | **Transaction Date and Time:** 07/17/2014 14:51 EDT |
| **Billing Address 2:** Suite 600 | | |
| **City:** Washington | | |
| **State / Province:** DC | | |
| **Zip / Postal Code:** 20006-1809 | | |
| **Country:** USA | | |