

Measurable Success: Five Locations, One Company - PWR

April 2009 - Students from United Technologies' **Pratt & Whitney Rocketdyne** operations in Canoga Park, West Palm Beach, Stennis Space Center, Kennedy Space Center, and Huntsville completed their Masters degrees in Quality Systems Management with the Lean Six Sigma Blackbelt. The 22 teams from these classes recently reported their project results to Pratt & Whitney Rocketdyne President, Jim Maser. Their return on investment resulting from these projects substantially exceeded the minimum 10:1 required by The National Graduate School.

"The projects exceeded my expectations," said Pratt & Whitney Rocketdyne President, Jim Maser, after meeting with NGS/U President & Founder, Dr. Robert Gee, to review the students' projects and results at PWR Headquarters in Canoga Park, CA. The national roll-out of the five Pratt & Whitney Rocketdyne sites helped towards Mr. Maser's goal of a "one company" way of thinking.

Mr. Maser was the Senior Project Champion for all 22 projects and commended the measurable achievements of NGS/U at Rocketdyne. He and senior management from all five locations validated the results of each of the projects. Credit goes to the employees, the local project champions and guiding coalitions.

Eight different disciplines (Engineering, EH&S, Finance, Human Resources, Information Technology, Operations, Programs, and Purchasing) worked collaboratively across the five cohorts on the 22 total projects. They expanded Pratt & Whitney Rocketdyne's continuous improvement strength by completing a curriculum which supports and expands UTC's Achieving Competitive Excellence system.

The projects also supported the priorities of the 122 other Financial, Day to Day, and Champions across PWR. Teams were focused on improving existing processes under the direction of their Senior Champions, and project results were validated by the Financial Champions. In addition, The National Graduate School provided a faculty team at each of these locations, guiding and coaching the teams throughout the process.

As a group, the NGS/U students dedicated themselves to nearly 20,000 hours of learning time and more than 21,000 hours of time dedicated to process improvement at their home location. They enhanced the organizational current state and learned the technology and leadership skills that allowed them to make a tangible difference in their organizations; and helped to bring a "one PWR" thinking through their efforts.

The 22 projects brought an estimated \$35 million return on investment for PWR. The projects included:

Customer Satisfaction

- Reliability Centered maintenance for Operations
- Improving test article tube availability for Operations
- Hardware shortage reduction for Operations
- Improving current site proposal process and resulting product to the customer for Programs
- Government security export control improvement for Human Resources

Leadership, Culture and Environment

- Defining the requirements for developing an educational database tool for Engineering

- Accelerating reduction in OSHA recordables for Environmental, Health and Safety
- Improving greenhouse gas reduction for Environmental Health and Safety
- On boarding for new hires for Human Resources
- Capturing tacit knowledge prior to anticipated attrition for Engineering

Process, Product and Service Excellence

- PPAR (Procured Product Acceptance Requirements) i.e. system enhancement for Quality
- Supplier ACE Gold for PWR supply base for Purchasing
- Reduction in induced nonconformance for Operations
- Site Turnback Utilization and Tracking for Engineering
- Corrective action for imported nonconformances for Quality
- Reducing consumables going in the waste stream for Operations
- Correcting a calibration delta between the company and the site calibration contractor lab for Engineering
- EVMS (Earned Value Management System) initial baseline for Finance
- Improving distribution lists for emergency emails for Information Technology

Financial Results

- Increase accountability for space utilization and occupancy costs for Finance
- Improving the overhead determination process to reduce the frequency of non-regulatory overhead rate changes