



2026 DSP CONFERENCE · STRENGTH THROUGH STANDARDIZATION

Availability is Lethality:

Innovative Approaches to Obsolescence and Supply Chain Management

Standardization as a readiness weapon on the MV-75 Cheyenne

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ROADMAP

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PROGRAM OVERVIEW

MV-75 Cheyenne

The Army's Future Long-Range Assault Aircraft

A next-generation assault aircraft is only as lethal as it is available.

This is the story of how we protected that availability — before the first aircraft ever flies.



THE STAKES

Availability Is Lethality

“

A next-generation weapon system's true power is its availability — not its speed, range, or payload.



THE COST OF WAITING

An aircraft on the ground waiting for an obsolete part is just an expensive museum piece.



THE COST OF REACTING

Reactive obsolescence management triggers months-long investigations before a single fix can begin.



THE COST OF EXPOSURE

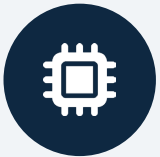
In today's threat landscape, supply chain security is national security.



THE APPROACH

From Reactive Scramble to Proactive Discipline

Three disciplines, integrated from Day 1 — all applied before there was a flying prototype.



01

OBSOLESCENCE

Identify and communicate early.
Requirements written into the RFP — not bolted on at Milestone C.



02

SUPPLY CHAIN RISK

A secure and resilient supply chain:
mapped, assessed, and cyber-integrated
all the way to the sub-tier.



03

STANDARDIZATION

Efficient, repeatable processes — adopted
where they already exist, created where
they do not.

If you're working in a silo, you've already lost the battle.



MOVE 01 · REQUIREMENTS

Proactive Management, Written Into the Contract



Into the RFP

Novel, proactive obsolescence and SCRM requirements incorporated directly into the solicitation.



Before CDR

Granular hardware and software BOM deliveries required prior to Critical Design Review.



From Lessons Learned

Drawn from a team with obsolescence experience across a wide variety of platforms.

WHEN THE DATA ARRIVES



“We didn’t wait until Milestone C. We demanded proactive management from Day 1.”



Obsolescence Engineering



Early Proactive Management

Requirements incorporated into the RFP embed obsolescence management into everything we do.



Bills of Materials

Hardware and software BOMs contractually required prior to CDR, enabling synchronized data analysis.



Obsolescence Forecasting

Predictive analytics let us strategically manage technology refresh cycles against the obsolescence lifecycle.



Software Obsolescence Process

Unprecedented granular SBOMs enable a process to manage, monitor, and address software obsolescence in a way that has never been done.



MOVE 02 • DATA

One Bill of Materials, Fleet-Wide Visibility

TIME TO IDENTIFY AFFECTED AIRCRAFT

SECONDS

not a months-long investigation

A vulnerability surfaces, or a critical component goes end-of-life — and we know immediately which aircraft are affected, where they are, and in what configuration.



Real-time access to industry data and systems



BOM and SBOM insight paired with a comprehensive digital twin



Integrated data hosted on secure US Government servers



Analytics synchronize technology refresh with the obsolescence lifecycle

AI is not magic. It is a tool — and it is most effective paired with deep human knowledge and experience.



Supply Chain Risk Management



Contract Language

SCRM planning and risk registry requirements written into the RFP, plus an unprecedented Consent to Subcontract process integrating Logistics, Cyber, Security, Legal, and Contracting SMEs.



Risk Framework

Proactive sub-tier risk assessments and cybersecurity integration ensure a supply chain that is not only efficient, but secure and resilient against adversarial threats.



Supplier Ecosystem

Mapping the entire supply chain and routinely visiting our suppliers — not to audit them into submission.



Transparency

An Intellectual Property summit with our teammates, to clearly explain our intent for the data we required.

MOVE 03 · RELATIONSHIPS

Trust as a Supply Chain Instrument

“We promise to over-share, if you promise not to over-react.”

COINED BY OUR INDUSTRY PARTNER, BELL · NOW THE PROGRAM’S GOLDEN RULE



Integrated Product Teams and Working Groups with obsolescence embedded throughout.



Supplier visits to explain why we need the data — not to audit them into submission.



An Intellectual Property summit reaching agreement with every vendor.

In defense acquisition, trust is the hardest commodity to procure.



RISK FRAMEWORK

Forging Supply Chain Resiliency

Resiliency forged by deliberate contract language and proactive management requirements, from Day 1.



MITIGATE

- Mitigate sole-source challenges through redundant supply chains
- Conduct supply chain illuminations to identify single points of failure
- Design in alternate sources and parts ahead of need



MANAGE

- Fully map the MV-75 supply chain ecosystem
- Early, proactive sub-tier supplier risk assessments
- Synchronize data analysis of hardware and software BOMs
- Leverage predictive analytics to forecast obsolescence

THE THEME

Levels of Standardization



Standardization compounds. What we settle at the system level, the joint force and our allies inherit.



DESIGN INFLUENCE

Standardization Through Design Influence

Balancing standardization with flexibility — and reducing long-term operational and sustainment burden.



Avoid Vendor Lock

Adopt established industry and Government standards.



Minimize Logistics Footprint

Existing maintenance concepts, tools, support equipment, and facilities.



MOSA & Digital Integration

Standardized architectures and interfaces.



Optimize for Supportability

Standard components and processes improve maintainability and reliability.



Open & Commercial Standards

Common interface standards simplify modernization integration.



Promote Interoperability

Communicate, share data, and operate across joint force and multi-domain environments.



PROGRAM SUCCESS

Four Risks Retired Before First Flight

Bell and the US Army finding and resolving risk before the aircraft has ever flown.



Mission & Flight Control Computing

Obsolescence identified and mitigated years before it could impact production.

DESIGN-IN ALTERNATES



Critical Adhesives

Diminishing manufacturing sources spotted early; sourcing strategy pivoted ahead of need.

DMSMS / RESOURCING



Transparencies

Canopy and window bottlenecks relieved by smartly adjusting the requirement itself.

REQUIREMENTS ADJUSTMENT



Deep Sub-Tier Components

Adversarial-nation components found below the prime and engineered out pre-production.

DEEP-TIER BOM ANALYSIS



CASE STUDY · MISSION & FLIGHT CONTROL COMPUTING

Retiring Computing Obsolescence Years Before Production

PROBLEM

Mission computing and flight control computers depend on microelectronics whose commercial life cycles are far shorter than the aircraft's. Obsolescence was not a risk — it was a certainty.

ACTION

BOM and SBOM deliveries required before CDR, so at-risk parts surfaced while the design could still absorb change — and technology refresh planned in step with obsolescence.

RESULT

Obsolescence identified and mitigated years before it could impact production, with alternates designed in rather than parts chased later.

Obsolescence found before CDR is a design choice. Found after, it is a redesign.



CASE STUDY · CRITICAL ADHESIVES

Seeing a Source Disappear Before It Did



PROBLEM

Diminishing manufacturing sources for critical adhesives — low-cost, low-visibility materials carrying qualification tails measured in years.



ACTION

Proactive DMSMS surveillance across the supplier base, backed by the supplier trust to report a thinning source early rather than at the point of failure.



RESULT

Sourcing strategy pivoted well ahead of need, protecting production continuity without an emergency requalification.

*The part that stops production **is rarely the expensive one.***



CASE STUDY · TRANSPARENCIES

Adjusting the Requirement to Open the Market

PROBLEM

Supply chain bottlenecks on transparencies — canopies and windows — with too few qualified sources to sustain production.

ACTION

Rather than accept the constraint, we reexamined the requirement itself and adjusted it smartly, without surrendering capability.

RESULT

The number of available sources expanded — restoring competition, resilience, and schedule margin before production.

The bottleneck was not the market. It was the specification.



CASE STUDY · DEEP SUB-TIER ANALYSIS

Finding What the Top-Level BOM Never Shows

PROBLEM

Adversarial-nation components can sit several tiers below the prime, invisible to any top-level bill of materials.

ACTION

Deep-tier BOM analysis, made possible by the granular data we required as a contract deliverable before CDR.

RESULT

Chinese-made components identified inside the sub-tier design and engineered out before they were ever produced.

You cannot engineer out **what you cannot see.**



TAKEAWAYS

What Transfers to Your Program

01

Write it into the solicitation.

Obsolescence and supply chain requirements added after award are requirements renegotiated.

02

Demand the data before CDR.

Insight that arrives after the design freezes is a report, not a decision.

03

Specify the format, not just the deliverable.

A list of software titles is not an SBOM. Granularity is what makes data actionable.

04

Buy the trust before you need it.

Over-sharing only works if the other side has already agreed not to over-react.

STRENGTH THROUGH STANDARDIZATION

Obsolescence and Supply Chain Management does not have to be an unavoidable crisis.

With standardized requirements, standardized data, and deliberate action, it is a risk we can manage — and defeat.

The MV-75 will be ready to fight and win — anytime, anywhere.



QUESTIONS

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