

RADIO STATION AUTHORIZATION

Name: Intelsat License LLC Authorization Type: License Non Common Carrier

Grant date: 10/04/2017

Expiration Date: 10/0



Call Sign: E170121

Nature of Service: Earth Station Aboard Aircraft Nature of Service: Fixed Satellite Service

Class of Station: Blanket Earth Stations

A) Site Location(s)

| # | Site ID | Address | Latitude | Longitude | Elevation (Meters) | Special Prov NAD (Refer to Sect | |
|----|-------------------|------------------------------|---------------|---------------|-----------------------|------------------------------------|--|
| 1) | Rantec Remotes | 2875 Fork Creek Church Road | | | | NA | |
| | | .46 METER, (1000 UNITS) | | | | | |
| | | Ellenwood, GA 30294 | | | | | |
| | | Licensee certifies antenna(s |) comply with | gain patterns | specified in | Section 25.209 | |
| | | | | | | | |
| 2) | TECOM Remotes | 2875 Fork Creek Church Road | | | | NA | |
| | | .65 METER, (1000 UNITS) | | | | | |
| | | Ellenwood, GA 30294 | | | | | |
| | | Licensee certifies antenna(s |) comply with | gain patterns | specified in | Section 25.209 | |
| | | | | | | | |

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning October 4, 2017 (3 AM Eastern Standard Time) and ending October 4, 2032 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is October 4, 2018 (3 AM Eastern Standard Time). Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands. The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

| # | Frequency (MHz) | Polarizatio Code | | Tx/Rx Mode | Max EIRP /Carrier (dBW) | Max EIRP Density /Carrieř (dBW/4kHz) | Associated Antenna | Special Provisions (Refer to Section H) | Modulation/ Services | |
|-----------------|----------------------|---------------------|---------|---------------|----------------------------------|---|-----------------------|--|-------------------------|----------|
| 1)1 | 4000.0000-14500.0000 | H,V | 375KG7W | Tx | 30.60 | 11.70 | Rantec | | Digital Data | Services |
| 2) ₁ | 4000.0000-14500.0000 | H,V | 7M05G7W | Tx | 43.40 | 11.70 | Rantec | | Digital Data | Services |
| 3) ₁ | 4000.0000-14250.0000 | H,V | 375KG7W | Tx | 30.60 | 11.70 | Rantec | | Digital Data | Services |
| 4) l | 4000.0000-14250.0000 | H,V | 7M05G7W | Tx | 43.40 | 11.70 | Rantec | | Digital Data | Services |
| 5) ₁ | 2500.0000-12750.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |



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B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands. The General Provision 1900 applies to all transmitting frequency bands. For the text of these provisions, refer to Section H.

| For | the text of these provisions, refe | r to Section H | | | Max EIRP | Max EIRP Density | | Special Provisions | | |
|-----|------------------------------------|----------------------|---------------|---------------|-------------------|------------------------|-----------------------|-------------------------|-------------------------|----------|
| # | Frequency (MHz) | Polarization Code | n Emission | Tx/Rx Mode | /Carrier (dBW) | /Carrier (dBW/4kHz) | Associated Antenna | (Refer to Section H) | Modulation/ Services | |
| 6) | 12500.0000-12750.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 7) | 12500.0000-12750.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 8) | 12250.0000-12750.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 9) | 12250.0000-12750.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 10) | 12250.0000-12750.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 11) | 12200.0000-12250.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 12) | 12200.0000-12250.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 13) | 12200.0000-12250.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 14) | 11700.0000-12200.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 15) | 11700.0000-12200.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 16) | 11700.0000-12200.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 17) | 11700.0000-11950.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 18) | 11700.0000-11950.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 19) | 11700.0000-11950.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 20) | 11450.0000-11950.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 21) | 11450.0000-11950.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 22) | 11450.0000-11950.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 23) | 11450.0000-11700.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 24) | 11450.0000-11700.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 25) | 11450.0000-11700.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 26) | 10950.0000-11200.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 27) | 10950.0000-11200.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 28) | 10950.0000-11200.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | Rantec | | Digital Data | Services |
| 29) | 14000.0000-14500.0000 | H,V | 2M59G7W | Tx | 42.50 | 15.20 | TECOM | | Digital Data | Services |

FCC Form 488



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Grant date: 10/04/2017

Expiration Date:

File Number: SES-LIC-20170626-00682 10/04/2032

Call Sign: E170121

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands. The General Provision 1900 applies to all transmitting frequency bands. For the text of these provisions, refer to Section H.

| For | the text of these provisions, refe | er to Section H | Ι. | | Max | Max EIRP | | Special Provisions | | |
|-----|------------------------------------|---------------------|---------------|---------------|---------------------------|-----------------------------------|-----------------------|-------------------------|-------------------------|----------|
| # | Frequency (MHz) | Polarizatio Code | n Emission | Tx/Rx Mode | EIRP /Carrier (dBW) | Density /Carrier (dBW/4kHz) | Associated Antenna | (Refer to Section H) | Modulation/ Services | |
| 30) | 14000.0000-14500.0000 | H,V | 375KG7W | Tx | 34.10 | 15.20 | TECOM | | Digital Data | Services |
| 31) | 14000.0000-14250.0000 | H,V | 2M59G7W | Tx | 42.50 | 15.20 | TECOM | | Digital Data | Services |
| 32) | 14000.0000-14250.0000 | H,V | 375KG7W | Tx | 34.10 | 15.20 | TECOM | | Digital Data | Services |
| 33) | 12500.0000-12750.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 34) | 12500.0000-12750.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 35) | 12500.0000-12750.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 36) | 12250.0000-12750.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 37) | 12250.0000-12750.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 38) | 12250.0000-12750.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 39) | 12200.0000-12250.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 40) | 12200.0000-12250.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 41) | 12200.0000-12250.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 42) | 11700.0000-12200.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 43) | 11700.0000-12200.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 44) | 11700.0000-12200.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 45) | 11700.0000-11950.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 46) | 11700.0000-11950.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 47) | 11700.0000-11950.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 48) | 11450.0000-11950.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 49) | 11450.0000-11950.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 50) | 11450.0000-11950.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 51) | 11450.0000-11700.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 52) | 11450.0000-11700.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |
| 53) | 11450.0000~11700.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data | Services |



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Grant date: 10/04/2017

Expiration Date:

File Number: SES-LIC-20170626-00682 ate: 10/04/2032

Call Sign: E170121

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands. The General Provision 1900 applies to all transmitting frequency bands. For the text of these provisions, refer to Section H.

| For the | text of these provisions, ref Frequency (MHz) | Polarizati Code | | Tx/Rx Mode | Max EIRP /Carrier (dBW) | Max EIRP Density /Carrier (dBW/4kHz) | Associated Antenna | Special Provisions (Refer to Section H) | Modulation/ Services | |
|---------|---|--------------------|---------|---------------|----------------------------------|---|-----------------------|--|-------------------------|------|
| 54) 10 | 950.0000-11200.0000 | H,V | 18M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data Servi | .ces |
| 55)10 | 950.0000-11200.0000 | H,V | 1M20G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data Servi | ces |
| 56)10 | 950.0000-11200.0000 | H,V | 54M0G7W | Rx | 0.00 | 0.00 | TECOM | | Digital Data Servi | ces |

C) Frequency Coordination Limits

| # | Frequency Limits (MHz) | Satellite Arc (Deg. Long.) East West Limit Limit | Elevation (Degrees) East West Limit Limit | Azimuth (Degrees) East West Limit Limit | Max EIRP Density toward Horizon (dBW/4kHz) | Associated Antenna(s) |
|-----|---------------------------|---|--|--|---|--------------------------|
| 1) | 14000.0000-14500.0000 | 127.0W-127.0W | 05.0-05.0 | 000.0-360.0 | -11 | TECOM |
| 2) | 11700.0000-12200.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 3) | 14000.0000-14250.0000 | 55.5W-55.5W | 05.0-05.0 | 000.0-360.0 | - 7 | TECOM |
| 4) | 11700.0000-12200.0000 | 127.0W-127.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 5) | 14000.0000-14500.0000 | 166.0E-166.0E | 05.0-05.0 | 000.0-360.0 | - 6 | TECOM |
| 6) | 12250.0000-12750.0000 | 166.0E-166.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 7) | 14000.0000-14500.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | - 6 | TECOM |
| 8) | 10950.0000-11200.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 9) | 11450.0000-11700.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 10) | 10950.0000-11200.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 11) | 11450.0000-11700.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 12) | 11450.0000-11700.0000 | 55.5W-55.5W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 13) | 14000.0000-14500.0000 | 45.0W-45.0W | 05.0-05.0 | 000.0-360.0 | -11 | TECOM |
| 14) | 11450.0000-11950.0000 | 45.0W-45.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 15) | 14000.0000-14250.0000 | 58.0W-58.0W | 05.0-05.0 | 000.0-360.0 | -7.5 | TECOM |
| 16) | 11450.0000-11700.0000 | 58.0W-58.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 17) | 14000.0000-14500.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | - 6 | TECOM |
| 18) | 11450.0000-11700.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 19) | 12250.0000-12750.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 20) | 11700.0000-12200.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 21) | 14000.0000-14500.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | -3 | TECOM |
| 22) | 10950.0000-11200.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| | | | | | | |



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Expiration Date:

File Number: SES-LIC-20170626-00682 : 10/04/2032

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Call Sign: E170121

C) Frequency Coordination Limits

| | | Satellite ArcElevationAzimuth(Deg. Long.)(Degrees)(Degrees) | | Azimuth (Degrees) | Max EIRP Density toward | |
|-----|---------------------------|---|--------------------------|--------------------------|----------------------------|--------------------------|
| # | Frequency Limits (MHz) | East West Limit Limit | East West Limit Limit | East West Limit Limit | Horizon | Associated Antenna(s) |
| 23) | 11450.0000-11700.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 24) | 12500.0000-12750.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 25) | 14000.0000-14500.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | - 7 | TECOM |
| 26) | 10950.0000-11200.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 27) | 11450.0000-11700.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 28) | 14000.0000-14500.0000 | 43.1W-43.1W | 05.0-05.0 | 000.0-360.0 | - 6 | TECOM |
| 29) | 11700.0000-12200.0000 | 43.1W-43.1W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 30) | 14000.0000-14500.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | - 6 | TECOM |
| 31) | 11450.0000-11700.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 32) | 10950.0000-11200.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 33) | 14000.0000-14500.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | - 3 | TECOM |
| 34) | 14000.0000-14500.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | - 7 | TECOM |
| 35) | 10950.0000-11200.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 36) | 12200.0000-12250.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 37) | 12250.0000-12750.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 38) | 14000.0000-14500.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | - 7 | TECOM |
| 39) | 10950.0000-11200.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 40) | 11450.0000-11700.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 41) | 12250.0000-12750.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 42) | 11700.0000-12200.0000 | 97.0W-97.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 43) | 11450.0000-11700.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 44) | 12500.0000-12750.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 45) | 14000.0000-14500.0000 | 53.0W-53.0W | 05.0-05.0 | 000.0-360.0 | - 7 | TECOM |
| 46) | 11450.0000-11700.0000 | 53.0W-53.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 47) | 11700.0000-12200.0000 | 53.0W-53.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 48) | 14000.0000-14500.0000 | 97.0W-97.0W | 05.0-05.0 | 000.0-360.0 | -11 | TECOM |
| 49) | 11700.0000-11950.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 50) | 12500.0000-12750.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 51) | 10950.0000-11200.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 52) | 11450.0000-11700.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 53) | 10950.0000-11200.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 54) | 11450.0000-11700.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| 55) | 14000.0000-14500.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | -5.3 | TECOM |
| 56) | 11700.0000-12200.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | TECOM |
| | | | | | | |



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Grant date: 1

e: 10/04/2017

Expiration Date:

File Number: SES-LIC-20170626-00682 e: 10/04/2032

Call Sign: E170121

C) Frequency Coordination Limits

| # | Frequency Limits (MHz) | Satellite Arc (Deg. Long.) East West Limit Limit | Elevation (Degrees) East West Limit Limit | Azimuth (Degrees) East West Limit Limit | 22011-01- | Associated Antenna(s) |
|------------|--|---|--|--|-----------|--------------------------|
| | | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | -3 | TECOM |
| 57) | 14000.0000 - 14500.0000 14000.0000 - 14500.0000 | 127.0W-127.0W | 05.0-05.0 | 000.0-360.0 | -3.1 | Rantec |
| 58) 59) | 11700.0000-12200.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | 5.1 | Rantec |
| | 14000.0000-14250.0000 | 55.5W-55.5W | 05.0-05.0 | 000.0-360.0 | 0.9 | Rantec |
| 60) 61) | 11700.0000-12200.0000 | 127.0W-127.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 62) | 14000.0000-14500.0000 | 166.0E-166.0E | 05.0-05.0 | 000.0-360.0 | 1.9 | Rantec |
| 63) | 12250.0000-12750.0000 | 166.0E-166.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 64) | 14000.0000-14500.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | -3.1 | Rantec |
| 65) | 10950.0000-11200.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 66) | 11450.0000-11700.0000 | 50.0W-50.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 67) | 10950.0000-11200.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 68) | 11450.0000-11700.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 69) | 11450.0000-11700.0000 | 55.5W-55.5W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 70) | 14000.0000-14500.0000 | 45.0W-45.0W | 05.0-05.0 | 000.0-360.0 | -3.1 | Rantec |
| 71) | 11450.0000-11950.0000 | 45.0W-45.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 72) | 14000.0000-14250.0000 | 58.0W-58.0W | 05.0-05.0 | 000.0-360.0 | 0.4 | Rantec |
| 73) | 11450.0000-11700.0000 | 58.0W-58.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 74) | 14000.0000-14500.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | 1.9 | Rantec |
| 75) | 11450.0000-11700.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 76) | 12250.0000-12750.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 77) | 11700.0000-12200.0000 | 60.0E-60.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 78) | 14000.0000-14500.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | 4.9 | Rantec |
| 79) | 10950.0000-11200.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 80) | 11450.0000-11700.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 81) | 12500.0000-12750.0000 | 66.0E-66.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 82) | 14000.0000-14500.0000 | 72.1E-72.1E | 05.0-05.0 | 000.0-360.0 | 0.9 | Rantec |
| 83) | 10950.0000-11200.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 84) | 11450.0000-11700.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 85) | 14000.0000-14500.0000 | 43.1W-43.1W | 05.0-05.0 | 000.0-360.0 | 1.9 | Rantec |
| 86) | 11700.0000-12200.0000 | 43.1W-43.1W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 87) | 14000.0000-14500.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | 1.9 | Rantec |
| 88) | 10950.0000-11200.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 89) | 11450.0000-11700.0000 | 34.5W-34.5W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 90) | 14000.0000-14500.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | 4.9 | Rantec |



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Grant date: 10/04/2017

Expiration Date:

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C) Frequency Coordination Limits

| | Frequency Limits | Satellite Arc (Deg. Long.) East West | Elevation (Degrees) East West | Azimuth (Degrees) East West | Max EIRP Density toward Horizon | Associated |
|------|-----------------------|--|-------------------------------------|-----------------------------------|---------------------------------------|------------|
| # | (MHz) | Limit Limit | Limit Limit | Limit Limit | (dBW/4kHz) | Antenna(s) |
| 91) | 14000.0000-14500.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | 0.9 | Rantec |
| 92) | 10950.0000-11200.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 93) | 12200.0000-12250.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 94) | 12250.0000-12750.0000 | 169.0E-169.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 95) | 14000.0000-14500.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | 0.9 | Rantec |
| 96) | 10950.0000-11200.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 97) | 11450.0000-11700.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 98) | 12250.0000-12750.0000 | 180.0E-180.0E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 99) | 11700.0000-12200.0000 | 97.0W-97.0W | 05.0-05.0 | 000.0-360.0 | · · · · · · · · · · · · · · · · · · · | Rantec |
| 100) | 11450.0000-11700.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 101) | 12500.0000-12750.0000 | 68.5E-68.5E | 05.0-05.0 | 000.0-360.0 | 1 | Rantec |
| 102) | 14000.0000-14500.0000 | 53.0W-53.0W | 00.0-05.0 | 000.0-360.0 | 0.9 | Rantec |
| 103) | 11450.0000-11700.0000 | 53.0W-53.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 104) | 11700.0000-12200.0000 | 53.0W-53.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 105) | 14000.0000-14500.0000 | 97.0W-97.0W | 05.0-05.0 | 000.0-360.0 | -3.1 | Rantec |
| 106) | 10950.0000-11200.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | 1 | Rantec |
| 107) | 11450.0000-11700.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 108) | 11700.0000-11950.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 109) | 12500.0000-12750.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 110) | 14000.0000-14500.0000 | 18.0W-18.0W | 05.0-05.0 | 000.0-360.0 | 2.6 | Rantec |
| 111) | 11700.0000-12200.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 112) | 10950.0000-11200.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 113) | 11450.0000-11700.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | | Rantec |
| 114) | 14000.0000-14500.0000 | 8.0W-212.0W | 05.0-05.0 | 000.0-360.0 | 4.9 | Rantec |
| | | | | | | |

D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

1) TECOM Remotes to INTELSAT 14 (S2785) @ 45 degrees W.L. (U.S.-licensed)

2) TECOM Remotes to INTELSAT 18 (S2817) @ 180 degrees E.L. (U.S.-licensed)

3) TECOM Remotes to INTELSAT 20 (S2847) @ 68.5 degrees E.L. (U.S.-licensed)

4) TECOM Remotes to INTELSAT 21 (S2863) @ 58.0 degrees W.L. (U.S.-licensed)

5) TECOM Remotes to INTELSAT 22 (S2846) @ 72.1 degrees E.L. (U.S.-licensed)

6) TECOM Remotes to INTELSAT 29e (S2913) @ 50.0 degrees W.L. (U.S.-licensed)



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D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

7) TECOM Remotes to INTELSAT 33e (S2939) @ 60.0 degrees E.L. (U.S.-licensed) 8) TECOM Remotes to SKY-B1 (S2922) satellite @ 43.15 degrees W.L. (U.S.-licensed) 9) TECOM Remotes to INTELSAT 19 (S2850) @ 166.0 degrees E.L. (U.S.-licensed) 10) TECOM Remotes to HORIZONS 1 (S2475) @ 127 degrees W.L. (Japan-licensed) 11) TECOM Remotes to INTELSAT 34 (S2915) @ 55.5 degrees W.L. (U.S.-licensed) 12) TECOM Remotes to GALAXY 19 (S2647) @ 97 W.L. (U.S.-licensed) 13) TECOM Remotes to INTELSAT 23 (S2831) @ 53 degrees W.L. (U.S.-licensed) 14) TECOM Remotes to INTELSAT 35e (S2959) @ 34.5 degrees W.L. (U.S.-licensed) 15) TECOM Remotes to HORIZONS 3 (S2947) satellite @ 169 degrees E.L. (U.S.-licensed) 16) TECOM Remotes to INTELSAT 17 (S2814) @ 66 E.L. (U.S.-licensed) 17) TECOM Remotes to INTELSAT 37e (S2972) @ 18.0 degrees W.L. (U.S.-licensed) 18) TECOM Remotes to Permitted Space Station List 19) Rantec Remotes to SKY-B1 (S2922) satellite @ 43.15 degrees W.L. (U.S.-licensed) 20) Rantec Remotes to INTELSAT 17 (S2814) @ 66 E.L. (U.S.-licensed) 21) Rantec Remotes to INTELSAT 37e (S2972) @ 18.0 degrees W.L. (U.S.-licensed) 22) Rantec Remotes to Permitted Space Station List 23) Rantec Remotes to INTELSAT 19 (S2850) @ 166.0 degrees E.L. (U.S.-licensed) 24) Rantec Remotes to INTELSAT 20 (S2847) @ 68.5 degrees E.L. (U.S.-licensed) 25) Rantec Remotes to INTELSAT 21 (S2863) @ 58.0 degrees W.L. (U.S.-licensed) 26) Rantec Remotes to INTELSAT 29e (S2913) @ 50.0 degrees W.L. (U.S.-licensed) 27) Rantec Remotes to INTELSAT 18 (S2817) @ 180 degrees E.L. (U.S.-licensed) 28) Rantec Remotes to INTELSAT 23 (S2831) @ 53 degrees W.L. (U.S.-licensed) 29) Rantec Remotes to INTELSAT 33e (S2939) @ 60.0 degrees E.L. (U.S.-licensed) 30) Rantec Remotes to GALAXY 19 (S2647) @ 97 W.L. (U.S.-licensed) 31) Rantec Remotes to INTELSAT 14 (S2785) @ 45 degrees W.L. (U.S.-licensed) 32) Rantec Remotes to INTELSAT 22 (S2846) @ 72.1 degrees E.L. (U.S.-licensed) 33) Rantec Remotes to INTELSAT 35e (S2959) @ 34.5 degrees W.L. (U.S.-licensed) 34) Rantec Remotes to INTELSAT 34 (S2915) @ 55.5 degrees W.L. (U.S.-licensed) 35) Rantec Remotes to HORIZONS 3 (S2947) satellite @ 169 degrees E.L. (U.S.-licensed) 36) Rantec Remotes to HORIZONS 1 (S2475) @ 127 degrees W.L. (Japan-licensed)



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E) Antenna Facilities

| Si | | Antenna ID | Units | Diameter (meters) | Manufacturer | Model number | Site Elevation (Meters) | Max Antenna Height (Meters) | Special Provisions (Refer to Section H) |
|--------|--------|---------------|-------|----------------------|---|---------------|-------------------------------|-----------------------------------|--|
| Ranteo | | Rantec | 1000 | 0.46 | Rantec Microwave Systems | Rantec SATCOM | | 0 AGL/ 0 AMSL | |
| | | total input | power | | 11.3000 GHz 34 na flange (Watts) = all carriers (dBW) | | 00 GHz | | |
| TECOM | Remote | TECOM | 1000 | 0.65 | TECOM | 1500 | | 0 AGL/ 0 AMSL | |
| | | total input | power | | 12.0000 GHz 3 na flange (Watts) = all carriers (dBW) | | 00 GHz | | |

F) Remote Control Point:

| Rantec Remotes | Network Operations Center, 2875 Fork Creek Church Road | Call Sign: N/A |
|-------------------|--|----------------|
| | Ellenwood, Clayton, GA 30294 | |
| | 1 404.381.2900 | |
| TECOM Remotes | Network Operations Center, 2875 Fork Creek Church Road | Call Sign: N/A |
| | Ellenwood, Clayton, GA 30294 | |
| | | |

1 404.381.2900

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
 - 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Bureau Filing System (IBFS) in the "Other Filings" tab within 10 days of the change.



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- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
 - 5 --- Licensee must notify the Commission when an earth station is no longer operational or when it has not been used to provide any service during any 6-month operation.
 - 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
- 90062 --- Operation pursuant to this authorization outside the United States in the 14.0-14.5 GHz band must be in compliance with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz band.
- 90066 --- Stations authorized herein must not be used to provide air traffic control communications.
- 90067 --- Operation in the territory or airspace of any country other than the United States must be in compliance with the applicable laws, regulations, and licensing procedures of that country, as well as with the conditions of this authorization.
- 90075 --- Licensee is afforded 30 days from the date of release of this grant and authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
- 90079 --- Antenna elevation for all operations must be at least 5 degrees above the geographic horizon while the aircraft is on the ground.
- 90104 --- For any new antenna authorized by this grant, the licensee must file with the Commission a certification including the following information: name of the licensee, file number of the application, call sign of the antenna, Site ID, date of the license and certification that the antenna model was put into operation.
- 90105 --- Authority is granted to operate this station by remote control provided that the operator is responsible for ensuring the operations are in accordance with the terms and conditions of the license and pursuant to Section 25.271 of the Commission's rules. 47 C.F.R 25.271.
- 90116 --- The licensee must maintain a U.S. point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein. The licensee shall have available, at all times, the technical personnel necessary to perform supervision of remote station operations.
- 90118 --- The licensee shall comply with any pertinent limits established by the International Telecommunication Union to protect other services allocated internationally.
- 90122 --- The earth stations in this blanket license are operated by remote control. The remote control point is a material term of the license and may not be changed without prior authorization under Section 25.117 of the Commission's rules. Public Notice "The International Bureau Provides Guidance Concerning the Relocation of Earth Station Remote Control Points," DA 06-978 (rel. May 4, 2006).



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- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 90123 --- Operations authorized pursuant to this license are operations by U.S.-registered aircraft anywhere within the coverage area/frequency bands identified in the application for the satellites listed as points of communication. Operations authorized pursuant to this license also include operations by non-U.S.-registered aircraft within U.S. territory, including territorial waters. Authorization for operations by U.S.-registered aircraft outside U.S. territory, pursuant to this license, does not constitute a grant of access to the market in the United States under the Commission's DISCO II policies.
- 90246 --- ESAAs authorized herein must employ a tracking algorithm that is resistant to capturing and tracking adjacent satellite signals, and each station must be capable of inhibiting its own transmission in the event it detects unintended satellite tracking.
- 90247 --- ESAAs authorized herein must be monitored and controlled by a ground-based network control and monitoring center. Such stations must be able to receive "enable transmission" and "disable transmission" commands from the network control center and must cease transmission immediately after receiving a "parameter change" command until receiving an "enable transmission" command from the network control center. The network control center must monitor operation of each ESAA to determine if it is malfunctioning, and each ESAA must self-monitor and automatically cease transmission on detecting an operational fault that could cause harmful interference to a fixed-satellite service network.
- 90259 --- For purposes of this authorization, the term earth stations aboard aircraft, or ESAA, is used to refer to any earth station on aircraft communicating with Fixed-Satellite Service (FSS) geostationary-orbit (GSO) space stations, without reference to the technical and licensing rules specifically adopted for earth stations on aircraft in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz, and 14.0-14.5 GHz frequency bands. See 47 C.F.R. § 25.227; Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary-Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands, IB Docket No. 12-376, Notice of Proposed Rulemaking and Report and Order, FCC 12-161, 27 FCC Rcd 16510 (2012); Revisions of Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostations Operating in the 10.95-11.2 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands, IB Docket No. 12-376, Notice of Proposed Rulemaking and Report and Order, FCC 12-161, 27 FCC Rcd 16510 (2012); Revisions of Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary-Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands, IB Docket No. 12-376, Second Report and Order on Reconsideration, FCC 14-45, 29 FCC Rcd 4226 (2014). Nothing in this authorization extends those technical and licensing rules to earth stations on aircraft not operating in those specified frequency bands.
- 90304 --- Operation pursuant to this authorization must be in compliance with the terms of the licensee's coordination agreements with the National Science Foundation and the National Aeronautics and Space Administration pertaining to operation of ESAAs in the Ku-Band.
- 90305 --- When operating in international airspace within line-of-sight of the territory of a foreign administration where Fixed Service networks have a primary allocation in the 14.0-14.5 GHz band, an ESAA must not produce ground-level power flux density (pfd) in such territory in excess of the following values unless the foreign administration has imposed other conditions for protecting its FS stations: -132 + 0.5 x THETA dB(W/(m^2 MHz)) for THETA <= 40°; -112 dB(W/(m^2 MHz)) for 40° < THETA <= 90°. Where: THETA is the angle of arrival of the radio-frequency wave in degrees above the horizontal, and the aforementioned limits relate to the pfd and angles of arrival that would be obtained under free space propagation conditions.



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- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 90308 --- The ESAAs are authorized to receive downlink transmissions in the 11.7-12.2 GHz frequency band from the geostationary orbit space stations listed as a point of communication in Section D above subject to the particulars of operation and identified frequencies included in Section B above and the licensee's application. Reception is authorized on a primary basis as an application of the Fixed-Satellite Service pursuant to the allocation determinations and service rules in IB Docket No.12-376 (Docket Name: Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands). Operations must be in accordance with the Federal Communications Commission's rules not waived herein, the technical specifications contained in licensee's application, and are subject to the other conditions listed in the authorization.
- 90309 --- The ESAAs are authorized to receive downlink transmissions in the 10.95-11.2 GHz and 11.45-11.7 GHz frequency band from the geostationary orbit space stations listed as a point of communication in Section D above subject to the particulars of operation and identified frequencies included in Section B above and the licensee's application. Reception is authorized on an unprotected basis as an application of the Fixed-Satellite Service pursuant to the allocation determinations and service rules in IB Docket No.12-376 (Docket Name: Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands). Operations must be in accordance with the Federal Communications Commission's rules not waived herein, the technical specifications contained in licensee's application, and are subject to the other conditions listed in the authorization.
- 90310 --- For each ESAA transmitter, the licensee shall maintain records of the following data for each operating ESAA, a record of the aircraft location (i.e., latitude/longitude/altitude), transmit frequency, channel bandwidth and satellite used shall be time annotated and maintained for a period of not less than one year. Records shall be recorded at time intervals no greater than one (1) minute while the ESAA is transmitting. The ESAA operator shall make this data available, in the form of a comma delimited electronic spreadsheet, within 24 hours of a request from the Commission, NTIA, or a frequency coordinator for purposes of resolving harmful interference events. A description of the units (i.e., degrees, minutes, MHz ...) in which the records values are recorded will be supplied along with the records.
- 90311 --- The ESAAs are authorized to transmit in the 14.0-14.5 GHz frequency band to the geostationary orbit space stations listed as a point of communication in Section D above subject to the particulars of operation and identified frequencies included in Section B above and the licensee's application. Such transmissions are authorized on a primary basis as an application of the Fixed-Satellite Service pursuant to the allocation determinations and service rules in IB Docket No. 12-376 (Docket Name: Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands). Operations must be in accordance with the Federal Communications Commission's rules not waived herein, the technical specifications contained in licensee's application, and are subject to the other conditions listed in the authorization.
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)



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- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 90412 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access in the following bands: 3600-4200 MHz (space-to-Earth) 5850-6725 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-12.2 GHz (space-to-Earth) 13.75-14.5 GHz (Earth-to-space) 18.3-18.8 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 24.75-25.25 GHz (Earth-to-space) 28.35-28.6 GHz (Earth-to-space) 29.25-30.0 GHz (Earth-to-space). Operations pursuant to this authorization in the 14-14.5 GHz (Earth-to-space) frequency band with space stations on the Permitted List must comply with the off axis e.i.r.p. density power limits established in 47 CFR 25.227(a)(1).
- 900413 --- Operation pursuant to this authorization must be in compliance with the terms of coordination agreements between Intelsat License LLC and operators of other Ku-band geostationary space stations within six angular degrees of those space stations. In the event that another GSO Fixed-Satellite Service space station commences operation in the 14.0-14.5 GHz band at a location within six degrees of any of these space stations, aircraft earth stations operating pursuant to this authorization must cease transmitting to that space station unless and until such operation has been coordinated with the new space station's operator or Intelsat License LLC demonstrates that such operation will not cause harmful interference to the new co-frequency space station.
- 900414 --- Reception of downlink transmissions is on a non-interference, non-protected basis from the following geostationary orbit space stations: IS-17 (Call Sign: S2814) at 66° E.L. in the 12.2-12.75 GHz frequency band; IS-18 (Call Sign: S2817) at 180° E.L. in the 12.25-12.75 GHz frequency band; IS-20 (Call Sign: S2847) at 68.5° E.L. in the 12.5-12.75 GHz frequency band; IS-22 (Call Sign: S2846) at 72.1° E.L. in the 12.25-12.75 GHz frequency band; IS-27 (Call Sign: S2972) at 18° W.L. in the 12.5-12.75 GHz frequency band. When receiving transmissions from these satellites in these frequency bands, the ESAA operations authorized herein must accept interference from any authorized user of the band.
- 900415 --- Reception of downlink transmissions in ITU Region 2 is on a non-interference, non-protected basis from the following geostationary orbit space stations: Horizons 3e (S2947) at 169° E.L. in the 12.2-12.75 GHz frequency band; IS-19 (Call Sign: S2850) at 166° E.L. in the 12.25-12.75 GHz frequency band; IS-33e (Call Sign S2939) at 60.0° E.L. in the 12.5-12.6 GHz frequency band. Operations are not authorized in these bands over the U.S. and its territories.



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- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 900416 --- Intelsat's request for a limited waiver of Section 25.227(a)(1)(i)(B) of the Commission's rules, 47 C.F.R. § 25.227(a)(1)(i)(B), to permit operation of the TECOM terminal at off-axis eirp limits in the plane perpendicular to the GSO arc in excess of those set forth in Section 25.227(a)(1)(i)(B), is GRANTED, as conditioned: In the event a future NGSO network is deployed in the Ku-band that would receive interference from the higher off-axis radiated power, Intelsat must coordinate with the NGSO network in order to facilitate co-frequency operations and must modify its ESAA operations to reflect any coordination agreement reached. In the event a coordination agreement is not reached, Intelsat must comply with the eirp density limits set forth in section 25.227(a)(1)(i)(B).
- 900417 --- Waiver of 25.115(g)(1)(i) of the Commission's rules, 47 C.F.R. § 25.115(g)(1)(i), is GRANTED for the Rantec terminal.
- 900418 --- Communications between Intelsat License LLC's ESAAs and the Horizons 1 space station must be in compliance with all existing and future space station coordination agreements reached between Japan and other Administrations.



RADIO STATION AUTHORIZATION

Name: Intelsat License LLC Authorization Type: License Non Common Carrier

Grant date: 10/04/2017

Expiration Date:

Call Sign: E170121 File Number: SES-LIC-20170626-00682 10/04/2032

B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R.§ 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station does not meet each required construction deadline by the required date of completion unless, before such date(s), a specific application is timely filed to request an extension of the construction deadline(s), supported with good cause why that failure to construct by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulatees is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.



FCC Form 488