

Procurement Title* Compact-Range Reflector Upgrade

Statement of Work* Sandia National Laboratories is upgrading our existing antenna & radar-cross-section (RCS) compact-range facility. We seek a vendor to build, deliver, and install a compact-range reflector and feed system in the existing anechoic chamber. The feed system must be compatible with existing instrumentation. The new reflector system must be installed through the existing high-bay doors and must be compatible with the existing concrete mounting pad.

- Vendor shall build and deliver a compact-range reflector and feed system.
- Vendor shall be responsible for installation and alignment in existing anechoic chamber.
- Vendor shall provide onsite verification that system meets requirements.

Mandatory Requirements* Reflector Requirements:

- Type: Offset Center-Fed Parabola
- Focal Length: 24 ft minimum
- Termination: Both rolled & serrated edge will be considered
- Quiet Zone/Test Area Dimensions: Height 8 ft, Width 12 ft, Depth 12 ft
- Bandwidth: 1-40 GHz

Feed Specifications:

- Type: Dual polarized linear, two each; one transmit & one receive
- Bands: Five easily interchangeable options; 1-18 GHz, S-band, X-band, Ku-band, Ka-band

Reflector / Feed system must be compatible with these existing facility specifications:

- Absorber: 26 inch pyramid & wedge (Eccosorb: VHP-26-NRL & WG-26-NRL)
- Dimensions (Excluding Absorber): Height 26 ft, Width 42 ft, Length 75 ft
- Access Door Dimensions: Height 139 inches, Width 143 inches
- Mounting Pad: 3000-psi concrete, 5 ft x 16 ft x 1 ft, pad edge is less than 4 ft from front wall

Additional information to include in response:

- Field Quality: Describe expected field performance in test zone
- Weight: Approximate weight of reflector and compatibility with existing mounting pad
- Dimension of Section: Dimension of largest reflector section and compatibility with existing doors
- Experience: Describe your company's expertise and experience with compact range reflectors

Requirements in future Request for Quote from capable responders:

- Overall Reflector size: Sketch of reflector in Autocad compatible format (dxf)
- References: Provide detailed references of similar installations

NOTE: These last 2 items aren't required in the response to this posting, and are only for future notice