



Improving Products and Processes

To integrate stewardship into every aspect of our business, it is not enough to have world-class programs targeting governance, compliance, ethics, workplace safety, employee wellness, inclusion and environmental responsibility. We must also embrace the values of stewardship in our fundamental approach to product design and manufacturing processes. Raytheon's engineering culture is not only strongly aligned with these values, but exceptionally well-equipped to support them. From Engineering, Technology and Research to Operations and Performance Excellence, we work aggressively at every

organizational level to improve our products and processes. Senior management is directly charged with implementing Raytheon's stewardship programs. Sophisticated and time-tested internal processes such as Raytheon Six Sigma™ drive actions throughout the organization and in relation to suppliers and customers. The result is a continual improvement in total product performance, including environmental performance and the other aspects of stewardship responsibility.

Delivering the Promise of NoDoubt™ Performance

Mission Assurance is at the heart of everything we do at Raytheon. By taking an integrated approach across the company, we have brought our Mission Assurance promise of NoDoubt performance to unprecedented levels. Doing so requires a continuous commitment from everyone across the enterprise — from employees on the factory floor to senior leaders of every business. We support this commitment with a broad range of proprietary tools and internal and external metrics. Among them:

Capability Maturity Model® Integration (CMMI®):

A set of standards established by the Software Engineering Institute to help organizations measure the effectiveness of internal processes. Our engineering community uses CMMI to enhance efficiency, reduce variability and ensure the same excellent standards of quality from project to project and location to location. Of the 34 engaged Raytheon sites, all are at a CMMI Level 3 rating, with a future goal set to reach CMMI Level 5 across the entire engineering function.



Raytheon Six Sigma (R6σ®): An integrated, knowledge-based system that serves as the vehicle to increase productivity, grow the business and build a company culture that embraces all of these goals. R6σ is directly aligned with the strategic

goals of our company to impact areas critical to our success.

Engineering Tomorrow's Solutions

Our ability to grow depends on technological innovation. Our disciplined processes ensure a continuing stream of new and improved solutions — enabling us to meet our customers' expectations. Recent examples include:

- *Active Protection System*, a “mini-missile defense system” that is capable of defeating in-flight rocket-propelled grenades in the blink of an eye to safeguard armored vehicles and our armed forces. It is part of the U.S. Army's Future Combat Systems.
- *Advanced Spectroscopic Portal*, a next-generation, point-of-entry system that performs high-volume spectroscopic cargo inspections to detect and forestall nuclear threats. The first four portals were delivered to the U.S. Department of Homeland Security in November 2006.

- *National Data Exchange*, now being developed by Raytheon for the U.S. Federal Bureau of Investigation (FBI), will allow more than 18,000 state and local law enforcement agencies to exchange crime report information with the FBI and one another. This breakthrough system promises to overcome long-standing barriers to the rapid apprehension of criminals or terrorists operating in multiple jurisdictions.
- *Synthetic Aperture LADAR for Tactical Imaging*, an airborne coherent Laser Detection and Ranging (LADAR) laser radar imaging system that produces high-resolution 3-D images, enhancing situational awareness and target identification. We produced the world's first optical wavelength synthetic aperture images from an airborne platform for the Defense Advanced Research Projects Agency in 2006.
- *U.S. Visitor and Immigrant Status Indicator Technology*, a joint undertaking by Raytheon, Accenture and others to design and deploy a system for the U.S. Department of Homeland Security that will track visitors to the United States. This project incorporates state-of-the-art biometrics and scanning technologies and will be deployed at our nation's ports-of-entry — land, sea and air.

Taking the Initiative in Lead Reduction

The European Union's “Restriction of Use of Certain Hazardous Substances” (RoHS) directive went into effect in 2006. It requires many products ranging from consumer appliances to electronic equipment be free of hazardous materials, most notably lead. While this directive is limited to Europe and does not apply to the defense industry, Raytheon is taking the initiative to provide lead-free products. By investing in alternate alloys and new lead-free processes, we are proving that we can reduce our dependence on hazardous materials without compromising product performance.

Reinventing the Metal Coating Process

We have also developed environmentally friendly substitutes for traditional corrosion-resistant coating technologies requiring volatile organic compounds and chromium. By replacing previous wet coating systems with an equally effective suite of powder coatings, we have removed four tons of hexavalent chromium compounds, 30 tons of volatile organic compounds and 30 tons of hazardous waste from the process stream over the span of five years. At the same time, we have reduced the cost of coatings for customers by up to 70 percent.