

Power Converters Secure Electronics in Harsh Environments



Johnson Space Center

**VPT Inc.
Blacksburg, VA**

NASA Technology

- ◆ In the vast reaches of space, radiation can wreak havoc on power converters, which send the necessary energy to electronic equipment.
- ◆ NASA wanted to develop technology that would protect power converters from failing and causing catastrophic damage.



Technology Transfer

- ◆ Johnson awarded VPT with Small Business Innovation Research (SBIR) funding to create DC-DC power converters that could stand up to radiation exposure.
- ◆ The resulting converters received a major certification from the Defense Logistics Agency (DLA), which oversees military specifications.

Benefits

- ◆ In addition to radiation resistance, the converters can withstand rapid temperature changes and extreme g-force acceleration.
- ◆ Boeing, Raytheon, Lockheed Martin, and the US Air Force now use the converters, and for the firm the uptick in sales has spawned four new jobs and the creation of a space product division.