ABSTRACT

In the era of advance military technology, Indonesia need technology to increase it military defence system. As we know, that Indonesia has a vast teritory area, Indonesia need a hardware that can watch dan defence it teritory. The Electronic Support Measure (ESM) can increase it defence system.

ESM are some electronic hardware to receive electromagnetik signal, then the received signal will be proced and analize until it got location, signal dan radiation pattern, etc. To design the ESM, we need one half conical monopole antena with omnidirectional of radiation pattern and linier polarization, the antenna will become receiver antenna then the result will be send to ESM and processed until we got location, signal dan other parameters to catch enemy's signal.

The Processed half conical monopole antena will be designed in Ultra wideband Frequency (2 until 18 Ghz) with VSWR of 2 and antenna gain of 10 dB. Once designed and realized, the half conical monopole antena with wideband characteristic and omnidirectional radiation pattern is expected to be suitable to support ESM to determine the enemy radar signal.