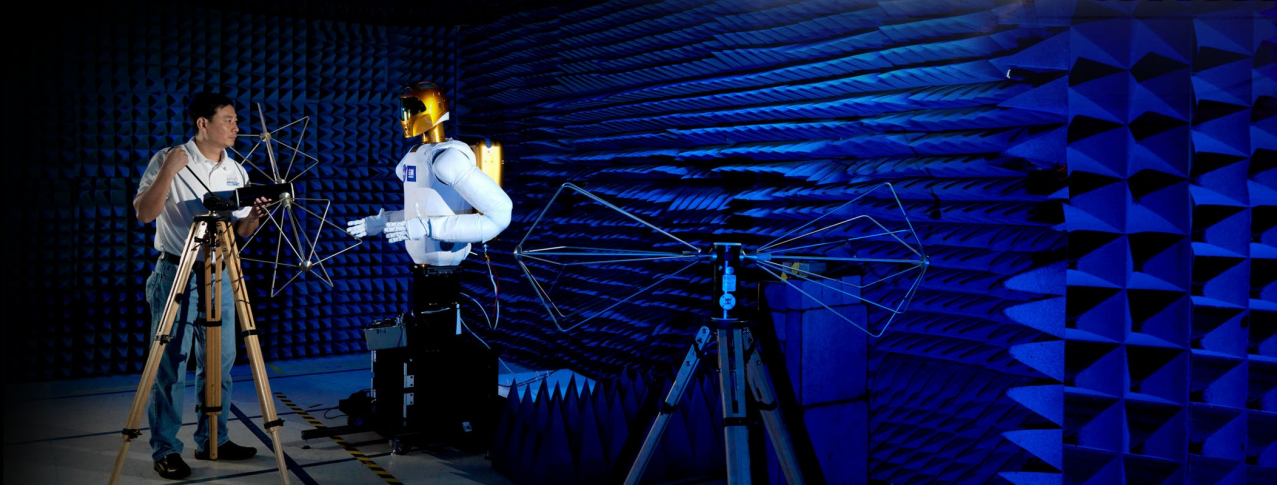
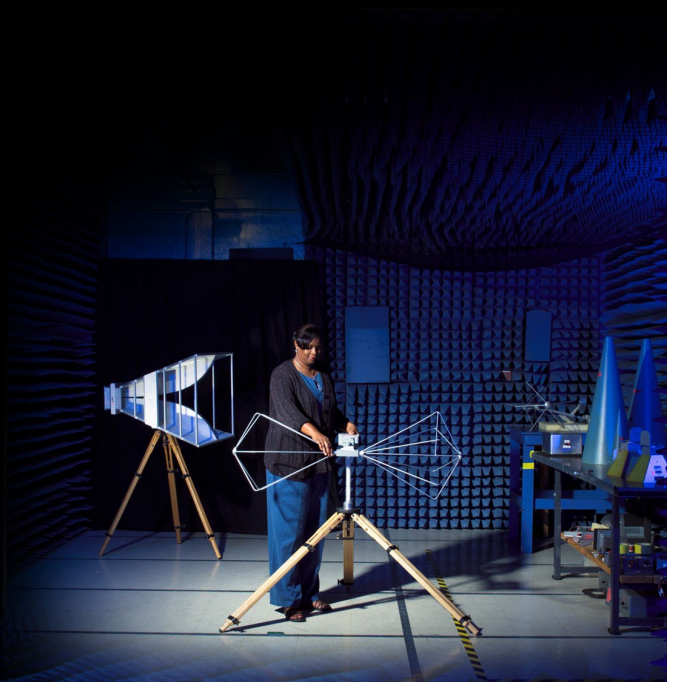


Electromagnetic Interference/Electromagnetic Compatibility

The Electromagnetic Interference/Electromagnetic Compatibility (EMI/EMC) Control Test and Measurement Facility supports engineering development and provides EMI/EMC evaluation and certification testing of crew, flight, and ground support equipment, including but not limited to communication, instrumentation, biomedical, guidance and navigation, computation, and robotics. The Computational Electromagnetics Laboratory is used for full-wave, frequency domain electromagnetic simulations.

Services Provided

- Developmental, engineering support, performance and precertification evaluation, and certification testing
- Conducted and radiated emissions and susceptibility testing (e.g., Mil-STD-461, all revisions; DO-160, sections 16 through 21)
- Lightning indirect effects and electrostatic discharge assessment (e.g., DO-160, sections 22 and 25)
- Cable transfer impedance and equipment shielding effectiveness assessment
- EMC design consultation
- General three-dimensional (3D) frequency domain electromagnetic analysis



EMI/EMC Testing

Capabilities	
Shielded room enclosures	Meet military standard MIL STD 285
Synthesized signal generators	Capable of covering a frequency range of 10 Hz to 26 GHz
Radio frequency power amplifiers	Provide up to 500W of output power in the frequency range of 10 kHz to 18 GHz
Lightning transient generator and support probes	Provide test waveforms 1, 3A, 3B, 4 and 5A for lightning indirect effects testing up to level 3
Electrostatic discharge test equipment	Provides standard ESD test waveforms up to 30kV peak pulse voltage
Complete line of general purpose ancillary test equipment	Power supplies, oscilloscopes, powermeters, voltmeters
Hi-fidelity EMC modeling software	General purpose 3D electromagnetic modeling



Robonaut 2 Undergoing EMI Testing

We have developed customer-friendly agreements to streamline business relationships and are eager to share our unique facilities and expertise with new customers. We invite your inquiries regarding application or adaptation of our capabilities to satisfy your special requirements. Briefings on general or specific subjects of mutual interest can be arranged at JSC or at your business site.

Facility Testing Information

<http://jsceng.nasa.gov>

Point of Contact

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