

Acquisition Reform Lessons Learned

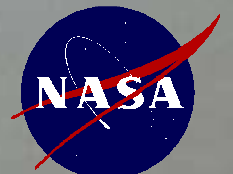
CQSDI

Jim Schultz

March 15, 2010

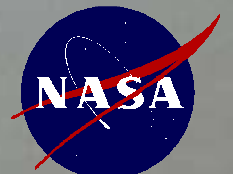
NASA Acquisition Reform

- History
- Contractor Mergers & Acquisitions
- Voluntary Consensus Standards
- NASA Failures
- Troubled Practices That We Must Not Repeat
- Lesson's Learned & Plan Forward



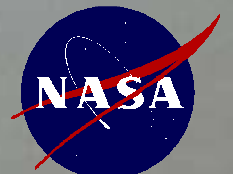
NASA Acquisition Reform History

- Faster, Better, Cheaper started at NASA in 1992 timeframe.
 - Concept of being more competitive is good.
 - No guidance given on achieving “faster, better, cheaper”
- Space Station Program was way over budget and under threat of being cancelled.
- NASA Program mind-set was to build the “Rolls Royce” version.



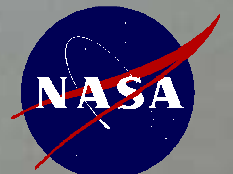
NASA Acquisition Reform History

- Federal Acquisition Streamlining Act (FASA) introduced in 1994.
 - Overhauled federal procurement law in an effort to reform acquisition processes and reduce project costs.
- Pendulum swung
 - Lots of NASA oversight to little NASA oversight
 - “*but the contractors don’t want to fail*”
 - Complicated costly projects to simpler lower-cost projects.



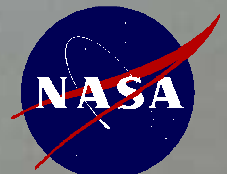
Contractor Mergers & Acquisitions

- Contractor mergers and acquisitions (1980's to Present) (*more detail in breakout session*)
 - Over 100 Companies combined into Six
 - Lockheed Martin
 - Northrup
 - General Dynamics
 - Boeing
 - Raytheon
 - Alliant Techsystems (ATK)
 - Creates “Must Win / Do-Or-Die” environment to win contacts.



Voluntary Consensus Standards

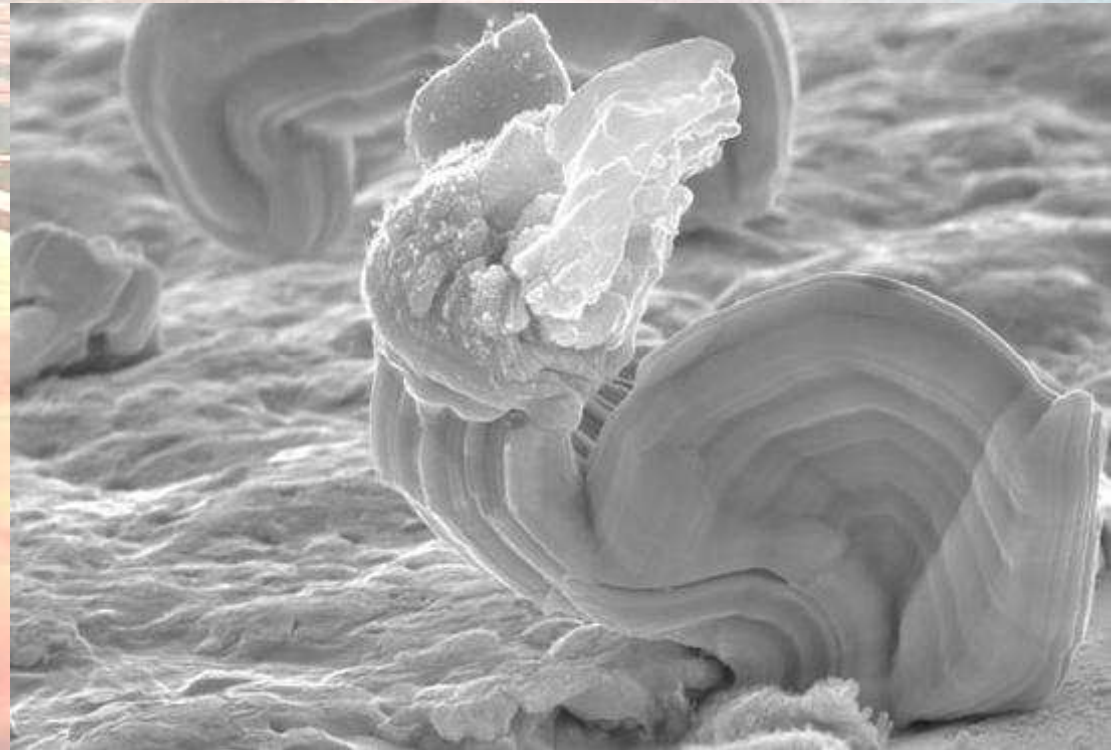
- OMB Circular A-119, dated February 19, 1998, mandates government use of Voluntary Consensus Standards (VCSs) unless “inconsistent with law or otherwise impractical”
 - “The use of such standards, whenever practicable and appropriate, is intended to achieve the following goals:
 - a) Eliminate the cost to the Government of developing its own standards and decrease the cost of goods procured and the burden of complying with agency regulation
 - b) Provide incentives and opportunities to establish standards that serve national needs
 - c) Encourage long-term growth for U.S. enterprises and promote efficiency and economic competition through harmonization of standards
 - d) Further the policy of reliance upon the private sector to supply Government needs for goods and services”



Tin Whiskers



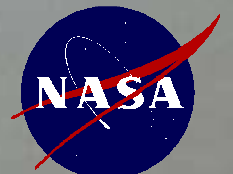
Cute Whiskers



“Not So” Cute Whiskers

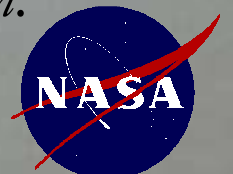
Acquisition Reform History – NASA Failures

- NASA experienced several failures as a result of “faster, better, cheaper” implementation including:
 - **The Orbiting Carbon Observatory (OCO) Satellite**
 - **Demonstration for Autonomous Rendezvous Technology (DART) Spacecraft**
 - **NASA Helios**
 - **The Hubble Space Telescope**
 - **Genesis**
 - **Space-Based Infrared System (SBIRS)**



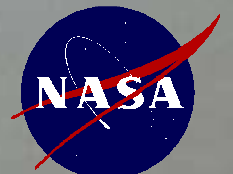
Acquisition Reform History – NASA Failures

- NASA experienced failures continued:
 - The Mars Polar Lander (MPL)
 - Deep Space 2
 - The Mars Climate Orbiter (MCO)
 - NOAA-19
 - Comet Nucleus Tour (CONTOUR)
 - Lewis Spacecraft
 - Solar Heliospheric Observatory Spacecraft (SOHO)
 - Wide-Field Infrared Explorer (WIRE) Spacecraft
- *NASA experienced failures discussed in more detail in breakout session.*



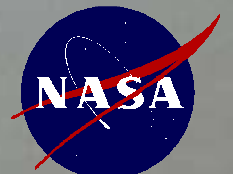
Troubled Practices That We Must Not Repeat

- “Trust Me” is based on the presumption that the Contractor knows how to do their job and wants to succeed.
- Reducing Government oversight based on presumption that Contractor’s processes, measurement devices, and practices are accurate and have a proven success track record.
- Overuse of analysis in lieu of test.



Troubled Practices That We Must Not Repeat

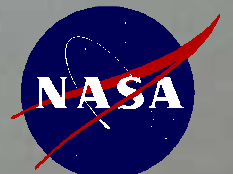
- Misuse of Qualification by similarity.
- Ineffective Quality Metrics
- No focused Continuous Improvement
- Ineffective separate Corrective Action Systems
- Cost and Schedule induced risk used to justify reduction in Quality Assurance.



Troubled Practices That We Must Not Repeat

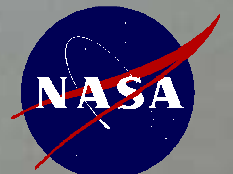
- Breakdown of internal controls/discipline.
- Poor oversight of sub-contractors (2nd, 3rd, 4th-tier suppliers).
- Releasing contracts before requirements are developed.

History has shown that we don't seem to learn from our mistakes.



Lesson's Learned & Plan Forward

- Lesson's Learned & Plan Forward (*discussed in breakout session*)
 - Dedicated Effort to Change
 - Contract Management
 - Organization and Style
 - Ready, Aim, Fire (not Fire, Aim, Ready)
 - Work Practices



Breakout Session

We will discuss each of the following in more detail:

- History
- Contractor Mergers & Acquisitions
- NASA Failures
- Troubled Practices That We Must Not Repeat
- Lesson's Learned & Plan Forward

