Obsolescence Management

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• **Purpose:** Implement a Proactive Approach to Obsolescence Management in support of our customer base

• **Process:** Commitment to customer satisfaction and mission excellence through standardization of processes, efficiency through automation and expertise through training

• **People:** 15 Government personnel and 29 Contractors providing support to PEO Aviation, PEO Missiles and Space, CECOM, TACOM, Missile Defense Agency, Navy and Department of Homeland Security

• **Product:** Over $66 Million Dollars in Cost Avoidance for FY 2017 which Resulted in a ROI of 11:1
• What is obsolescence?
  – The decline of product availability in a market due to the introduction of improved products or rapid technology developments. “Can’t get it anymore”

• Obsolescence impact:
  – System readiness becomes degraded due to reduced availability of products
  – Increased costs for production and support
  – Unplanned redesigns/upgrades; Threat to schedules
  – Funding not available when needed to address inevitable issues

• Why it is critical to be proactive?
  – Remove problematic products prior to production
  – Prevents schedule slip and soaring costs during production
  – Establishes procedures to handle inevitable problems of support phase
  – Maximizes potential to implement timely solution options, at a lower cost
  – Facilitates ability to create a remediation budget (tech refresh, e.g.)
Obsolescence Best Practices

- Develop and document obsolescence management processes
- Establish customer relationships (Buy in is a MUST!)
- Obsolescence management lifecycle strategy
- Obsolescence management contract language
- Implement life cycle obsolescence working group
- Perform obsolescence analysis
- Identify and track resolutions
- Maintain part tracking database
- Calculate cost avoidance
- Project obsolescence program objective memorandum (POM) budget
Benefits of Implementing Obsolescence Best Practices

• Increased efficiencies
  – Parts research
  – Resolution options
  – Reduces logistics footprint

• Standardized proactive obsolescence management
  – Leverage community of excellence
  – Continuity of practices throughout Army systems
  – Proactive support to product support managers (PSM)

• Enhanced readiness
  – Increased lifecycle affordability
  – Supports robust system availability
  – Reduces counterfeit part risk

Doing nothing is NOT an option
Historically, DoD and industry have been **REACTIVE** when it comes to Obsolescence. This results in:

- Schedule Slip
- Multiple redesigns
- No planning for future
- Vulnerable to counterfeit/cyber security risk
- Only concerned with current contract
- High production cost
- Degraded system readiness
- No understanding of issues

AMRDEC’s Obsolescence Management Team employs a **PROACTIVE** approach, which results in:

- Obsolescence strategy
- Affordable solutions
- Reduced risks
- Remediation budget (tech refresh) budgeting
- Honest broker
- 3 to 5 year outlook for obsolescence
- Lifecycle planning
Obsolescence can and must be managed throughout the entire equipment life cycle……

………and it’s never too late to start
• My equipment is not in the support phase yet, I don’t have obsolescence
  9 out of 10 systems with electronic components have obsolescence in or even before LRIP

• I use a Performance Specification acquisition strategy so the prime is taking care of that for me
  The prime is taking care of it for you….for the period of performance of the contract. Bridge buys of
  parts have minimal impact to prime’s profit margin and is still providing what is contractually
  required. Do you know if you can go into another production contract without a redesign?

• Commercial-Off-the Shelf (COTS) equipment has built-in obsolescence immunity
  Seldom can one COTS item replace another without a requalification of the system. So, yes, you may
  have obsolescence immunity….but it still comes with a cost. Have you budgeted for that?

• Performance Based Logistics (PBL) will force the vendor to address obsolescence effectively
  The duration of PBL contracts don’t incentivize the prime to do anything other than the most cost
  effective fix…..and that’s not a redesign.

• Technology obsolescence cannot be effectively managed
  Programs supported by AMRDEC’s Obsolescence Branch have Achieved Over $350M Cost Avoidance
  in Last 5 Years

• I can’t fund obsolescence with RDT&E dollars….that’s a Working Capital Fund bill
  If you don’t manage and fund obsolescence during the RDT&E phase, your WCF Bill is going to be
  outrageous!
Research & Analysis

Multiple Tools Provide Better Coverage, Increased Confidence in Availability Status and Timely Receipt of End of Life Notifications

MORE Obsolescence Data Management Environment
Hardware Obsolescence Process

Obtain Parts List / Bill of Material (BOM)

Track New Parts

Research Parts for Availability

Alerts (EOL, Lead Free, GIDEP)
- Processed & distributed as they are received

Mitigation Identification

Identify Issues & Generate Cases

New parts are added to the AMRDEC database and researched

Feedback obtained from OEM on implemented mitigations

Example Mitigations:
- Replace XYZ with 123
- Last Time Buy for ABC
- Adequate Stock on Hand for ZZZ

<table>
<thead>
<tr>
<th>Obsolete</th>
<th>EOL</th>
<th>Cannot Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>7</td>
<td>3</td>
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• Adding capability to track Sustainment Data within MORE
  – Sustainment Data Available for either Box or Board

• Sustainment Module is fully integrated within the existing database
  – Utilizes existing Structure Data to ensure parts are correctly associated

• Provide a holistic view of the product’s lifecycle
• Obsolescence is a given and increases over time…issues continue to grow as systems age and new program starts are limited

• Electronics are affected with the most frequency

• The cornerstones of effective and successful management:
  – An aggressive, proactive, and adequately staffed working group including OEM PARTICIPATION
  – Deployment of standardized processes and procedures
  – Open communication
  – Availability of technical data

• Identification of risk, planning for short and long term mitigation strategies and development of budgets to execute are the focus of the Obsolescence Management team

ROI Realized Through Cost Avoidance and Readiness Gain
Deliver collaborative and innovative aviation and missile capabilities for responsive and cost-effective research, development and life cycle engineering solutions.
Who is AMRDEC?

~9,211
FY17 Strength

2,945
Civilian

16
Military

6,250
Contractor

Core Competencies

- Life Cycle Engineering
- Research, Technology Development and Demonstration
- Design and Modification
- Software Engineering
- Systems Integration
- Test and Evaluation
- Qualification
- Aerodynamics/Aeromechanics
- Structures
- Propulsion
- Guidance/Navigation
- Autonomy and Teaming
- Radio Frequency (RF) Technology
- Fire Control Radar Technology
- Image Processing
- Models and Simulation
- Cyber Security

FY17
$2,904M

6%
Aviation S&T

7%
Missile S&T

63%
Army

24%
Other
#1: Readiness
Provide aviation and missile systems solutions to ensure victory on the battlefield today.

#2: Future Force
Develop and mature Science and Technology to provide technical capability to our Army’s (and nation’s) aviation and missile systems.

#3: Soldiers and People
Develop the engineering talent to support both Science and Technology and the aviation and missile materiel enterprise.
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