

Exhibit 2

Operating Interrogation Rates

The equipment for which this application is made utilizes a dynamic Pulse Repetition Frequency (PRF) management scheme that adjusts the interrogation rate depending on interrogation modes, interrogation interlace, and antenna speed.

Telephonics Stagger Algorithm Overview (Telephonics Proprietary)

An important element of Interrogation Management is **PRF Stagger control**. PRF stagger is of greater concern for interoperability performance of mobile or transportable interrogators as well as for fixed ATC ground sites. Fixed sites usually employ a fixed set of n-period stagger selections. Fixed sites can be controlled by the selection of fixed stagger patterns and by varying the base PRF for each overlapping site. Adjacent ATC sites usually require a minimum PRF separation of 25 μ s. Fixed n-period stagger with set PRF separations are not optimal for airborne, shipboard, ground mobile and transportable systems. The PRF stagger capability of these systems must be more robust and must provide a PRF stagger algorithm that protects against interrogations that synchronously interfere with other nearby interrogator systems, must also provide self-interference from synchronous FRUIT conditions and must insure that the stagger algorithm minimizes false targets.

The Telephonics PRF stagger algorithm uses a 256 step stagger table array configured as a stagger matrix of 16 columns of 16 rows. The matrix values are software downloadable and are designed not only to operate in the surveillance volume of other military and civil interrogator systems without mutual interference but also to support multiple like systems (e.g. several interrogators operating within the same surveillance volume) or other Military mobile or shipboard systems operating in the same surveillance volume.

The combination of the Telephonics RPF stagger algorithm of a pseudorandom operation coupled with a set stagger sequence mitigates the problems associated with pseudorandom only stagger algorithms or with fixed set stagger algorithms. The Telephonics PRF stagger algorithm has been rigorously tested through flight testing and by independent adjacent site performance evaluations made by the FAA technical center and by Eurocontrol in live demonstrations with our AWACS AN/UPX-40 interrogator system and others. The result of the US and European testing was that no interference to ATC systems was detected. These results were provided at the 2010 DoD AIMS Conference in Orlando, Florida.

The Telephonics Interrogation Management stagger algorithm is software controlled, provides dynamic allocation of interrogation rates and staggers, and is table driven to be very flexible. The Telephonics Interrogation Management stagger algorithm was specifically designed to address FAA/DoD AIMS concerns and in conjunction, provides a robust stagger capability that meets or exceeds all system requirements.