



COMSEARCH®

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Ashburn, VA 20147
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March 17, 2003

Mr. Phillip Harlow
ESATEL COMMUNICATIONS
4900 Seminary Road #1120
Alexandria, Virginia 22311

**RE: ESATEL COMMUNICATIONS, INC.
C-Band Transmit/Receive Earth Station
Silver Spring, Maryland
Comsearch Job ID #: 030313JECA**

*******EXPEDITED FREQUENCY COORDINATION*******

Dear Mr. Harlow:

Enclosed please find a copy of the prior coordination notice (PCN) for the above listed earth station. This notice was forwarded to all common carriers within the coordination distance contours of the earth station.

Please review the parameters of the proposed earth station and contact Comsearch immediately if you find any discrepancies with this information.

The final Frequency Coordination Report will be forwarded within two weeks after completion of the prior coordination process when all interference cases have been resolved.

In addition, if this station is not filed with the FCC within six months from the coordination date, you must notify us so that we can forward a six month renewal notice to the microwave community.

Thank you for the opportunity to be of service to you. If you need additional information, please call me at (703) 726-5660.

Sincerely,

Jeffrey E. Cowles
Senior Frequency Coordinator
Microwave and Satellite Services

JEC:rh
Enclosure

19700 Janelia Farm Boulevard

Ashburn, VA 20147

(703) 726-5500



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March 13, 2003

*** CLIENT COPY ***
*** PLEASE MAIL ***
*** TO CUSTOMER ***

RE: ESATEL Communications, Inc.
C-Band Transmit/Receive Earth Station
Silver Spring, Maryland
Comsearch Job ID #: 030313JECA

***** EXPEDITED FREQUENCY COORDINATION *****

Dear Frequency Coordinator:

This notice is being provided in accordance with Section 25.203 (c) of the FCC Rules and Regulations. We are forwarding the attached expedited coordination data on behalf of our client ESATEL Communications, Inc., 4900 Seminary Road, Suite 1120, Alexandria, Virginia 22311, for a proposed 4.6 meter C-band earth station to be added to their Silver Spring, Maryland facility.

This coordination notice is being circulated to the owners (or their coordination agents) of all existing or proposed terrestrial facilities operating in the shared frequency band within the coordination area/contours of the proposed earth station(s).

We respectfully request that you examine this data for its interference potential with your systems(s). Please note that the RF transmit power density for this earth station is lower than other licensed C-band earth stations at this facility. In the event that your analysis identifies potential interference cases that have not been resolved, please contact COMSEARCH by March 21, 2003. To help expedite the coordination, our client will accept any potential 4 GHz cases that may be identified.

If there are any questions concerning this coordination, please call me at (703) 726-5660.

Sincerely,

COMSEARCH

Jeffrey E. Cowles
Senior Frequency Coordinator
Microwave and Satellite Services

SATELLITE EARTH STATION
 FREQUENCY COORDINATION DATA
 03/13/2003

| | | | |
|--|-----------------------------|-------------|-----------|
| Company | ESATEL COMMUNICATIONS, INC. | | |
| Earth Station Name, State | SILVER SPRING, MD | | |
| Latitude (DMS) (NAD83) | 39 | 0 | 5.4 N |
| Longitude (DMS) (NAD83) | 77 | 3 | 26.9 W |
| Ground Elevation AMSL (Ft/m) | 241.0 / | 73.46 | |
| Antenna Centerline AGL (Ft/m) | 9.0 / | 2.74 | |
| Receive Antenna Type: | ANDREW CORPORATION | | |
| | ESA4.6 | | |
| 4.0 GHz Gain (dBi) / Diameter (m) | 44.4 / | 4.6 | |
| 3 dB / 15 dB Half Beamwidth | 0.46 / | 0.91 | |
| Transmit Antenna Type: | ANDREW CORPORATION | | |
| | ESA4.6 | | |
| 6.0 GHz Gain (dBi) / Diameter (m) | 48.2 / | 4.6 | |
| 3 dB / 15 dB Half Beamwidth | 0.31 / | 0.60 | |
| Operating Mode | TRANSMIT AND RECEIVE | | |
| Modulation | DIGITAL | | |
| Emission / Receive Band (MHz) | 43K9G7W - 5M76G7W / | 3700.0000 - | 4200.0000 |
| Emission / Transmit Band (MHz) | 43K9G7W - 5M76G7W / | 5925.0000 - | 6425.0000 |
| Max. Available RF Power (dBW)/4 kHz) | -18.30 | | |
| (dBW)/MHz) | 5.70 | | |
| Max. EIRP (dBW)/4 kHz) | 29.90 | | |
| (dBW)/MHz) | 53.90 | | |
| Max permissible Interference Power | | | |
| 4.0 GHz, 20% (dBW/1 MHz) | -157.0 | | |
| 4.0 GHz, 0.0100% (dBW/1 MHz) | -147.0 | | |
| 6.0 GHz, 20% (dBW/4 kHz) | -154.0 | | |
| 6.0 GHz, 0.0025% (dBW/4 kHz) | -131.0 | | |
| Range of Satellite Arc (Geostationary) | | | |
| Degrees Longitude | 5.0 W / | 149.0 W | |
| Azimuth Range (Min/Max) | 101.5 / | 258.4 | |
| Corresponding Elevation Angles | 5.2 / | 5.3 | |
| Radio Climate | A | | |
| Rain Zone | 2 | | |
| Max Great Circle Coordination Distance (Mi/Km) | | | |
| 4.0 GHz | 371.2 / | 597.5 | |
| 6.0 GHz | 137.7 / | 221.6 | |
| Precipitation Scatter Contour Radius (Mi/Km) | | | |
| 4.0 GHz | 383.4 / | 617.0 | |
| 6.0 GHz | 62.1 / | 100.0 | |

Table of Earth Station Coordination Values
03/13/2003

Earth Station Name SILVER SPRING MD
 Owner ESATEL COMMUNICATIONS, INC.
 Latitude (DMS) (NAD83) 39 0 5.4 N
 Longitude (DMS) (NAD83) 77 3 26.9 W
 Ground Elevation (Ft/m) 241.0 / 73.46 AMSL
 Antenna Centerline (Ft/m) 9.0 / 2.74 AGL
 Antenna Model ANDREW CORPORATION ESA4.6
 Objectives: Receive -157.0 (dBW /1 MHz)
 Transmit -154.0 (dBW /4 kHz) TX Power -18.3 (dBW/4 kHz)

| Azimuth (Deg) | Horizon Elevation Angle (Deg) | Antenna Disc. Angle (Deg) | 4.0 GHz | | 6.0 GHz | |
|------------------|--|------------------------------------|--------------------------|----------------------------------|--------------------------|----------------------------------|
| | | | Antenna Gain (dBi) | Coordination Distance (Km) | Antenna Gain (dBi) | Coordination Distance (Km) |
| 0 | 0.00 | 101.47 | -10.00 | 291.7 | -10.00 | 121.4 |
| 5 | 1.56 | 96.51 | -10.00 | 208.6 | -10.00 | 100.0 |
| 10 | 1.62 | 91.52 | -10.00 | 206.8 | -10.00 | 100.0 |
| 15 | 1.93 | 86.53 | -10.00 | 201.1 | -10.00 | 100.0 |
| 20 | 1.52 | 81.54 | -10.00 | 209.7 | -10.00 | 100.0 |
| 25 | 1.58 | 76.55 | -10.00 | 207.9 | -10.00 | 100.0 |
| 30 | 1.99 | 71.55 | -10.00 | 199.4 | -10.00 | 100.0 |
| 35 | 2.41 | 66.55 | -10.00 | 189.8 | -10.00 | 100.0 |
| 40 | 2.73 | 61.55 | -10.00 | 182.8 | -10.00 | 100.0 |
| 45 | 2.76 | 56.55 | -10.00 | 181.9 | -10.00 | 100.0 |
| 50 | 2.66 | 51.57 | -10.00 | 184.3 | -10.00 | 100.0 |
| 55 | 2.70 | 46.57 | -9.70 | 184.8 | -9.70 | 100.0 |
| 60 | 2.73 | 41.58 | -8.47 | 190.2 | -8.47 | 100.0 |
| 65 | 3.04 | 36.58 | -7.08 | 190.3 | -7.08 | 100.0 |
| 70 | 3.09 | 31.58 | -5.49 | 197.1 | -5.49 | 100.0 |
| 75 | 3.09 | 26.60 | -3.62 | 206.4 | -3.62 | 100.0 |
| 80 | 2.91 | 21.64 | -1.38 | 219.8 | -1.38 | 100.0 |
| 85 | 2.34 | 16.76 | 1.39 | 252.3 | 1.39 | 100.0 |
| 90 | 2.17 | 11.90 | 5.11 | 285.2 | 5.11 | 100.0 |
| 95 | 2.15 | 7.19 | 10.58 | 332.9 | 10.58 | 104.6 |
| 100 | 2.06 | 3.48 | 18.46 | 597.4 | 18.46 | 221.5 |
| 105 | 1.88 | 4.80 | 14.97 | 443.7 | 14.97 | 148.5 |
| 110 | 1.83 | 8.59 | 8.65 | 327.9 | 8.65 | 105.8 |
| 115 | 2.02 | 12.17 | 4.87 | 287.8 | 4.87 | 100.0 |
| 120 | 2.08 | 15.75 | 2.07 | 264.5 | 2.07 | 100.0 |
| 125 | 2.22 | 19.19 | -0.08 | 245.2 | -0.08 | 100.0 |
| 130 | 2.55 | 22.37 | -1.74 | 226.2 | -1.74 | 100.0 |
| 135 | 2.91 | 25.38 | -3.11 | 210.3 | -3.11 | 100.0 |
| 140 | 3.11 | 28.32 | -4.30 | 202.7 | -4.30 | 100.0 |
| 145 | 3.25 | 31.07 | -5.31 | 194.6 | -5.31 | 100.0 |
| 150 | 3.30 | 33.64 | -6.17 | 189.2 | -6.17 | 100.0 |
| 155 | 3.25 | 36.00 | -6.91 | 186.7 | -6.91 | 100.0 |
| 160 | 3.08 | 38.10 | -7.52 | 187.1 | -7.52 | 100.0 |
| 165 | 2.87 | 39.88 | -8.02 | 189.4 | -8.02 | 100.0 |
| 170 | 2.68 | 41.22 | -8.38 | 191.8 | -8.38 | 100.0 |
| 175 | 2.40 | 42.21 | -8.63 | 196.7 | -8.63 | 100.0 |
| 180 | 2.01 | 42.83 | -8.79 | 204.5 | -8.79 | 100.0 |

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 Objectives: Receive -157.0 (dBW /1 MHz)
 Transmit -154.0 (dBW /4 kHz) TX Power -18.3 (dBW/4 kHz)

| Azimuth (Deg) | Horizon Elevation Angle (Deg) | Antenna Disc. Angle (Deg) | Antenna Gain (dBi) | 4.0 GHz Coordination Distance (Km) | Antenna Gain (dBi) | 6.0 GHz Coordination Distance (Km) |
|------------------|--|------------------------------------|--------------------------|---|--------------------------|---|
| 185 | 1.53 | 43.07 | -8.86 | 215.0 | -8.86 | 100.0 |
| 190 | 0.97 | 42.87 | -8.80 | 233.3 | -8.80 | 100.0 |
| 195 | 0.66 | 41.94 | -8.57 | 254.2 | -8.57 | 100.0 |
| 200 | 0.54 | 40.37 | -8.15 | 264.2 | -8.15 | 100.4 |
| 205 | 0.61 | 38.24 | -7.56 | 263.3 | -7.56 | 100.0 |
| 210 | 0.64 | 35.81 | -6.85 | 265.9 | -6.85 | 100.0 |
| 215 | 0.66 | 33.11 | -6.00 | 270.4 | -6.00 | 100.8 |
| 220 | 0.56 | 30.24 | -5.01 | 283.3 | -5.01 | 107.5 |
| 225 | 0.48 | 27.16 | -3.85 | 298.8 | -3.85 | 115.4 |
| 230 | 0.47 | 23.85 | -2.44 | 309.7 | -2.44 | 119.6 |
| 235 | 0.40 | 20.46 | -0.77 | 331.9 | -0.77 | 129.7 |
| 240 | 0.48 | 16.84 | 1.34 | 338.1 | 1.34 | 129.3 |
| 245 | 0.48 | 13.19 | 3.99 | 359.5 | 3.99 | 135.6 |
| 250 | 0.60 | 9.40 | 7.67 | 381.8 | 7.67 | 141.2 |
| 255 | 0.53 | 5.83 | 12.85 | 470.7 | 12.85 | 170.2 |
| 260 | 0.61 | 4.94 | 14.66 | 594.6 | 14.66 | 220.8 |
| 265 | 0.67 | 8.04 | 9.37 | 390.3 | 9.37 | 143.0 |
| 270 | 0.53 | 12.52 | 4.56 | 360.0 | 4.56 | 134.6 |
| 275 | 0.47 | 17.26 | 1.07 | 338.1 | 1.07 | 129.8 |
| 280 | 0.49 | 22.10 | -1.61 | 314.6 | -1.61 | 120.6 |
| 285 | 0.52 | 26.99 | -3.78 | 295.3 | -3.78 | 113.0 |
| 290 | 0.33 | 31.94 | -5.61 | 304.5 | -5.61 | 122.3 |
| 295 | 0.33 | 36.88 | -7.17 | 294.4 | -7.17 | 118.6 |
| 300 | 0.55 | 41.82 | -8.53 | 261.4 | -8.53 | 100.0 |
| 305 | 0.43 | 46.79 | -9.75 | 264.6 | -9.75 | 103.3 |
| 310 | 0.47 | 51.76 | -10.00 | 258.8 | -10.00 | 100.0 |
| 315 | 0.38 | 56.74 | -10.00 | 269.0 | -10.00 | 106.6 |
| 320 | 0.39 | 61.71 | -10.00 | 267.7 | -10.00 | 105.8 |
| 325 | 0.41 | 66.69 | -10.00 | 266.3 | -10.00 | 104.8 |
| 330 | 0.49 | 71.66 | -10.00 | 256.8 | -10.00 | 100.0 |
| 335 | 0.56 | 76.64 | -10.00 | 251.7 | -10.00 | 100.0 |
| 340 | 0.71 | 81.62 | -10.00 | 242.1 | -10.00 | 100.0 |
| 345 | 0.98 | 86.61 | -10.00 | 226.3 | -10.00 | 100.0 |
| 350 | 1.37 | 91.59 | -10.00 | 213.9 | -10.00 | 100.0 |
| 355 | 0.99 | 96.58 | -10.00 | 226.0 | -10.00 | 100.0 |