



# RADIATION TEST SOLUTIONS

## The Difference Experience Makes

Radiation Test Solutions is the world leader in performing radiation effects testing and analysis for electronics in space and military applications. Our experienced staff and comprehensive commercial laboratory ensures we can meet your testing or analysis needs, on time and on budget.

### Radiation Testing

Providing your team access to dedicated radiation effects testing engineers and equipment.

### Analysis

Turn your design into reality faster with analysis and feedback that gets your project moving on time.

### Consultation

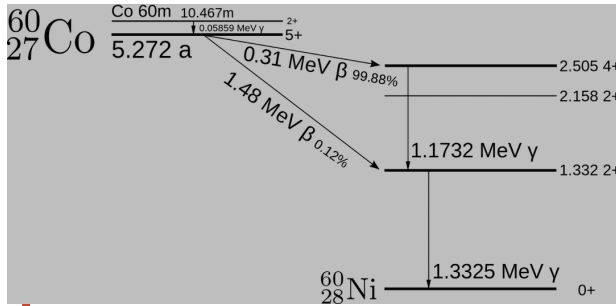
Small Business Solutions: Gain access to radiation effects engineers as often or as little as needed.



[RadiationTestSolutions.com](http://RadiationTestSolutions.com)

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# Radiation Testing

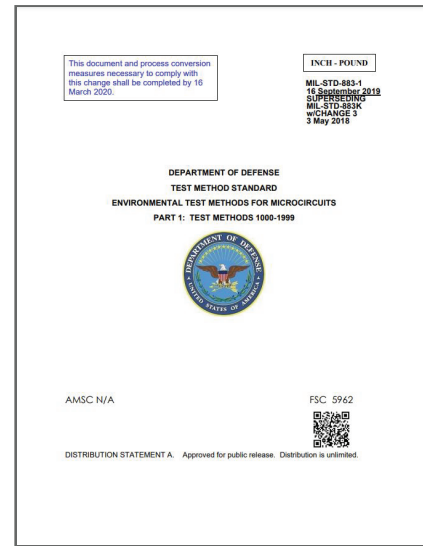


## High Dose Gamma Irradiation

RTS offers high dose irradiation to MIL-STD 750 & 883, TM 1019 or to custom dose rates for materials, components or systems.

## Two Low Dose Room Gamma Irradiators

Using either of our room irradiators components or circuit cards can be exposed to low doses of gamma radiation over a long period. Most tests are performed in accordance with MIL-STD 750 & 883, TM 1019.



## Two Flash X-Ray/Prompt Dose Irradiators

RTS has a Pulserad 112A and an Ion Physics FX25 for higher energy level and redundancy. With two x-ray irradiators supporting MIL-STD 750 & 883, TM 1020, TM 1021, RTS can offer faster turn times and predictable delivery dates.

## Neutron Generator

Using a 14-MeV Neutron Generator RTS offers displacement damage and upset testing in accordance with MIL-STD 750 & 883, TM 1017 and JESD89A.



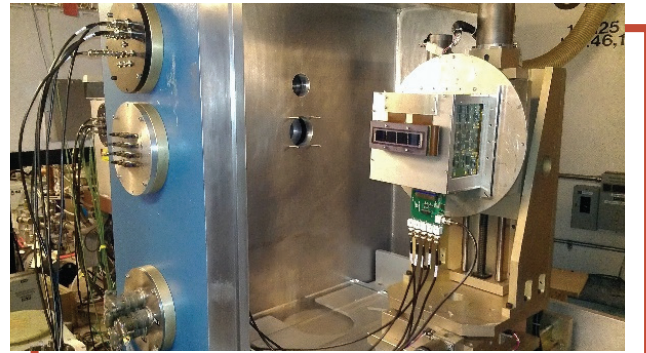


## Pelletron 1-MeV E-Beam Generator

Materials and electronics that are located on the outside of a satellite and vulnerable to significant electrical charging may require testing with an electron beam in order to evaluate the potential charging effects.

## Single Event Effects

At RTS we have a dedicated team of experts that perform turnkey tests on devices from transistors to FPGAs and microcontrollers. RTS can perform destructive, non-destructive, full characterizations or specific tests for SEL, SEDR, SEU, SEGR, SEB, SET & SEFI. We offer services for device preparation, including packaging, de-lidding and die thinning. See additional Single Event Effects testing options in the SEREEL2 section below.



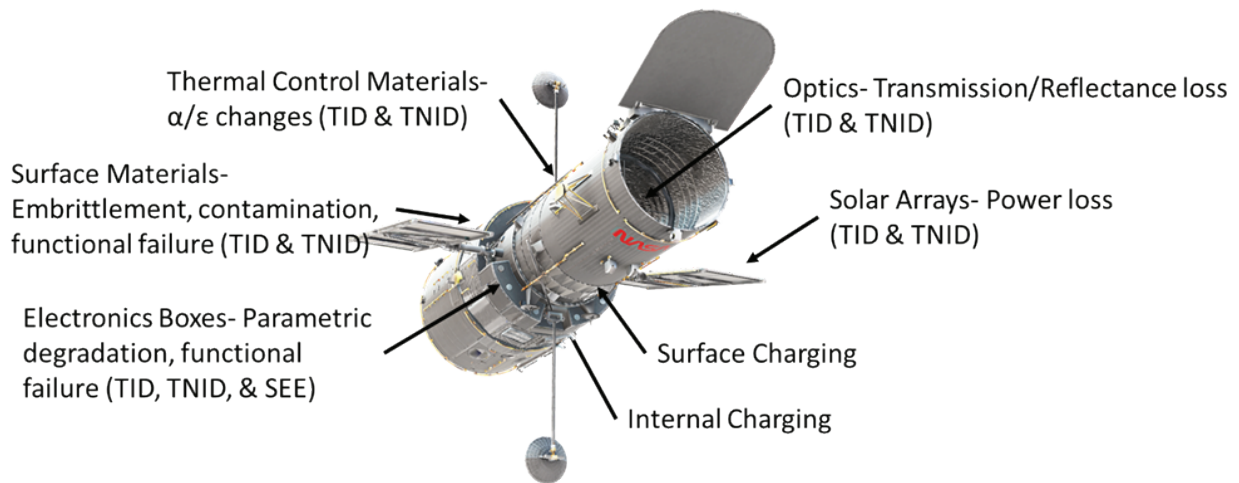
## SEREEL2 for Laser SEE Testing

RTS offers Laser SEE testing and support services, expanding our Single Event Effects testing options. This technology works by using a pulsed laser to simulate the impact of heavy ions, allowing for a direct correlation of the upset site with a location on the die and automated scanning of user-defined areas of the sample with pin-point accuracy.

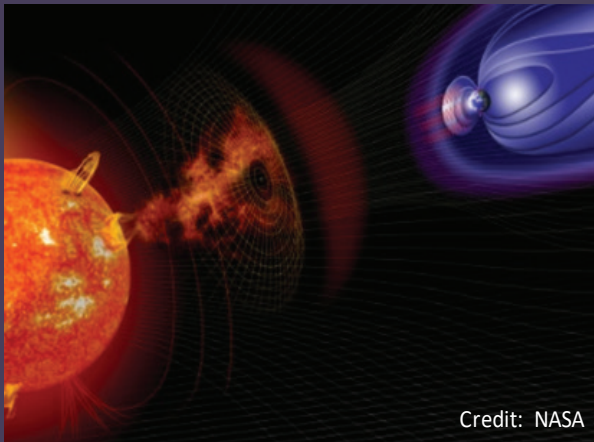
The SEREEL2 testing units are also available for purchase. The SEREEL2 system is incredibly customizable to fit your specific requirements and needs. The customized setup options include a variety of wavelengths, pulse duration and pulse energies.



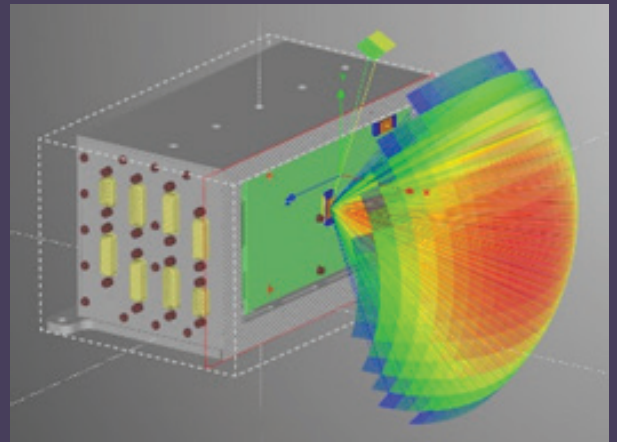
# Analysis & Consultation



As a center of excellence for radiation effects, let Radiation Test Solutions, Inc. become an extension of your team. Whatever the mission, whatever the environment, our engineers will work with your team to find the solutions that best meet your needs.



Radiation environments defined specific for your mission.



## Circuit and System Analysis:

RTS will work closely with your team to understand and mitigate long-term parametric degradation, destructive effects, and non-destructive effects on materials, electronics, and optics, at the component and the system level. Errors or degradation are evaluated at the component level and then propagated through the system to evaluate and understand the impact to performance and understand how to best mitigate the effect if necessary.

