

**The Purpose of this license is the demonstration of equipment in support of Public Safety/Border Security Operations.**

**Thales BOR-A550:** (Frequency range requested is 9.22 – 10 GHz)

- Modulation type: **M** (BOR-A is transmitting phase-coded pulses, i.e. PPM, where optimum codes of either +180° or -180° phased subpulses are forming the transmit pulse)
- Nature of modulating signal: **2** (digital with modulation)
- Information type: **X**
- the pulses comprise of either 1.067  $\mu$ s or 0.267  $\mu$ s duration subpulses arranged in codelengths of either 1, 5, 13 or 29, i.e. 8 different transmit pulse widths between 0.267 and 30.93 $\mu$ s
- the pulses are transmitted in coherent pulse trains of lengths 64, 128 or 256 at PRFs of either 2858 Hz, 3024 Hz, 3189 Hz, or 3348 Hz (where either a single PRF can be selected or a PRF-4-stagger can be employed)
- **BOR-A550:** the nominal 3dB bandwidth for the shortest subpulse codes (40 m, 0.267  $\mu$ s) is 4 MHz

**GO12:** (Frequency range requested is 16.38 – 16.82 GHz)

- Modulation type: **F** (linear FM)
- Nature of modulating signal: **2** (digital with modulation)
- Information type: **X**
- the pulses are linear FM with a compressed pulsewidth of 0.067  $\mu$ s. The expanded pulsewidths are either the basic subpulse of 0.067  $\mu$ s, 0.533  $\mu$ s (CR8), 1.6  $\mu$ s (CR24), 5.333  $\mu$ s (CR80) or 10.67  $\mu$ s (CR160).
- the pulses are transmitted in coherent pulse trains of lengths 128 or 256 at PRFs of either 4468Hz, 4709 Hz, 4840 Hz, 4978 Hz or 5280Hz (when a single PRF is selected, it will be the middle one; it is also possible to select PRF-3-stagger or PRF-4-stagger where in the former case the middle and the 2 outer PRFs are employed whereas in the latter cases the two outer pairs each are taken)
- **GO12:** the nominal 3dB bandwidth, given the 0.067  $\mu$ s subpulse width is 15 MHz