

STA Confirmation Number: EL873097  
STA File Number: 0083-EX-ST-2009  
Date of Submission: March 4, 2009

Timothy X Brown  
University of Colorado, CB 530  
Boulder, Colorado 80303  
303-492-1630  
timxb@colorado.edu

**Modulating Signal Description:**

This document describes the modulating signals. The 903.5 and 948.5 MHz Emitters are based on the well-known digital cellular radio standard GSM. This uses so-called BT = 0.3 GMSK modulation. The channel bit rate is 270.8333 kbps.

The 106.5 MHz signal is based on a Dicom RF1302 FM handheld radio. The peak frequency deviation is 6.5KHz and the voice signal bandwidth is 300-3000 Hz.