

Experiment Description

a. description of the nature of the research project being conducted.

To perform a calibrated measurement of the radar cross-section (RCS) level of the test body mounted on a 7.92-m low RCS pylon in the far-field utilizing a ground-reflection radar range across the bands listed. The recorded measured data will be appropriately processed across the required bands to insure that the test article meets the Government's System Performance Specification. This increase in the measured frequency bandwidth is required to certify that the measured RCS level complies with the entire Government's System Performance Specification.

b. showing that the communications facilities requested are necessary for the research project involved.

Current facility is a state-of-the-art Ground-Reflection Plane Radar Cross Section (RCS) Range designed to perform the precise far-field calibrated RCS level measurements required to certify that the measured RCS level complies with the entire Government's System Performance Specification. The radar system is designed to support the requested additional frequency spectrum. The system is computer-controlled which permits positive lock-out of any restricted frequency.

c. showing that existing communications facilities are inadequate.

Current licensed frequencies do not include the frequency spectrum necessary to certify that the measured RCS level complies with the entire Government's System Performance Specification. The requested frequencies are within the system performance test bands.