

May 10, 2005



Federal Communications Commission – International Bureau
445 12th Street, S.W.
Washington, D.C. 20554

Subject: GSI 0.75m Transportable Earth Station

To Whom It May Concern:

The Globecomm Systems Inc. Ku-band terminal will use one AvL Model 9066, temporary fixed antenna with a dimension of 90 x 66 cm (an equivalent aperture of 0.75 meter).

The antenna pattern of the GSI 75cm Small Earth Station is non-compliant with the 29 - 25 log{0} specification between 1.25 degrees and 1.73 degrees angle off bore-sight. The 1.25 degree point is within the main beam of the 75cm antenna. Consequently, it will not be possible to reduce the power density enough so that the terminal will radiate an EIRP density of 15 dBW/4 kHz at the 1.25 degrees angle off bore-sight that would be the equivalent to a terminal using a compliant antenna.

Our application to the FCC for an STA will be based on the calculation of the maximum EIRP density at the actual minimum angle off bore-sight (plus pointing error) to the next adjacent satellites.

The antenna pattern is compliant with the 29 - 25 log{0} specification beyond 1.73 degrees angle off bore-sight. With the worst case pointing error is 0.3 degrees, this means the emissions would be within the implied limits beyond 2.03 degrees off bore-sight.

Since the angle between adjacent satellites is always greater than the geocentric angle (see Attachment), the terminal will radiate an EIRP density in the direction of adjacent satellites that is equal to or less than the EIRP density radiated by a fully compliant antenna when both terminals limit the power density into the antenna to -14 dBW/4 kHz.

By this analysis, the 75cm terminal will not cause interference to the adjacent satellite.

Thus, we need only limit the power density to: -14 dBW / 4 kHz
Pointing angle difference between adjacent satellites with 2 degree spacing

Very truly yours,

GLOBECOMM SYSTEMS INC.

A handwritten signature in cursive script that reads 'Donald G. Woodring'.

Donald G. Woodring
Vice President

GLOBECOMM SYSTEMS INC.
ISO 9001 CERTIFIED

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Pointing angle difference between adjacent satellites with 2 degree spacing

	Long	Lat	nominal		with 0.05 stationkeeping	
			AMC-4	IA-6	AMC-4	IA-6
Tampa	277.73	27.56	2.30	2.44	2.29	2.35
Washington	282.98	38.53	2.26	2.20	2.24	2.30
New York	285.99	40.43	2.25	2.19	2.23	2.28
Atlanta	275.77	33.44	2.27	2.22	2.27	2.33
Washington	282.98	38.53	2.26	2.20	2.24	2.25
Minneapolis	266.85	44.58	2.21	2.16	2.23	2.27
Seattle	237.68	47.6	2.12	2.06	2.18	2.23
Los Angeles	241.86	34.03	2.17	2.11	2.24	2.30