Risk-Based Surveillance – a Government/Industry Partnership

Presented By:
Mr. Christopher D. Brust.
Director, Quality Assurance Engineering Division
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FAR Part 46 – Quality Assurance / Subpart 46.102 - Policy

Agencies shall ensure that:

c) Government contract quality assurance is conducted before acceptance (except as otherwise provided in this part), by or under the direction of Government personnel;

DFARS Part 246 – Quality Assurance / Subpart 246.102 – Policy

Departments and agencies shall also—

1. Develop and manage a systematic, **cost-effective** Government contract quality assurance program to ensure that contract performance conforms to specified requirements.
Acquisition Participants

**Purchasing Office**
Establishes Contractor Quality Requirements
Incorporates Quality Requirements in Contract

**Contractor (Supplier)**
Carries out Contractual Quality Obligations
Controls Quality of Products or Services
Offers to the Government for Acceptance Only Conforming Supplies

**Contract Administration Office**
Assesses Degree of Contractor Compliance with Contract Quality Requirements
Accepts Supplies on Behalf of the Government as Required
DCMA-QA Vision

Mr. Michael E. Shields, Jr.
Executive Director Quality Assurance

Community of Practice

• Establishing a Leadership Forum with DoD and Industry
  To discuss Quality Issues and improve warfighter support

• Established a QA Management Council in DCMA
  To improve DCMA Quality execution and share lessons learned

• Reaching out to our Customers and Industry
  AIA - Cost of Quality
  SAE Standards Committees
  Army Quality Federation
  DoD Prime Contractor Corporate Quality Councils
DCMA Transition QC → QA

• Training
  • Integrating ASQ Body of knowledge
  • Shifted to Competency-based certifications

• QA Tools
  • Real time data
  • Supporting GCQA planning, surveillance, and competencies

• Policy
  • Quality Assurance vs. Quality Control
  • Quality Engineering Policy
  • Process Specific Instructions

• Working Together
  • Improving the overall acquisition process
Process-Based Approach Provides:

Government determination of product acceptability based upon confidence in the supplier’s quality management system or inspection system developed through a risk-based systematic verification of significant objective evidence.
GCQA Approach

Basic QAR Responsibilities:

2. Perform & Document Risk Assessment
3. Plan GCQA Surveillance Based on Risk
4. Develop GCQA Surveillance Plan
5. Perform Planned GCQA Surveillance
6. Document Results of GCQA Surveillance (Records)
7. Adjust GCQA Surveillance Plan Based on Data

Outcome = Accept product on behalf of the Gov’t
• Identify the nature and extent of the requirements associated with procurements

• Includes complete review of the Contract, TDP, Quality Assurance Letters of Instruction (QALI), Letter of Delegation (LoD), and any other associated documentation

• Results of CTR must be documented in the eTool and can be reviewed online
DCMA’s risk assessment process is derived from the Department’s risk management concepts.

The original DoD model was released in 1994. DCMA has been involved since that time.
QA Risk-Based Surveillance: The Electronic Future

**Contract Technical Review**
- Critical Characteristics
- Critical Processes
- First Article
- CSI or ALRE
- Contract Clauses

**Supplier Risk System (Likelihood)**
- Corrective Action
- Customer Complaints
- Delivery
- PASS
- Other

**Risk Assessment Model (Consequence)**
- Specific Process Risks Identified
- Risk Statements Generated

**Item & Supplier Specific Enhanced Surveillance Plan**

**Electronic Surveillance Data**

**DCMA Supplier Data**
- Contract Clauses
- Critical Characteristics
- Critical Processes
- First Article
- CSI or ALRE
- Contract Clauses
• SRS 1.0 launched March 2011
• A modular architecture, enterprise eTool
• Holistic Quality perspective
• Provides “Risk Indicators”
• Captures DCMA Enterprise Data
• A population of 22,000+ CAGEs
• Uses:
  • Surveillance Planning
  • Leadership Decision Making
  • Viewing the Supply Chain
  • Information for Applicable Contractual Clauses
General Search Function

Home Page
Search a supplier.

Search
Date Range: Past 0-12 months - 03-Dec-2010 to 03-Dec-2011
Weapon System: 11F - AIRCRAFT, GALAXY C-5
Company Name:
CAGE: 50888
DUNS:
DoDAAC:
Search only CAGEs that have SRS data:
-- OR --
CAGE List: Enter a list of CAGEs separated by spaces or commas (a maximum of 1,000 CAGE codes)

Cancel Search
### CAGE Details

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<th>Country</th>
<th>DoDAAC:</th>
<th>D-U-N-S:</th>
<th>Active:</th>
<th>Outside Data Inquiry:</th>
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### Average Indicators by NAICS

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<th>Description</th>
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<td>32.03%</td>
<td>025</td>
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<td>238042</td>
<td>Military Armored Vehicle, Tank, and Tank..</td>
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<td>238042</td>
<td>All Other Motor Vehicle Parts Manufacturing</td>
<td>32.03%</td>
<td>025</td>
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<tr>
<td>238042</td>
<td>All Other Motor Vehicle Parts Manufacturing</td>
<td>31.06%</td>
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### Risk vs. Peers

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<table>
<thead>
<tr>
<th>Industry</th>
<th>Risk vs. Peers</th>
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<tbody>
<tr>
<td>Aircraft</td>
<td></td>
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<tr>
<td>Biplane</td>
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<td>Cessna</td>
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### Calculated Risk Indicators

- Quality: 100%
- Experience & Technical: 75%
- Delivery: 77%
- Business: 100%
- Production: 100%

### Overall Trend

- **90%**
- **93%**
- **99%**

### 3 Year Trend

- **0-12 months**
- **13-24 months**
- **25-36 months**
For Official Use Only

Weapon System Weekly Risk Indicators Report

Weapon System: 26F - AIRCRAFT, F-16
Overall: 88%
CAGE Count: 1,047
Date Range: Past 0 - 12 months - 04-FEB-11 to 04-FEB-12

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<td>Experience &amp; Technical</td>
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<tr>
<td>Delivery</td>
<td>77%</td>
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<tr>
<td>Business</td>
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</tr>
<tr>
<td>Production</td>
<td>99%</td>
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Export
The Future of SRS (2.5 and Beyond)

- Other DCMA Functional Areas
- Program granularity
- Earned Value measures
- CAR enhancements (CAP measures, Repeat CARs)
- FSC and Weapon System granularity improvements
- Archival data for analysis
- Other risk measures from external systems
  (Customers, [Air Force, MDA, …], DFAS, DLIS)
e-Tool Conclusions

• DCMA continues to evolve its e-Tools to gain additional insight into the supply chain and to enhance risk-based surveillance

• Additional Functional & Customer Data → Increase Accuracy

• Linkage to lower tier suppliers is complex

• Assist Customers with Risk Indicators to Drive Contractual Clauses and DCMA Engagement
DCMA – Industry Partnering
Cost of Quality

- Mil-Q-9858 (cancelled - 1996) - 3.6 Costs Related to Quality:
  - The contractor shall maintain and use quality cost data as a management element of the quality program.
  - These data shall serve the purpose of identifying the cost of both the prevention and correction of nonconforming supplies.
  - The specific quality cost data to be maintained and used will be determined by the contractor.
  - These data shall, on request, be identified and made available for "on-site" review by the Government Representative.

- Joint Project: Aerospace Industry Association - DCMA

- Requires Standardization:
  - Methodology
  - Measures of Effectiveness
  - Utilization of Data
DCMA-AIA Cost of Quality Project

- Kickoff meeting held Nov 2011 with Aerospace Industry Association (AIA) Quality Assurance Committee (QAC) member companies and DCMA, ASQ and APQC
- Deliverable: white paper to build concurrence and commitment with a recommended standard, basic, fundamental Quality Cost methodology - failure cost focused
- Recommended cost methodologies developed with a survey to be sent to member companies – March 2012
- Issue initial released draft of white paper – 4/27/12
- Ongoing coordination w/ AIA stakeholder committees ➔ 5/12
- Final white paper released – 6/29/12
Cost of Quality Project Outcomes

• DFARs Case to be developed and submitted
• White Paper - Continuous Improvement – standard methodology to evaluate and measure effectiveness leading to:
  • Reductions in:
    • Non-Conforming Material
    • Repair/Rework
    • Lead-times
  • Improvements in:
    • Performance
    • Program/Weapon System
    • Readiness
• Fiscal Constraints
  • Shared Cost Reductions – Supplier and Government
  • Focus on Risk Mitigation and Preventive Actions
Counterfeit - DCMA Actions

• Working w/Industry on SAE Industry Standards:
  • AS 5553 – Counterfeit Electronic Parts (test matrix)
  • AS 6081 – Counterfeit Electronic Parts - Distributors
  • AS 6174 – Counterfeit Material (draft in final ballot)

• Working with OSD
  • NDAA Implementation

• Contractor Letters:
  • Requested detailed information on contracts, parts and programs as well as their counterfeit mitigation strategy
  • Multifunctional team evaluating and developing strategy to notify customers and verify Contractors strategy
• QAR Surveillance Plan will include review of the counterfeit prevention processes and controls with a frequency as appropriate.

• The QAR will verify that the contractor is executing to their process and controls.
  • Yes – Periodic follow up checks
  • No – Issue a CAR and ensure that stock is screened for suspect counterfeit items. Follow up as appropriate.
• DCMA-QA Policy on suspect counterfeit supplemented with 3 Q-TIPs (Quality-Technical Information Papers)
  • When encountered call Legal fraud attorneys, Contract Integrity Center (CIC)
  • If the QAR suspects counterfeit parts they should, after coordination with the CIC, issue an AAN-L (Government only) GIDEP to the Services. This Alert should request readers to screen stock for possible non-conforming material/suspect counterfeit parts.
  • CIC coordinates with law enforcement and advises QAR
• DCMA-DOD-Industry need to continue to partner
  • Focus on Risk Mitigation and Preventative Actions
  • SAE Industry Standards
  • Combat Counterfeit Material
  • Reduce Cost of Quality
    • Improve: Performance, Program/Weapon System, Readiness
    • Reduce: Lead-times, Non-Conforming Material, Repair/Rework, Cost