

FCC Filing Notes

On-The-Move SATCOM Permanent Licensing

Form 312, Schedule B

E10: Our earth station is mobile with operation within CONUS and Hawaii. We are excluding transmissions near White Sands, NM in order to not interfere with government operations in that area.

- Mobile-CONUS
- 14.0 to 14.5 GHz
- No transmissions between 14.0 GHz and 14.2 GHz within 125 km of
 - White Sands, NM
 - latitude: 32.5430N, longitude 106.6121W
 - latitude: 32.5008N, longitude 106.6086W
 - Blossom Point, MD
 - latitude: 38.4289N, longitude 77.0839W

E11,12,14: Since this is a mobile satellite earth station we are leaving the coordinates completely empty and have indicated CONUS coverage in E10. The elevation is left blank since it will vary.

E35: The antenna will typically be mounted on top of a vehicle with a height of about 1-2 meters. We have indicated a maximum height of 3 meters to include the antenna height as well as that of the vehicle.

E36, 37, 39: Since this is a mobile satellite earth station the height field is left blank since it will vary.

E48, 49: For receive carriers we have left the EIRP field blank.

E49 Maximum EIRP Density per Carrier:

A range of transmit emissions are possible with an average EIRP density of 11 dBW/4kHz. Only ONE carrier type will be transmitted at any one time. Following is a list of carrier types that cover the minimum and maximum bandwidths and the minimum and maximum EIRPs.

	Maximum EIRP Density	11.1 dBW/4 kHz
Carrier ID	Bandwidth (kHz)	Maximum EIRP/Carrier
1T	45	21.6 dBW
2T	717	33.6 dBW
3T	1430	36.6 dBW
5T	11500	45.7 dBW



E56, 57, 58, 59 Frequency Coord:

For the satellites and CONUS operation requested in this license the lowest elevation angle is 10 degrees and this occurs at Caribou, Maine while pointing at IA7 at 129 degrees W.

We have examined the azimuth and elevation angles for locations within CONUS to determine the extremities for eastern and western satellite limits.

- E56: ES Az Eastern Limit 124
- E57: ES EI Eastern Limit 21
- E58: ES Az Western Limit 250
- E59: ES EI Western Limit 10

Western Limit - 129 degrees W

Puget Sound, WA Lat 47.62 Long -122.58 EI 34.96 True Az 188.67	Caribou, MA Lat 46.87 Long -68.01 EI 10.84 True Az 248
Chula Vista, CA Lat 32.62 Long -117.07 EI 49.93 True Az 201.42	Miami, FL Lat 25.48 Long -79.98 EI 28.68 True Az 249.54

Minimum elevation = 10 degrees
 Most Westerly Azimuth = 250 degrees

Eastern Limit - 79 degrees W

Puget Sound, WA Lat 47.62 Long -122.58 EI 21.14 True Az 127.79	Caribou, MA Lat 46.87 Long -68.01 EI 35.07 True Az 194.91
Chula Vista, CA Lat 32.62 Long -117.07 EI 34.38 True Az 124.51	Miami, FL Lat 25.48 Long -79.98 EI 60.22 True Az 177.72

Minimum elevation = 21 degrees
 Most Easterly Azimuth = 124 degrees

