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:	SAPA15KU	E5: Call Sign:	
E2: Contact Name:	Paul Watts	E6: Phone Number:	805-933-4055
E3: Street:	7676 PINE GROVE ROAD (14.2M.TIW)	E7: City:	SANTA PAULA
E4: State:	0f2d5cd7dbbd22008e0b75131f961907	E8: County:	VENTURA
		E9: Zip Code:	93061
E10: Area of Operation:	CONUS		
E11: Latitude:	34° 24' 6.96"		
E12: Longitude:	119° 4' 21.25"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	202.42		

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 a technical analysis showing compliance with two-degree spacing policy.	Yes
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(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	Yes
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	No

POINTS OF COMMUNICATION

Satellite Name: SES-11 (S2964)	
E21. Common Name: SES-11 (S2964)	E22. ITU Name: SES-11
E23. Orbit Location: 104.95 W.L	E24. Country:

Satellite Name: EUTELSAT 174A (S2610)	
E21. Common Name: EUTELSAT174A(S2610)	E22. ITU Name: EUTELSAT174A(S2610)
E23. Orbit Location: 174 E. L.	E24. Country:

Satellite Name: EUTELSAT 172B (S3021)	
E21. Common Name: EUTELSAT172B(S3021)	E22. ITU Name: US & F filings
E23. Orbit Location: 172 E.L.	E24. Country:

Satellite Name: PERMITTED LIST	
E21. Common Name: PERMITTED LIST	E22. ITU Name: PERMITTED LIST
E23. Orbit Location: GSO	E24. Country:

Satellite Name: Intelsat 30 (S2887)	
E21. Common Name: Intelsat 30 (S2887)	E22. ITU Name: INTELSAT 30
E23. Orbit Location: 95.05 W.L.	E24. Country: USA

ANTENNA

Site ID	**E28. Antenna Id**	**E29. Quantity**	**E30. Manufacturer**	**E31. Model**	**E32. Antenna Size (meters)**	**E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)**
SAPA15KU	SAPA15KU	1	TIW	14.2 M	14.2	undefined at 0

E28. Antenna Id	**E33/34. Diameter Minor/Major (meters)**	**E35. Above Ground Level**	**E36. Above Sea Level**	**E37. Building Height Above**	**E38. Total Input Power at**	**E39. Maximum Antenna Height**	**E40. Total EIRP for all**

		(meters)	(meters)	Ground Level (meters)	Antenna Flange (Watts)	Above Rooftop (meters)	carriers (dBW)
SAPA15KU	14.2/14.2	15.7	218.12	0	200	0	86

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)
SAPA15KU	13750 14500	T	null	56M0D1W	69.9	28.4

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13799 14500	T	null	72M0F7W	81.6	39

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13779 14500	T	null	72M0F1W	81.6	39

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	11450 12200	R	null	72M0F1W	0	0

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	32K0D1W	59.6	50.569

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	10950 12200	R	null	32K0F7W	0	0

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	56M0D1W	69.9	28.4

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	56M0D1W	69.9	28.4

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	32K0D1W	59.6	50.569

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	24M0G7W	80	42.2184875

E50. Modulation and Services

Digital Video

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)

SAPA15KU	13750 14500	T	null	32K0D1W	59.6	50.569

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	56M0D1W	69.9	28.4

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA15KU	13750 14500	T	null	56M0D1W	69.9	28.4

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz
SAPA15KU	Geostationary	13750 14500	46 / 168	99.75 / 260.15	5.24 / 5.36	27.6

SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13799

1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary11450
1220046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13779
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary10950
1220046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6SAPA15KUGeostationary13750
1450046 / 16899.75 / 260.155.24 / 5.3627.6

REMOTE CONTROL POINT LOCATION

E61. Call Sign: undefined		E65. Phone Number: undefined	
E62. Street Address: undefined			
E63. City: undefined	E67. County: undefined	E64/68. State/Country: undefined / undefined	E66. Zip Code: undefined

Location of Earth Station Site

E1: Site Identifier:	SAPA41KU	E5: Call Sign:	
E2: Contact Name:	PAUL WATTS	E6: Phone Number:	8059334055
E3: Street:	7676 PINE GROVE (7.3M GD7.3MKu)	E7: City:	SANTA PAULA
E4: State:	0f2d5cd7dbbd22008e0b75131f961907	E8: County:	VENTURA
		E9: Zip Code:	93060
E10: Area of Operation:	CONUS		
E11: Latitude:	34° 24' 9.59"		
E12: Longitude:	119° 4' 22.68"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	239.57		

If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with	Yes

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 a technical analysis showing compliance with two-degree spacing policy.	
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(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	No
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	No

POINTS OF COMMUNICATION

Satellite Name: EUTELSAT 172B (S3021)	
E21. Common Name: EUTELSAT172B(S3021)	E22. ITU Name: US & F filings
E23. Orbit Location: 172 E.L.	E24. Country:

Satellite Name: PERMITTED LIST	
E21. Common Name: PERMITTED LIST	E22. ITU Name: PERMITTED LIST
E23. Orbit Location: GSO	E24. Country:

Satellite Name: SES-11 (S2964)	
E21. Common Name: SES-11 (S2964)	E22. ITU Name: SES-11
E23. Orbit Location: 104.95 W.L	E24. Country:

Satellite Name: EUTELSAT 174A (S2610)	
E21. Common Name: EUTELSAT174A(S2610)	E22. ITU Name: EUTELSAT174A(S2610)
E23. Orbit Location: 174 E. L.	E24. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
SAPA41KU	SAPA41KU	1	GENERAL DYNAMICS	GD7.3MKU	7.3	undefined at 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 all carriers (dBW)
SAPA41KU	7.3/7.3	8.1	247.67	0	750	0	86.9

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)
SAPA41KU	11450 12200	R	null	72M0F7W	0	0

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA41KU	14000 14500	T	null	72M0F7W	86.7	44.147

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA41KU	10950 12200	R	null	72M0F1W	0	0

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz
SAPA41KU	Geostationary	14000 14500	57 / 170	106.67 / 258.94	14.3 / 7.01	14

SAPA41KUGeostationary10950
1220057 / 170106.67 / 258.9414.3 / 7.0114SAPA41KUGeostationary11450
1220057 / 170106.67 / 258.9414.3 / 7.0114

REMOTE CONTROL POINT LOCATION

E61. Call Sign:	E65. Phone Number:
undefined	undefined

E62. Street Address:

undefined

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

Location of Earth Station Site

E1: Site Identifier:	SAPA42KU	E5: Call Sign:	
E2: Contact Name:	PAUL WATTS	E6: Phone	8059334055

		Number:	
E3: Street:	7676 PINE GROVE ROAD (7.3M GD7.3MKu)	E7: City:	SANTA PAULA
E4: State:	0f2d5cd7dbbd22008e0b75131f961907	E8: County:	VENTURA
		E9: Zip Code:	93060
E10: Area of Operation:	CONUS		
E11: Latitude:	34° 24' 8.93"		
E12: Longitude:	119° 4' 22.92"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	238.35		

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 a technical analysis showing compliance with two-degree spacing policy.	N/A
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(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	No
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	No

POINTS OF COMMUNICATION

Satellite Name: EUTELSAT 172B (S3021)	
E21. Common Name: EUTELSAT172B(S3021)	E22. ITU Name: US & F filings
E23. Orbit Location: 172 E.L.	E24. Country:

Satellite Name: EUTELSAT 174A (S2610)

E21. Common Name: EUTELSAT174A(S2610)	E22. ITU Name: EUTELSAT174A(S2610)
E23. Orbit Location: 174 E. L.	E24. Country:

Satellite Name: PERMITTED LIST	
E21. Common Name: PERMITTED LIST	E22. ITU Name: PERMITTED LIST
E23. Orbit Location: GSO	E24. Country:

Satellite Name: SES-11 (S2964)	
E21. Common Name: SES-11 (S2964)	E22. ITU Name: SES-11
E23. Orbit Location: 104.95 W.L	E24. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
SAPA42KU	SAPA42KU	1	GENERAL DYNAMICS	GD7.3MKU	7.3	undefined at 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 all carriers (dBW)
SAPA42KU	7.3/7.3	8.1	246.45	0	750	0	86.9

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)
SAPA42KU	10950	R	null	72M0F7W	0	0

	12200					

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA42KU	11450 12200	R	null	72M0F7W	0	0

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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)
SAPA42KU	14000 14500	T	null	72M0D1W	86.7	44.147

E50. Modulation and Services

Digital Traffic Using Phase and Amplitud

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/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz
SAPA42KU	Geostationary	14000 14500	57 / 170	106.67 / 258.94	14.3 / 7.01	14

SAPA42KUGeostationary11450
1220057 / 170106.67 / 258.9414.3 / 7.0114SAPA42KUGeostationary10950
1220057 / 170106.67 / 258.9414.3 / 7.0114

REMOTE CONTROL POINT LOCATION

E61. Call Sign: undefined		E65. Phone Number: undefined	
E62. Street Address: undefined			
E63. City: undefined	E67. County: undefined	E64/68. State/Country: undefined / undefined	E66. Zip Code: undefined

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