



# Supplier Outreach Process Control

*Growing with your Supplier Base  
and Industry Partners*

*Quality Leadership Forum*

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# NASA's Current Conditions

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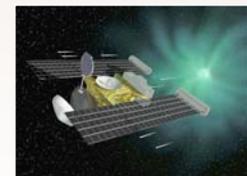
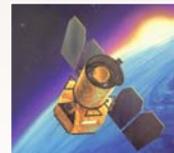
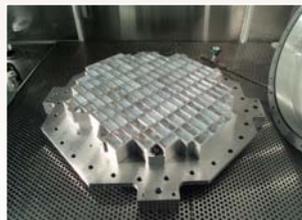
- 75% of NASA's \$13Bil budget is used on **outsourcing** to Business Firms (large and small)
- Many **critical items** are dependant on **Small Business suppliers**, but these items are a minute percentage of their entire business (.5% - 5%)
- Although there are thousands of suppliers in the industry, our qualified, critical, and competent supplier base is dwindling because **they are going out of business.**
- Loss of corporate knowledge / tribal knowledge



# NASA's Challenges

## NASA's Challenges

- Flowing down of requirements to suppliers and sub-tiers
- Obtaining insight into the health of our Suppliers (financial, infrastructure, capabilities, and processes)
- Recognizing and communicating to suppliers and sub-tiers their contributions to the overall project





# NASA's Traditional Relationship with Suppliers

- The only form of visits to suppliers were in the form of **audits**.
- Audits are conducted more at the companies that showed problems **after-the fact**.
- Therefore, visits to suppliers have a **negative connotation**.

## Challenges...

- Convince suppliers that **outreach visits are positive** opportunities to exchange information.
- Helping to **identify problems** that face the Supplier and helping them improve.

*What can we do to help our Suppliers  
continue to grow in capability and competency  
and improve their processes?*



# Supplier Outreach Process Control Initiative

***OUR GOAL IS TO...***

***THANK*** our Supplier's workforce  
***SHARE*** lessons learned  
***PROVIDE*** tools and resources and  
***CAPTURE*** Supplier data to share within the Agency

(Supporting the Earth Science, Space Science, Biological & Physical Research programs)



# Supplier Outreach Goals

## THANK

- Thank Suppliers' **workforce** for their specific contributions to the program and recognize the company and outstanding individuals.
- Encourage Suppliers to **be proactive** and initiate a robust process control awareness program within their company.

## SHARE

- Share process escape / **lessons learned** to the workforce and management.
- **Communicate expectations** from NASA and future requirements (Quality Clauses & Quality Requirements) that may impact their business.
- Receive **feedback** from suppliers on how we can improve.
- Share **best practices**.



# Supplier Outreach Goals (cont)

## PROVIDE

- Provide **channels of communication** between Suppliers and Customers.
  - Process Based Mission Assurance (PBMA) Knowledge Management System (“Quality Suppliers” and Quality Leadership Forum QLF intranet groups)
- Provide **resources and tools** for training and continuous improvement for suppliers to maintain or improve their capability to provide quality hardware to the program.

## CAPTURE

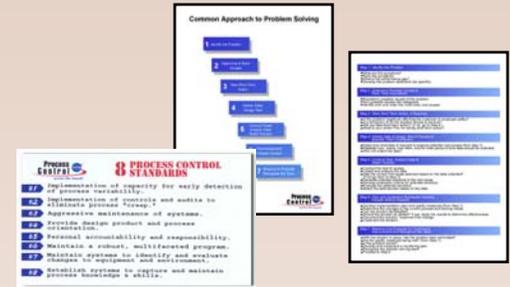
- Capture **data** on Suppliers in the form of structured surveys and populate NASA’s Supplier database
- Capture **first-hand** company information on Suppliers in the form of outreach visits and use that data to address issues (if any) in a supportive manner.



# Process Control Tools & Awareness Products

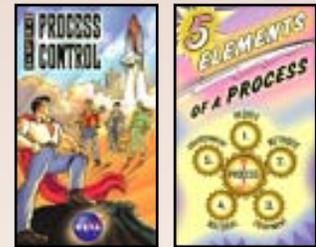
## Learning/Guidance Tools

- “How to” general guidance
- Problem Solving Fishbone chart
- Process Based Mission Assurance & Knowledge Management database



## Process Control Educational Products

- Process Control Information Cards
- Posters, stickers, decals
- Program specific fact sheets
- Process Control videos
- Process Control websites
- Process Control Pocket Guide





# Outreach benefits NASA and Centers

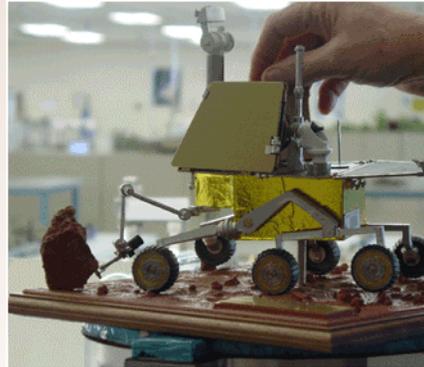
- Joint visits foster **collaboration between Centers** (achieving the OneNASA vision)
- **Alleviates** the **cost** of each center conducting their own individual outreach program.
- **Sharing** of supplier **information** throughout the agency.
- **Positive public perception** of NASA and OEM collaboration with the supplier base.
- Increases **positive working relationships** between Center and Supplier
- Increases the **quality** of NASA procured products and services and **reduce process escapes** and **mishaps**.





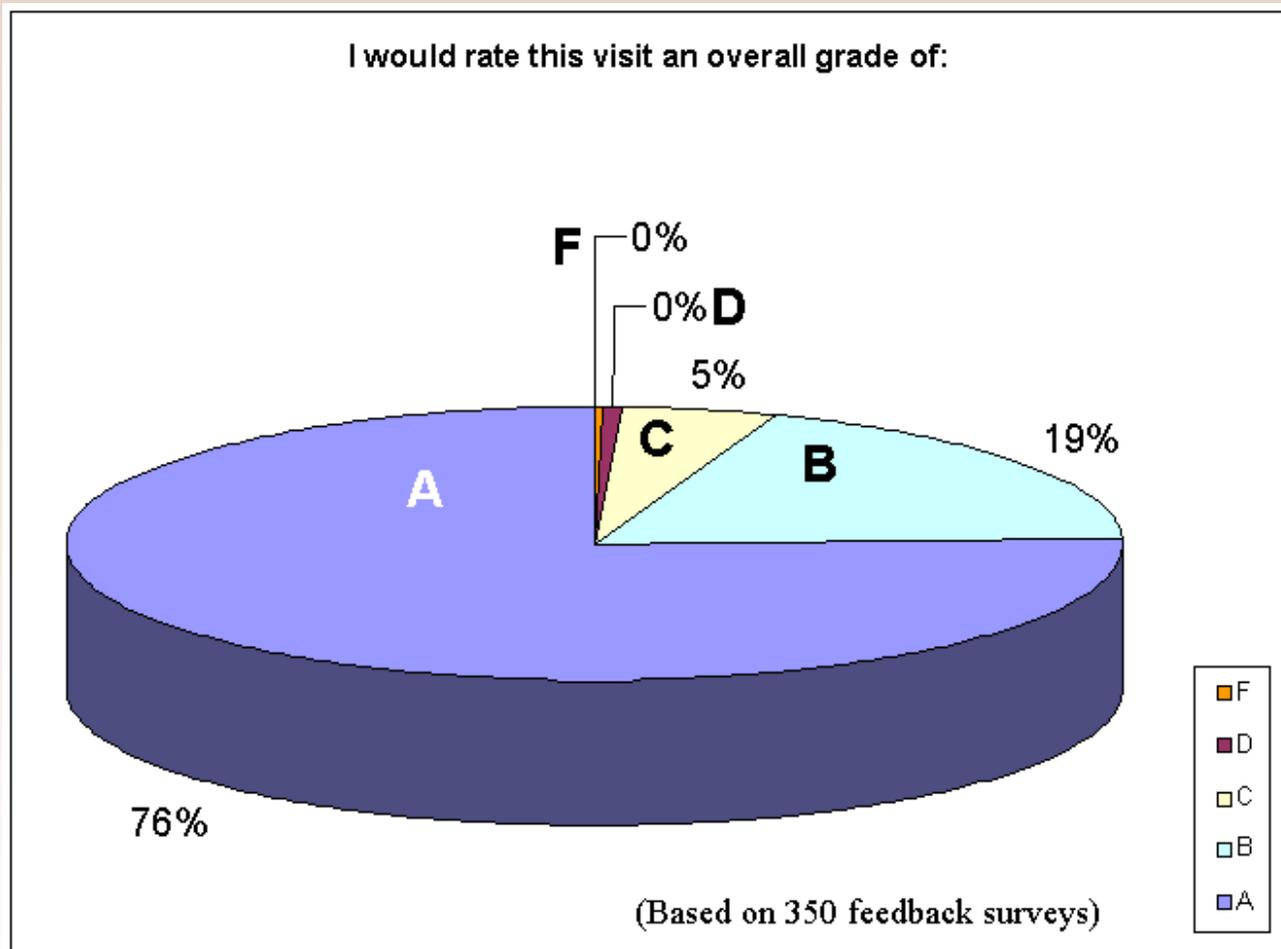
# Outreach benefits our Suppliers

- Increases awareness of Process Control issues.
- Workforce is recognized and appreciated.
- Suppliers receive fewer inquiries from individual NASA Centers.
- Suppliers receive visibility throughout all of NASA creating opportunities that didn't exist before.





# Employees were asked: *“I would rate this visit an overall Grade of:”*





# Accomplishments

- Visited 122 Suppliers (including sub-tiers) since June 2001
- Supported by NASA Centers (and other NASA work groups and Gov't agencies):
  - *HQ, ARC, DFRC, SSFC, GRC, JPL, JSC, KSC, LaRC, MSFC, SSC, Space Shuttle Program – Process Control Focus Group (PCFG)*
  - *MDA, DoD, DCMA*
- Supported by NASA Primes:
  - *ATK Thiokol, Boeing, Hamilton Sundstrand, Lockheed Martin, Orbital Sciences, Pratt & Whitney, United Space Alliance*
- Developed Quarterly Newsletters since 2003
- Co-developed the “My Role in Process Control” pocket guide with the Space Shuttle Program’s Process Control Focus Group (PCFG)



# Feedback

- ◆ On average, suppliers **strongly** agreed that outreach visits are value added
- ◆ Suppliers indicate they would like to be visited **once a year**
- ◆ Suppliers **appreciate** the face-to-face visit



Cristek Interconnects



EMF



Baker Hill Industries



Advanced Measurement Labs



# Supplier Visit Feedback Survey Questions:

Q1	<b>I understood the objective of the outreach visit.</b>
Q2	<b>I felt comfortable asking questions during the visit.</b>
Q3	<b>My questions and concerns were answered.</b>
Q4	<b>The Supplier Outreach Team was knowledgeable about process control.</b>
Q5	<b>The Supplier Outreach Team was knowledgeable about my company.</b>
Q6	<b>I can use the information and tools provided to assist me in my job.</b>
Q7	<b>I am more aware of Process Control now than prior to the visit.</b>
Q8	<b>The Pocket Guide is interesting to read.</b>
Q9	<b>The language used in the Pocket Guide is easily understandable.</b>
Q10	<b>The Pocket Guide is informative.</b>
Q11	<b>The Pocket Guide is useful to my job.</b>
Q12	<b>The visit is worth my time.</b>
Q13	<b>I would give this visit an overall grade of: [a, b, c, d, f]</b>



# Feedback Metrics

Overall Summary

