

Experimental STA Request
February 9, 2000
STA File No. 0051-EX-ST-2000
STA Confirmation No. EL7775

Exhibit 1
Modulating Signal Description

This request seeks authority to demonstrate prototype equipment that uses the “time modulated” ultra wideband (UWB) technology developed by Time Domain Corporation (“Time Domain”). The device to be demonstrated is a field disturbance sensor, the Radar Vision™. This device generates a signal that is unmodulated in the sense that it does not convey information. The device is used to determine the presence of persons behind walls. It was the subject of a limited basis pursuant to waiver granted by the Office of Engineering and Technology. See letter of June 29, 1999, from Dale Hatfield, to David Hilliard, Counsel for Time Domain. J See Exhibit 3 of this request. The position of the unmodulated pulse employed by the Radar Vision™ is varied in time so as to produce a spectrum that approximates Gaussian noise. If an emission designator were to be applied to this device, Time Domain believes that 2G00P0N would be descriptive of the signal. The nominal center frequency of the signal is 2.0 GHz. The radiated power is below the part 15 general limits. For the purpose of this STA, it should be specified as <-73 dBW/MHz. The total radiated power is 36 microwatts EIRP.

The transmitter and antenna to be used is that which was approved under FCC ID NUF-CW, except that this demonstration equipment does not contain a deadman’s switch. The equipment does, however, include a timer that limits transmit time to a maximum of 20 minutes.