

## Administrative Information

### Summary

<b>File Number:</b>	SES-LIC-20120513-00435	<b>Date Filed:</b>	5/13/12
<b>Call Sign:</b>	E120086		
<b>Status:</b>	Filed – awaiting fee verification	<b>Status Date:</b>	5/13/12
<b>Last Action:</b>		<b>Action Date:</b>	
<b>AFPN Date:</b>		<b>ATPN Date:</b>	
<b>Begin Date:</b>		<b>Expiration Date:</b>	
<b>Description</b>			

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Ku-band R/T Earth Station

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**Applicant/Licensee**

<b>FRN:</b>	0021762208	<b>Attn. Phone:</b> <b>NNN-NNN-NNNN xNNN</b>	334-303-1731 x
<b>Contact Name:</b>		<b>Attn. Fax:</b> <b>NNN-NNN-NNNN xNNN</b>	334-280-7894
<b>Company:</b>	GJ and Associates, LLC	<b>Attn. E-mail:</b>	mark@kayousystems.com
<b>Street 1:</b>	Southern Systems	<b>Attention:</b>	Mark Johnson
<b>Street 2:</b>	6188 Butler Mill Road		
<b>City, State, Zip:</b>	Montgomery, AL 36105- USA		
<b>Corp. Phone:</b>			
<b>Corp. Fax:</b>			
<b>Corp. E-mail:</b>			

**Contact**

**FRN:** 0021762208  
**Contact Name:** Mark Johnson  
**Company:**  
**Street 1:** Southern Systems  
**Street 2:** 6188 Butler Mill Road  
**City, State, Zip:** Montgomery, AL 36105- USA  
**Corp. Phone:**  
**Corp. Fax:**  
**Corp. E-mail:**

**Contact Attn.:** Mark Johnson  
**Contact Attn. Phone:** 334-303-1731 x  
**NNN-NNN-NNNN xNNN**  
**Contact Attn. Fax:** 334-280-7894  
**NNN-NNN-NNNN xNNN**  
**Contact Attn. E-mail:** mark@kayousystems.com

## Qualification Information

No.	Question	Answer
1.	Are you applying for a NEW earth station license or registration (i.e., one that has not been previously licensed or registered?)	Yes
2.	Will your proposed earth station be a fixed earth station or temporary-fixed earth station ( not part of a VSAT network) that will operate only in the Fixed Satellite Service?	FES
3.	Which band will your proposed earth station be operating in?	KUBAND
5.	Will you operate your proposed earth station ONLY with U.S.-licensed or Permitted List geostationary satellites (within the parameters specified on the Permitted List)?	Yes
6.	Does your proposed earth station and its operation conform to all technical, procedural, and operational requirements of the FCC Rules and Regulations (47 CFR) and therefore requires NO waivers or exemptions from any of the Commission's Rules?	Yes
7.	Does your proposed antenna(s) comply with the antenna gain standard specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurements?	Yes
8.	Does your proposed earth station operation conform with all routine power and power density rules contained in Sections 25.211 and 25.212?	Yes
9.	Can you certify that FAA notification is not required under 47 CFR Part 17 and 47 CFR Section 25.113(c)?	Yes
11.	Do you certify that Commission grant of any proposal in this application will NOT have a significant environmental impact as defined by 47 CFR Section 1.1307?	Yes
12.	Are you asking for a:	TR
13.	Has a Radiation Hazard Study (refer to OET bulletin 65) been completed and will this Radiation Hazard Study be attached as an exhibit to this application?	Yes
14.	Do you certify that you are not a foreign government or a representative of a foreign government?	Yes
15.	Do you certify that you are not an alien, or the representative of an alien?	Yes
16.	Do you certify that you are not a corporation organized under the laws of any foreign government?	Yes
17.	Do you certify that you are not 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
18.	Do you certify that you are not 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
19.	Do you certify that the applicant or any party to this application has NOT 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?	Yes

20. Do you certify that neither you nor any party to this application, nor any party directly or indirectly controlling your company, has EVER been convicted of a felony by any state or federal court? Yes
21. Do you certify that NO court has 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? Yes
22. Do you certify that neither you nor any person directly or indirectly controlling the applicant, is currently a party in any pending matter referred to in the preceding two items? Yes
23. Does the undersigned certify that neither the 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 Section 1.2002(b) for the meaning 'party to the application' for these purposes. Yes

## Station Information

<b>Call Sign</b>	E120086
<b>Nature of Service</b>	Fixed Satellite Service
<b>Status</b>	Non-Common Carrier
<b>Satellite Orbit Type</b>	GSO
<b>Class of Earth Station</b>	Fixed Earth Station
<b>Filing Classification</b>	Application for License of New Station
<b>Satellite Name</b>	PERMITTED LIST
<b>Frequency Band(s)</b>	KU Band
<b>Type of Earth Station Facility</b>	Transmit/Receive
<b>PN Description</b>	

A fixed Ku-band earth station will be utilized to provide satellite distribution of audio and data content to regional downlinks in the US. Domestic Ku-band (ALSAT) satellites will be used for these services.

## Site Information

**Site ID:** One      **Contact Name:** Mark Johnson      **Contact Phone:**  
NNN-NNN-NNNN xNNN

703-370-5090

**Area of Operation:** VIRGINIA  
**Street 1:** 13209 Pressmont Lane      **State:** VIRGINIA  
**Street 2:**      **City:** Fairfax  
**County:** Fairfax      **Zip Code:** 22033

	<b>Deg.</b>	<b>Min.</b>	<b>Sec.</b>	<b>Hem.</b>	<b>NAD Indicator:</b>
<b>Latitude:</b>	38	52	31.7	N	NAD 83
<b>Longitude:</b>	77	24	5.0	W	

**Elevation (meters):** 111.86

## Antenna Information

<b>Site ID</b>	<b>Antenna ID</b>	<b>ASR No</b>
One	One	
<b>Quantity</b>	<b>Manufacturer</b>	<b>Model</b>
1	Andrew	Type 183
<b>Max Antenna Hgt AGL (m)</b>	<b>Max Antenna Hgt AMSL (m)</b>	<b>Structure Hgt AGL (m)</b>
2.0	113.9	0.0
<b>Total Input Pwr at Antenna Flange (W)</b>		<b>Total EIRP – All Carriers (dBW)</b>
4.0		52.82

<b>T/R Mode</b>	<b>Antenna Gain</b>	<b>dBi at GHZ</b>
T	46.8	14.3
<b>T/R Mode</b>	<b>Antenna Gain</b>	<b>dBi at GHZ</b>
R	45.3	12.0



## Frequency Information

<p><b>Select</b></p> <p><input type="checkbox"/> <b>Antenna ID</b></p> <p>One</p> <p><b>Freq Lower (MHz/GHz)</b></p> <p>14000</p> <p><b>Emission Designator</b></p> <p>230KG7W</p> <p><b>Antenna Polarization</b></p> <p>(H/V)Horizontal and Vertical</p>	<p><b>T/R Mode</b></p> <p>T</p> <p><b>Freq Upper (MHz/GHz)</b></p> <p>14500</p> <p><b>Describe Modulation &amp; Services</b></p> <p>Digitally encoded audio and data, QPSK, 1/2 FEC</p> <p><b>Max EIRP per Carrier (dBW)</b></p> <p>46.8</p> <p><b>Max EIRP Density per Carrier (dBW/4kHz)</b></p> <p>29.2</p>	<p><b>Freq Unit</b></p> <p>MHz</p>
<p><b>Select</b></p> <p><input type="checkbox"/> <b>Antenna ID</b></p> <p>One</p> <p><b>Freq Lower (MHz/GHz)</b></p> <p>11700</p> <p><b>Emission Designator</b></p> <p>230KG7W</p> <p><b>Antenna Polarization</b></p> <p>(H/V)Horizontal and Vertical</p>	<p><b>T/R Mode</b></p> <p>R</p> <p><b>Freq Upper (MHz/GHz)</b></p> <p>12200</p> <p><b>Describe Modulation &amp; Services</b></p> <p>Digitally encoded audio and data, QPSK, 1/2 FEC</p> <p><b>Max EIRP per Carrier (dBW)</b></p>	<p><b>Freq Unit</b></p> <p>MHz</p> <p><b>Max EIRP Density per Carrier (dBW/4kHz)</b></p>

## Frequency Coordination Information

<input type="checkbox"/>	<b>Select</b>	<b>Antenna ID</b>	<b>Trans/Rec Mode</b>	<b>Lower Freq Limit (MHz)</b>	<b>Upper Freq Limit (MHz)</b>
		One	Transmit	14000	14500
		<b>Satellite Arc East Limit (Deg)</b>		<b>Satellite Arc West Limit (Deg)</b>	
		37.5	W	129.0	W
		<b>Ant Elev Angle E (Deg)</b>	<b>Azimuth Angle E (Deg)</b>	<b>Ant Elev Angle W (Deg)</b>	<b>Azimuth Angle W (Deg)</b>
		29.1	126.9	20.8	243.6
		<b>Max EIRP Density to Horizon (dBW/4KHz)</b>			
		-22.4			
<input type="checkbox"/>	<b>Select</b>	<b>Antenna ID</b>	<b>Trans/Rec Mode</b>	<b>Lower Freq Limit (MHz)</b>	<b>Upper Freq Limit (MHz)</b>
		One	Receive	11700	12200
		<b>Satellite Arc East Limit (Deg)</b>		<b>Satellite Arc West Limit (Deg)</b>	
		37.5	W	129.0	W
		<b>Ant Elev Angle E (Deg)</b>	<b>Azimuth Angle E (Deg)</b>	<b>Ant Elev Angle W (Deg)</b>	<b>Azimuth Angle W (Deg)</b>
		29.1	126.9	20.8	243.6
		<b>Max EIRP Density to Horizon (dBW/4KHz)</b>			

## Points of Communication Information

Select Site Id

Point of Communication

One

PERMITTED LIST

## Certification Information

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.

### Type of Applicant

Other

### Applicant Other Text

Limited Liability Company (LLC)  
If other, describe the type of applicant.

### Signer Name

Mark Johnson

### Signer Title

Director of Technology

### Signature

### Date Signed (XX/XX/XXXX)

05/13/2012

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## Attachment Information

Select	Attachment Type	File Name	Date Uploaded
<input type="checkbox"/>	Radiation Hazard Study	RadHaz.pdf	05/13/2012

