

RADIATION EFFECTS ENGINEERING AND TEST SERVICES

One-stop shop for radiation hardened solutions

With over 40 years of pioneering radiation effects engineering, Honeywell has been at the forefront of delivering innovative solutions for space and defense applications. Our mission is to ensure mission success for Honeywell and our customers through state-of-the-art analysis, design, and testing services.

Honeywell offers comprehensive radiation effects engineering and testing services, including Environment Definition, Circuit Design, Characterization Testing, and Hardness Assurance. Our elite test facilities and seasoned team of experts provide fast, cost-effective solutions to meet stringent radiation hardening requirements.

RADIATION ANALYSIS CAPABILITIES

- Natural Space Radiation Environment Definition
- Hostile Environment Definition
- Energy Deposition, Transport and Shielding Analyses
- System Assessment and Hardening Approach Definition
- Circuit Hardening, Error Mitigation

RADIATION TEST CAPABILITIES

- Total Ionizing Dose
- Prompt Ionization (Dose Rate)
- Displacement Damage
- Single-Event Effects (e.g., proton, neutron, heavy ion)
- Vast experience at particle accelerators and other outside facilities

A detailed image of a satellite network in space. Multiple satellites are visible, connected by a complex web of thin lines representing communication or data links. The Earth's horizon is visible in the background, showing a blue and white horizon line against the blackness of space.

Honeywell

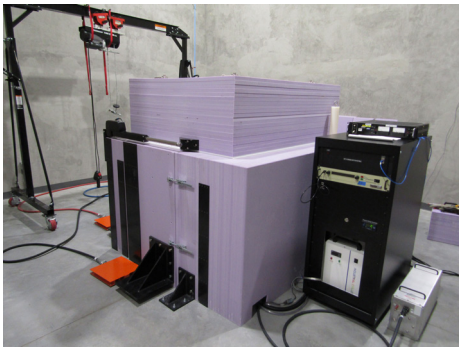
RADIATION ANALYSIS AND TEST CAPABILITIES

We specialize in defining hostile environments, energy deposition analyses, system hardening, and error mitigation. Our test capabilities cover Total Ionizing Dose, Dose Rate, Displacement Damage, Single-Event Effects, and more, all conducted and orchestrated at our advanced Clearwater, Florida facility. Options include full-service testing and facility usage.

RADIATION TEST EQUIPMENT	DOSE RATES/FLUX	CAPABILITIES
Ion Physics FX-25 Flash X-Ray	Dose rates from ~1.0E6 rad(Si)/s to ~3.0E9 rad(Si)/s	20 ns pulse width
Pulserad 430 Flash X-Ray	Dose rates from ~1.0E6 rad(Si)/s to ~1.25E11 rad(Si)/s	20 ns pulse width
JL Shepherd 484B Co-60 Irradiator	Dose rate from -0.001 rad(Si)/s to -0.1 rad(Si)/s	Expose >14 part types at once
JL Shepherd 484CR Co-60 Irradiator	Dose rates from -1.0rad(Si)/s to 300 rad(Si)/s	Chamber dimensions - 14in x 14in x 12in
Hopewell Designs Co-60 Room Irradiator	Dose rates from ~0.001 rad(Si)/s to ~0.1 rad(Si)/s	Expose >28 part types at once
Adelphi DT-110 Neutron Irradiator	Neutron flux ~1 E10 n/s	1E7 n/cm2/sec at 4cm distance

HONEYWELL RADIATION EFFECTS CENTER OF EXCELLENCE:

The radiation effects center of excellence (RECOE) assures radiation needs across Aerospace aremet efficiently and effectively, featuring a dedicated team in multiple strategic locations. Our common processes and extensive test and analysis database underpin our cost-effective, timely solutions.



For more information

Please click [here](#) to visit our website or contact one of our experts to the right.

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RADIATION TESTING SERVICES:

- Located at Honeywell Clearwater, FL
- Flexible Offerings:
 - Full-Service Radiation Testing:
 - You provide the test samples
 - Honeywell provides test results
 - Facility Usage:
 - Daily rate for test equipment

Let us help ensure the success of your next mission. Contact us for radiation effects engineering and test services.

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell