



## CAIV Packs 'Em In

In the Cost as an Independent Variable initiative, acquisition professionals accept higher risks by setting aggressive but realistic cost targets and managing to achieve those targets. Under CAIV, target cost is treated more as a constraint than a variable in the acquisition process.

To sustain the momentum on this aspect of acquisition reform, both the Air Force and the Navy recently held CAIV sessions. Following are highlights from them.

### Air Force

Air Force, OSD and industry representatives gathered at Andrews AFB, MD, to arrive at a common understanding of Cost as an Independent Variable (CAIV) and to share best-practices experiences.

The conference was sponsored by Arthur L. Money, Assistant Secretary of the Air Force (Acquisition), and Lt. Gen. John P. Jumper, Deputy Chief of Staff for Air & Space Operations.

Several program managers made presentations.

**Oscar Soler, USAF, program director for the Joint Direct Attack Munition (JDAM)**, compared CAIV and the Design-To-Cost (DTC) approach. By minimizing the number of Key Performance Parameters (KPPs) and making everyone take ownership of cost, the JDAM team was able to conduct many cost-performance trades in coming up with a design that meets most performance objectives and achieves a

large reduction in life-cycle cost.

**Col. James Feigley, USMC, program manager for the Advanced Amphibious Assault Vehicle (AAAV)**, said cost trades must start early. He emphasized the need to train engineers to incorporate cost in design and to provide tools or expertise an engineer can use for rapid assessment of cost impact. He called for an approach allowing additional work in a contract based on CAIV trades that would not penalize the contractor's cost and schedule performance.

**Maj. Sylvia Wardley-Niemi, USAF, Advanced Cost Estimating Team leader for the Joint Strike Fighter (JSF)**, described the foundation of a Joint Common Cost Model and the pillar activities of cost and operational

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performance trades, commonality, affordability initiatives, and technology maturation. She reviewed the JSF approach of mapping various performance goals against thrust-to-weight and wing-area on carpet plots. Using cost-driver based axes helped relate the trades to cost impact.

**Col. Ben Overall, USAF, program manager for the Space-Based Infrared System (SBIRS)**, described how cost-performance trades were started early and proceeded to more detailed

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## 'Acquisition for the Future'

That was the theme of the recent Acquisition Research Symposium (ARSYM) in Rockville, MD.

Sponsored by the Deputy Under Secretary of Defense for Acquisition Reform and co-hosted by the Defense Systems Management College and the National Contract Management Association, the event drew 250 acquisition professionals from DoD, other federal agencies, academia and industry.

The symposium explored acquisition reform now that relevant laws are two to five years old, in an era of declining budgets and the continued need for superior performance.

Following are highlights of the symposium.

John J. Hamre, Under Secretary of Defense (Controller), said the next 30 months will be very challenging in terms of technology utilization because of the planned re-engineering of DoD business practices. He pinpointed three goals:

- Paper-free contracting
- Omnibus contracts for multiple purchases using a purchase card
- Re-engineering the source acceptance process

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## LETTERS

### **The 21-Minute PDR**

Dear AR Today:

Major Design Reviews invoked by Military Standard 1521 have been a time-consuming and costly process. Preparing for a Preliminary Design Review (PDR), with detailed briefings, rehearsals, preparation and distribution of extensive data packs, travel, and hundreds of Review Item Descriptions (RIDs), took weeks, sometimes months.

Military Standard 1521 was not levied on the GPS IIF program, so we had the opportunity to streamline and improve the review process. Our first major program event, the Preliminary Design Complete (PDC), was completed in 21 minutes without a single RID. We may have set a new record.

Our success is attributed to our joint government and Boeing Integrated Product Teams (IPTs) and the implementation of an Integrated Master Schedule (IMS). We developed our IMS around Military Standard 1521 so that each task resulted in a product

and this collective set of products contained all the necessary data required to successfully complete the event.

We conducted incremental reviews at the IPT level. As each product was completed, the government IPT leader reviewed and acknowledged his acceptance by signature on a product matrix. The formal PDC was conducted as a "review by exception" and focused only on tasks that had not been mutually agreed upon and closed by the responsible IPTs.

The participation of the government teams early on and their empowerment to accept our products at the team level contributed greatly to our success. PDC consisted of a presentation of the signed-off Boeing product matrix by the GPS IIF program manager to the Air Force JPO program manager.

Bob Pritchard  
Boeing Defense & Space Group  
Seal Beach, CA

### **Hooray, Deskbook**

Dear AR Today:

The Contingency Contracting Office is a consolidated office located in the Directorate of Contracting (DOC), Fort Hood, TX. We are manned by Contracting Officers from the 1st Cavalry Division, 4th Infantry Division, and the 13th COSCOM — usually about 12 people. We deploy all over the world contracting for the supplies, services and construction necessary to support military operations.

We have 10 laptops for training and deployments. The regulations we use on deployments are the FAR, the DFAR and the AFAR. It used to cost us \$7,800 a year for 10 copies of the FAR and DFAR, updates and maintenance, from a commercial contractor.

The Defense Acquisition Deskbook now provides this not only at a large savings in dollars but also in the man-hours saved in not updating the laptops. When we first started receiving our copies over a year ago, we would send our excess copies to other contracting commands. Every office that received our excess copies now has its own subscription.

The no-cost subscription to Deskbook CD provides a service that is almost immeasurable. The Joint Program Office at Wright Patterson AFB, OH, is setting the standard in joint training and cooperation between services. Thank you from the field for your support.

SFC Jerry A. Bost

*(Editor's note: The Deskbook address is <http://deskbook.osd.mil>)*

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## **Oops!**

The May/June issue of Acquisition Reform Today was misnumbered on the front and back covers. It should have been Vol. 2, No. 3. We regret the error.

# AR News Roundup

## DoD Teams Win Hammer Awards

DoD teams recently won three of seven Hammer Awards given out government-wide.

The Commercial Purchase Card Database/Procurement & Contracts (PC) Legislation Team won for developing the International Merchant Purchase Authorization Card (IMPAC) and its database, which allow customers to order and receive supplies and services without the delays associated with traditional preparation and review of paperwork.

The Defense Activity for Non Traditional Education Team, part of the Education, Support, Assessment and Training group and based in Pensacola, FL, won for reinventing the delivery of training and reference materials to members of the Armed Services.

The Personnel Clearance Division of the

Defense Investigative Service won for restructuring entirely by empowered employees.

Hammer Awards are presented by Vice President Gore's National Performance Review to teams of federal employees to recognize their efforts to streamline the government. The name refers to the days when the government overpaid for simple items like hammers.

## DoD to Share Use of Radar System

The Defense Department has agreed to share the use of a government radar system in order to shift the cost of maintaining and operating the system to a private company. DoD will still have low-cost access to the system's ability to produce accurate, detailed maps and digital terrain elevation models.

Intermap Technologies Inc. of Englewood,

CO, will assume the cost of maintaining and operating the system, known as interferometric synthetic aperture radar, and will try to sell commercial mapping services. The technology has been used in Bosnia for terrain and elevation analysis.

The radar system was developed by the nonprofit Environmental Research Institute of Michigan as a Defense Advanced Research Projects Agency project. ERIM and Intermap have a partnership where ERIM develops new radar technologies and Intermap develops commercial applications.

## Navy Launches Acquisition Hall of Fame

The Department of the Navy has established an Acquisition Hall of Fame in the Pentagon to celebrate the achievements of Navy and Marine Corps acquisition pioneers throughout history and to promote continuous progress in acquisition reform.

The first inductees are John Ericsson, designer and builder of USS Monitor; Rear Adm. Walter M. Locke, pioneer of cruise missiles; Rear Adm. Wayne E. Meyer, pioneer of the Aegis Combat System; Rear Adm. William A. Moffett, pioneer of naval aviation; Maj. Gen. Emile P. Moses, pioneer of World War II landing craft; Adm. Hyman G. Rickover, pioneer of nuclear power, and Vice. Adm. Levering Smith, pioneer of Poseidon and Polaris missiles.

The dedication display is temporarily located outside the office of the Assistant Secretary of the Navy for Research, Development and Acquisition. The permanent Hall of Fame will be built on the A-ring, 4th floor, between Corridors 4 and 5.



Secretary of the Navy John H. Dalton, left, inducts Rear Adm. William A. Moffett, center, into the Hall of Fame as John W. Douglass, Assistant Secretary of the Navy (Research, Development and Acquisition) applauds.

ROUNDUP Photo Credit: Terry A. Cosgrove

## AMC, DCMC to Perform Joint Quality Assessments

By Marc Saperstein

It sounds like a scene from a space movie. "You there, R2D2, into the capsule! Yo, CP2, get the guy with the green hair!"

But CP2, once its parentheses are restored, is not a mechanical marvel but (CP)2, the nickname for the Army Materiel Command's (AMC) Contractor Performance Certification Program.

(CP)2 is a government-contractor partnership that recognizes world-class suppliers to the Army. Companies that voluntarily participate and pass a self-assessment and a series of customer evaluations are certified by AMC for their exceptional quality practices, commitment to the customer and focus on continuous improvement.

Certifications are offered in design and development as well as production and are honored by all of AMC's major subordinate commands.

Since the (CP)2 assessment criteria use the ISO-9000 quality system model, the program is consistent with a Defense Contracts Management Command (DCMC) initiative to provide contractors with an ISO-9000 Statement of Qualification.

The U.S. Army Tank-automotive and Armaments Command - Armament Research, Development and Engineering Center (TACOM-ARDEC) has begun working with DCMC to perform joint (CP)2-ISO 9000 qualification assessments. The concept has been blessed by

the AMC (CP)2 Management Board and elevated through the two chains of command.

DCMC has resolved to make this linkage formal and routine, and AMC headquarters is staffing the memorandum of agreement. Both organizations stand to gain from the teaming.

Further benefit occurs from initiating the first reciprocal agreement within DoD to replace contract oversight with the far more effective, and soon to be streamlined, process of insight.

*Marc Saperstein is a quality systems manager in TACOM-ARDEC's Quality Engineering Directorate, Picatinny Arsenal, NJ.*

### 'ARSYM'

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Keynoter Norman R. Augustine, chairman of Lockheed Martin Corp., expressed concern that downsizing will be taken too far and offered recommendations for future acquisition activities:

- Use milestone budgeting to assist the budget process.
- Do not punish people for taking risks, but hedge risks through the use of prototyping.
- Place more emphasis on controlling costs.
- Share risk between buyer and seller, in part through use of the appropriate contract type.
- Provide sufficient reserves in people and technology.
- Assign responsibility and accountability to the appropriate people; then let them do their jobs.
- Provide courageous managers who will risk their careers if necessary.

- Enact responsible collegialism vs. adversarialism.
- Stress past performance, but don't dump good people for making mistakes.

In a panel discussion featuring industry representatives, Donna Ireton, director of Contracts at Advanced Systems Development, said she sees considerable reluctance in the acquisition workforce to follow through on directives to use commercially available products and services, and to move from cost-plus to fixed-price contracts. This will hurt small business, she said, unless it becomes more electronically sophisticated by downloading solicitations from the Internet and becomes more proactive in meeting with government employees.

Another panelist, Dr. William Kinzey of Sverdrup Corp., said performance-based contracting can hinder good ideas if it isn't done right. He said true partnering is for government employees to say "when" and let industry say "how."

In a luncheon address to the symposium, Richard Sylvester, director of Program Acquisition Improvement Programs in the office of the Assistant Deputy Under Secretary for Acquisition Reform, said it is important for the workforce to step back and remind itself of the vision, purpose and goals of AR from time to time:

- The vision is to buy the best value from the global industrial base and to become the world's smartest, most efficient, most responsive buyer of best value.
- The purpose is to support the warfighter as a customer.
- The goals include moving data electronically, moving from a regulatory based system to one of guiding principles, paying more attention to cost, using Integrated Product Teams and moving forward with the Single Process Initiative.

On the second day of the symposium, Dr. Steven J. Kelman, administrator of the Office of Federal Procurement Policy in

## ITEC Lets Navy Customers Buy IT Online

What could be more fitting than using an on-line shopping service to buy information technology (IT)?

The Naval Information Systems Management Center (NISMC) recently unveiled an Internet based electronic catalog that allows Navy customers a fast, easy way to order IT products at market or better prices.

The Information Technology Electronic Commerce program, known as ITEC Direct, provides commercially available, USN standard compliant hardware, software and services. The catalog includes desktop work stations, servers, notebook PCs, printers, peripherals, and software. Its address is <http://www.part.net/itec/itec.htm>.

All DoD customers may browse the site for comparison of features and prices. Online ordering is available to Navy customers who have a Government Wide Purchase Card (IMPAC) and have registered to place orders through ITEC.

Before registering individual

cardholders, the command Agency/Organization Program Coordinator (APC) must first send their e-mail addresses to [itec.direct@nismc.navy.mil](mailto:itec.direct@nismc.navy.mil) or register online on ITEC Direct. Once the APC has registered, individual cardholders may register to place orders.

The items in the catalog are contained on Navy Awarded Blanket Purchase Agreements (BPAs) with General Services Administration (GSA) Federal Supply Schedule (FSS) contractors. This streamlines the process and allows ITEC items to be discounted from the schedule price. BPAs also provide a way to quickly add new items to ITEC.

Since ITEC Direct items are on GSA schedules, customers can order without further competition or justification of price. ITEC Direct allows the customer to decide which item provides the best value for the requirement. DoN policy permits use of the IMPAC card for transactions up to \$100,000 against FSS GSA contracts, which covers all of the items in the ITEC Direct catalog.

Heads of Activities can liaison with their Head of Contracting Activity to increase authorization of cardholder single purchase limitation up to \$100,000 for individual cardholders within the activity.

Customer support is provided through 24-hour access to the catalog, discounted prices and a special search function that allows comparison of product features and prices.

ITEC Direct was developed under a partnership between NISMC and the Defense Logistics Agency. DLA provided ITEC with a unique parametric search technology developed under DLA's Logistics R&D program. ITEC Direct is a "store" in the DLA Electronic Mall (E-Mall), which provides access to a wide range of DLA commodity items. The DLA E-Mall is accessible on the Internet at <http://www.supply.dla.mil>.

For additional information on ITEC Direct, contact Capt. David Capizzi or Cmdr. Janet Zucker at 202-433-4910, DSN 288-4910 or e-mail at [ITEC.direct@nismc.navy.mil](mailto:ITEC.direct@nismc.navy.mil).

### 'ARSYM'

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the Office of Management and Budget, praised people on the front lines of AR for their vast accomplishments. The challenge now, he said, is to convert AR from "isles of innovation" into "a continent of good business practices" — that is, make it an everyday occurrence.

In past performance evaluations, Kelman said, customer satisfaction has risen 21%. He said past performance needs to be considered more often in the course of the contract rather than just in source selection.

Kelman said contractors charge more than twice the price to perform services for the government than they charge

commercial customers. The reason, he said, is that government customers are vague about what they want at the start of the contract. He also called for more stringent metrics. The acquisition workforce needs to be held accountable for prices, lead times and the like.

In a panel discussion aimed at providing a congressional perspective, Jonathon Etherton, a staff member of the Senate Armed Services subcommittee on acquisition and technology, applauded the fact that taxpayers are seeing real benefits from AR. He said the bill currently being considered calls for the acquisition work force to remain at its present level and retains the \$5 million threshold for commercial items.

Charles E. Rowe III, counsel to the

House subcommittee on small business, said small business wants AR, but in the context of fairness and competition. Regulatory implementation has reduced opportunities for small business to compete, he said.

After the congressional panel, Deputy Under Secretary (Logistics) John F. Phillips said that upcoming logistics challenges include reduced cycle times, responsive readiness support, seamless systems, a streamlined infrastructure and increasing competition for outsourcing. He called for a single source of information with access to the environment, which he said means integrating legacy systems through the use of a universal translator and linking of depots through a shared data warehouse.

## Technology Navigator: Swap Shop for Technical Info

By Barbara Lesser

The Defense Technical Information Center (DTIC) plays a vital role in collecting and disseminating scientific and technical information for DoD. Technology Navigator is an integral part of DTIC's continuing efforts to improve access and exchange of scientific and technical information.

Technology Navigator is a DTIC-sponsored web site at: <http://www.dtic.mil/technav/>

It uses the Internet and the government's intranets to enable government, industry and academia to share research efforts on today's technology issues with others.

This information-sharing service is designed to match the needs, interests and requirements of government technologists and program managers with products, service providers and researchers in industry, academia and other government agencies. The service focuses on Information Technology and Measurements and Signatures Technology. Sample topics include:

- automated warning, anomaly detection and

- discovery tools
- collaborative analysis tools and groupware
- data analysis, visualization and fusion tools
- data warehousing, storage, retrieval and dissemination
- geographic information systems and displays
- human-computer interface for information systems
- information management and decision support
- information processing and transformation
- modeling and simulation for intelligence analysis
- multilingual information technologies and translation support
- multimedia authoring, production and distribution
- multimedia storage, retrieval and analysis
- multisearch, data mining and retrieval from heterogeneous sources
- object-oriented databases and database development

- security, auditing, records and copyright management
- advanced radio frequency sensors
- biological materials sensors
- chemical materials sensors
- nonimaging infrared sensors
- nuclear materials sensors
- remote spectral sensors
- unattended sensors

Technology Navigator also provides an opportunity for industry and academia to showcase their latest technology projects and products to a worldwide audience of the government's global networks. It is free to both its users and to those who submit information.

In addition, Technology Navigator has news groups, abstracts, information papers, points of contact, e-mail addresses, telephone numbers and an events calendar.

*Barbara Lesser heads the Directorate of User Services at DTIC.*

## UPCOMING EVENTS

We would like to post all events of interest to the AR community. See the box on Page 2 to find out how to notify us of your event.

- **Satellite Broadcasts:** (For more information, visit <http://www.acq.osd.mil/dau/arcc/index.html>)
  - 15 October 1997 - FAR Part 15
  - 23 October 1997 - Market Research
  - 29 October 1997 - Performance-Based Service Contracting "PBSC"
  - 5 November 1997 - Cost as an Independent Variable "CAIV"
  - 20 November 1997 - Earned Value Management "EVM"
- **DTIC '97 Annual Users Meeting & Training Conference**, Nov. 3-6, at the Double Tree Hotel, National Airport, Arlington, VA. The conference theme is "Information in the New Millennium". For more information visit <http://www.dtic.mil/dtic/annualconf>, call Julia Foscue at 703-7767-8236, DSN 427-8222, or e:mail [jfoscue@dtic.mil](mailto:jfoscue@dtic.mil)
- NPR's Reinvention Express presents "**Integrating Strategic Planning, Performance Measurements, Budgeting and Customer Satisfaction in Government**", Nov. 17-19 at the Madison Hotel, Washington, DC. You'll hear from officials from NASA, EPA, Naval Medical Department, and others. For more information visit <http://www.iqpc.com/1197scgv.htm>, call 1-800-882-8684 or 201-256-0211, or e:mail [info@iqpc.com](mailto:info@iqpc.com)
- **The Technology Management Symposium & Expo for Commercial and Military Products & Components Used in DoD Systems**, sponsored by the International Society of Logistics, Nov. 17-19 in Hilton Head, SC. Topics include COTS/NDI, JITS and acquisition changes in component technology. For more information, visit <http://www.sole.org/calendar/techman.html> or call Mike O'Leary at 317-322-1890.

## 'CAIV' *continued from page 1*

trades during pre-EMD efforts. A minimum number of KPPs were established. It was necessary to trade down, and warfighter buy-in was gained by including them in the decision-making process.

**David Schwendeman, Associate Principle Finance and Business Management of Boeing Commercial Airplane Group,** presented the Boeing method of Market-Driven Target Costing (MDTC) as applied to the 757-300 model development — establishing a target cost and then working the design, engineering, and cost estimating in concert — which results in a market-based price, whereas the latter leads to a cost-based price.

**Maj. Gen. Gregory Martin, HQ USAF/XOR,** described how CAIV impacts the requirements community. He emphasized the need for a greater up-front investment in requirements generation and identification of trade-offs to achieve aggressive CAIV cost objectives. He said CAIV should be applied consistently to all ACAT programs.

The conference included a series of workshops to define CAIV implementation issues and a panel discussion of specific projects. Panel members called the Joint Air-to-Surface Stand-off Missile (JASSM) is a great example of the successful application of CAIV. They pointed out an institutional problem "which causes us to transfer risk to the sustainment side of the equation during development."

On the second day, participants divided into facilitated focus groups to discuss how CAIV should be implemented in the requirements, acquisition, sustainment, and industry communities. Their recommendations included necessary actions, potential barriers to implementation, and means

of overcoming those barriers.

Details are available on the Air Force Acquisition web site at <http://www.safaq.hq.af.mil/restricted/offsite/caiv> (.mil domain access only) or on our web site at <http://www.acq.osd.mil/ar/caivconf.htm>.

## Navy

The Department of the Navy recently held the second in a series of Cost As an Independent Variable tools and methods workshops.

It focused on the Simulating New Acquisition Processes (SNAP) program, which creates a "virtual" acquisition process that can quantify cost, performance, and schedule trade-offs for exploring alternative designs, process technologies, and management decisions.

Developed by Decision Dynamics, Inc. using the systems dynamics methodology, SNAP is organized into five models.

The Production model simulates the planned sequence of purchase, fabrication, assembly, and testing activities necessary to manufacture a complex product.

The Operations and Support model will show how alternative maintenance actions and technology upgrades, designed to combat aging and obsolescence, can extend the life and lower the cost of products, components, and supporting resources under various logistical assumptions and mission scenarios.

A Resource model will simulate how changes in the availability and productivity of capital and human resources affect organizational budgets and mission performance.

Two models on Design and Engi-

## AR ON-LINE

### Visit These Hot *Military Sites* On the Internet!

**Air Force Acquisition.** This SAF/AQ site provides career development, initiatives, training, policy & guidance, contracting, events, programs, as well as a "profile of the month" spotlighting key movers & shakers in the Air Force AR. Visit <http://www.safaq.hq.af.mil>

**Army Acquisition.** This Army site provides the latest acquisition information, a reference library, news, upcoming events, professional development, past performance issues, as well as "virtual shopping" and guidance regarding the Standard Procurement System. Visit <http://acqnet.sarda.army.mil>

**Navy Acquisition Reform.** The user-friendly Navy AR site highlights Specifications and Standards, Partnering, World Class AR Practices, Industrial Base Integration, policy & guidance, training, newsletter, success stories, as well as NARSOC news. Visit <http://www.acq-ref.navy.mil>

**Other AR Sites.** These and all web sites spotlighted in this column can be directly linked from our "Other Sites" page on the DUSD(AR) web site at <http://www.acq.osd.mil/ar/htm#sites>. It's the most comprehensive listing of AR-related sites anywhere on the web -- Bookmark it!

neering and Industrial Base are being planned.

More information on Navy acquisition reform is available at <http://www.acq-ref.navy.mil>. The Navy's CAIV page is at <http://www.acq-ref.navy.mil/wcp/civ.html>.



## Paintless Aircraft Unveiled

Thanks to a successful partnership between industry and the Navy, the first "paintless" aircraft was recently unveiled. The technology it represents has the potential to save DoD at least \$3 billion dollars over the life cycle of the fleet, including \$40 million a year in repair and maintenance costs.

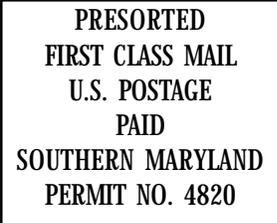
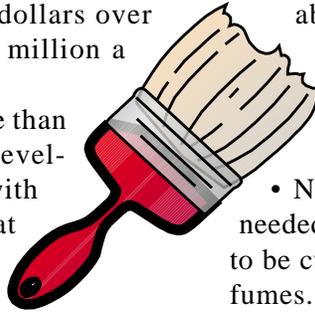
The aircraft is an F/A-18B covered more than 80% with a patented polymer applique developed by Boeing and 3M under a contract with the Joint Strike Fighter Program Office at Patuxent River Naval Air Station, MD.

The two companies are demonstrating the feasibility of replacing paint with the polymer. During a

one-year flight test (recently extended), the applique flew 106 hours.

Rear Adm. Craig E. Steidle said the polymer probably reduces fuel costs because some fighters carry 800 pounds of paint accumulation from repeated repainting. In addition:

- The applique can be patched in one hour while paint repairs require 24 hours.
- No fume-reducing equipment or facilities are needed, and during repairs, activities would not have to be curtailed on the decks of aircraft carriers due to fumes.
- The applique may last six years vs. four for paint.



**Direct to you!**