



FY2024 Defense Standardization Program Achievement Awards

These awards honor personnel and organizations of the military departments and defense agencies for outstanding performance in the implementation of the Defense Standardization Program. The recipients have made singular improvements in technical performance, greatly enhanced safety for DoD personnel, and avoided billions of dollars in costs.



Distinguished Award Winner



Mr. Jason Dirner

U.S. Army, Army Futures Command, CMOSS / SOSA™

In an era of rapid change, Army platforms became oversized, overweight, underpowered, and unaffordable as each new countermeasure or overmatch capability required costly, time-consuming, and often redundant add-ons, risking safety and lethality through efforts to stay current. Efficiency saves money, accelerates progress, and improves performance. Jason Dirner's leadership of Sensor Open Systems Architecture (SOSA™) efforts since the concept's inception have shepherded Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance (C5ISR)/Electronic Warfare (EW) Modular Open Suite of Standards' (CMOSS') success in creating a universal integration kit to save weeks of complex integration through a consistent, repeatable path from research and development to production.

CMOSS reduces the size, weight, and power of C5ISR, EW, and position, navigation, and timing (PNT) systems while increasing their flexibility and adaptability and improving their performance, interoperability, reliability, availability, and maintainability. The payoff of Mr. Dirner's contributions of the field have resulted in greater than \$100 million in lifecycle savings. Moreover, he has helped transition these innovations beyond U.S. Army, Navy, and Air Force programs to our allies in Australia and the United Kingdom with further Joint, Interagency, Intergovernmental, and Multinational (JIIM) systems planning acquisition investments. Mr. Dirner's patience, professionalism, and diplomacy enable him to steer working group consensus procedures through a continuous integration and continuous delivery process to refine and improve standards through collaboration with government, industry and academia.



Lifetime Achievement Award Winner

Mr. Christopher Paquette

Department of the Navy

Over his 40-year career, Christopher Paquette not only improved the technical standards he worked on but transformed the Navy's engineering culture through his sustained dedication and leadership. His efforts have improved costs, schedule, performance, and safety throughout the lifecycle of defense systems and platforms. He saved millions of dollars and countless labor hours by streamlining maintenance, offering alternative solutions, and empowering local decision-making for previously burdensome qualification requirements.

By championing a technical authority policy, Mr. Paquette helped balance program execution with engineering rigor, fostering greater collaboration, responsiveness, quality, and relevance while reducing duplication of effort. Incorporation of configuration management and human systems integration in standards delivered more capable, interoperable, reliable, affordable, and supportable products throughout the lifecycle.

To counter loss of knowledge and expertise as baby boomers retire, Mr. Paquette trained all Naval Sea Systems Command (NAVSEA) engineering supervisors on capturing knowledge while embedding lessons learned into policies and standards. His team, supporting acquisition reform, maintained the discipline and effectiveness of standards, earning them a Packard Award for acquisition excellence. He advanced technology transitions, adopting and tailoring additive manufacturing standards and instituting continuous process improvements. His contributions to NAVSEA's award-winning efforts to reduce variations achieved an estimated savings of more than \$5 billion over 30 years.

Mr. Paquette's dedication and leadership improved the speed, affordability, engineering rigor, trust, and quality of Navy products and standards, leading the way to further gains throughout the Department of Defense.



Achievement Award Winner

The Open Architecture Management Technical Team

Air Force Lifecycle Management Center

The contributions of the Open Architecture Management (OAM) Technical Team helped the Air Force maintain technology superiority over peer adversaries using Modular Open System Approach– (MOSA-) enabling standards: Open Mission Systems (OMS), Universal Command and Control Interface (UCI), Sensor Open Systems Architecture (SOSA), and Government Avionics Reference Architecture (GARA). By ensuring these standards remain relevant and current and by promoting awareness and education for industry, the government, and allies, the team enhances capability and interoperability while reducing costs.

OMS and UCI increase capability and interoperability while reducing costs and outpacing adversaries. UCI creates an integration layer for legacy systems for interoperability. SOSA promotes subsystem reuse across platforms with minimal effort and introduces commercial off-the-shelf components to decrease size, weight, costs, and labor hours. Together, these standards lower the total costs of ownership, accelerate integration timelines, and enhance modularity.

The team's overall working group efforts on OMS and UCI improved efficiency through agile development, prioritized community needs, and increased the pace of change, reducing technical risks. Further, GARA coordination efforts prevented vendor lock and accelerated technology deployment by aligning standards across organizations.

The team's efforts continue through development of horizontal integration as a single point of entry for MOSA adoption to avoid duplication of effort, address complexity, and make MOSA easier to implement across all systems. The team's dedication ensures that the Air Force maintains technological superiority, agility, adaptability, and cost-effectiveness in its defense acquisitions.

Team members: Stephen R. Brooks, Vahid Rajabain-Schwartz, Trenton M. Kline, Devin W. Wisdom, and Erin Rogers.





DoD Handbook Cold Spray and Nondestructive Testing Methods for Quality Assurance Team

U.S. Army DEVCOM Research Laboratory, U.S. Navy, NAVAIR, and the U.S. Air Force Materiel Command

As adoption of cold spray processes increased across the services and beyond, the Office of the Secretary of Defense requested a new military handbook (MIL-HDBK) for nondestructive testing (NDT) for quality assurance (QA) of cold spray. The award-winning team of subject matter experts from the Army, Navy, and Air Force adjudicated over 100 comments through various working group meetings to gain consensus from various stakeholders, creating a comprehensive handbook covering visual, liquid penetration, magnetic particle, eddy current, ultrasound, radiography, and thermography NDT methods.

The Cold Spray Working Group accelerates cold spray technology adoption and develops joint strategies to avoid redundancy. The new handbook supports one of the group's main lines of effort, helping the Joint Defense Manufacturing Council achieve its goals.

Dr. Victor Champagne, a leading expert in cold spray technologies, drove the effort to authorize U.S. Army Combat Capabilities Development Command (DEVCOM) Army Research Laboratory (ARL) as the Preparing Activity, propelling the project forward. His contributions, along with Adam Barrett's resolution of numerous comments, Dr. Brandi Briggs' crucial feedback from research experience, Mr. Jason Hansel's drafting and coordination expertise, and Mr. Jason Wolf's leadership of a joint service team, were pivotal in creating and refining the handbook.

This collaborative effort established a vital resource for NDT and QA in cold spray applications, ensuring higher quality and expanding the successful use of this technology across the Department of Defense and allied nations, saving the DoD over \$100 million annually while increasing readiness and safety for aircraft, ships, submarines, and tanks.

Team members: Adam D. Barret, Brandi Briggs, Victor K. Champagne, Jason E. Hansel, and Jason B. Wolf





Generic Instrumentation and Control Team

U.S. Navy, NAVSEA 08

This award-winning team transitioned the Naval Nuclear Propulsion Program (NNPP) to generic instrumentation and control (I&C) systems, addressing unsustainable rising costs of obsolescence management and growing non-recurring development and qualification costs due to lack of commonality between designs. By adopting generic I&C, NNPP leverages the benefits of software-based I&C (increased ship speed, simpler operations, reduced maintenance, and better reactor core utilization) as well as a standardized look and feel for operators across ships and classes, improved supply chain management, and enhanced obsolescence management.

Generic I&C enables life-of-ship systems that never require technology refresh, saving \$500 million over the life of the Virginia-class alone. The non-reoccurring costs of developing a reactor plant suite with generic I&C is 40% to 60% lower than for non-generic systems, with faster fielding speeds. Reoccurring costs for generic I&C across all nuclear-powered warships are less than the annual cost of maintaining individual, non-generic I&C systems of similar complexity.

Centralized hardware building blocks reduce management burden and facilitate comprehensive obsolescence management across the entire fleet, enabling rapid problem identification and correction. The team continues to enhance generic I&C, planning its expansion to submarines and aircraft carriers. The UK has leveraged many of generic I&C's standards and processes for development, qualification, and obsolescence management.

Team members: Brian McNamara, Victor Harris, Jennifer Hahn, Nicholas Venanzi, and Michael Dodson.



The Defense Standardization Program



Purpose

We champion standardization throughout the Department of Defense to reduce costs and improve operational effectiveness.



Mission

We identify, influence, develop, manage, and provide access to standardization processes, products, and services for warfighters, the acquisition community, and the logistics community to promote interoperability, reduce total ownership cost, and sustain readiness.



Vision

The Defense Standardization Program is a comprehensive, integrated standardization program linking Department of Defense acquisition, operational, sustainment, and related military and civil communities. It is universally recognized for advancing the Department of Defense's joint interoperability, acquisition, and sustainment goals.



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