Date & Time Filed: Nov 24 2020 8:18:31:116PM File Number: SES-LIC-INTR2020-03587

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:

DataPath DKET 3420 (Ku Conversion Kit)

| 1–8. Legal Name of A | pplicant | | |
|----------------------|--|---------------|-----------------------|
| Name: | General Atomics Aeronautical Systems, Inc. | Phone Number: | 858-879-5167 |
| DBA Name: | | Fax Number: | 858-312-2920 |
| Street: | 14200 Kirkham Way | E–Mail: | erica.emel@ga-asi.com |
| City: | Poway | State: | CA |
| Country: | USA | Zipcode: | 92064 – |
| Attention | : Erica Emel | | |

9–16. Name of Contact Representative

Name: General Atomics Aeronautical **Phone Number:** 858–879–5167

Systems, Inc.

Company: Fax Number: 858–312–2920

Street: 14200 Kirkham Way E–Mail: erica.emel@ga–asi.com

City: Poway State: CA

Country: USA Zipcode: 92064–

Attention: Relationship:

CLASSIFICATION OF FILING

| 17. Choose the button next to the | b. |
|--|--|
| classification that applies to this filing for | b1. Application for License of New Station |
| both questions a. and b. Choose only one | b2. Application for Registration of New Domestic Receive-Only Station |
| for 17a and only one for 17b. | (N/A) b3. Amendment to a Pending Application |
| | (N/A) b4. Modification of License or Registration |
| a. | (N/A) b5. Assignment of License or Registration |
| a1. Earth Station | (N/A) b6. Transfer of Control of License or Registration |
| (N/A) a2. Space Station | (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 |
| 17. In a few submitted with this application | 1 |

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 BAX – Fixed Satellite Transmit/Receive Earth Station

18. If this filing is in reference to an 19. If this filing is an amendment to a pending application enter: existing station, enter: (a) Date pending application was filed: (b) File number of pending application: (a) Call sign of station: Not Applicable Not Applicable Not Applicable

| TYPE OF SERVICE | |
|--|---|
| 20. NATURE OF SERVICE: This filing is for an authorization to provid | e or use the following type(s) of service(s): Select all that apply: |
| a. Fixed Satellite b. Mobile Satellite c. Radiodetermination Satellite d. Earth Exploration Satellite e. Direct to Home Fixed Satellite f. Digital Audio Radio Service g. Other (please specify) | |
| 21. STATUS: Choose the button next to the applicable status. Choose only one. Common Carrier Non–Common Carrier | 22. If earth station applicant, check all that apply. Using U.S. licensed satellites Using Non–U.S. licensed satellites |
| 23. If applicant is providing INTERNATIONAL COMMON CARRIER of facilities: Connected to a Public Switched Network Not connected to a Public Switched Network Network Not connected to a Public Switched Network N | service, see instructions regarding Sec. 214 filings. Choose one. Are these blic Switched Network N/A |
| 24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all a a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz) c.Other (Please specify upper and lower frequencies in MHz.) Frequency Lower: Frequency Upper: | pplicable frequency band(s). |

TYPE OF STATION

- 25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
 - a. Fixed Earth Station
 - b. Temporary-Fixed Earth Station
 - c. 12/14 GHz VSAT Network
 - d. Mobile Earth Station

(N/A) e. Geostationary Space Station

(N/A) f. Non-Geostationary Space Station

g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Choose only one.

Transmit/Receive Transmit-Only Receive-Only N/A

PURPOSE OF MODIFICATION

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

Not Applicable

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.

Yes No

radiation hazard rep

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

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

BASIC QUALIFICATIONS

| 35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents. | Yes | No |
|--|-----|----|
| 36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances. | Yes | No |
| 37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances. | Yes | No |
| 38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances | Yes | No |
| 39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances. | Yes | No |

| 40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer. | | |
|--|-----------|----------------|
| 41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. | Yes | No |
| 42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43. | Yes | No |
| 42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, where the coordinated or is in the process of coordinating the space station? Datapath, Inc. | nat admin | nistration has |

43. Description. (Summarize the nature of the application and the services to be provided).

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

Temporary fixed satellite earth stations used at General Atomics

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.

B

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.

C

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.

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

| 44. Applicant is a (an): (Choose the button next | t to applicable response.) |) | | |
|--|----------------------------|---|--|--|
| Individual Unincorporated Association Partnership Corporation Governmental Entity Other (please specify) | | | | |
| 45. Name of Person Signing Erica Emel | | 46. Title of Person Sig International Contract | | |
| 47. Please supply any need attachments. | | | | |
| Attachment 1: | Attachment 2: | | Attachment 3: | |
| (U.S. Code, Title 18, Se | ection 1001), AND/OR R | EVOCATION OF ANY | BY FINE AND / OR IMPRISONMENT STATION AUTHORIZATION ode, Title 47, Section 503). | |

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier: GB (04CA) E5. Call Sign:

E2: Contact Name Flightline E6. Phone 661–224–5960

Operations Number:

Manager

E3. Street: Gray Butte Airport E7. City: Palmdale

25500 East E8. County: Los Angeles

Avenue, R-8

E4. State CA E9. Zip Code 93591

E10. Area of Operation: Gray Butte Airfield, Palmdale CA

E11. Latitude: 34 °33 '59.84 "N

E12. Longitude: 114 °40 '48.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 923.0 meters

| E15. If the proposed antenna(s) operate in the Fixed Satellite Service (F proposed antenna(s) comply with the antenna gain patterns specified in by the manufacturer's qualification measurement? If NO, provide as a to two-degree spacing policy. | Section 25.209(a) and (b) as demonstrated | Yes | No | N/A |
|---|---|----------|----|-----|
| E16. If the proposed antenna(s) do not operate in the Fixed Satellite Se Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements? | posed antenna(s) comply with the antenna | Yes | No | N/A |
| E17. Is the facility operated by remote control? If YES, provide the local point. | tion and telephone number of the control | Yes | | No |
| E18. Is frequency coordination required? If YES, attach a frequency coordination | ordination report as | 1 | | |
| | | Yes | | No |
| E19. Is coordination with another country required? If YES, attach the recoordination contours as | name of the country(ies) and plot of | Yes | | No |
| E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(you attached a copy of a completed FCC Form 854 and or the FAA's stustructure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL REAPPLICATION. | dy regarding the potential hazard of the | Yes | | No |
| POINTS OF COMMUNICATION | | <u> </u> | | |
| 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: | |
|-----------------------|---------------|
| E26. Common Name: | E27. Country: |

ANTENNA

| Site ID | E28. Antenna Id | E29. Quantity | E30. Manufacturer | | Size <meters></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
|-----------|-----------------|---------------|----------------------|------------------------|------------------------|--|
| GB (04CA) | 2 | 1 | DataPath | DKET 3420 w/ Ku kit | 4.2 | 52.7 dBi at 11.95 |
| | | | | | | 54.6 dBi at 14.25 |

| Id | Diameter | Ground | (meters) | Height Above Ground Level | Input Power at antenna flange (Watts) | Maximum Antenna Height | E40. Total EIRP for al carriers (dBW) |
|----|----------|--------|----------|-------------------------------------|--|---------------------------|--|
| 2 | 4.2/4.2 | 2.4 | 925.4 | 0.0 | 200.0 | 0.0 | 77.6 |

FREQUENCY

| | E43/44. Frequency Bands (MHz) | E45. T/R Mode | | | E48. Maximum EIRP per Carrier (dBW) | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|---|-------------------------------------|---------------|----------------------------|---------|---|---|
| 2 | 11700 12200 | R | Horizontal and Vertical | 36M0G7D | -100.0 | -100.0 |

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.)

modulation

T Horizontal and Vertical

36M0G7D 71.6 45.8

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.)

phase modulation. service

FREQUENCY COORDINATION

| E28. Antenna Id | E51. Satellite Orbit Type | E52/53. Frequency Limits(MHz) | E54/55. Range of Satellite Arc E/W Limit | Station Azimuth Angle | 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) |
|--------------------|------------------------------|-------------------------------------|---|-----------------------------|--|---|---|--|
| 2 | Geostationary | 11700 12200 | 51.0/ 184.0 | 103.75 | 10.49 | 256.03 | 10.78 | -100.0 |
| | Geostationary | 14000 14500 | 51.0/ 184.0 | 103.75 | 10.49 | 256.03 | 10.78 | -11.8 |

REMOTE CONTROL POINT LOCATION

| E61. Call Sign | | E65. Phone Number | | |
|--|-------------|-------------------|--------------------------|---------------|
| NOTE: Please enter the callsign of the controcallsign 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: ELMO (99CL) E5. Call Sign:

E2: Contact Name Flightline E6. Phone 661–224–5960

Operations Number:

Manager

E3. Street: 73 El Mirage E7. City: Adelanto

Airport Rd

E8. County: San Bernardino

E4. State CA E9. Zip Code 92301

E10. Area of Operation: El Mirage Airfield

E11. Latitude: 34 °37 '24.0 "N

E12. Longitude: 117 °35 '59.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 873.0 meters

| E15. If the proposed antenna(s) operate in the Fixed Satellite Service (F proposed antenna(s) comply with the antenna gain patterns specified in by the manufacturer's qualification measurement? If NO, provide as a to two-degree spacing policy. | Section 25.209(a) and (b) as demonstrated | Yes | No | N/A |
|---|---|----------|----|-----|
| E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements? | posed antenna(s) comply with the antenna | Yes | No | N/A |
| E17. Is the facility operated by remote control? If YES, provide the local point. | Yes | | No | |
| | | | | |
| E18. Is frequency coordination required? If YES, attach a frequency coordination required? | rdination report as | Yes | | No |
| E19. Is coordination with another country required? If YES, attach the necoordination contours as | Yes | | No | |
| E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113() you attached a copy of a completed FCC Form 854 and or the FAA's stustructure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESAPPLICATION. | Yes | | No | |
| POINTS OF COMMUNICATION | | <u> </u> | | |
| Satellite Name:PERMITTED LIST If you selected OTHER, I | 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></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
|-------------|-----------------|---------------|----------------------|------------------------|--|--|
| ELMO (99CL) | 1 | 1 | DataPath | DKET 3420 w/ Ku kit | 4.2 | 52.7 dBi at 11.95 |
| | | | | | | 54.6 dBi at 14.25 |

| Id | Diameter | Ground | (meters) | Height Above Ground Level | Input Power at antenna flange (Watts) | Maximum Antenna Height | E40. Total EIRP for al carriers (dBW) |
|----|----------|--------|----------|-------------------------------------|--|---------------------------|--|
| 1 | 4.2/4.2 | 2.4 | 875.4 | 0.0 | 200.0 | 0.0 | 77.6 |

FREQUENCY

| E28. Antenna Id | E43/44. Frequency Bands (MHz) | E45. T/R Mode | | | E48. Maximum EIRP per Carrier (dBW) | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|-----------------|-------------------------------------|---------------|----------------------------|---------|---|---|
| 1 | 14000 14500 | Т | Horizontal and Vertical | 36M0G7D | 71.6 | 45.8 |

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.)

modulation

| 1 | 11700 | R | Horizontal and | 36M0G7D | -100.0 | -100.0 |
|---|-------|---|----------------|---------|--------|--------|
| | 12200 | | Vertical | | | |

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.)

phase modulation. service

FREQUENCY COORDINATION

| E28. Antenna Id | E51. Satellite Orbit Type | | E54/55. Range of Satellite Arc E/W Limit | Station Azimuth Angle | E57. Antenna Elevation Angle Eastern Limit | Station Azimuth Angle | E59. Antenna Elevation Angle Western Limit | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|--------------------|------------------------------|----------------|---|-----------------------------|--|-----------------------------|--|--|
| 1 | Geostationary | 11700 12200 | 51.0/ 184.0 | 103.81 | 10.54 | 256.06 | 10.71 | -100.0 |
| | Geostationary | 14000 14500 | 51.0/ 184.0 | 103.81 | 10.54 | 256.06 | 10.71 | -11.8 |

REMOTE CONTROL POINT LOCATION

| E61. Call Sign | | E65. Phone Number | | |
|---|-------------|-------------------|--------------------------|---------------|
| NOTE: Please enter the callsign of the contro 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: POWAY E5. Call Sign:

E2: Contact Name Flightline E6. Phone 661–224–5960

Operations Number:

Manager

E3. Street: 14040 Danielson St E7. City: Poway

E8. County: San Diego

E4. State CA E9. Zip Code 92064

E10. Area of Operation: General Atomics Poway campus

E11. Latitude: 32 °56 '28.7 "N

E12. Longitude: 117 °1 '36.6 "

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 157.0 meters

| 5. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the posed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with —degree spacing policy. | | | | N/A |
|---|--|-----|----|-----|
| E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements? | posed antenna(s) comply with the antenna | Yes | No | N/A |
| E17. Is the facility operated by remote control? If YES, provide the loca point. | Yes | | No | |
| | | | | |
| E18. Is frequency coordination required? If YES, attach a frequency coordination required? | rdination report as | Yes | | No |
| E19. Is coordination with another country required? If YES, attach the recoordination contours as | Yes | | No | |
| E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(you attached a copy of a completed FCC Form 854 and or the FAA's stustructure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESAPPLICATION. | Yes | | No | |
| POINTS OF COMMUNICATION | | | | |
| Satellite Name:PERMITTED LIST If you selected OTHER, | blease enter the following: | | | |
| E21. Common Name: | E22. ITU Name: | | | |
| E23. Orbit Location: | B. 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 | | E32. Antenna Size <meters></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
|---------|-----------------|---------------|----------------------|------------------------|--|--|
| POWAY | 3 | 1 | DataPath | DKET 3420 w/ Ku kit | 4.2 | 52.7 dBi at 11.95 |
| | | | | | | 54.6 dBi at 14.25 |

| Id | Diameter | Ground | (meters) | Height Above Ground Level | Input Power at antenna flange (Watts) | Maximum Antenna Height | E40. Total EIRP for al carriers (dBW) |
|----|----------|--------|----------|-------------------------------------|--|---------------------------|--|
| 3 | 4.2/4.2 | 2.4 | 159.4 | 0.0 | 200.0 | 0.0 | 77.6 |

FREQUENCY

| E28. Antenna Id | E43/44. Frequency Bands (MHz) | E45. T/R Mode | | | E48. Maximum EIRP per Carrier (dBW) | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|-----------------|-------------------------------------|---------------|----------------------------|---------|---|---|
| 3 | 11700 12200 | R | Horizontal and Vertical | 36M0G7D | -100.0 | -100.0 |

| modulation | | |
|---|---------------------|---------------------------|
| | | |
| 14000 T Horizontal and Vertical 36M0G7D | 71.6 | 45.8 |
| E50. Modulation and Services (If the complete description does not appear in this box, please gontirety.) modulation | o to the end of the | he form to view it in its |

FREQUENCY COORDINATION

| E28. Antenna Id | E51. Satellite Orbit Type | E52/53. Frequency Limits(MHz) | E54/55. Range of Satellite Arc E/W Limit | Station Azimuth Angle | E57. Antenna Elevation Angle Eastern Limit | E58. Earth Station Azimuth Angle Western Limit | Elevation | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|--------------------|------------------------------|-------------------------------------|---|-----------------------------|--|---|-----------|--|
| 3 | Geostationary | 11700 12200 | 50.0/ 184.0 | 102.98 | 10.58 | 256.98 | 10.63 | -100.0 |
| | Geostationary | 14000 14500 | 50.0/ 184.0 | 102.98 | 10.58 | 256.98 | 10.63 | -11.8 |

REMOTE CONTROL POINT LOCATION

| E61. Call Sign | | E65. Phone Number | | |
|---|-------------|-------------------|--------------------------|---------------|
| NOTE: Please enter the callsign of the contro 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: YPG (KLGF) E5. Call Sign:

E2: Contact Name Flightline E6. Phone 661–224–5960

Operations Number:

Manager

E3. Street: Laguna Army E7. City: Yuma

Airfield

E8. County: Yuma

E4. State AR E9. Zip Code 85365

E10. Area of Operation: Laguna Army Airfield

E11. Latitude: 32 °51 '36.0 "N

E12. Longitude: 114 °23 '48.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 131.9 meters

| E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FS proposed antenna(s) comply with the antenna gain patterns specified in S by the manufacturer's qualification measurement? If NO, provide as a te two–degree spacing policy. | Section 25.209(a) and (b) as demonstrated | Yes | No | N/A |
|--|---|-----|----|-----|
| E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the propagain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements? | posed antenna(s) comply with the antenna | Yes | No | N/A |
| E17. Is the facility operated by remote control? If YES, provide the local point. | ion and telephone number of the control | Yes | | No |
| | 11 | | | |
| E18. Is frequency coordination required? If YES, attach a frequency coordination required? | rdination report as | Yes | | No |
| E19. Is coordination with another country required? If YES, attach the nation contours as | ame of the country(ies) and plot of | Yes | | No |
| E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c) you attached a copy of a completed FCC Form 854 and or the FAA's sturstructure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESAPPLICATION. | dy regarding the potential hazard of the | 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 | Size <meters></meters> | E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz) |
|------------|-----------------|---------------|----------------------|------------------------|------------------------|--|
| YPG (KLGF) | 4 | 1 | DataPath | DKET 3420 w/ Ku kit | 4.2 | 52.7 dBi at 11.95 |
| | | | | | | 54.6 dBi at 14.25 |

| Id | Diameter | Ground | (meters) | Height Above Ground Level | Input Power at antenna flange (Watts) | Maximum Antenna Height | E40. Total EIRP for al carriers (dBW) |
|----|----------|--------|----------|-------------------------------------|--|---------------------------|--|
| 4 | 4.2/4.2 | 2.4 | 134.3 | 0.0 | 200.0 | 0.0 | 77.6 |

FREQUENCY

| E28. Antenna Id | E43/44. Frequency Bands (MHz) | E45. T/R Mode | | | E48. Maximum EIRP per Carrier (dBW) | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|-----------------|-------------------------------------|---------------|----------------------------|---------|---|---|
| 4 | 11700 12200 | R | Horizontal and Vertical | 36M0G7D | -100.0 | -100.0 |

| E50. Modulation entirety.) | and Services (If the | e complete description | on does not appear in | this box, please go t | to the end of the form | to view it in its |
|----------------------------|----------------------|------------------------|----------------------------|-----------------------|------------------------|-------------------|
| modulation | | | | | | |
| 1 | 14000 14500 | Т | Horizontal and Vertical | 36M0G7D | 71.6 | 45.8 |
| E50. Modulation entirety.) | | e complete description | on does not appear in | this box, please go t | o the end of the form | to view it in its |

FREQUENCY COORDINATION

| E28. Antenna Id | E51. Satellite Orbit Type | E52/53. Frequency Limits(MHz) | | Station Azimuth Angle | E57. Antenna Elevation Angle Eastern Limit | E58. Earth Station Azimuth Angle Western Limit | Elevation | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|--------------------|------------------------------|-------------------------------------|-------------|-----------------------------|--|---|-----------|---|
| 4 | Geostationary | 11700 12200 | 47.0/ 182.0 | 102.73 | 10.29 | 257.4 | 10.12 | -100.0 |
| | Geostationary | 14000 14500 | 47.0/ 182.0 | 102.73 | 10.29 | 257.4 | 10.12 | -11.8 |

REMOTE CONTROL POINT LOCATION

| E61. Call Sign | E65. Phone Number | | | | | | | | |
|---|-------------------|--|--------------------------|---------------|--|--|--|--|--|
| NOTE: Please enter the callsign of the contro 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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