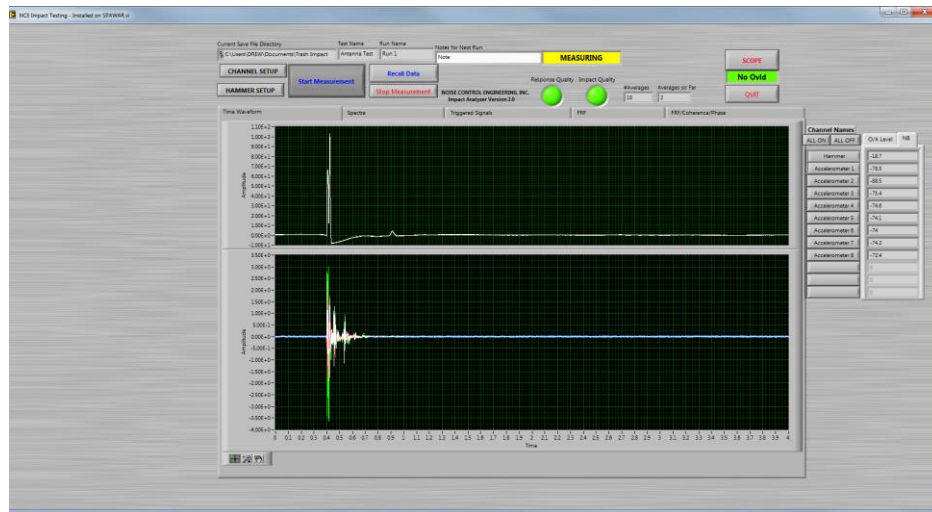


PROJECT PORTFOLIO

Project: Impact/response Structural Vibration Software

Client: US Navy Space & Naval Warfare Systems Command (SPAWAR)

Services Provided by NCE:

- Developed and delivered a comprehensive set of software routines that allows SPAWAR personnel to perform impact/response structural vibration measurements to determine the natural frequencies of mission communication antennas such as NMT and WSC-6, thus eliminating the need for SPAWAR to subcontract such services.
- Identified a suite of instrumentation (transducer type, impact hammer, data acquisition system, etc.) for procurement by SPAWAR, which provided the client with the hardware needed to exercise the software developed by NCE, perform impact/response measurements, and determine the natural frequencies of mission communication antennas.
- Developed and delivered a comprehensive user's manual describing the impact/response structural vibration measurement software and hardware.
- Trained SPAWAR personnel how to use the impact/response structural vibration measurement software and hardware when measuring the natural frequency of foundations.

NOTE: *U.S. Navy ship specifications for communications antennas typically require that antenna foundations and radome foundations not exhibit any natural frequencies below approximately 30 Hz.*