SES-STA-20130226-00211 The Production Crew and Co.

IB2013000468

Approved by OMB 3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu: STA Request – Ponce

1. Applicant

Name:

The Production Crew and Co.

Phone Number:

787-667-2214

DBA Name:

Fax Number:

787-977-7762

Street:

#169 DEL PARQUE ST

E-Mail:

FEDERICO.GOMEZ.

HERNANDEZ@GMAIL.COM

SUITE 201

City:

SAN JUAN

State:

PR

Country:

USA

Zipcode:

00911

-1967

Attention:

Mr FEDERICO E GOMEZ

File 3 SES-57A-20130 221-0021

Call Sign

Grant Date 3-14-12

(or other identifier)

From 3-14-13

To: 4-13-12

Approved:

GRANTED
International Bureau

Applicant: The Production Crew and Co. File No.: SES-STA-20130226-00211 Special Temporary Authority (STA)

using a 2.4 meter Prodelin model 2.4M antenna with the following conditions: MHz in Pachin Vicens Arena, Ponce, Puerto Rico to access ALSAT-designated authority Temporary-Fixed earth station using the conventional C-band frequencies 5925-6425 The Production Crew and Co. is granted STA for 30 days to operate a Transmit-Only

- The Production Crew and Co. shall not cause harmful interference to, and shall operating station and it shall cease transmission(s) immediately upon notice of not claim protection from, interference caused to it by any other lawfully such interference.
- 2 In the event that there is a report of interference, The Production Crew and Co. must immediately terminate transmissions and notify the FCC in writing
- ω Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at The Production Crew and Co.'s risk.
- 4 radiation to persons who may be in the vicinity of the earth station when it is in ensure that the earth station does not create a potential for harmful non-ionizing The Production Crew and Co. shall take all reasonable and customary measures to potential for exceeding the maximum permissible exposure limits. individuals do not stray into the regions around the earth station where there is a The earth station operator shall be responsible for assuring that
- S delegated authority, 47 C.F.R. § 0.261, and is effective immediately. This action is issued pursuant to Section 0.261 of the Commission's rules on



| 2. Contact | | | | | |
|--------------|-------------------------|--|--------------------------------|---|--|
| | Name: | Mr FEDERICO E GOMEZ | Phone Number: | 787–667–2214 | |
| | Company: | The Production Crew and Co. | Fax Number: | 787–977–7762 | |
| | Street: | #169 DEL PARQUE ST | E-Mail: | FEDERICO.GOMEZ. HERNANDEZ@GMAIL.COM | |
| | | Suite 201 | | | |
| | City: | San Juan | State: | PR | |
| | Country: | USA | Zipcode: | 00911 -1967 | |
| | Attention: | Mr FEDERICO E GOMEZ | Relationship: | Other | |
| | | | | | |
| application. | Please enter | | ne Commission, enter either th | ne file number or the IB Submission ID of the related | |
| | | with this application? attach FCC Form 159. If No, in | digata rasson for foo avamnti | on (see 47 C E.D. Section 1 1114) | |
| | | Noncommercial educations | | on (See 47 C.P.R.Section 1.1114). | |
| | olease explair | ~ | ar recensee | | |
| 4b. Fee Clas | ssification (| CGX - Fixed Satellite Transmit/Re | eceive Earth Station | | |
| 5. Type Rec | luest | | | | |
| Use Pr | ior to Grant | O Chang | ge Station Location | Other | |
| • | d Use Prior I 3/2013 | Date | | | |

| 7. CityPonce | 8. Latitude (dd mm ss.s h) 17 59 17.0 N |
|--|--|
| 9. State PR | 10. Longitude (dd mm ss.s h) 66 37 11.0 W |
| 11. Please supply any need attachments. | |
| Attachment 1: Fixed App Attachment 2: PCN | Attachment 3: RadHaz |
| | |
| 12. Description. (If the complete description does not appear in this bo | ox, please go to the end of the form to view it in its entirety.) |
| Temporary Earth Station Services - Ponce, PR, | additional events possible. |
| 13. By checking Yes, the undersigned certifies that neither applicant nor subject to a denial of Federal benefits that includes FCC benefits pursua of 1988, 21 U.S.C. Section 862, because of a conviction for possession See 47 CFR 1.2002(b) for the meaning of "party to the application | ant to Section 5301 of the Anti–Drug Act or distribution of a controlled substance. |
| 14. Name of Person Signing Mr FEDERICO E GOMEZ | 15. Title of Person Signing Partner |
| (U.S. Code, Title 18, Section 1001), AND/OR REV | ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT OCATION OF ANY STATION AUTHORIZATION FORFEITURE (U.S. Code, Title 47, Section 503). |

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February 26, 2013

*** CLIENT COPY ***

*** PLEASE MAIL ***

*** TO CUSTOMER ***

Re: The Production Crew and Co.
PONCE, PR - PACHIN VICENS ARENA
Temporary Transmit-Only Earth Station
Operation Dates: 02/28/2013 - 08/28/2013
Job Number: 130226COMSTC03

Dear Frequency Coordinator:

Only Earth Station to be located at the site referenced above. On behalf of The Production Crew and Co., we are forwarding the attached coordination data for a Temporary Transmit-

This earth station will transmit only on the satellite(s) and frequency or frequencies as described in the attached data. Please do not report cases involving 4 GHz facilities or problems involving non-active paths or frequencies outside the specified range.

COMSEARCH

Tundley O Coutcher

Timothy O. Crutcher Principal Frequency Coordinator

Enclosure(s)

copy sent to: Mr. Charles Magin, EIC FCC - Columbia, MD

COMSEARCH

Earth Station Data Sheet 19700 Janelia Farm Boulevard, Ashburn, VA 20147 (703)-726-5500 Fax: (703)-726-5600 http://www.comsearch.com

Job Number: 02/26/2013 130226COMSTC03

| Job Number: | 130226COMS1C03 |
|---|--|
| Administrative Information | TEMBODABY (Operation from 03/38/3043 to 08/38/3043) |
| Licensee Name | The Production Crew and Co. |
| Site Information | PONCE, PR |
| Latitude (NAD 83) | 17°59' 11 0" N |
| Longitude (NAD 83) | 66°37′5.0" W |
| Climate Zone | C |
| Rain Zone | |
| Ground Elevation (AMSL) | 3.0 m / 9.8 ft |
| Link Information | |
| Satellite Type | Geostationary Transmit Only |
| Modulation | Digital |
| Satellite Arc | 58°W to 99°West Longitude |
| Corresponding Elevation Angles | 133.9 to 244.0 66.7°/ 47.6° |
| Antenna Centerline (AGL) | 3.66 m / 12.0 ft |
| Antenna Information | Transmit |
| Wanutacturer Gain / Diameter | Prodelin 42.0 dBi / 2.4 m |
| 3-ab / 15-ab beamwidth | 1.00% 2.00% |
| Max Available RF Power (dBW/4 kHz) (dBW/MHz) | kHz) -14.1 Hz) 9.9 |
| Maximum EIRP (dBW/4 kHz) | kHz) 27.9 |
| (dBW) | |
| Interference Objectives: Long Term Short Term | n -154.0 dBW/4 kHz 20% n -131.0 dBW/4 kHz 0.0025% |
| Frequency Information | Transmit 6.1 GHz |
| Emission / Frequency Range (MHz) | 36M0G7W / 6197.0 |
| | |

Max Great Circle Coordination Distance Precipitation Scatter Contour Radius

225.5 km / 140.1 mi 100.0 km / 62.1 mi

COMSEARCH
Earth Station Data Sheet
19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)-726-5500 Fax: (703)-726-5600 http://www.comsearch.com

| Max Available RF Power | Short Term | Interference Objectives: Long Term | Antenna Mode | Antenna Centerline (AGL) | Ground Elevation (AMSL) | Longitude (NAD 83) | Latitude (NAD 83) | Licensee Name | Coordination Values |
|------------------------|-----------------------------|------------------------------------|------------------|--------------------------|-------------------------|--------------------|-------------------|-----------------------------|---------------------|
| -14.1 (dBW/4 kHz) | rm -131.0 dBW/4 kHz 0.0025% | m -154.0 dBW/4 kHz 20% | Transmit 6.1 GHz | 3.66 m / 12.0 ft | 3.0 m / 9.8 ft | 66°37'5.0" W | 17°59' 11.0" N | The Production Crew and Co. | PONCE, PR |

| Interference Objectives: Max Available RF Power | Interference Objectives: Long Term Short Term Max Available RF Power | n -154.0 dBW/4 kHz n -131.0 dBW/4 kHz -14.1 (dBW/4 kHz) | (Hz 20% (Hz 0.0025% Hz) | 7 7 7 7 8 1 9 |
|---|--|---|-------------------------------|---------------------------------|
| Azimuth (°) | Elevation (°) | Discrimination (°) | Gain (dBi) | Distance (km) |
| 0 | 1.89 | 107.81 | -10.00 | 100.00 |
| ე თ | 1.89 | 111.06 | -10.00 | 100.00 |
| i 0 | 1.21 | 109.58 | -10.00 | 100.00 |
|) <u>1</u> | 1.27 | 108.26 | -10.00 | 100.00 |
| 20 | 0.64 | 106.34 | -10.00 | 138.47 |
| 25 | 0.51 | 104.68 | -10.00 | 154.92 |
| 30 | 0.37 | 102.93 | -10.00 | 186.73 |
| 35 | 0.49 | 101.23 | -10.00 | 158.17 |
| 40 | 1.22 | 99.67 | -10.00 | 100.00 |
| 45 | 1.18 | 97.70 | -10.00 | 100.00 |
| 50 | 0.60 | 95.57 | -10.00 | 143.60 |
| 55 | 0.32 | 93.54 | -10.00 | 197.16 |
| 60 | 0.00 | 91.53 | -10.00 | 225.03 |
| 65 | 0.00 | 89.55 | -10.00 | 225.03 |
| 70 | 0.00 | 87.57 | -10.00 | 225.03 |
| 75 | 0.00 | 85.62 | -10.00 | 225.03 |
| 80 | 0.00 | 83.68 | -10.00 | 225.03 |
| 85 | 0.00 | 81.79 | -10.00 | 225.03 |
| 90 | 0.00 | 79.96 | -10.00 | 225.03 |
| 95 | 0.00 | 78.19 | -10.00 | 225.03 |
| 100 | 0.00 | 76.50 | -10.00 | 225.03 |
| 105 | 0.00 | 74.91 | -10.00 | 225.03 |
| 110 | 0.00 | 73.42 | -10.00 | 225.03 |
| 115 | 0.00 | 72.05 | -10.00 | 225.03 |
| 120 | 0.00 | 70.81 | -10.00 | 225.03 |
| 125 | 0.00 | 69.72 | -10.00 | 225.03 |
| 130 | 0.00 | 68.78 | -10.00 | 225.03 |
| 135 | 0.00 | 68.01 | -10.00 | 225.03 |
| 140 | 0.00 | 67.40 | -10.00 | 225.03 |
| 145 | 0.00 | 66.98 | -10.00 | 225.03 |
| 150 | 0.00 | 66.74 | -10.00 | 225.03 |
| 155 | 0.00 | 66.69 | -10.00 | 225.03 |
| 160 | 0.00 | 66.83 | -10.00 | 225.03 |
| 165 | 0.00 | 67.15 | -10.00 | 225.03 |
| 170 | 0.00 | 67.66 | -10.00 | 225.03 |
| 175 | 0.00 | 68.34 | -10.00 | 225.03 |
| 180 | 0.00 | 68.89 | -10.00 | 225.03 |
| 185 | 0.00 | 68.25 | -10.00 | 225.03 |
| | | | | |

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147

(703)-726-5500 Fax: (703)-726-5600 http://www.comsearch.com

| | Max Available RF Power | Short Term | Interference Objectives: Long Term | Antenna Mode | Antenna Centerline (AGL) 3.66 m / 12.0 ft | Ground Elevation (AMSL) | Longitude (NAD 83) | Latitude (NAD 83) | Licensee Name | Coordination Values |
|---|------------------------|----------------------------|------------------------------------|------------------|---|-------------------------|--------------------|-------------------|-----------------------------|---------------------|
| | -14.1 (dBW/4 kHz) | m -131.0 dBW/4 kHz 0.0025% | -154.0 dBW/4 kHz | Transmit 6.1 GHz | 3.66 m / 12.0 ft | 3.0 m / 9.8 ft | 66°37' 5.0" W | 17°59' 11.0" N | The Production Crew and Co. | PONCE, PR |
| : | | 0.0025% | 20% | • | | | | | ò | |

| 320 325 330 330 340 350 355 | 276 275 286 286 296 300 300 310 | 200 200 200 200 200 200 200 200 200 200 | Latitude (NAD 83) Longitude (NAD 83) Ground Elevation (AMSL) Antenna Centerline Antenna Mode Interference Objectives: L Max Available RF Power Horizon Azimuth (°) Elevation 190 0.00 195 0.00 |
|--|---|--|--|
| 1.23 1.45 1.69 1.74 1.75 1.72 2.07 | 0.88 1.07 1.47 1.66 1.63 1.33 1.33 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | Latitude (NAD 83) Longitude (NAD 83) Ground Elevation (AMSL) Antenna Centerline (AGL) Anterna Mode Interference Objectives: Long Term Short Term Max Available RF Power Azimuth (°) Elevation (°) 190 0.00 195 0.00 195 0.00 |
| 80.36 83.75 87.19 90.67 94.15 97.61 101.11 104.46 | 51.94 53.84 55.87 58.17 61.09 64.03 67.08 70.39 73.57 | 50.99 58.41 56.02 51.98 50.39 49.13 47.72 47.72 47.87 48.53 49.15 | |
| -10.00 -10.00 -10.00 -10.00 -10.00 -10.00 | -10.00 -10.00 -10.00 -10.00 -10.00 | -10.00 -10.00 -10.00 -10.00 -10.00 -10.00 -10.00 -10.00 -10.00 | loriz |
| 100.00 100.00 100.00 100.00 100.00 100.00 | 111.49 100.00 100.00 100.00 100.00 100.00 100.00 | 225.03 225.03 225.03 225.03 225.03 225.03 225.03 225.27 225.27 225.46 225.03 225.03 166.76 137.18 | 0% 1.0025% Transmit 6.1 GHz Coordination (dBi) Distance (km) (dBi) Distance (km) 00 225.03 |
| | | R ₁ | |

COMSEARCH

Earth Station Data Sheet

(703)-726-5500 Fax: (703)-726-5600 http://www.comsearch.com 19700 Janelia Farm Boulevard, Ashburn, VA 20147

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.

02/26/2013. Verbal and written coordination data for this earth station was conducted with the below listed carriers on

<u>Company</u> ALL AMERICAN CABLE AND RADIO INC AT&T COMMUNICATIONS OF VIRGIN ISLANDS

AT&T Mobility Puerto Rico
AT&T Mobility Virgin Islands, Inc.

Ackley Caribbean Enterprises, Inc.
Aeronet Wireless Broadband Corp.
CROWN CASTLE INT CORP DE PUERTO RICO

Choice Communications, LLC

Critical Hub Networks, Inc.

EVERTEC, INC

INTERISLAND TELEPHONE CORPORATION Iniciativa Tecnologica Centro Oriental **Federal Communications Commission**

Interference Office, Arecibo Observatory

Neptuno Media

PRWireless, Inc.

PUERTO RICO HIGHWAY AUTHORITY

Puerto Rico Commonwealth of State Police
Puerto Rico Electric Power Authority
Puerto Rico Telephone Company

Sprint PCS

Sprintcom, Inc
Sprintcom, Inc. Puerto Rico
System Development Integration, LLC
T-Mobile Puerto Rico LLC
UNIVERSITY OF THE VIRGIN ISLANDS

Virgin Islands Telephone Corporation

Analysis of Non-Ionizing Radiation for a Station System 2.4-Meter Earth

analysis described in this report is to determine the power flux density levels of the earth station in compare these levels to the specified MPEs. surface, at the main reflector surface, and between the antenna edge and the ground and to the far-field, near-field, transition region, between the subreflector or feed and main reflector transmit frequency and is for an exposure period of six minutes or less. The purpose of the status of the individuals who are subject to the exposure. The Maximum Permissible Exposure exposure limits that are dependant on the situation in which the exposure takes place and/or the exposure period of thirty minutes or less. The MPE limits for persons in an Occupational/Controlled environment are shown in Table 2. The Occupational MPE is a function of (MPE) limits for persons in a General Population/Uncontrolled environment are shown in Table 1. analysis and calculations performed in this report comply with the methods described in the FCC The General Population/Uncontrolled MPE is a function of transmit frequency and is for an in Edition 97-01. The radiation safety limits used in the analysis are in conformance with the FCC R&O 96-326. Bulletin No. 65 and the FCC R&O specifies that there are two separate tiers of Office of Engineering and Technology Bulletin, No. 65 first published in 1985 and revised in 1997 This report analyzes the non-ionizing radiation levels for a 2.4-meter earth station system.

Table 1. Limits for General Population/Uncontrolled Exposure (MPE)

| 1.0 | 1500-100,000 |
|-------------------------------------|-----------------------|
| Frequency (MHz)*(0.8/1200) | 300-1500 |
| 0.2 | 30-300 |
| Power Density (mW/cm ²) | Frequency Range (MHz) |

Table 2. Limits for Occupational/Controlled Exposure (MPE)

| 5.0 | 1500-100,000 |
|----------------------------|-----------------------|
| Frequency (MHz)*(4.0/1200) | 300-1500 |
| 1.0 | 30-300 |
| Power Density (mW/cm²) | Frequency Range (MHz) |
| | |

Table 3. Formulas and Parameters Used for Determining Power Flux Densities

| Parameter | Symbol | Formula | Value | Units |
|-----------------------|-----------------|-----------------------------------|-----------|-----------------|
| Antenna Diameter | D | Input | 2.4 | 3 |
| Antenna Surface Area | Asurface | $\pi D^2 / 4$ | 4.52 | m ² |
| Feed Flange Diameter | D _{fa} | Input | 9.1 | CM |
| Area of Feed Flange | A_{fa} | π D _{fa} ² /4 | 65.04 | cm ² |
| Frequency | П | Input | 6175 | MHz |
| Wavelength | λ | 300 / F | 0.048583 | В |
| Transmit Power | Р | Input | 350.00 | 8 |
| Antenna Gain (dBi) | Ges | Input | 42.0 | dBi |
| Antenna Gain (factor) | G | 10 ^{Ges/10} | 15848.9 | n/a |
| Pi | π | Constant | 3.1415927 | n/a |
| Antenna Efficiency | η | $Gλ^2/(π^2D^2)$ | 0.66 | n/a |
| | | | | |

1. Far Field Distance Calculation

The distance to the beginning of the far field can be determined from the following equation:

$$R_{\rm ff} = 0.60 \, D^2 / \lambda$$
 (1)
= 71.1 m

equation: The maximum main beam power density in the far field can be determined from the following

$$_{\rm ff} = {\rm G P / (4 \pi R_{\rm ff}^{-2})}$$
= 87.233 W/m²
= 8.723 mW/cm²

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Near Field Calculation

antenna decreases linearly with respect to increasing distance. defined Near Field region. diameter as the antenna. Past the boundary of the Near Field region, the power density from the Power flux density is considered to be at a maximum value throughout the entire length of the defined Near Field region. The region is contained within a cylindrical volume having the same

The distance to the end of the Near Field can be determined from the following equation:

$$R_{nf} = D^2 / (4 \lambda)$$
 (3)
= 29.6 m

The maximum power density in the Near Field can be determined from the following equation:

$$S_{nf} = 16.0 \text{ } \eta \text{ } P / (\pi \text{ } D^2)$$

= 203.639 W/m²
= 20.364 mW/cm²

3. Transition Region Calculation

calculated in Section 1 is the highest power density the antenna can produce in any of the regions away from the antenna. The power density at a distance R_t can be determined from the following the Transition region will not exceed that calculated for the Near Field region. The power density begins to decrease linearly with increasing distance in the Transition region. While the power density decreases inversely with distance in the Transition region, the power density decreases inversely with the square of the distance in the Far Field region. The maximum power density in equation: Transition region is located between the Near and Far Field regions. The power density

$$S_t = S_{nf} R_{nf} / R_t$$
 (5)
= 20.364 mW/cm²

4. Region between the Feed Assembly and the Antenna Reflector

surface. This can be determined from the following equation: confined within a conical shape defined by the type of feed assembly. The most common feed assemblies are waveguide flanges, horns or subreflectors. The energy between the feed assembly and reflector surface can be calculated by determining the power density at the feed assembly Transmissions from the feed assembly are directed toward the antenna reflector surface, and are

Power Density at the Feed Flange

=
$$4000 P / A_{fa}$$
 (6)
= $21525.605 \text{ mW/cm}^2$

 S_{fa}

5. Main Reflector Region

The power density in the main reflector is determined in the same manner as the power density at the feed assembly. The area is now the area of the reflector aperture and can be determined from the following equation:

Power Density at the Reflector Surface

$$S_{\text{surface}} = 4 \text{ P } / A_{\text{surface}}$$

= 309.468 W/m²
= 30.947 mW/cm²

တ Region between the Reflector and the Ground

the ground can be determined from the following equation: Assuming uniform illumination of the reflector surface, the power density between the antenna and

Power Density between Reflector and Ground

$$S_g = P / A_{surface}$$

= 77.367 W/m²
= 7.737 mW/cm²

8

.7 Summary of Calculations

Tahla 1 2

| רטנפוונומו רומצמוע | 1.101 | C | סי הכיאנינין ייפוופגינין מווע כווכמווע |
|--------------------|--------------------------------------|----------------------|---|
| Dotontial Llagard | 7 727 | n | 8 Between Reflector and Ground |
| Potential Hazard | _{se} 30.947 | S _{surface} | 5. Main Reflector |
| | | | Antenna Reflector |
| Potential Hazard | S _{fa} 21525.605 | S_{fa} | Between Feed Assembly and |
| Potential Hazard | 20.364 | င္ | 3. Transition Region (R _{nf} < R _t < R _{ff}) |
| Potential Hazard | 20.364 | S _{nf} | 2. Near Field (R _{nf} = 29.6 m) |
| Potential Hazard | 8.723 | S _{ff} | 1. Far Field (R _{ff} = 71.1 m) |
| Hazard Assessment | (mW/cm²) | n) | Region |
| | Radiation Power Density Level | Radiation Po | |
| | Calculated Maximum | Calcula | |
| Environment | els for Uncontrolled | Radiation lev | i able 4. Sufficially of Expected Radiation levels for Uncontrolled Environment |

Table 5. Summary of Expected Radiation levels for Controlled Environment

| The state of the s | | | |
|--|----------------------|---------------------------|--------------------------|
| | Calculate | Calculated Maximum | |
| | Radiation I | Radiation Power Density | |
| Region | Level | Level (mW/cm²) | Hazard Assessment |
| 1. Far Field (R _{ff} = 71.1 m) | S _{ff} | 8.723 | Potential Hazard |
| 2. Near Field (R _{nf} = 29.6 m) | S_{nf} | 20.364 | Potential Hazard |
| 3. Transition Region (R _{nf} < R _t < R _{ff}) | ၞ | 20.364 | Potential Hazard |
| 4. Between Feed Assembly and | Sta | S _{fa} 21525.605 | Potential Hazard |
| Antenna Reflector | | | |
| 5. Main Reflector | S _{surface} | 30.947 | Potential Hazard |
| Between Reflector and Ground | S_{g} | 7.737 | Potential Hazard |
| | | | |

exposed to harmful levels of radiation. It is the applicant's responsibility to ensure that the public and operational personnel are not

œ Conclusions

Based on this analysis it is concluded that the FCC RF Guidelines have been exceeded in the specific regions of Tables 4 and 5. The applicant proposes to comply with the Maximum Permissible Exposure (MPE) limits of 1 mW/cm2 for the Uncontrolled areas and the MPE limits of 5 mW/cm2 for the Controlled areas by one or more of the following methods:

Means of Compliance Uncontrolled Areas

The antenna will be located on top of a truck. The bottom lip of the dish will be 3.50 meters above ground level. The general public will not have access to areas within $\frac{1}{2}$ diameter from the edge of the antenna.

Since one diameter removed from the main beam of the antenna or ½ diameter removed from the edge of the antenna the RF levels are reduced by a factor of 100 or 20 dB. None of the areas exceeding the MPE levels will be accessible by the general public.

Radiation hazard signs will be posted while this earth station is in operation.

The applicant will ensure that no buildings or other obstacles will be in the areas that exceed the MPE levels.

Means of Compliance Controlled Areas

The earth station's operational personnel will not have access to the areas that exceed the MPE levels while the earth station is in operation.

The transmitters will be turned off during antenna maintenance.

Approved by OMB 3060-0678

Callsign/Satellite ID: File Number: Date & Time Filed:

APPLICATION FOR EARTH STATION AUTHORIZATIONS FOR OFFICIAL USE ONLY **FCC 312 MAIN FORM** FCC Use Only

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: .4 Meter Transportable

Country: Street: Name: City: DBA Name: Attention: 1-8. Legal Name of Applicant USA Mr FEDERICO E SAN JUAN **#169 DEL PARQUE ST** SUITE 201 The Production Crew and Phone Number: State: Zipcode: E-Mail: Number: 00911 -1967 PR FEDERICO.GOMEZ.HERNANDEZ@GMAIL.COM 787-977-7762 787-667-2214

9-16. Name of Contact Representative GOMEZ

Name: GOMEZ Mr FEDERICO Phone Number: 787-667-2214

Company: The Production Crew

and Co. Fax Number: 787-977-7762

SUITE 201

Street:

#169 DEL PARQUE ST

E-Mail:

FEDERICO.GOMEZ.HERNANDEZ@GMAIL.COM

City: Country: USA San Juan

Zipcode: 00911-1967

PR

Attention: Mr FEDERICO E GOMEZ Relationship: Other

CLASSIFICATION OF FILING

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

a1. Earth Station (N/A) a2. Space Station

© 2 b1. Application for License of New Station

O b2. Application for Registration of New Domestic Receive-Only Station (N/A) b3. Amendment to a Pending Application

(N/A) b4. Modification of License or Registration

(N/A) b5. Assignment of License or Registration

(N/A) b7. Notification of Minor Modification (N/A) b6. Transfer of Control of License or Registration

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 O b10. Other (Please specify) O 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? | cation? |
| ● If Yes, complete and attach FCC Form 159 | Form 159. |
| If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). | on (see 47 C.F.R.Section 1.1114). |
| O Other(please explain): | mercial educational licensee |
| 17d. | |
| Fee Classification BAX - Fixed | Fee Classification BAX - Fixed Satellite Transmit/Receive Earth Station |
| 18. If this filing is in reference to an existing station, enter: (a) Call sign of station: | 19. If this filing is an amendment to a pending application enter:(a) Date pending application was filed: (b) File number of pending application: |
| | Not Applicable Not Applicable |
| | TYPE OF SERVICE |
| 20. NATURE OF SERVICE: This filir all that apply: | 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 | |
| d. Earth Exploration Satellite | |

TYPE OF STATION

LcOther (Please specify upper and lower frequencies in MHz.)
Frequency Lower: Frequency Upper:

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

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

Connected to a Public Switched Network O Not connected to a Public Switched Network O N/A

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings.

Using U.S. licensed satellites

Using Non-U.S. licensed satellites

22. If earth station applicant, check all that apply

Choose one. Are these facilities:

status. Choose only one.

Common Carrier Non-Common Carrier

21. STATUS: Choose the button next to the applicable

f. Digital Audio Radio Service g. Other (please specify)

O d. Mobile Earth Station (N/A) e. Geostationary Space Station 25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one O c. 12/14 GHz VSAT Network b. Temporary-Fixed Earth Station • a. Fixed Earth Station

| | | | | | _ |
|--|---|--|-----------------------------|--|---|
| | | Ñ | | $\overline{}$ | - |
| TAID OUT OUT TO THE TAIL OUT T | ○ Transmit/Receive ● Transmit-Only ○ Receive-Only ○ N/A | 26. TYPE OF EARTH STATION FACILITY: Choose only one. | O g. Other (please specify) | (N/A) f. Non-Geostationary Space Station | |

PURPOSE OF MODIFICATION

Not Applicable 27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

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 0 Yes ⊗ No

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

| | 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. |
|------------------|--|
| O Yes O No O 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? |
| O Yes O No O 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? |
| O Yes @ No O N/A | 31. Is the applicant a corporation organized under the laws of any foreign government? |
| O yes O No O N/A | 30. Is the applicant an alien or the representative of an alien? |
| O Yes @ No | 29. Is the applicant a foreign government or the representative of any foreign government? |

BASIC QUALIFICATIONS

| 38. Has any the applica communica exclusive t | 37. Has the indirectly call of Yes, atta | 36. Has the authorization FCC station attach as an | 35. Does the If Yes, attandocuments. |
|--|---|--|---|
| 38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting 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 | 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. | 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 PCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances. | the Applicant request any waivers or exemptions from any of the Commission's Rules? The as an exhibit, copies of the requests for waivers or exceptions with supporting |
| Ο γes ⊗ No | O Yes ⊗ No | O yes @ No | O Yes @ No |
| | | | - |

| Individual Unincorporated Association Partnership Corporation | 44. Applicant is a (an): (Choose the button next to applicable response.) | 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. | CERTIFICATION | 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. | 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. | 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. | 43. Description. (Summarize the nature of the application and the services to be provided). for various clients throughout the Uninted States and its territories. | 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? | 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. | 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. | 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. | 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. | as an exhibit, an explanation of circumstances |
|--|---|--|---------------|--|--|---|--|--|---|--|--|--|--|
| | vie response.) | r frequency or of the electromagnetic spectrum as against the our use of the same, whether by license or otherwise, and on. The applicant certifies that grant of this application would negation limit in 47 CFR Part 20. All statements made in exhibits set out in full in this application. The undersigned, individually ade in this application and in all attached exhibits are true, debilef, and are made in good faith. | IFICATION | t is subject to the geographic service or Part 25 and will not comply with such or to do so, or that, while technically oc sin satellite design and operation as to and technical analysis demonstrating | t is subject to the geographic service or OB Part 25 and will comply with such | t is not subject to the geographic © A 47 C.F.R. Part 25. | and the services to be provided). Temporary fixed services and its territories. | of licensing the space station? If no license will be issued, wha dinating the space station? | satellite to provide service in the United \bigcirc Yes \bigcirc No the information specified in 47 C.F.R. | er applicant nor any other party to the ncludes FCC benefits pursuant to ction 862, because of a conviction for © Yes O No (7 CFR 1.2002(b) for the meaning of | pace station license, attach as an exhibit owning a record and/or voting 10 tages so held. In the case of fiduciary ies. Also list the names and addresses | ontrolling the applicant, currently a party \bigcirc Yes \circledcirc No ms? If yes, attach as an exhinit, an | |

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

FOR OFFICIAL USE ONLY

| • 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 | E20. FA Where I FCC Fo |
|---------------|--|--|
| O Yes ⊗ No | E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as | E19. Is the coun |
| O Yes ⊗ No | requency coordination required? If YES, attach a frequency coordination | E18. Is f report as |
| O Yes ⊗ No | E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point. | E17. Is th number o |
| OYes ONo ON/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? | E16. If th operate ir antenna(s demonstr |
| OYes ⊗No ON/A | 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. | E15. If th satellites, Section 2 NO, prov |
| | E14. Site Elevation (AMSL): 0.0 meters | E14. Site |
| ONAD-83 ON/A | E13. Lat/Lon Coordinates are: ONAD-27 | E13. Lat |
| | ngitude: 0 ° 0 ' 0.0 " | E12. Longitude: |
| | 0 ° 0 ' 0.0 " | E11. Latitude: |
| territories | E10. Area of Operation: United States and its territories | E10. Are |
| | Eo. County. E9. Zip Code | E4. State |
| | | E3. Street: |
| 7-667-2214 | E2: Contact Name FEDERICO E GOMEZ-HERNANDEZ E6. Phone Number: 787-667-2214 | E2: Con |
| - Charles | E1: Site Identifier: 2.4M E5. Call Sign: | E1: Site |
| | Location of Earth Station Site | Location |

structure to aviation?

FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.

POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT If you selected OTHER, please enter the E21. Common Name: following: E22. ITU Name:

E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E23. Orbit Location:

E25. Site Identifier: E26. Common Name: Country:

ANTENNA

| | T | 1100 | |
|---------|---|-------------------|--|
| 2.4 | E28. Antenn Id | 2.4M 2.4 | Site ID |
| 0 | <u> </u> | 2.4 | E28. Antenna Id |
| 0.0/0.0 | E33/34. Diameter Minor/Maj (meters) | | 8. inna |
| | or | 1 | E29. Quantity |
| 3 66 | E35. Above Ground Level (meters) | Prodelin | E30. Manufacturer |
| 0.0 | E36. Above Sea Leve (meters) | | 30. acturer |
| 0.0 |) head | 2.4M | E31. Model |
| | 9 | 2.4 | E32. Antenna Size |
| 2500 | E38. Total Input Power at antenna flange (Watts) | | |
| | | 42.0 dl | Gain1 |
| n n | E39. Maximum Antenna Height Above Rooftop (meters) | 42.0 dBi at 6.175 | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
| 7 7 7 | E40. Total EIRP for al carriers (dBW) | | ma or Recieve GHz) |

FREQUENCY

| E28. Antenna Id | E43/44. E45. Frequency T/R Bands(MHz) Mode | 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) |
|-----------------------|--|---------------------|--|--------------------------------|---|--|
| 2.4 | 5925 6425 | Ŧ | Right Hand Circular | 36M0G7W 67.4 | | 27.9 |
| E50. Modu | ılation and Serv | ices Dig | E50. Modulation and Services Digital Traffic Various FEC, data rates, modulation | us FEC, data ra | ites, modulation | |
| 2.4 | 5925 6425 | ⊢ | Horizontal and Vertical | 4M00G7W 57.9 | | 27.9 |
| E50. Modu | ulation and Serv | ices Dig | E50. Modulation and Services Digital Traffic Various FEC, data rates, modulation | us FEC, data ra | tes, modulation | The state of the s |

FREQUENCY COORDINATION

| 1 | 1 |
|------------------------------|--|
| 2.4 | E28. Antenna Id |
| Geostationary | a E51. Satellite Frequency Orbit Type Limits (MHz) |
| onary 5925 6425 0.0/ 0.0 0.0 | |
| 0.0/ 0.0 | E54/55. Range of Satellite Arc E/W Limit |
| 0.0 | E56. Earth Station Azimuth Angle Eastern Limit |
| 5.0 | E57. Antenna Elevation Angle Eastern Limit |
| 0.0 | E58. Earth Station Azimuth Angle Western Limit |
| 5.0, / | E59. Antenna Elevation Angle Western Limit |
| -14.0 | E60. Maximum EIRP Density toward the Horizon (dBW//4kHz) |

REMOTE CONTROL POINT LOCATION

REMOTE CONTROL POINT LOCATION

| The state of the s | | |
|--|--------------------------|------------------|
| E61. Call Sign | E65. Phone Number | |
| NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed. | | |
| E62. Street Address | | |
| E63. City E67. County | E64/68. State/Country | E66. Zip Code |
| | | |

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