

RADIO STATION AUTHORIZATION

Name: Iridium Satellite LLC

Call Sign: E960132

Authorization Type: Modification of License

File Number: SES-MOD-20170413-00388

Non Common Carrier

Grant date:

03/06/2018

Expiration Date:

11/01/2021

Nature of Service: Mobile Satellite Service

Class of Station: Mobile Earth Station

A) Site Location(s)

| # Site ID | Address | Latitude | Longitude | Elevation (Meters) | Special Provisions NAD (Refer to Section H) |
|----------------------|--|----------|-----------|--------------------|---|
| 1) AMS(R)S | 20,000 AMS(R)S terminals Operating aboard aircraft McLean, Fairfax, VA 22102 | | | | NA |
| | | | | • | |
| 2) Iridium Certus | 1750 Tysons Boulevard, Suite 1400 0.312M. 50,000 units | | | | NA |
| | McLean, Fairfax, VA 22102 | | | | |
| 3) LiveTV | 0.407M. 50,000 units (LiveTV) | | | | NA |
| | Mobile, | | | | |
| 4) METS | (200,000) Handheld | | | 0 | NA |
| T) METO | Operating in the US&P | | | | |
| | | | | | |
| 5) OpenPort | (0.525 M.) 50,000 units Mobile, | | | | NA |

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 November 1, 2006 (3 AM Eastern Standard Time) and ending November 1, 2021 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is March 6, 2019 (3 AM Eastern Standard Time). Grantee must file with the Commission a certification upon completion of construction and commencement of operation.



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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.

| F | or the tex | t of these provisions, ref | fer to Section F | . | | Max EIRP | Max EIRP Density | | Special Provisions | |
|----|------------|----------------------------|---------------------|---------------|---------------|-------------------|------------------------|-----------------------|-------------------------|-------------------------|
| # | ŧ | Frequency (MHz) | Polarizatio Code | n Emission | Tx/Rx Mode | /Carrier (dBW) | /Carrier (dBW/4kHz) | Associated Antenna | (Refer to Section H) | Modulation/ Services |
| 1 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-1 | | Voice and Data; DQPSK |
| 2 | 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 9.00 | -10.80 | AMS(R)S-1 | 90266 | Voice and Data; DQPSK |
| 3 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-2 | | Voice and Data; DQPSK |
| 4 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 8.00 | -11.80 | AMS(R)S-2 | 90266 | Voice and Data; DQPSK |
| 5 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS (R) S-3 | | Voice and Data; DQPSK |
| 6 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 9.00 | -10.80 | AMS(R)S-3 | 90266 | Voice and Data; DQPSK |
| 7 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-4 | | Voice and Data; DQPSK |
| 8 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 9.00 | -10.80 | AMS (R) S-4 | 90266 | Voice and Data; DQPSK |
| 9 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS (R) S-5 | | Voice and Data; DQPSK |
| 10 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 6.00 | -13.80 | AMS (R) S-5 | 90266 | Voice and Data; DQPSK |
| 11 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-6 | | Voice and Data; DQPSK |
| 12 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 9.00 | -10.80 | AMS (R) S-6 | 90266 | Voice and Data; DQPSK |
| 13 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-7 | | Voice and Data; DQPSK |
| 14 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 9.00 | -10.80 | AMS(R)S-7 | 90266 | Voice and Data; DQPSK |
| 15 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-8 | | Voice and Data; DQPSK |
| 16 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 8.50 | -11.30 | AMS(R)S-8 | 90266 | Voice and Data; DQPSK |
| 17 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | AMS(R)S-9 | | Voice and Data; DQPSK |
| 18 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Тх | 8.50 | -11.30 | AMS(R)S-9 | 90266 | Voice and Data; DQPSK |
| 19 |) 1618. | 7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 1-C | | QPSK Voice & Data |
| 20 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Rx | | | Aero 1-C | | QPSK Voice & Data |
| 21 |) 1618. | 7250-1626.5000 | R | 83K3Q7W | Rx | | | Aero 1-C | | QPSK Voice & Data |
| 22 |) 1618. | 7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 1-C | | 16 QPSK Voice & Digital |
| 23 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Tx | 11.70 | 2.70 | Aero 1-C | | QPSK Voice & Data |
| 24 |) 1618. | 7250-1626.5000 | R | 41K7Q7W | Тх | 14.30 | 5.20 | Aero 1-C | | QPSK Voice & Data |
| | | | | | | | | | | |

FCC Form 488



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Non Common Carrier

Grant date: 03/06/2018

Expiration Date:

11/01/2021

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, ref | fer to Section I | Н. | | Max | Max EIRP | | Special | |
|-------|-----------------------------------|---------------------|----------------|---------------|---------------------------|-----------------------------------|-----------------------|---------------------------------------|-------------------------|
| # | Frequency (MHz) | Polarizatio Code | on Emission | Tx/Rx Mode | EIRP /Carrier (dBW) | Density /Carrier (dBW/4kHz) | Associated Antenna | Provisions (Refer to Section H) | Modulation/ Services |
| 25) | 1618.7250-1626.5000 | R | 83K3Q7W | Tx | 14.50 | 2.40 | Aero 1-C | | QPSK Voice & Data |
| 26) | 1618.7250~1626.5000 | R | 333KQ7W | Tx | 14.30 | -3.80 | Aero 1-C | | QPSK Voice & Data |
| 27) | 1618.7250-1626.5000 | R | 333KQ7W | Tx | 21.20 | 3.10 | Aero 1-C | | 16 QPSK Voice & Digital |
| 28) | 1618.7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 1-T | | QPSK Voice & Data |
| 29) : | 1618.7250-1626.5000 | R | 41K7Q7W | Rx | | | Aero 1-T | | QPSK Voice & Data |
| 30) | 1618.7250-1626.5000 | R | 83K3Q7W | Rx | | | Aero 1-T | | QPSK Voice & Data |
| 31) | 1618.7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 1-T | | 16 QPSK Voice & Digital |
| 32) | 1618.7250-1626.5000 | R | 41K7Q7W | Тх | 11.70 | 2.70 | Aero 1-T | | QPSK Voice & Data |
| 33) : | 1618.7250-1626.5000 | R | 41K7Q7W | Tx | 14.30 | 5.20 | Aero 1-T | | QPSK Voice & Data |
| 34) | 1618.7250-1626.5000 | R | 83K3Q7W | Tx | 14.50 | 2.40 | Aero 1-T | | QPSK Voice & Data |
| 35) | 1618.7250-1626.5000 | R | 333KQ7W | Tx | 14.30 | -3.80 | Aero 1-T | | QPSK Voice & Data |
| 36) 3 | 1618.7250-1626.5000 | R | 333KQ7W | Tx | 21.20 | 3.10 | Aero 1-T | | 16 QPSK Voice & Digital |
| 37) : | 1618.7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 2-T | | QPSK Voice & Data |
| 38) 1 | 1618.7250-1626.5000 | R | 41K7Q7W | Rx | | | Aero 2-T | | QPSK Voice & Data |
| 39) 🤉 | 1618.7250~1626.5000 | R | 83K3Q7W | Rx | | | Aero 2-T | | QPSK Voice & Data |
| 40)] | 1618.7250-1626.5000 | R | 333KQ7W | Rx | | | Aero 2-T | | 16 QPSK Voice & Digital |
| 41)] | 1618.7250-1626.5000 | R | 41K7Q7W | Tx | 11.70 | , 2.70 | Aero 2-T | | QPSK Voice & Data |
| 42)] | 1618.7250-1626.5000 | R | 41K7Q7W | Tx | 14.30 | 5.20 | Aero 2-T | | QPSK Voice & Data |
| 43)] | 1618.7250-1626.5000 | R | 83K3Q7W | Tx | 14.50 | 2.40 | Aero 2-T | | QPSK Voice & Data |
| 44)] | 1618.7250-1626.5000 | R | 333KQ7W | Tx | 14.30 | -3.80 | Aero 2-T | | QPSK Voice & Data |
| 45)] | 1618.7250-1626.5000 | R · | 333KQ7W | Tx | 21.20 | 3.10 | Aero 2-T | | 16 QPSK Voice & Digital |
| 46)] | 1618.7250-1626.5000 | R | 41K7Q7W | Rx | | | Handheld | | DQPSK |
| 47)] | 1618.7250-1626.5000 | R | 41K7Q7W | Tx | 11.95 | 3.99 | Handheld | 90263 | DQPSK |
| 48) 1 | 1618.7250-1626.5000 | R | 333KQ7W | Rx | | | LandMobile | | QPSK Voice & Data |
| | | | | | | | | | |

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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 | he text of these provisions, re | fer to Section I | I. | | Max EIRP | Max EIRP | | Special Provisions | |
|------------------|---------------------------------|---------------------|---------------|---------------|-------------|-----------------------------------|-----------------------|-------------------------|-------------------------|
| # | Frequency (MHz) | Polarizatio Code | n Emission | Tx/Rx Mode | /Carrier | Density /Carrier (dBW/4kHz) | Associated Antenna | (Refer to Section H) | Modulation/ Services |
| 49) 1 | 618.7250-1626.5000 | R | 41K7Q7W | Rx | | | LandMobile | | QPSK Voice & Data |
| 50) ₁ | 618.7250-1626.5000 | R | 83K3Q7W | Rx | | | LandMobile | | QPSK Voice & Data |
| 51) 1 | 618.7250-1626.5000 | R | 333KQ7W | Rx | | | LandMobile | | 16 QPSK Voice & Digital |
| 52) ₁ | 618.7250-1626.5000 | R | 41K7Q7W | Тx | 11.70 | 2.70 | LandMobile | | QPSK Voice & Data |
| 53) ₁ | 618.7250-1626.5000 | R | 83K3Q7W | Tx | 14.50 | 2.40 | LandMobile | | QPSK Voice & Data |
| 54) ₁ | 618.7250-1626.5000 | R | 333KQ7W | Tx | 14.30 | -3.80 | LandMobile | | QPSK Voice & Data |
| 55) ₁ | 618.7250-1626.5000 | R | 41K7Q7W | Tx | 14.30 | 5.20 | LandMobile | | QPSK Voice & Digital |
| 56) ₁ | 618.7250-1626.5000 | R | 333KQ7W | Тx | 21.20 | 3.10 | LandMobile | | 16 QPSK Voice & Digital |
| 57) ₁ | 618.7250-1626.5000 | R | 667KQ7W | Rx | | | LiveTV | | FDMA/TDMA/TDD |
| 58) ₁ | 618.7250-1626.5000 | R | 667KQ7W | Tx | 6.40 | -13.60 | LiveTV | 90265 | FDMA/TDMA/TDD |
| 59) 1 | 618.7250-1626.5000 | R | 333KQ7W | Rx | | | Maritime | | QPSK Voice & Data |
| 60) ₁ | 618.7250-1626.5000 | R | 41K7Q7W | Rx | | | Maritime | | QPSK Voice & Data |
| 61) ₁ | 618.7250-1626.5000 | R | 83K3Q7W | Rx | | • | Maritime | | QPSK Voice & Data |
| 62) ₁ | 618.7250-1626.5000 | R | 333KQ7W | Rx | | | Maritime | | 16 QPSK Voice & Digital |
| 63) ₁ | 618.7250-1626.5000 | R | 41K7Q7W | Tx | 11.70 | 2.70 | Maritime | | QPSK Voice & Data |
| 64) ₁ | 618.7250-1626.5000 | R | 41K7Q7W | Tx | 14.30 | 5.20 | Maritime | | QPSK Voice & Data |
| 65) ₁ | 618.7250-1626.5000 | R | 83K3Q7W | Tx | 14.50 | 2.40 | Maritime | | QPSK Voice & Data |
| 66) ₁ | 618.7250-1626.5000 | R | 333KQ7W | Tx | 14.30 | -3.80 | Maritime | | QPSK Voice & Data |
| 67) ₁ | 618.7250-1626.5000 | R | 333KQ7W | Tx | 21.20 | 3.10 | Maritime | | 16 QPSK Voice & Digital |
| 68) ₁ | 618.7250-1626.5000 | R | 667KQ7W | Tx | 9.40 | -10.60 | OpenPort | 90264 | FDMA/TDMA/TDD |
| 69) ₁ | 618.7250-1618.7250 | R | 667KQ7W | Rx | | | OpenPort | | FDMA/TDMA/TDD |



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C) Frequency Coordination Limits

| ssociated ntenna(s) |
|------------------------|
| eld |
| ort |
| v |
| l) S-1 |
| s) S-2 |
| L) S-3 |
| L) S-6 |
| .) S-4 |
| .) S-5 |
| .) S-7 |
| .) S-8 |
| .) S-9 |
| 1-T |
| 2-T |
| ime |
| obile |
| 1-C |
| 2 2 2 2 2 2 2 |

D) Points of Communications

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

- 1) METS to IRIDIUM NGSO MSS (S2110) (U.S.-licensed)
- 2) OpenPort to IRIDIUM NGSO MSS (S2110) (U.S.-licensed)
- 3) LiveTV to IRIDIUM NGSO MSS (S2110) (U.S.-licensed)
- 4) AMS(R)S to IRIDIUM NGSO MSS (S2110) (U.S.-licensed)
- 5) Iridium Certus to IRIDIUM NGSO MSS (S2110) (U.S.-licensed)



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E) Antenna Facilities

| Site ID | Antenna ID | Units | Diameter (meters) | Manufacturer | Model number | Site Elevation (Meters) | Max Antenna Height (Meters) | Special Provisions (Refer to Section H) |
|------------|-----------------|----------|----------------------|---|---------------------------|-------------------------------|-----------------------------------|--|
| AMS(R)S | AMS(R)S-1 | 20000 | | Aero Antenna | AT1621-23 Dual Patch | | | |
| Max: | - | t power | | 1.6210 GHz a flange (Watts) = ll carriers (dBW) = | 5.16 9.00 | | | |
| AMS(R)S | AMS(R)S-2 | 1 | 0.089 | Aero Antenna | AT2775-110 Single Pa | | | |
| Max | Gains(s): | 1.0 | dBi @ | 1.6210 GHz | | | | |
| Maxi | lmum total inpu | t power | at antenna | a flange (Watts) = | 5.16 | | | |
| Maxi | imum aggregate | output | EIRP for al | ll carriers (dBW) = | 8.00 | | | |
| AMS(R)S | AMS(R)S-3 | 1 | 0.089 | Sensor Systems | S67-1575-409 Single | | | |
| Max | Gains(s): | 2.0 | dBi @ | 1.6210 GHz | | | | |
| Maxi | imum total inpu | t power | at antenna | a flange (Watts) = | 5.16 | | | |
| Maxi | imum aggregate | output : | EIRP for al | ll carriers (dBW) = | 9.00 | | | |
| AMS(R)S | AMS (R) S-4 | 1 | 0.21 | Sensor Systems | S67-1575-365 · Dual Pa | | | |
| Max | Gains(s): | 2.0 | dBi @ | 1.6210 GHz | | | | |
| Maxi | .mum total inpu | t power | at antenna | a flange (Watts) = | 5.16 | | | |
| Maxi | .mum aggregate | output : | EIRP for al | ll carriers (dBW) = | 9.00 | | | |
| AMS(R)S | AMS(R)S-5 | 1 | 0.21 | Sensor Systems | S67-1575-168 Single | | | |
| Max | Gains(s): | -1.0 | dBi @ | 1.6210 GHz | | | | |
| Maxi | mum total inpu | t power | at antenna | a flange (Watts) = | 5.16 | | | |
| Maxi | .mum aggregate | output 1 | EIRP for al | ll carriers (dBW) = | 6.00 | | | |
| AMS(R)S | AMS (R) S-6 | 1 | 0.21 | Sensor Systems | S67-1575-160 Single | | | |
| Max | Gains(s): | 2.0 | dBi @ | 1.6210 GHz | | | | |
| Maxi | mum total inpu | t power | at antenna | a flange (Watts) = | 5.16 | | | |
| Maxi | mum aggregate | output 1 | EIRP for al | .l carriers (dBW) = | 9.00 | | | |



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E) Antenna Facilities

| ת נוש | | racintics | | | | | Site | | Special |
|-------------------|----------|---------------|----------|----------------------|---------------------|-------------------------|-----------------------|-----------------------------------|---------------------------------------|
| Sit ID | | Antenna ID | Units | Diameter (meters) | Manufacturer | Model number | Elevation (Meters) | Max Antenna Height (Meters) | Provisions (Refer to Section H) |
| AMS (R) | S . | AMS (R) S-7 | 1 | 0.089 | Cobham | Comant CI 490-1 Sing | , | | • |
| | Max Gair | ns(s): | 2.0 | dBi @ | 1.6210 GHz | | | | |
| | Maximum | total input | power | at antenna | a flange (Watts) = | 5.16 | | | |
| | Maximum | aggregate o | output | EIRP for a | ll carriers (dBW) = | 9.00 | | | |
| AMS(R) | S . | AMS(R)S-8 | 1 | 0.001 | Antcom | S4IR16RR-P-XX-X Sing | | | |
| | Max Gain | ıs(s): | 1.5 | dBi @ | 1.6210 GHz | | | | |
| | Maximum | total input | power | at antenna | a flange (Watts) = | 5.16 | | | |
| | Maximum | aggregate c | output : | EIRP for a | ll carriers (dBW) = | 8.50 | | | |
| AMS(R) | S i | AMS (R) S-9 | 1 | 0.102 | · Antcom | S5GIR121RR-AP-XT Si | | | |
| | Max Gain | ıs (s) · | 1.5 | dBi @ | 1.6210 GHz | | | | |
| | | • • | | | a flange (Watts) = | 5.16 | | | |
| | | - | - | | ll carriers (dBW) = | 8.50 | | | |
| Iridium Certus | n | Aero 1-C | 10000 | 0.312 | Cobham | General Aviation | | | |
| | Max Gain | ıs(s): | 11.8 | dBi @ | 1.6210 GHz | | | | |
| | Maximum | total input | power | at antenna | a flange (Watts) = | 57.50 | | | |
| | Maximum | aggregate o | utput 1 | EIRP for al | ll carriers (dBW) = | 27.70 | | | |
| Iridium Certus | n | Aero 1-T | 10000 | 0.312 | Thales | General Aviation | | | |
| | Max Gain | .s(s): | 11.8 | dBi @ | 1.6210 GHz | | | | |
| 1 | Maximum | total input | power | at antenna | a flange (Watts) = | 57.50 | | | |
| 1 | Maximum | aggregate o | utput 1 | EIRP for al | ll carriers (dBW) = | 27.70 | | | |
| Iridium Certus | n | Aero 2-T | 10000 | 0.312 | Thales | AMS (R) S | | | |
| 1 | Max Gain | s(s): | 11.8 | dBi @ | 1.6210 GHz | | | | |
| | | • • | | | flange (Watts) = | 57.50 | | | |
| | | - | _ | | .l carriers (dBW) = | 27.70 | | | |
| | | | - | | | | | | |



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E) Antenna Facilities

| Sit | | Units | Diameter (meters) | Manufacturer | Model number | Site Elevation (Meters) | Max Antenna Height (Meters) | Special Provisions (Refer to Section H) |
|------------------|--------------------|------------|-------------------|----------------------|-----------------------|-------------------------------|-----------------------------------|--|
| METS | Handheld | 200000 | 0 | MOTOROLA (200,000) | TIME DOMAIN DUPLEX | 0 | 0 AGL/ 0 AMSL | |
| | Max Gains(s): | 3.5 | dBi @ | 1.6210 GHz | | | | |
| | Maximum total inpu | t power | at antenr | na flange (Watts) = | 7.00 | | | |
| | Maximum aggregate | output E | IRP for a | all carriers (dBW) = | 11.95 | | | |
| Iridiu Certus | | 10000 | 0.312 | Various | Various | | | |
| | Max Gains(s): | 11.8 | dBi @ | 1.6210 GHz | | | | |
| | Maximum total inpu | t power | at antenr | na flange (Watts) = | 57.50 | | | |
| | Maximum aggregate | output E | CIRP for a | all carriers (dBW) = | 27.70 | | | |
| LiveTV | LiveTV | 50000 | 0.407 | LiveTV | LV16-100301-101 | | | |
| | Max Gains(s): | 7.7 | dBi @ | 1.6210 GHz | | | | |
| | Maximum total inpu | t power | at antenr | na flange (Watts) = | .74 | | | |
| | Maximum aggregate | output E | IRP for a | all carriers (dBW) = | 6.40 | | | |
| Iridiu Certus | | 10000 | 0.312 | Various | Various | | | |
| | Max Gains(s): | 11 8 | dBi @ | 1.6210 GHz | | | | |
| | , , | | | na flange (Watts) = | 57.50 | | | |
| | - | - | | all carriers (dBW) = | 27.70 | | | |
| | , | - <u>r</u> | | ,, | - · · · · · | | | |
| OpenPo | ort OpenPort | 50000 | 0.525 | CELESTICA | AT7521-2-A | | | |
| | Max Gains(s): | 10.7 | dBi @ | 1.6210 GHz | | | | |
| | - | - | | na flange (Watts) = | .74 | | | |
| | Maximum aggregate | output E | IRP for a | all carriers (dBW) = | 9.40 | | | • |

F) Remote Control Point:

8440 South River Parkway AMS(R)S

Tempe, Maricopa, AZ 85284

1-480-752-5111

FCC Form 488

Call Sign: N/A

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F) Remote Control Point:

Iridium Certus 8440 South River Parkway

Call Sign: E960131

Tempe, Maricopa, AZ 85284

1-480-752-5111

LiveTV

8440 South River Parkway

Call Sign: N/A

Tempe, Maricopa, AZ 85284

(240) 515-0148

METS

8440 South River Parkway

Call Sign: N/A

Tempe, Maricopa, AZ 85284

(240) 515-0148

OpenPort

8440 South River Parkway

Call Sign: E960131

Tempe, Maricopa, AZ 85284

(240) 515-0148

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

H) 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.
 - 5 --- Licensee must notify the Commission when this 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.
 - 20 --- Iridium Certus antenna operations are authorized pursuant to the Commission's Order (DA 18-214) released March 6, 2018.
 - 167 --- This authorization is limited to the total number of terminals listed in Section A of this license for this Site ID.



RADIO STATION AUTHORIZATION

Name: Iridium Satellite LLC

Call Sign: E960132

Authorization Type: Modification of License

File Number: SES-MOD-20170413-00388

Non Common Carrier

Grant date:

03/06/2018

Expiration Date:

11/01/2021

H) Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 90145 --- The licensee must commence operations and notify the Commission within twelve months of the date of grant of this authorization. See 47 C.F.R. § 25.133(a)(2).
- 90263 --- The Max EIRP/Carrier for Antenna ID "Handheld" reflects the sum of the maximum flange power and the antenna gain. The Handheld Max EIRP Density/Carrier reflects the Max EIRP/Carrier (11.95 dBW) divided by the occupied bandwidth of 25kHz normalized to a 4kHz bandwidth.
- 90264 --- The Max EIRP/Carrier for Antenna ID "OpenPort" reflects the sum of the maximum flange power adjusted for the transmitted duty cycle and the antenna gain. The OpenPort Max EIRP Density/Carrier reflects the maximum EIRP (9.4 dBW) divided by 16 times the occupied subcarrier bandwidth of 25kHz, which each equals 400 kHz, normalized to a 4kHz bandwidth.
- 90265 --- The Max EIRP/Carrier for Antenna ID "LiveTV" reflects the sum of the maximum flange power adjusted for the transmitted duty cycle and the antenna gain. The Live TV Max EIRP Density/Carrier reflects the maximum EIRP (6.4 dBW) divided by carrier bandwidth of 25kHz normalized to a 4kHz segment.
- 90266 --- The Max EIRP/Carrier for Antenna ID "AMS(R)S-X" reflects the sum of the maximum flange power adjusted for the transmitted duty cycle and the antenna gain. The AMS(R)S Max EIRP Density/Carrier reflects the maximum EIRP (dBW) divided by occupied bandwidth of 35kHz normalized to a 4kHz.
- 90267 --- Operations are subject to ITU Radio Regulations 5.364, 5.365, 5.366, 5.367, and 5.368.
- 90268 --- Site ID AMS(R)S authorizes both AMSS and AMS(R)S operations. AMSR(S) operations are limited to remote, oceanic, and polar regions
- 90294 --- Operations shall comply with Section 25.213 of the Commission rules, 47 C.F.R. § 25.213.
- 90299 --- 20,000 AMS(R)S terminals are authorized for operation aboard U.S commercial aircraft, wherever located, and aboard non-U.S. commercial aircraft located in U.S. and over adjacent waters.
- 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)
- 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.



RADIO STATION AUTHORIZATION

Name: Iridium Satellite LLC

Call Sign: E960132

Authorization Type: Modification of License

File Number: SES-MOD-20170413-00388

Non Common Carrier

Grant date:

03/06/2018

Expiration Date:

11/01/2021

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 is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction 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 regulates 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.