



**DCMA**

# DCMA – Transitioning from Detection to Prevention

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## CQSDI: Industry-Government Collaboration in Quality

**Presented By:**  
**Mr. Michael E. Shields, Jr**  
**Executive Director, DCMA-QA**  
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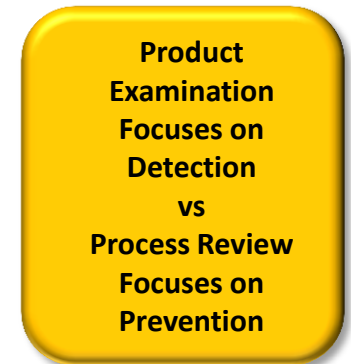
- **Professionalization of the Workforce**
- **Risk Assessment**
- **Risk Mitigation**
- **Objective Evidence as a Driver**
- **Feedback Mechanisms**

- **Certified Quality Technicians**
  - Certifications began in 2011 (11 exam sessions through 2014)
  - Over 300 DCMA employees are CQTs
  - 73% aggregate pass rate
- **Certified Quality Auditors**
  - Certifications began in 2012 (8 exam sessions through 2014)
  - Over 325 DCMA employees are CQAs
  - 88% aggregate pass rate
- **Certified Quality Engineer**
  - Certifications began in 2014 (2 exam sessions to date)
  - 18 DCMA employees are CQEs
  - 63% pass rate



- The result of Contract Technical Review provides DCMA Quality Assurance personnel with a sound basis to identify potential risks based on complexity, special processes/materials.
- The level of severity that a product failure may have on equipment, mission, or the safety of personnel; i.e., SOF, CSI, etc. This is an inherent risk. It is used in part to determine the frequency and intensity of surveillance activities. DCMA has no influence on consequence of failure.
- Supplier processes that are determined to be potential risks through an assessment of a number of supplier performance factors e.g. Supplier Risk System, Corrective Action Requests, Product Quality Deficiency Reports, Supplier Process Controls etc.
- The results of the supplier performance factors assessment and associated data analysis serve as the basis for likelihood ratings.

- Risk consequence and likelihood together determines the frequency and intensity of Government Contract Quality Assurance (GCQA) surveillance activity.
- GCQA surveillance can only influence the likelihood risk causes, so the higher the likelihood risk (lower SRS indices, quality escapes, etc.), the more frequent and intensive the surveillance activity will be.
- Places emphasis on the use of Process Review (PR) method of surveillance to foster the prevention of defects versus use of the Product Examination (PE) surveillance method for the detection of defects.
- Establish data-driven confidence level in supplier performance to determine frequency and intensity of continued GCQA surveillance activities.
- Places emphasis on PR and DC&A to establish supplier confidence levels and appropriate allocation of resources to higher risk areas where confidence is lacking and risk is high.





- DCMA surveillance is based upon risk assessment and mitigation. Risk at the contractor level is based upon past performance.
- Data developed by both DCMA and the Contractor provide a real time understanding of changes (in processes, systems).
- Objective data can indicate processes well under control (high Cpk or lack of system/product failure over an extended period of time)
- Positive results should lead to updates to contract clauses and QALIs to cost-effectively manage the contract and support BBP initiatives

# Feedback Mechanism – Actionable Information

- DCMA Contract Management Offices (CMOs) are seeing enhanced SRS usage by multiple functional areas to provide input into resource utilization and contractor focus
- Corporate Management Councils (CMCs) are a launch pad for joint DCMA-Contractor mini-projects based upon SRS actionable information. Contractors see directionally consistent SRS and internal perceptions.
- Superior Supplier Incentive Programs supporting BBP initiatives are seeking additional data from sources like SRS to help determine viable relief methodologies
- SRS performance indices and supplier/DCMA data ( $Cp_k$ , No returns and Field Failures/Customer Returns) communicated to program offices drive contract modifications to reduce GCQA requirements

Enhanced usage of  
DCMA/Supplier  
information at  
Program Office



Contractual changes  
that optimize DCMA  
engagement and  
reduce costs