16266 - Latest Advances in DoD Acquisition ESOH Policy, Guidance, and Initiatives

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Outline

Acquisition Environment, Safety, and Occupational Health (ESOH)

- Mission
- Policy, Guidance, and Oversight
- Initiatives
  - Sustainability in Acquisition
  - Hazardous Materials Management (HMM) - Phase 1
  - Impacting the Requirements Process
  - Streamlining and Integrating ESOH in Acquisition Documentation
- The Way Forward: What’s on the Horizon
  - HMM - Phase 2
  - Acquisition Community Connection (ACC) Update
  - Military Standard 882E, Standard Practice Systems Safety
  - Life Cycle Sustainment Plan (LCSP) Integration
Support the warfighter and DoD’s mission

- Prevent loss of life or serious injury to personnel
- Avoid damage to facilities or equipment
- Prevent harm to the environment and the surrounding community
- Avoid system failures that negatively impact mission capability or mission operability
Acquisition ESOH
Policy, Guidance and Oversight
Acquisition ESOH Policy

- DoD Instruction 5000.02, Operation of the Defense Acquisition System Update
  - AT&L Lead: Defense Procurement & Acquisition Policy (DPAP)
- Re-write to:
  - Incorporate Facts-of-Life changes & Significantly Streamline content
  - Address separate Acquisition System Types
  - Reference MIL-STD-882E, Standard Practice System Safety
  - Better Address ESOH for early Testing and Development Activities
Defense Acquisition Guidebook (DAG) Chapter 4 Changes:

- Published May 15, 2013
- Target audience - Program Manager & Lead Systems Engineer
- Significant size reduction
- Minimized hyperlinking within chapter
- Added Sustainability Life Cycle Assessment Section as a Systems Engineering process tool
- Operational Energy added as a Design Consideration
DAG Chapter 4, ESOH Section Changes:

- Reference new MIL-STD-882E, Standard Practice System Safety
- Clarify ESOH content between Systems Engineering Plan (SEP) and Programmatic ESOH Evaluation (PESHE)
- Identify National Environmental Policy Act (NEPA) / EO 12114 Compliance Schedule as separate document
- Describe ESOH Risk Acceptance and Reporting Requirements
Acquisition ESOH Oversight - Program Support Reviews (PSRs)

- Office of Deputy Assistant Secretary of Defense for Systems Engineering (ODASD(SE)) leads PSRs
  - DoDI 5000.02 mandated Defense Acquisition Board decision support
  - Provides a Systems Engineering Focused Review
  - Examines multiple aspects of Program

- ODUSD(I&E) provides ESOH Subject Matter Experts to:
  - Validate program compliance
  - Assess effectiveness of Acquisition ESOH policy
  - Work closely with program teams

- Currently supporting Small Diameter Bomb II PSR
Acquisition ESOH Initiatives
Sustainability in Acquisition Programs

- Refining “Sustainability in Acquisition” Methodology
  - Based on three Levels of Life Cycle Assessment (LCA)
  - LCA could be placed on contracts
  - Communicating with stakeholders to identify improvements and gain support

- Programs would identify sustainability factors to be considered at the appropriate decision point
  - Use physical, chemical, and toxicity data to make smart choices
  - Possible weighting or scoring system for alternatives
  - Estimates potential life cycle costs that need to be considered

- Could be used to support Life Cycle cost estimating

Added LCA to DAG Chapter 4 as one of the Systems Engineering Tools
Hazardous Material Management
Phase 1


- **Goal:** Address current HMM challenges
  - Multiple management approaches
  - Multiple hazardous material lists

- **Approach:**
  - MIL-STD-882E, Task 108 prioritizes efforts to eliminate or reduce hazardous material usage by categorizing targeted materials as:
    - Prohibited, Restricted, and Tracked
  - NAS 411 update provides:
    - Detailed guidance for implementing MIL-STD-882E, Task 108
    - Lists of baseline hazardous materials in the three categories
AIA published two issuances on September 30, 2013
- NAS 411 Revision 3
- NAS 411-1, Hazardous Materials Target List Standard Practice
  - Standard lists for MIL-STD-822E Task 108 prohibited and restricted materials

Phase 2, develop “tracked” materials list
Impacting the Requirements Process

Defense Acquisition University Course - CLR 030, ESOH in JCIDS (Joint Capabilities Integration and Development System)

- Replaces original 2010 version
- Launched February 2013
- Highlights:
  - Updated content to include CJCSI 3170.01H (Jan 2012),
  - Updated test bank. Final Exam 100% score required to pass
  - Improved graphics and screen readability
  - ESOH Subject Matter Expert can complete entire course < four (4) hours
Developed a Human Systems Integration (HSI) & ESOH Handbook for pre-Milestone A Joint Capabilities Integration and Development System (JCIDS) and Analysis of Alternatives (AoA) Activities

- Handbook completed in September 2013
  - Supports ESOH & HSI participation in the JCIDS process
  - Contains detailed descriptions of pre-Milestone A JCIDS activities
  - Identifies most-valued insertion points for HSI & ESOH considerations
  - Provides example capability statements for variety of platforms
  - Supports requirements traceability
  - Builds on DAU course CLR030 “ESOH in JCIDS,” as a resource for applying lessons learned

More details in Presentation 16272 – October 30, 2013, 11:25AM
Streamlining and Integrating ESOH in Acquisition Documents

Guide to ESOH in the Systems Engineering Plan (SEP), Programmatic ESOH Evaluation (PESHE), and NEPA/EO 12114 Compliance Schedule to:

- Describes technical planning for ESOH considerations in SE
- Documents data generated from implementing the technical plan

- Built on lessons learned & best practices from Acquisition ESOH professionals

- Guide completed in September 2013
  - Improves ESOH risk management
  - Resource for developing system documentation and fielding activities
  - Supports the USD(AT&L) mandate to streamline Acquisition documentation process and improve cost efficiency
The Way Forward:
What’s on the Horizon
HMM – Phase 2

- Update NAS 411-1, Hazardous Materials Target List
  Standard Practice
  - Current version lists MIL-STD-822E Task 108 prohibited and restricted materials

- Phase 2 will address “tracked” materials
  - DoD and AIA working together
  - Developing standard list for MIL-STD-882E Task 108 tracked materials to add to NAS 411-1
  - Using Naval Sea Systems Command Prohibited and Controlled Chemicals List as a starting point
Acquisition Community Connection (ACC) Update

- Updating the ACC ESOH Community of Practice (CoP)
  - Remove outdated content to reflect current policy/guidance
  - Add links on front page to specific key ESOH areas
    - Synchronize new look to match Systems Engineering CoP
  - Front page of ESOH CoP:
    - Overview
    - Topics
    - Documents
    - Resources
    - Compliance
    - ESOH Policy
  - Target completion – 2nd quarter FY2014
ACC Update (continued)

ACC Topics

- ESOH Risk Management
- System Safety Methodology – MIL-STD-882E
- Explosives Safety
- Laser Safety
- Radiation Safety
- Battery Safety
- Directed Energy Weapons/Systems
- Energy Usage/Fuel Consumption Reduction
- GOTS/COTS Special Considerations
- Noise and Occupational Health Risks
- National Environmental Policy Act
- Executive Order 12114
- Hazardous Materials Management
- Life Cycle Analysis
- Sustainability
- Green Procurement Program
- ESOH Demilitarization & Disposal Considerations

Each topic will have one or more paragraphs and/or sub topics

Users raising Implementation Challenges/Questions/Concerns

Potential Solutions may include:

- Changes to MIL-STD-882E
- Publishing additional guidance
- Developing new training courses and materials

More on this in Presentation 16267 - MIL-STD-882E: Implementation Challenges – October 30, 2013, 4:05PM
Life Cycle Sustainment Plan (LCSP) Integration

- Improve ESOH Integration in LCSP, especially right before and after Full Rate Production / Full Deployment (FRP/FD) Decision
  - Improve ESOH in post FRP/FD Sustainment Engineering
  - Provide necessary System Safety (i.e., hazard tracking system) and Environmental data (i.e., Hazardous Materials data)
  - Support eventual Demilitarization and Disposal requirements
Wrap-up

Acquisition Environment, Safety, and Occupational Health (ESOH)

- **Mission**
  - Support the War Fighter

- **Policy, Guidance, and Oversight**
  - Policy and Guidance to Support Mission
  - Oversight to ensure Compliance

- **Initiatives**
  - Activities ranged from Hazardous Materials to Documentation Streamlining

- **The Way Forward: What’s on the Horizon**
  - Activities range from Improving Communications through ACC update to Systems Safety and Sustainability
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