

CSS ANTENNA, INC.
10552 Philadelphia Road, Suite 150
White Marsh, MD 21162



Telephone 410-344-1010
Fax 410-344-1007

October 29, 2001

Dr. Peter Karabinis
Mobile Satellite Ventures LLC
10802 Parkridge Boulevard
Reston, VA 20191-5416

Dear Dr. Karabinis:

CSS Antenna, Inc. did in fact design and build the antenna shown in Inmarsat's Figure 3.3-1 of their response (lower trace labeled Motient proposed antenna performance). This was also one of eight antennas built, and not a prototype "one of a kind" antenna. This design uses a one-piece circuit board for the feed network and radiating elements combined. This is controlled by fabricating every board from the same artwork, making every antenna exactly like the last one. This design also eliminates any assembly variations, which are traditional in our industry.

We can produce this antenna in very high volume. This antenna is assembled in the same package as a current PCS antenna of ours, which we produce by the thousands today. This makes this antenna a very cost effective choice for large scale Base Station deployment.

We based the design of this antenna at a Frequency of 1.660 GHz and can produce the same results in an antenna tuned for 1.525-1.559 GHz. Attached is the actual tested data of the 1.660 GHz antenna, from the CSS test lab as well as an independent testing house, Seavey Engineering in Pembroke, MA.

CSS Antenna, Inc. is a leading manufacturer of Cellular and PCS Base Station Antennas in North America. CSS supplies Antennas to the majority of the Operators, including being the Antenna Company of choice for the largest Operator, in the United States.

Cordially,

A handwritten signature in black ink, appearing to read "David M. Sobczak", is written over a light blue horizontal line. The signature is stylized and cursive.

David M. Sobczak
Executive VP
CSS Antenna, Inc.

Proprietary

File: EM1003EG.DAT
Date: 02-Aug-00
Time: 17:00
Operator: Mark Gladden
Ser. no.: 1003
Channel: Gain

LCC Dipole (Eng. model 1003)
E-plane, gain

Tx pol: Horiz. Rx pol: Horiz.

Calibration status: Frequency : 1.660 GHz
File: EM1003EG.DAT
Chan.: Gain
Table: LCC band
Units: dBi



