Approved by OMB
3060−0678

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Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS 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:
Heartland Satellite Registration

1−8. Legal Name of Applicant

Name:	Heartland Tower Inc.	**Phone Number:**	785−266−3999
DBA Name:		**Fax Number:**	
Street:	PO Box 130	**E−Mail:**	fcc@heartlandtower.com
City:	Auburn	**State:**	KS
Country:	USA	**Zipcode:**	66402 −0130
Attention:	Mr Robert C Nall		

9−16. Name of Contact Representative

Name:	Heartland Tower Inc.	**Phone Number:**	785−266−3999
Company:		**Fax Number:**	
Street:	PO Box 130	**E−Mail:**	fcc@heartlandtower.com
City:	Auburn	**State:**	KS
Country:	USA	**Zipcode:**	66402−0130
Attention:	Mr Robert C Nall	**Relationship:**	Engineer

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. a. ◉ a1. Earth Station (N/A) a2. Space Station	b. ○ b1. Application for License of New Station ◉ 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) b6. Transfer of Control of License or Registration (N/A) 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 ○ b10. Other (Please specify) ○ 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. ○ b12. Application for Database Entry (N/A) b13. Amendment to a Pending Database Entry Application (N/A) b14. Modifiction of Database Entry
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 BGV − Fixed Satellite VSAT System	

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

○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Robstown	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	35.6	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Newcastle	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	6801 N. US 62 Highway	E7. City:	Newcastle
		E8. County:	McClain
E4. State	OK	E9. Zip Code	73065

E10. Area of Operation: Continental United States

E11. Latitude: 35 °12 ’6.61 "N

E12. Longitude: 97 °36 ’2.14 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 414.3 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

○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Newcastle	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	420.3	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Ransom	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	841 yds SE of K−4 Hwy & 533 Rd.	E7. City:	Ransom
		E8. County:	Ness
E4. State	KS	E9. Zip Code	67572

E10. Area of Operation: Continental United States

E11. Latitude: 38 °37 ’52.9 "N

E12. Longitude: 99 °59 ’22.6 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 770.4 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	○ 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:PERMITTED LIST | | 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: Ransom	
E26. Common Name:	E27. Country:USA

ANTENNA

Site ID	**E28. Antenna Id**	**E29. Quantity**	**E30. Manufacturer**	**E31. Model**	**E32. Antenna Size<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Ransom	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	776.4	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W 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)
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign

NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.

E65. Phone Number

E62. Street Address

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	St. Marys	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	27240 Diamond Rd.	E7. City:	St. Marys
		E8. County:	Pottawatomie
E4. State	KS	E9. Zip Code	66536

E10. Area of Operation: Continental United States

E11. Latitude: 39 °15 ’35.9 "N

E12. Longitude: 96 °4 ’52.9 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 383.5 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
St. Marys	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	389.5	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign

NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.

E65. Phone Number

E62. Street Address

E63. City

E67. County

E64/68. State/Country /

E66. Zip Code

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:	Table Mound	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	4862 Table Mound Rd.	E7. City:	Independence
		E8. County:	Montgomery
E4. State	KS	E9. Zip Code	67301

E10. Area of Operation: Continental United States

E11. Latitude: 37 °15 ’42.2 "N

E12. Longitude: 95 °46 ’2.9 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 295.7 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Table Mound	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	301.7	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

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

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:	TopekaSE	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	4316 SE Oakview Ln	E7. City:	Topeka
		E8. County:	Shawnee
E4. State	KS	E9. Zip Code	66609

E10. Area of Operation: Continental United States

E11. Latitude: 38 °59 ’22.4 "N

E12. Longitude: 95 °40 ’27.1 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 311.6 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
TopekaSE	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	317.6	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Tribune	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	1441 yds W. of K96 & Astor Rd. S. Side.	E7. City:	Tribune
		E8. County:	Greeley
E4. State	KS	E9. Zip Code	67879

E10. Area of Operation: Continental United States

E11. Latitude: 38 °27 ’55.0 "N

E12. Longitude: 101 °54 ’56.5 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 1150.0 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Tribune	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	1156.0	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Walnut	E5. Call Sign:			
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999		
E3. Street:	1497 W. 710 Ave.	E7. City:	Walnut		
		E8. County:	Crawford		
E4. State	KS	E9. Zip Code	66780		
E10. Area of Operation:		Continental United States			
E11. Latitude:	37 °38 ’42.0 "N				
E12. Longitude:	95 °5 ’15.0 "W				
E13. Lat/Lon Coordinates are:		○ NAD−27	◉ NAD−83	○ N/A	
E14. Site Elevation (AMSL):		317.0 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Walnut	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	323.0	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Belton	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	401 S. Mullen Rd.	E7. City:	Belton
		E8. County:	Cass
E4. State	MO	E9. Zip Code	64012

E10. Area of Operation: Continental United States

E11. Latitude: 38 °48 ’28.19 "N

E12. Longitude: 94 °30 ’41.33 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 338.1 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

○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Belton	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	344.1	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Carthage	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	1253 W. Mound	E7. City:	Carthage
		E8. County:	Jasper
E4. State	MO	E9. Zip Code	64836

E10. Area of Operation: Continental United States

E11. Latitude: 37 °10 ’52.2 "N

E12. Longitude: 94 °19 ’35.4 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 290.7 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

○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Carthage	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	296.7	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Marshall	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	.5 mil N. on CR−103 from Hwy 240	E7. City:	Marshall
		E8. County:	Saline
E4. State	MO	E9. Zip Code	65340

E10. Area of Operation: Continental United States

E11. Latitude: 39 °8 ’19.5 "N

E12. Longitude: 93 °11 ’37.8 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 231.6 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	○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Marshall	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	237.6	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Columbus	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	1 mi E Hwy 64 fr Hwy 81 then S 2 mi	E7. City:	Columbus
		E8. County:	Butler
E4. State	NE	E9. Zip Code	68658

E10. Area of Operation: Continental United States

E11. Latitude: 41 °18 ’21.0 "N

E12. Longitude: 97 °20 ’57.0 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 505.4 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Columbus	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	511.4	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

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FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Humboldt	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	63211 718th Rd.	E7. City:	Humboldt
		E8. County:	Richardson
E4. State	NE	E9. Zip Code	68376

E10. Area of Operation: Continental United States

E11. Latitude: 40 °13 ’55.0 "N

E12. Longitude: 95 °58 ’18.0 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 358.7 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Humboldt	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	364.7	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

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FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Winslow	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	26677 CO Rd. 10	E7. City:	Winslow
		E8. County:	Washington
E4. State	NE	E9. Zip Code	68044

E10. Area of Operation: Continental United States

E11. Latitude: 41 °37 ’30.2 "N

E12. Longitude: 96 °25 ’7.5 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 417.7 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	○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Winslow	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	423.7	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

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FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Ketchum	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	3 mi N of Ketchum on 4480 Rd.	E7. City:	Ketchum
		E8. County:	Craig
E4. State	OK	E9. Zip Code	74301

E10. Area of Operation: Continental United States

E11. Latitude: 36 °34 ’2.0 "N

E12. Longitude: 95 °1 ’24.0 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 293.5 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

○ 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?

○ Yes ◉ No

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

POINTS OF COMMUNICATION

Satellite Name: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Ketchum	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	299.5	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Canton	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	29120 Hwy 11	E7. City:	Canton
		E8. County:	Lincoln
E4. State	SD	E9. Zip Code	57034

E10. Area of Operation: Continental United States

E11. Latitude: 43 °10 ’2.5 "N

E12. Longitude: 96 °37 ’40.1 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 480.2 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Canton	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	486.2	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

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

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:	Kismet	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	RR #1 Box 73	E7. City:	Kismet
		E8. County:	Seward
E4. State	KS	E9. Zip Code	67859

E10. Area of Operation: Continental United States

E11. Latitude: 37 °15 ’28.1 "N

E12. Longitude: 100 °47 ’50.1 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 854.3 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	○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Kismet	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	860.3	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Liberal	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	4.8 km NE of 6−points intersection	E7. City:	Liberal
		E8. County:	Seward
E4. State	KS	E9. Zip Code	67901

E10. Area of Operation: Continental United States

E11. Latitude: 37 °3 ’11.5 "N

E12. Longitude: 100 °51 ’17.0 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 849.1 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	○ 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: 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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Liberal	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	855.1	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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:	Plains	E5. Call Sign:	
E2: Contact Name	Robert Nall	E6. Phone Number:	785−266−3999
E3. Street:	Between Plains & Meade	E7. City:	Plains
		E8. County:	Meade
E4. State	KS	E9. Zip Code	67869

E10. Area of Operation: Continental United States

E11. Latitude: 37 °17 ’11.0 "N

E12. Longitude: 100 °29 ’58.0 "W

E13. Lat/Lon Coordinates are: ○ NAD−27 ◉ NAD−83 ○ N/A

E14. Site Elevation (AMSL): 829.7 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	○ 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:	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<meters>**	**E41/42. Antenna GainTransmint and/or Recieve (____dBi at _____GHz)**
Plains	ANT1	1	ASC Signal	ES45P−1	4.5	42.9 dBi at 4.0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level (meters)**	**E36. Above Sea Level (meters)**	**E37. Building Height Above Ground Level (meters)**	**E38. Total Input Power at antenna flange (Watts)**	**E39. Maximum Antenna Height Above Rooftop (meters)**	**E40. Total EIRP for al carriers (dBW)**
ANT1	4.5/4.5	6.0	835.7	0.0	0.0	0.0	0.0

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)**
ANT1	3700 4200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Video

FREQUENCY COORDINATION

E28. Antenna Id	**E51. Satellite Orbit Type**	**E52/53. Frequency Limits(MHz)**	**E54/55. Range of Satellite Arc E/W 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)**
ANT1	Geostationary	3700 4200	60.0/ 143.0	154.0	41.6	254.4	9.9	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number
E62. Street Address	

E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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