

Supplier Outreach and Process Control Program

Gerhardt Gear Co., Inc. Supplier Outreach Visit

TO: SOPC Distribution List, NASA HQ, and Gerhardt Gear Co., Inc. internal

FROM: Supplier Outreach Program Administrator

SUBJECT: Trip Report: Supplier Outreach of Gerhardt Gear Co., Inc.

REPORT DATE: July 7, 2004

On July 6, 2004 a NASA Supplier Outreach Process Control (SOPC) visit was conducted at Gerhardt Gear Co., Inc. in Burbank, CA. The purpose of the SOPC visit was to:

Thank the suppliers for their contributions,

Share process escape stories/lessons learned,

Provide tools and resources for Process Control awareness and Continuous Improvement, and *Capture* supplier data to share with the NASA community.

About the Company and who they support:

Gerhardt Gear is a third generation and family-owned small manufacturing shop that supports NASA Centers including the Jet Propulsion Laboratory (JPL), Johnson Space Center (JSC), and Kennedy Space Center (KSC). Gerhardt Gear is also considered a sub-tier supplier to NASA through Prime Contractors Lockheed Martin and Boeing. Gerhardt Gear specializes in the development and manufacturing of precision and commercial gears, splines, serrations, sprockets and timing belt pulleys. The company is ISO-9002:1994, QS-9000:1998, and AS-9000-1998 compliant.

Gerhardt Gear supports numerous NASA centers and programs of which include the Mars Exploration Rover program. The company provided the sun gears, planetary gears, and splines for the mobility actuators and mobility drive housings for the Mars Exploration Rovers.

About the visit:

The visit and presentation was attended by about thirty (30) of the thirty-seven (37) employees of Gerhardt Gear. Buck Crenshaw, NASA's representative from the JPL, gave an informative presentation about several NASA initiatives. His briefing to the employees included a sincere "thank-you" to Mr. Ron Gerhardt (Owner) and the employees by presenting a recognition plaque of appreciation for their contributions to the Mars Exploration Rover (MER) program.

Buck Crenshaw also shared with the employees several process escapes and lessons learned stories. The purpose of this is to promote awareness and prevent such incidents from being repeated. Process Control awareness tools (pocket guides, bookmarks, pins and fact sheets) and mission specific information was provided to all employees.





What is Process Control?

Process Control consists of the systems, tools, awareness, and commitment of management and the workforce to ensure that processes are defined, maintained, performed, and changes are coordinated so that the completed product will conform to established requirements. It also includes human factors issues that may influence process controls.

Feedback:

Initial feedback after the presentation indicated that the visit was well received. Management appreciated the value of the visit and the time NASA, their customer, took out to talk to their employees.

NASA Outreach Representatives:

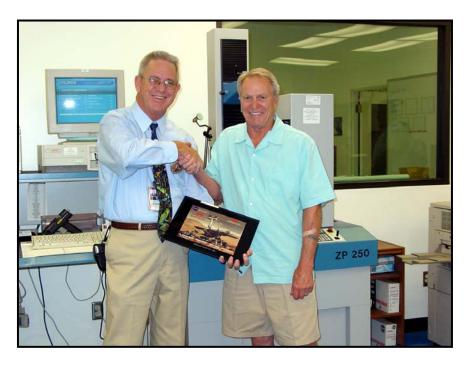
- Buck Crenshaw, NASA/JPL Procurement Quality Assurance Manager
- Arvin Llamzon, NASA/JPL Supplier Outreach and Process Control Support

For additional information on the MER Program or the SOPC Program, please visit: http://mars.ipl.nasa.gov and http://quality.nasa.gov/outreach

The following pages are pictures from the visit.

Thank you, Supplier Outreach Process Control Program

^{*} If you would like additional information on this supplier (i.e. NASA Supplier Information Survey) please email us at sope@jpl.nasa.gov All requests for surveys will be subject to Supplier's concurrence.



The plaque that was presented to Mr. Ron Gerhardt and the Gerhardt Gear Employees reads: JPL's Mechanical Prototype and Hardware Fabrication Section 357 and the Procurement Quality Assurance Group 5127, are honored to present this recognition for Excellent Performance and Workmanship in the support of Developmental, Manufacturing, and Test of Flight Hardware for JPL's Mars Exploration Rover Mission. Both rovers successfully landed on Mars during January of 2004 and have delivered exceptionally valuable scientific information.







Buck Crenshaw (NASA/JPL) met with 30 employees of Gerhardt Gear. The company stopped production for a presentation on Process Control









An employee of Gerhardt Gear operating a machine



Buck Crenshaw (NASA/JPL) during the plant tour



A few samples of Gerhardt Gear products



An employee of Gerhardt Gear operating a machine