

Special Temporary Authority Application

Summary of the Earth Station Technical Information

Call Signs: E980250

File Nos.: SES-MOD-2004082501242

Name of the Applicant: Loral Skynet Network Services, Inc.

Name of the contact representative: Stanley Edinger, 908-470-2342, se@loralskynet.com

STA term: 30 days

Country to communicate with: Bhutan

Satellite to be used: Telstar 18/Apstar V

Location: 138° E.L.

ITU designation: TONGASAT C/KU-3

Location of Earth Station: Kapolei, Hawaii

Site Location: 91-340 Farrington Highway, Kapolei, Hawaii

Latitude: 21 20 12.6 N

Longitude: 158 5 21.1 W

Frequency Bands and Polarity: 5925 - 6425 MHz Transmit (V, H)
3700 - 4200 MHz Receive (V, H)

Antenna Diameter and Transmission Characteristics: 13 Meter FCC32 VERTEX KPC

Input power Density into the antenna: 450 Watts

Antenna Size: 13.0 Meter

Gain: Tx: 56.3 dBi @ 6.000 GHz

Rx: 53.3 dBi @ 4.000 GHz

Maximum antenna height: 15.1 Meters AGL/ 54.7 AMSL

Ground Elevation: AMSL (Ft/m) 129.93 / 39.60

| Frequency Bands | Tr | Emission | Max EIRP | Max EIRP_Density |
|-----------------|----|----------|----------|------------------|
|-----------------|----|----------|----------|------------------|

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|-----------------|--|---------|----------|----------------|
| 5925 - 6425 MHz | | 36M0F9W | 82.8 dBW | 55.8 dBW/4 kHz |
|-----------------|--|---------|----------|----------------|

Emission description: Analog TV/FM with associated audio subcarriers

| Frequency Bands | Tr | Emission | Max EIRP | Max EIRP_Density |
|-----------------|----|----------|----------|------------------|
|-----------------|----|----------|----------|------------------|

| | | | | |
|-----------------|--|---------|----------|----------------|
| 5925 - 6425 MHz | | 360KG7W | 60.0 dBW | 40.5 dBW/4 kHz |
|-----------------|--|---------|----------|----------------|

Emission description: Digital SCPC, QPSK/data, voice & video, rate 1/2 FEC, 256 Kbps

| Frequency Bands | Tr | Emission | Max EIRP | Max EIRP_Density |
|-----------------|----|----------|----------|------------------|
|-----------------|----|----------|----------|------------------|

5925 - 6425 MHz 36M0G7W 80.0 dBW 40.5 dBW/4 kHz
 Emission description: Digital Multiplex, QPSK/data, voice & video, rate 7/8 FEC, 48.38 Mbps

Frequency Bands Re Emission Max EIRP Max EIRP Density

3700 - 4200 MHz 36M0F9W ----- -----

Emission description: Analog TV/FM with associated audio subcarriers

Frequency Bands Re Emission Max EIRP Max EIRP Density

3700 - 4200 MHz 360KG7W ----- -----

Emission description: Digital SCPC, QPSK/data, voice & video, rate 1/2 FEC, 256 Kbps

Frequency Bands Re Emission Max EIRP Max EIRP Density

3700 - 4200 MHz 36M0G7W ----- -----

Emission description: Digital Multiplex, QPSK/data, voice & video, rate 7/8 FEC, 48.38 Mbps

| Range of Satellite Arc Eastern Limit** | Range of Satellite Arc Western Limit** | Antenna Elevation Angle Eastern Limit | Antenna Elevation Angle Western Limit | Earth Station Azimuth Angle Eastern Limit | Earth station Azimuth Angle Western Limit | |
|--|--|---|---|---|---|--|
| 214.0 | 232.0 | 23.5 | 6.3 | 256.2 | 264.0 | |