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The MITRE Corporation researches, purchases and evaluates commercial equipment, to include modems, amplifiers, multiplexers and VSAT networks for U.S. government applicability. As part of ongoing evaluations MITRE leases satellite bandwidth to perform over-the-air research and evaluations of the commercial equipment and require FCC licensing to perform over-the-air activities. The MITRE Corporation has been performing these evaluations since December 2001 and will continue into the foreseeable future.

The MITRE Corporation has leased 7.2 MHz of bandwidth from Intelsat (Service Order # IGB-00869) on Galaxy-25, at an orbital position of 93.1° west. Our leased bandwidth is on transponder 15 with an uplink polarization of horizontal and downlink of vertical and utilizing the North America beam. The uplink frequency range is 14277.5 to 14284.7 MHz, downlink frequency range is 11977.5 to 11984.7 MHz. The included document, AppendixB_10097_G25_10Jan13, Is provided by Intelsat concerning the satellite specifications.

Periodically MITRE will host a different VSAT network or multiple VSAT networks on the satellite. MITRE in Colorado Springs primarily utilizes the two Andrew 4.6m or 3.7m antennas to host the hub or network control signals to the remote terminals. The remote terminals utilize either the 2.4m or 1.2m antennas, depending on the configuration, to communicate with Colorado Springs. All the antennas are commercially available and are Type Approved. The remote terminals operate from either Colorado Springs or sites located on government or MITRE property in CA, ID, FL, VA and TX. Prior to hosting a network on the satellite or make changes to a network MITRE must contact the Intelsat Secure Operations Center (ISOC) for cross pole and peak power calibrations for all antennas and signals.

	Tx Gain (dBi/Ku)	Beamwidth (Ku)	Tx Gain (dBi/C)	Beamwidth (C)	Tx Gain (dBi/X)	Beamwidth (X)
4.6m	55.10	0.29	48.40	0.63	50.40	0.47
3.7m	53.00	0.36	46.30	0.80	48.40	0.60
2.4m	47.20	0.75				
1.2m	40.80	1.70				

	Diameter	Azimuth	Elevation	EL (MSL)	EL (AGL)
CO	4.6m	161.78	43.43	1850.87	5.86
CO	3.7m	161.78	43.43	1849.19	5.34
CO	2.4m	161.78	43.43	1850.32	3.5
CO	2.4m	161.78	43.43	1849.86	3.5
CO	2.4m	161.78	43.43	1851.01	3.4
CO	2.4m	161.78	43.43	1851.07	3.4
CO	2.4m	161.78	43.43	1850.53	3.5
CO	1.2m	161.78	43.43	1851.07	1.6
CO	1.2m	161.78	43.43	1850.53	1.6
CO	1.2m	161.78	43.43	1851.6	1.6
CO	1.2m	161.78	43.43	1850.64	1.6
CO	1.2m	161.78	43.43	1850.58	1.6
CO	1.2m	161.78	43.43	1850.52	1.6
CO	1.2m	161.78	43.43	1850.64	1.6
CO	1.2m	161.78	43.43	1850.65	1.6
CO	1.2m	161.78	43.43	1851.9	1.6
CA	1.2m	140.38	43.90	6.09	1.6
ID	1.2m	149.38	35.92	1094.23	1.6
FL	1.2m	207.64	56.98	2.13	1.6
VA	1.2m	204.10	42.12	90.22	1.6
TX	1.2m	168.90	55.13	240.18	1.6