Training together,

Joint-force warfare calls for changing cultures and discarding old ideas



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PAUL MAYBERRY DEPUTY UNDERSECRETARY OF DEFENSE, READINESS BY PAUL MAYBERRY

perations Desert Storm, Allied Force, Noble Eagle, Enduring Freedom and now Iraqi Freedom — it is hard to remember a time when our military services did not operate as a joint entity.

For many of us, both military and civilian, serving today in the defense of our nation, the thought of not working as a national defense team seems inconceivable. However, a determined drive to truly integrate unique service capabilities into joint-training activities, prior to deploying into a hostile situation, never has been fully pursued — until now.

"Transforming is about more than developing new strategies and structures — it is about changing culture, about encouraging new ways of thinking so that we can develop new ways of fighting and provide our armed forces the tools they need to defend our way of life," said Defense Secretary Donald Rumsfeld.

The path to this cultural change will take the services through a transformation of Defense Department training, including establishment of a joint national training capability (JNTC).

WHAT'S NEEDED

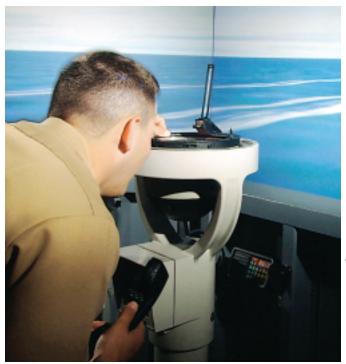
The Defense Department must train the way it fights as demonstrated in Operation Iraqi Freedom.

The objective will be to provide dynamic, capabilities-based training for the Defense Department in support of national security requirements across the full spectrum of service, joint, interagency, intergovernmental and multinational operations.

A global-training capability, achieved through the initiation of a JNTC, will provide a joint force that not only includes the services and combat-support agencies but also expands the definition of "jointness" to include interagency, intergovernmental, multinational and coalition partners. This integration goes beyond basic interoperability to the complex integration across services, agencies and countries that have been notable in recent operations.

WHAT ENCOMPASSES A JNTC

A JNTC encompasses more than a set of training ranges. A JNTC is a cooperative collection of interoperable training sites, nodes and events that synthesizes combatant-commander and service training re-



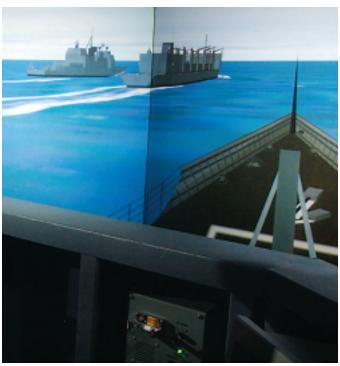
quirements with the appropriate joint context.

Physically, this capability will include ranges, simulations, simulators, instrumentation and communications links. In the future, collective suites of embedded training simulations, stimulators and simulators will network over operational command-and-control architectures to create collective joint-training environments at will. This joint capability will seamlessly segue into mission rehearsal using the same synthetic environment to exercise command, control, communications and computers, intelligence, surveillance and reconnaissance networks prior to D-Day and H-Hour.

The last training transformation occurred in the 1970s with the establishment of major service training centers and range complexes. The joint national training capability represents a similar transformation by building on the four pillars that made these major service training complexes so successful: realistic combat training; an adaptive, credible and coherent opposing force; common "ground truth"; and high-quality feedback.

Deputy Defense Secretary Paul Wolfowitz directed in August 2002 that the Defense Department provide more routine joint-training opportunities between units at the tactical level and integrate training of

fighting together



D. KEVIN ELLIOTI

U.S. Navy Ensign Johnny Lykins "virtually" approaches an oiler for underway replenishment at the Naval Surface Forces Atlantic/Marine Safety International shiphandling complex.

component and joint-force commander staffs. Building upon each service's core competency, the four training pillars will underpin our efforts to enhance interoperability training at the tactical level by introducing an appropriate level of joint context and will provide opportunities to link component staff with joint command and staff training.

LIVE-VIRTUAL-CONSTRUCTIVE ARENA

The ability to efficiently and economically achieve a routine training structure that provides joint context at training venues traditionally reserved for service-centric activities requires an effective training architecture. Although the focus has been, and will continue to be, on live-training opportunities for our forces, the ability to physically collocate a large number of units on a regular basis is limited by geography, personnel, unit and training-range availability, and funding. Technology has advanced and is expected to continue progressing to such a point that we will be able to integrate distributed training events in real time through supporting simulation and communication designs. We intend to leverage these ad-

The ability to link geographically separated training venues does not mean that every event will involve the entire collection of sites. The power to successfully tie together service ranges, areas and facilities when training objectives require it is an important take-away. Instrumented live forces must be able to interact with mission simulators and wrap-around simulations on a real-time basis through open architectures. Constructive simulation feeds must be able to stimulate and provide interaction at the tactical, operational and strategic levels. And all of this must be captured to provide timely and useful feedback through effective afteraction reviews and mission debriefs.

THE WAY AHEAD

We already have made considerable progress on the JNTC. As director, program planner and executor for JNTC, the U.S. Joint Forces Command (JFCom) is working with the services to achieve this realistic, network-centric, distributed global combat joint training and mission-rehearsal capability. The standup of a JFCom-based Joint Management Office is the first step in achieving the defense planning guidance-directed initial operational capability of no later than October 2004. Initial planning for technical testing and events is under way, with some JNTC events proposed for fiscal 2004 as we move toward a projected full operational capability in 2009.

Keeping the combatant commander as the key customer in mind, the JNTC will provide enhanced mission-rehearsal capabilities on a scale much greater than current venues, which normally concentrate on individual, disparate computer-simulation exercises and modeling for planning staff and platform-based crew training.

JNTC's future relies heavily on partnering with industry as we bridge the technological gap between service-centric, stovepipe training venues and a robust, more routine joint-training program with sites and facilities that are geographically dispersed and architecturally distributed. The capability to create full-spectrum environments, to realistically replicate the firepower of modern weapons and to provide insightful debriefings that generate real learning all depend on applying the revolution in computers and communications to the joint training problem.

The training environment that prepares our forces for combat will be only as good as Defense Department support contractors can construct.

Paul Mayberry is the deputy undersecretary of defense for readiness.

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