

Exhibit A

The equipment to be tested is being developed to upgrade the TPS-77, FPS-117 and TPS-59 Radars and for future long range surveillance radars. These radars are currently used by the USMC and USAF. The equipment will test several different schemes for digitally generating transmit waveforms. Figure 1 and 2 show representative examples of equipment that will be tested. The final output frequency will always remain between 1215 and 1400 MHz.

Figure 1 Frequency Multiplication Stages Block Diagram

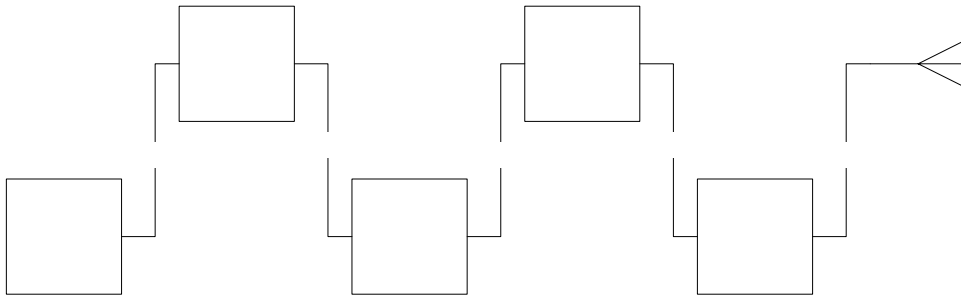
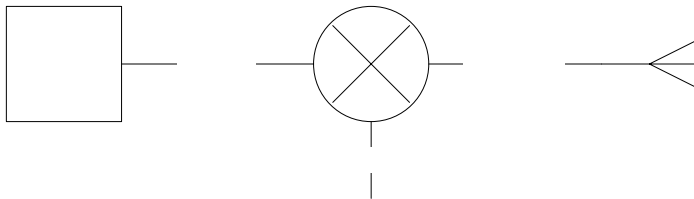


Figure 2 Single Mix Approach



Four different models will be developed and tested:

- TPS-X (A) – Concept Array – 8 radiating elements
- TPS-X (B) – Prototype Array I – 32 radiating elements
- TPS-X (C) – Prototype Array II – 256 radiating elements
- TPS-X (D) – Prototype Array III – 512 radiating elements

These experiments will allow for development and testing of: next generation digital waveform generators, transmitter modules using semiconductor material, antenna elements and test antenna pattern and beam forming, software to control the radar system and high resolution radar waveforms

The testing will be done under internal research and development to support development of upgrades for current generation and to develop next generation long range surveillance radars. The upgrades will make the radars more supportable and, improve the radar performance.

