

Madam President, an important aspect of the Army's effort to incorporate digital technology into its divisions is the unprecedented cooperation between the Army and the contractor community. This cooperation extended to the exercise at the National Training Center. During my visit I toured what the Army calls the Central Technical Support Facility, a facility jointly manned by Army personnel and contractor personnel. The Army established this unique organization to act as an enabler for rapid integration of software and hardware systems through interaction of soldiers, contractors, and program managers. Any problems identified by the soldier-users of the tactical internet and digital systems were immediately dealt with by hardware and software engineers at the Central Technical Support Facility. In some cases, their solutions resulted in design changes which were immediately incorporated into the experiment, shaving months or years off the normal time-lines for the testing and acquisition process. Senior Army officials believe this concept is a prototype which holds great potential for changing the way users and contractors interact in the future. I share the Army's interest in further development of this arrangement.

I have inevitably been asked who won the 2-week exercise—was it the EXFOR with its new technology, or was it the OPFOR who lacked the newer technology but had a tremendous home-field advantage with its intimate knowledge of the terrain and long experience of fighting together? The answer to that question is not nearly as important as the answer to the question of how effective were the various new technologies used by the EXFOR.

The answer to both will have to wait for the results of the comprehensive after-action review that is being conducted by the Army. My own discussions during my visit left me with the overall impression that this digitization technology can be a tremendously powerful tool for the Army. UAV's—unmanned aerial vehicles—were a great force multiplier, as were the latest generation night vision equipment and the situational awareness technology. The Apache Longbow helicopter, the new Javelin antitank weapon and the Paladin howitzer were all combat systems available to the EXFOR which gave them a clear advantage over the OPFOR, and these systems were made even more effective by UAV's and other systems that provided real-time targeting data.

In some significant instances, the NTC exercise did not reflect the full potential of some new technologies that are already reaching the deployed forces. For example, the M1A2 tank is in such short supply at this time that the Army is fielding this system only with the early deploying combat forces. The EXFOR was using M1A1 tanks with internally mounted computer terminals to provide situational awareness. Although these internally mounted terminals are a great help,

they are not a long-term solution and do not adequately represent the target acquisition and situational awareness capability of the embedded information warfare systems fielded with the M1A2.

The technologies that the Army is testing under their advanced warfighting experiments are not without bugs and problems. Some echelons of command, for example, were reluctant to rely on the real-time situational awareness reported digitally over the EXFOR's tactical internet and preferred instead to rely on traditional acetate maps and voice communications. With much of the technology still in development, this reliance on traditional methods of command and control was understandable, and some backup capability to the tactical internet will need to be retained in the future. In general, though, much of the technology that I saw on display during the exercise can be incorporated into systems that will significantly improve the survivability and lethality of our Army combat forces. The commander of the OPFOR brigade acknowledged that his brigade had been tested more than usual by the EXFOR brigade. He also said that he would not like to fight the EXFOR brigade after they had a year to train with their new equipment.

There is an old saying that knowledge is power. The advanced warfighting experiment at the National Training Center demonstrated that knowledge is also military power—particularly the knowledge of the battlefield that comes from the tremendous situational awareness available through the digital technology of information warfare. No amount of technology is going to change the basic requirement for Army combat forces to be able to close with and destroy the enemy. But the information dominance that the Army is developing through the Force XXI effort can be a tremendous force multiplier.

Earlier this year General Shalikashvili told the Armed Services Committee that the Defense Department will have to change the way it does business. "Where possible," General Shalikashvili stated, "we will also have to trim personnel end strength especially where technological changes such as improved weapons systems afford us the possibility to consider fewer and smaller units." The technology of information warfare tested at the National Training Center last month is a good example of technology that may in fact allow a smaller force to have the same or even greater lethality and combat effectiveness as the forces we have today.

Madam President, I want to congratulate General Reimer, the Army Chief of Staff and his predecessor Gen. Gordon Sullivan; Gen. William Hartzog, the commander of the Army's Training and Doctrine Command; and Maj. Gen. Paul Kern, the commander of the 4th Infantry Division for their vision and determination to make information technology a force multiplier for the Army of the future. I also want

to congratulate the thousands of soldiers, Department of the Army civilians, and civilian contractors responsible for their contributions to this important effort.

The job, however, is not complete. There are a number of challenges that must be addressed before the decision is made to expand this technology throughout the Army, including questions of cost; the integration of new technology into existing systems; the impact of this technology on the Army's organizational structure and doctrine, and on the tactics, techniques and procedures to execute this doctrine; the impact on the training base; and the impact on personnel systems, including leader development.

Madam President, the Armed Services Committee will look closely at the results and lessons learned from the advanced warfighting experiment in the coming weeks and months. I look forward to working with the Army and with my colleagues on the Armed Services Committee to bring the best of this experiment to the rest of the Army in a timely manner.

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Mr. Williams, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, which were referred as indicated:

EC 1501. A communication from the Director of the U.S. Arms Control and Disarmament Agency, transmitting, a draft of proposed legislation entitled "The Chemical Weapons Convention Implementation Act of 1997"; to the Committee on Foreign Relations.

EC 1502. A communication from the Chairman of the Board of the African Development Foundation, transmitting, a draft of proposed legislation to authorize appropriations for the African Development Foundation; to the Committee on Foreign Relations.

EC 1503. A communication from the Assistant Secretary of State (Legislative Affairs), transmitting, pursuant to law, the report of voluntary contributions to international organizations for the period October 1, 1995 through March 31, 1996; to the Committee on Foreign Relations.

EC 1504. A communication from the Assistant Legal Adviser for Treaty Affairs, Department of State, the report of the texts of