Defense Standardization Program Awards

By Mr. Gregory E. Saunders
Director

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.

2002 Distinguished Achievement Award Winner

Martin L. Snyder
Department of the Army, Tank-Automotive Command

Martin L. Snyder led the development of a new, multivolt IR-secure blackout drive lamp that puts enough light in front of military vehicles, while minimizing the chance of detection. Based on light-emitting diode technology, the new lamp meets all requirements of NATO Standardization Agreement 4381, enabling interoperability with NATO forces. The lamp will fit all tactical vehicles, all commercial construction equipment with drive lamps, and some major combat vehicles.

Not only can the new lamp be used on many different platforms—standardization was a key project goal—but it is safer, less expensive, and more reliable than the old drive lamps. It is safer because it gives the soldier/driver enough light, reducing the chance of accidents and, therefore, the number of injuries, both in peacetime and times of conflict. It costs only $50, compared with about $90 for the old lamps. And, the new lamp has an estimated operating life of 100,000 hours—a significant feature, considering that old lamps sometimes fail during the first week of operation. All of those benefits add to a significantly reduced logistics footprint and, most important, improved readiness.

Test System Speeds Return to Action

A team from the Army's Communications and Electronics Command and its contractors developed a tool to test and diagnose data buses built to MIL-STD-1553. The tool, known as the Advanced Multiplex Test System (AMTS), is faster and more accurate than existing 1553-based test sets and can be used by all U.S. services and allies on any assets with 1553 data buses.

Deploying a single standardized tool for testing all 1553-based electronics systems will significantly reduce the logistics footprint.

Enhanced readiness also is a key benefit. Because AMTS permits onboard testing, maintainers can diagnose problems, make repairs, and get assets back into action faster.

AMTS's economic payoff is huge—potentially several hundred million dollars. In the pilot program, the AMTS was fielded to the Apache Longbow helicopter fleet at a cost of less than $3 million, and the 6-year projected payoff is more than $10 million.

Team members: Gerard Boyan, ARINC; Kenneth Capolongo, Army; John Klubnick Sr., Aspen Consulting; John Lippert Sr., Aspen Consulting; Lisa Russo, Army.

Standards Improve Ground Control Systems

Stephen Daniel, Navy, and George Halak, BAE Systems, were instrumental in the success of a NATO Specialist Team formed to produce an architectural standard for tactical unmanned air vehicles. The standard—*NATO Standardization Agreement (STANAG) 4586 Standard Interfaces of the Unmanned Control System (UCS) for NATO UAV Interoperability*—identifies the protocols, message formats, and other parameters that must be used in ground control systems so that they can operate multiple types of unmanned air vehicles. Use of a standardized control system not only promotes joint service, multinational UAV interoperability, but facilitates shared development of components, among other things.

Mr. Daniel and Mr. Halak coordinated and ensured government and industry support and participation. Their work resulted in multinational consensus about the new standard (10 nations intend to ratify it), and they obtained buy-in from a broad industrial base—21 companies from 8 nations.

Easy Access to Data Increases Productivity

A joint team developed a contract that enables Army, Navy, and Air Force architects and engineers to use the Internet to view, print, and download non-government standards (NGS) established by organizations such as the American Society for Testing and Materials and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers. The team identified organizations whose standards are referenced in military criteria, standards, and specifications for facilities planning, design, construction, operation, and maintenance. The team also unified some military specifications, continuing the process of eliminating single-service specifications and contributing to DoD's goal to maximize the use of NGS.

Easy access to up-to-date facilities-related NGS increases productivity, resulting in direct savings of $0.8 million annually. DoD also expects substantial savings that are difficult to quantify, such as reduced construction and engineering costs.

Team members: Bob Billmyre, Army; R. David Curfman, Navy; Richard Paradis, Navy; Larry Spangler, Air Force; Maria Swift, Navy.

Airworthiness Certification Criteria Cut Costs

An Air Force and Navy team developed and published *Airworthiness Certification Criteria* (MIL-HDBK-516)—a concise, consensus-based set of assessment criteria that apply to all fixed-wing aircraft systems. MIL-HDBK-516 addresses 15 key technical areas and contains more than 700 criteria that must be addressed to ensure safety. In addition, it cross-references the criteria to the technical performance requirements in joint service specification guides and Federal Aviation Administration documentation. Standardizing the airworthiness certification criteria eliminates the need for each military service to recertify the airworthiness of an aircraft, which in turn eliminates the needless consumption of limited resources (manpower, financial, schedule). Certifying the airworthiness of a single aircraft can easily exceed $1 million. Eliminating the need for recertification results in substantial savings. It also reduces response times, which translates directly to increased readiness.

Team members: Susan Breslin, Air Force; Susan DeGuzman, Navy; Fernando Falasca, Air Force; Robert FitzHarris, Air Force; Robert Hanley, Navy.

Built-In Test Equipment Makes Weapons Smarter

An Air Force and Navy team developed equipment that can test and reprogram the latest generation of smart weapons defined by MIL-STD-1760. The equipment—Common Munitions Built-In Test Reprogramming Equipment, or CMBRE—is small, lightweight, computer-controlled, and easy to use. With CMBRE, warfighters can ensure that smart munitions on combat aircraft are mission ready. CMBRE also is highly reliable; in Kosovo, the mean time between failures for CMBRE was 8,892 hours, exceeding contract requirements by 4,000 hours. The standard tester reduces the logistics footprint and saves DoD several million dollars through reductions in training and spares and elimination of weapon-unique support equipment. Also, CMBRE increases interoperability. Initially, it is being used with three munitions, but can be used on numerous other MIL-STD-1760 munitions.

Team members: William Cannington, Air Force; Rick Foulk, Air Force; Raymond Holden, Navy; MSgt G.B. Thomas, Air Force; Margaret Villagran, Air Force.

New Specifications Make Better Connections

Abdonasser Abdouni, Defense Logistics Agency, Defense Supply Center, Columbus, contributed significantly to improving MIL-DTL-38999, the specification on circular electrical connectors. In one effort, he worked closely with a Society of Automotive Engineers committee to solve a connector vibration problem that resulted in jet engine shutdown. He also led a major effort to overhaul MIL-DTL-38999 and its specifications sheets. That effort required completing 59 DoD standardization projects, upgrading technical requirements, and streamlining qualification and conformance testing, among other things. The result is an up-to-date circular connector specification that reflects DoD's requirements for state-of-the-art connectors. MIL-DTL-38999 applies to more than 10,000 standard connectors in the DoD inventory system and affects 130 critical military weapons systems. Mr. Abdouni's work improves the performance and availability of standard connectors and directly supports interoperability and readiness of existing military systems.

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 Vision 2020 and acquisition goals.

"Standardization is about finding common solutions for common problems and sharing them across programs. It can be a great challenge."

Gregory E. Saunders
Director, Defense Standardization Program

2002 Defense Standardization Program Achievement Awards
presented by
Mr. Allen Beckett
Principal Assistant Deputy Under Secretary of Defense
for Logistics Materiel Readiness