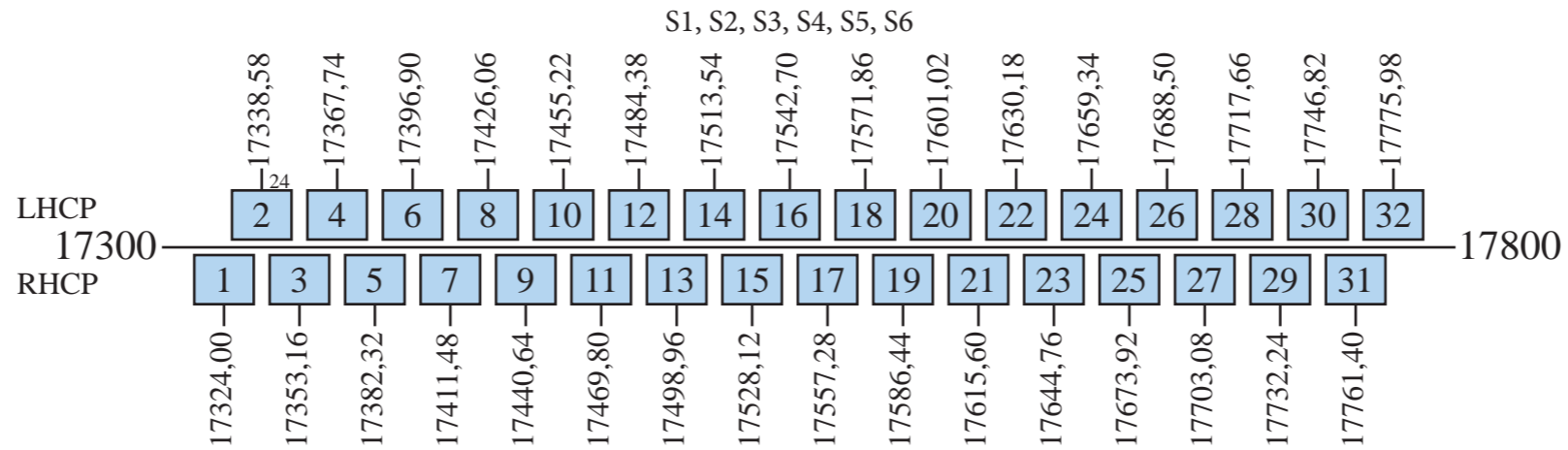


# Echostar 14

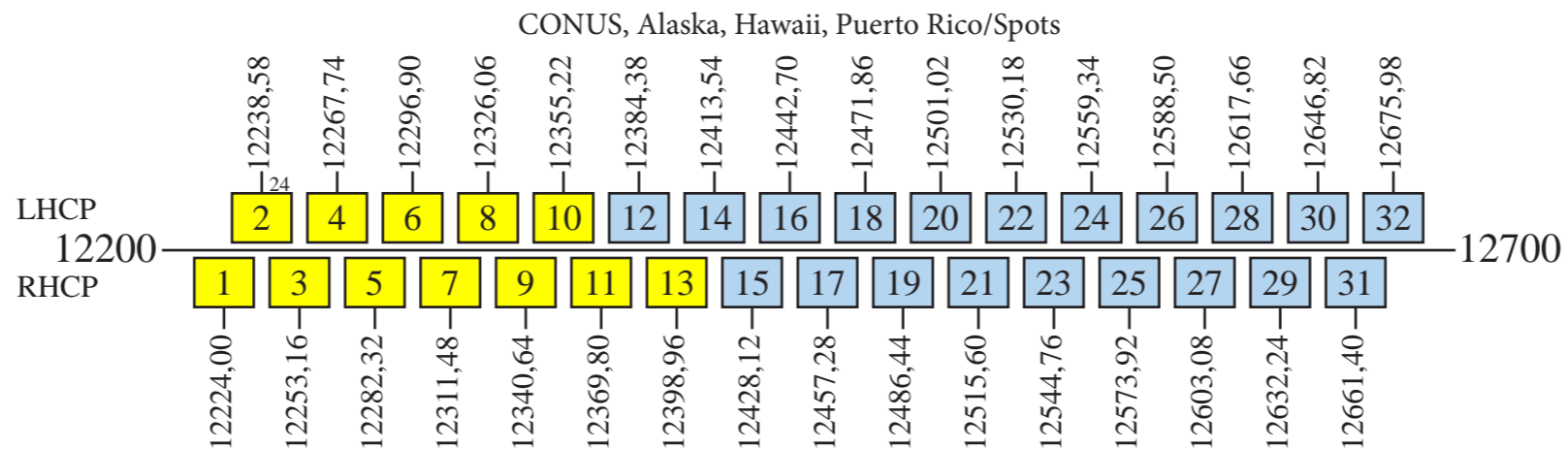
## Frequency Plan

### Uplink



**Note:** S1=Cheyenne (WY) S2=Gilbert (AZ) S3=Peoria (IL) S4=Richmond (VA) S5=San Antonio (TX) S6=Spokane (WA)

### Downlink



CONUS, Alaska, Hawaii, Puerto Rico or Spots

Command 1: 17794,00 R Global  
 Command 2: 17797,00 R Global  
 Telemetry 1a: 12692,00 R Global  
 Telemetry 1b: 12692,00 R Conus  
 Telemetry 2a: 12698,50 R Global  
 Telemetry 2b: 12698,50 R Conus

| Spot Beam Interconnectivity |        |         |          |        |         |
|-----------------------------|--------|---------|----------|--------|---------|
| U/L Site                    | U/L Ch | U/L Pol | D/L Beam | D/L Ch | D/L Pol |
| S5                          | 5      | R       | A01      | 5      | R       |
| S5                          | 19     | R       | A01      | 5      | R       |
| S5                          | 21     | R       | A01      | 7      | R       |
| S5                          | 12     | L       | A02      | 2      | L       |
| S5                          | 14     | L       | A02      | 4      | L       |
| S5                          | 16     | L       | A02      | 6      | L       |
| S5                          | 2      | L       | A03      | 2      | L       |
| S5                          | 4      | L       | A03      | 4      | L       |
| S5                          | 6      | L       | A03      | 6      | L       |
| S5                          | 5      | R       | A04      | 5      | R       |
| S5                          | 19     | R       | A04      | 5      | R       |
| S5                          | 7      | R       | A04      | 7      | R       |
| S5                          | 9      | R       | A04      | 9      | R       |
| S5                          | 11     | R       | A04      | 11     | R       |
| S6                          | 4      | L       | A05      | 4      | L       |
| S6                          | 6      | L       | A05      | 6      | L       |
| S2                          | 8      | L       | A06      | 8      | L       |
| S6                          | 9      | R       | A07      | 1      | R       |
| S4                          | 15     | R       | A07      | 1      | R       |
| S6                          | 13     | R       | A07      | 5      | R       |
| S4                          | 21     | R       | A07      | 7      | R       |
| S6                          | 20     | L       | A07      | 13     | R       |
| S2                          | 2      | L       | A08      | 2      | L       |
| S1                          | 2      | L       | A08      | 2      | L       |
| S6                          | 14     | L       | A09      | 4      | L       |
| S6                          | 2      | L       | A10      | 2      | L       |
| S6                          | 12     | L       | A10      | 2      | L       |
| S4                          | 1      | R       | A11      | 1      | R       |
| S4                          | 5      | R       | A11      | 5      | R       |
| S4                          | 7      | R       | A11      | 7      | R       |
| S4                          | 9      | R       | A11      | 9      | R       |
| S4                          | 13     | R       | A11      | 13     | R       |
| S4                          | 2      | L       | A12      | 2      | L       |
| S4                          | 8      | L       | A12      | 8      | L       |
| S6                          | 1      | R       | A13      | 1      | R       |
| S6                          | 7      | R       | A13      | 7      | R       |
| S6                          | 9      | R       | A13      | 9      | R       |
| S6                          | 13     | R       | A13      | 13     | R       |
| S6                          | 2      | L       | A14      | 2      | L       |
| S6                          | 12     | L       | A14      | 2      | L       |
| S6                          | 8      | L       | A14      | 8      | L       |
| S6                          | 10     | L       | A14      | 10     | L       |
| S3                          | 1      | R       | A15      | 1      | R       |
| S3                          | 7      | R       | A15      | 7      | R       |
| S3                          | 2      | L       | A16      | 2      | L       |
| S3                          | 8      | L       | A17      | 1      | R       |
| S3                          | 15     | R       | A17      | 1      | R       |
| S3                          | 10     | L       | A17      | 3      | R       |
| S6                          | 21     | R       | A17      | 7      | R       |
| S6                          | 18     | L       | A17      | 11     | R       |
| S3                          | 12     | L       | A18      | 2      | L       |
| S2                          | 6      | L       | A19      | 2      | L       |
| S6                          | 15     | R       | A20      | 1      | R       |
| S6                          | 19     | R       | A20      | 5      | R       |
| S5                          | 15     | R       | A21      | 1      | R       |
| S1                          | 13     | R       | A21      | 13     | R       |
| S2                          | 11     | R       | A22      | 5      | R       |
| S4                          | 15     | R       | A23      | 1      | R       |
| S2                          | 21     | R       | A23      | 7      | R       |
| S2                          | 1      | R       | A24      | 1      | R       |
| S2                          | 3      | R       | A24      | 3      | R       |
| S2                          | 5      | R       | A24      | 5      | R       |
| S2                          | 2      | L       | A25      | 2      | L       |
| S2                          | 4      | L       | A25      | 4      | L       |
| S2                          | 10     | L       | A25      | 10     | L       |
| S2                          | 7      | R       | A26      | 1      | R       |
| S3                          | 19     | R       | A26      | 5      | R       |
| S2                          | 15     | R       | A27      | 1      | R       |
| S2                          | 17     | R       | A27      | 3      | R       |
| S2                          | 19     | R       | A27      | 5      | R       |
| S2                          | 12     | L       | A28      | 2      | L       |
| S2                          | 14     | L       | A28      | 4      | L       |

| Spot Beam Interconnectivity |        |         |          |        |         |
|-----------------------------|--------|---------|----------|--------|---------|
| U/L Site                    | U/L Ch | U/L Pol | D/L Beam | D/L Ch | D/L Pol |
| S5                          | 8      | L       | B01      | 8      | L       |
| S5                          | 10     | L       | B01      | 10     | L       |
| S5                          | 15     | R       | B02      | 1      | R       |
| S5                          | 17     | R       | B02      | 3      | R       |
| S5                          | 1      | R       | B03      | 1      | R       |
| S5                          | 3      | R       | B03      | 3      | R       |
| S5                          | 13     | R       | B03      | 13     | R       |
| S1                          | 2      | L       | B04      | 2      | L       |
| S1                          | 8      | L       | B04      | 8      | L       |
| S6                          | 16     | L       | B05      | 9      | R       |
| S5                          | 20     | L       | B06      | 10     | L       |
| S1                          | 3      | R       | B07      | 3      | R       |
| S6                          | 17     | R       | B07      | 3      | R       |
| S1                          | 9      | R       | B07      | 9      | R       |
| S1                          | 11     | R       | B07      | 11     | R       |
| S4                          | 12     | L       | B08      | 2      | L       |
| S2                          | 8      | L       | B09      | 4      | L       |
| S1                          | 6      | L       | B09      | 6      | L       |
| S4                          | 8      | L       | B09      | 8      | L       |
| S1                          | 10     | L       | B09      | 10     | L       |
| S6                          | 3      | R       | B10      | 3      | R       |
| S6                          | 5      | R       | B10      | 5      | R       |
| S6                          | 11     | R       | B10      | 11     | R       |
| S6                          | 14     | L       | B11      | 4      | L       |
| S2                          | 16     | L       | B11      | 6      | L       |
| S2                          | 18     | L       | B11      | 8      | L       |
| S4                          | 4      | L       | B12      | 4      | L       |
| S4                          | 6      | L       | B12      | 6      | L       |
| S4                          | 10     | L       | B12      | 10     | L       |
| S4                          | 3      | R       | B13      | 3      | R       |
| S4                          | 17     | R       | B13      | 3      | R       |
| S4                          | 5      | R       | B13      | 5      | R       |
| S4                          | 11     | R       | B13      | 11     | R       |
| S4                          | 14     | L       | B14      | 4      | L       |
| S4                          | 16     | L       | B14      | 6      | L       |
| S4                          | 20     | L       | B14      | 10     | L       |
| S4                          | 17     | R       | B15      | 3      | R       |
| S4                          | 19     | R       | B15      | 5      | R       |
| S3                          | 3      | R       | B16      | 3      | R       |
| S3                          | 5      | R       | B16      | 5      | R       |
| S3                          | 9      | R       | B16      | 9      | R       |
| S3                          | 11     | R       | B16      | 11     | R       |
| S3                          | 13     | R       | B16      | 13     | R       |
| S3                          | 4      | L       | B17      | 4      | L       |
| S3                          | 6      | L       | B17      | 6      | L       |
| S3                          | 8      | L       | B17      | 8      | L       |
| S3                          | 10     | L       | B17      | 10     | L       |
| S3                          | 14     | L       | B18      | 4      | L       |
| S3                          | 16     | L       | B18      | 6      | L       |
| S3                          | 20     | L       | B18      | 10     | L       |
| S2                          | 9      | R       | B19      | 9      | R       |
| S2                          | 13     | R       | B19      | 13     | R       |
| S3                          | 16     | L       | B20      | 2      | L       |
| S3                          | 18     | L       | B20      | 4      | L       |
| S3                          | 17     | R       | B21      | 3      | R       |
| S3                          | 21     | R       | B21      | 7      | R       |
| S1                          | 1      | R       | B22      | 1      | R       |
| S1                          | 3      | R       | B22      | 3      | R       |
| S1                          | 5      | R       | B22      | 5      | R       |
| S1                          | 7      | R       | B22      | 7      | R       |
| S1                          | 4      | L       | B23      | 4      | L       |

| Beam Interconnectivity |        |         |          |        |         |
|------------------------|--------|---------|----------|--------|---------|
| U/L Site               | U/L Ch | U/L Pol | D/L Beam | D/L Ch | D/L Pol |
| S1                     | 1      | R       | Conus    | 1      | R       |
| S1                     | 2      | L       | Conus    | 2      | L       |
| S1                     | 3      | R       | Conus    | 3      | R       |
| S1                     | 4      | L       | Conus    | 4      | L       |
| S1                     | 5      | R       | Conus    | 5      | R       |
| S1                     | 6      | L       | Conus    | 6      | L       |
| S1                     | 7      | R       | Conus    | 7      | R       |
| S1                     | 8      | L       | Conus    | 8      | L       |
| S1                     | 9      | R       | Conus    | 9      | R       |
| S1                     | 10     | L       | Conus    | 10     | L       |
| S1                     | 11     | R       | Conus    | 11     | R       |
| S1                     | 12     | L       | Conus    | 12     | L       |
| S1                     | 13     | R       | Conus    | 13     | R       |
| S1                     | 14     | L       | Conus    | 14     | L       |
| S1                     | 15     | R       | Conus    | 15     | R       |
| S1                     | 16     | L       | Conus    | 16     | L       |
| S1                     | 17     | R       | Conus    | 17     | R       |
| S1                     | 18     | L       | Conus    | 18     | L       |
| S1                     | 19     | R       | Conus    | 19     | R       |
| S1                     | 20     | L       | Conus    | 20     | L       |
| S1                     | 21     | R       | Conus    | 21     | R       |
| S1                     | 22     | L       | Conus    | 22     | L       |
| S1                     | 23     | R       | Conus    | 23     | R       |
| S1                     | 24     | L       | Conus    | 24     | L       |
| S1                     | 25     | R       | Conus    | 25     | R       |
| S1                     | 26     | L       | Conus    | 26     | L       |
| S1                     | 27     | R       | Conus    | 27     | R       |
| S1                     | 28     | L       | Conus    | 28     | L       |
| S1                     | 29     | R       | Conus    | 29     | R       |
| S1                     | 30     | L       | Conus    | 30     | L       |
| S1                     | 31     | R       | Conus    | 31     | R       |
| S1                     | 32     | L       | Conus    | 32     | L       |
| S2                     | 1      | R       | Conus    | 1      | R       |
| S2                     | 2      | L       | Conus    | 2      | L       |
| S2                     | 3      | R       | Conus    | 3      | R       |
| S2                     | 4      | L       | Conus    | 4      | L       |
| S2                     | 5      | R       | Conus    | 5      | R       |
| S2                     | 6      | L       | Conus    | 6      | L       |
| S2                     | 7      | R       | Conus    | 7      | R       |
| S2                     | 8      | L       | Conus    | 8      | L       |
| S2                     | 9      | R       | Conus    | 9      | R       |
| S2                     | 10     | L       | Conus    | 10     | L       |
| S2                     | 11     | R       | Conus    | 11     | R       |
| S2                     | 12     | L       | Conus    | 12     | L       |
| S2                     | 13     | R       | Conus    | 13     | R       |
| S2                     | 14     | L       | Conus    | 14     | L       |
| S2                     | 15     | R       | Conus    | 15     | R       |
| S2                     | 16     | L       | Conus    | 16     | L       |
| S2                     | 17     | R       | Conus    | 17     | R       |
| S2                     | 18     | L       | Conus    | 18     | L       |
| S2                     | 19     | R       | Conus    | 19     | R       |
| S2                     | 20     | L       | Conus    | 20     | L       |
| S2                     | 21     | R       | Conus    | 21     | R       |
| S2                     | 22     | L       | Conus    | 22     | L       |
| S2                     | 23     | R       | Conus    | 23     | R       |
| S2                     | 24     | L       | Conus    | 24     | L       |
| S2                     | 25     | R       | Conus    | 25     | R       |
| S2                     | 26     | L       | Conus    | 26     | L       |
| S2                     | 27     | R       | Conus    | 27     | R       |
| S2                     | 28     | L       | Conus    | 28     | L       |
| S2                     | 29     | R       | Conus    | 29     | R       |
| S2                     | 30     | L       | Conus    | 30     | L       |
| S2                     | 31     | R       | Conus    | 31     | R       |
| S2                     | 32     | L       | Conus    | 32     | L       |