

EXHIBIT NO. 1

(Reference: Item No. 4(F))

The pulse duration is adjustable from 400 nanoseconds to 12 microseconds.
Bi-phase (180°) modulation may be employed in minimum intervals of 400 nanoseconds.

The pulse repetition frequency is also adjusted to the mode of operation, but cannot exceed 50 KHz.

EXHIBIT NO. 2

(Reference: Item No. 4(G))

Simple calculation using the minimum 400 nanosecond pulse/code cell durations yields:

Signal Level	Bandwidth;
Below Peak;	
-3 dB	2.2 MHz
-10 dB	3.7 MHz
-20 dB	12.7 MHz

These values have been confirmed by measurement.

EXHIBIT NO. 3

(Reference: Item No. 5(B))

The location is on Miramar Naval Air Station and is approximately 0.5 miles southeast of Kearny Villa Road, 1.5 miles north of Freeway 52, and 2.6 miles west of Interstate 15. The site will be shared with an existing National Weather Service upper air balloon release station.

EXHIBIT NO. 4

(Reference: Item No. 6)

The antenna system will consist of one steerable micro-patch phased array planar antenna with sidelobe reduction fence. The antenna will be pointed vertically, with electrically switched delays introduced to point it 21° off vertical, in planes that are 90° from each other. The antenna will have a beamwidth of $\sim 9^\circ$ by 9° , and ~ 26 dB of gain.

Normal operation will consist of sequential transmissions in each of three (two oblique, one vertical) or five (four oblique, one vertical) directions.

EXHIBIT NO. 5

(Reference: Item No. 10)

This system that would be operated under this requested license will collect wind and virtual temperature profiles at a site next to a National Weather Service's (NWS) facility in the Miramar Naval Air Station, San Diego. The establishment of this type of upper wind profiler is required by the 1990 Clean Air Act Amendments (Title I, Section 182).

The data will support regional ozone modeling, polluting transport studies, and air quality forecasting. The data will also be shared with the National Weather Service and the Navy, to improve their daily operations.