



# Commandant's NOTE

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## THE WARNET PILOT—TRAINING WITH TECHNOLOGY

In previous Commandant's Notes, I have highlighted the technological progress, initiatives, and materiel improvements that will support Infantry Force XXI as it faces the challenges of the next century. Computer-based training is not simply the way of the future: it is here now, and at Fort Benning—as across the Army—we are incorporating 21st century technology into how we train the force to meet tomorrow's challenges.

Fort Benning has been designated as the Training and Doctrine Command (TRADOC) proponent for the WARNET pilot, and in this Note, I want to talk about that initiative, a total Army effort within Force XXI that will enable us to structure and execute the kind of Army-wide training that will permit our soldiers to fully exploit the capabilities of the most advanced weapons and equipment our Nation has ever fielded.

The WARNET pilot team at Fort Benning was formed within the Infantry School's Directorate of Operations and Training, with the support of the National Guard Bureau, to synchronize the development and fielding of new technologies in training, and to prepare the infantry proponent course materials to be taught using those new technologies. At other TRADOC installations, proponent schools are likewise responsible for the development and delivery of courses in their own subject matter areas.

Earlier initiatives such as WARFIGHTER XXI, WARNET XXI, and WARRIOR XXI have focused on research for new battlefield technologies, new equipment training to support those technologies, and the tactical employment of new technology weapons. The WARNET pilot addresses an equally critical aspect of our profession: developing and applying the systems and methodologies that will facilitate the training of the infantry force on the doctrine and equipment we will rely upon as we execute a diverse array of missions.

The WARNET pilot reflects a multi-faceted approach to training that will draw upon simulations, distributive training, distributive interactive simulations, multimedia distance learning, and interactive courseware to ensure that we can both achieve and sustain the levels of proficiency necessary for the infantry force to accomplish its mission. All of these methodologies support the Total Army School System (TASS). At the same time, we must accomplish this within the austere budgets and constrained resources that will remain realities even as we prepare to meet the demands of the next century.

It is significant that the National Guard Bureau is a part of this effort, because the training and standards of Guard infantry units and their active Army counterparts must be qualitatively indistinguishable. In the coming months, you will hear references to *seamless* training; that is, training whose end product is a technically proficient, combat-ready National Guard or active Army infantryman who can deploy and complete his mission. To support this initiative, new technology training products and methodologies will first be delivered to Experimental Force (EXFOR) units at Fort Hood, Texas, for test and analysis, and then distributed Army-wide.

One of the first tangible products of this effort will be the Total Army Training System Courses (TATSCs) developed by each of the proponent branch schools under the TRADOC TASS initiative. The overall purpose of TATSC development is to create courseware that draws upon available technology to enable the student to derive maximum learning with a minimum of resident school attendance. This active-component effort will benefit the total Army through its standardization of the subject matter and phasing of course material and instruction.

A typical course may consist of multiple phases, such as a CD-ROM (computer disk, read-only-memory) phase

with interactive instruction, paper-based lessons, and computer-based testing; a teletraining network (TNET) phase using a video classroom with practical exercises, conventional instruction, and paper-based testing; and a resident phase that incorporates practical exercises with hands-on training and testing.

Course development for TASS will be executed in two phases:

Phase 1—consisting of four steps—will concentrate on the development of several short courses for test and analysis. Within this phase, the first step will involve immediate course conversion with TNET and distance learning applications. The second step will consist of long-term course development that includes computer-based testing, interactive courseware, and multimedia distance learning assets. The third step will consist of simultaneous course development and the management of multi-course programs. The final step will involve the testing and refinement of existing courses while new courses continue to be developed.

The second phase of TATSC course development will draw upon the latest teaching methodology, state-of-the-art equipment, and interactive capabilities to produce complete interactive courseware that includes pre-instruction, instruction, and post-instruction packages. The pre-instruction packages will contain read-ahead packets, VCR instructional tapes, paper-based practical exercises, computer-based/compact disc (CD) practical exercises, and instructions on how the student will interface with instructors over the INTERNET/World Wide Web (WWW).

Five short courses have been selected for production and development under Phase 1: the Tactics Certification Course (TCC), the TAC (Teach, Assess, and Counsel) Officer Training and Orientation Course, the Instructor-Trainer Course, the Infantry Mortar Leader Course, and the Bradley Fighting Vehicle Leaders' Course.

The selection of TCC as one of the Phase 1 prototype courses was based on two criteria: First, all course instructors for the officer candidate school (OCS) and career management field (CMF) 11 must be TCC qualified. To establish a base of instructors for the implementation of TASS in the seven regions designated by TRADOC, this course was the logical choice as the first to be developed. Second, the course selected as a prototype had to be relatively narrow in scope, so that the feasibility of the technology and concept could be evaluated

without the process becoming inordinately lengthy and complex.

The TCC could give the Infantry School the data base and experience upon which to structure future course development. TCC was selected over a longer course—such as the 20-week Infantry Officer Advanced Course—because its six-day resident phase program of instruction (POI) could be reduced to a shorter resident phase and/or a nonresident phase using distance learning type technology such as CD ROM, CBT, or TNET. As this initiative is expanded, other courses will follow the same concept.

The instruction package for Phase 2 will consist of video teletraining capabilities, multimedia classrooms linked by fiber optics, resident institutional training, on-line INTERNET/WWW instruction with instructor/student interface, and off-site instruction and testing. Lastly, the post-instruction package will offer the student compact discs, access to Army Training Digital Library assets, workbooks, quick-reference cards and charts, VCR instructional tapes, and instructional updates on the INTERNET/WWW.

The initial cost of bringing the WARNET pilot team and its computer-based training programs on line will be offset by savings in lesson preparation time, resident phase POI hours, schools away from units, and billeting and other support associated with conventional resident instruction.

Another major advantage of the initiatives I have outlined will be the standardization of course materials and the uniformity of instruction presented to the soldiers. Other nations are interested in computer-based training as well. The British have used it in a number of applications, have found it to be cost-effective, and have determined that students thus trained have greater retention of knowledge and correspondingly greater recall of the graphics and animations presented—precisely the type of results we are seeking.

In these austere times, we must make every penny count as we train the Army to operate and maintain increasingly sophisticated weapon systems and other equipment. Today, readiness does not stop at materiel; it also includes deployability, sustainment, and survivability. The WARNET pilot team and its counterparts throughout the Army recognize this and are hard at work developing training systems that will enable the soldiers of Force XXI to meet the challenges of the future.