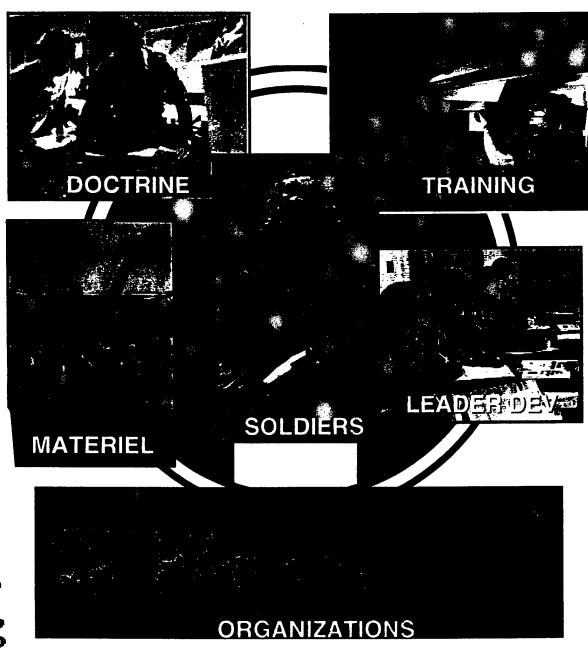
# TRAINING AND DOCTRINE COMMAND

#### **1ST QTR - FY96 UPDATE**



DTIC QUALITY INSPECTED 2

TRADOC . . . WHERE TOMORROW'S VICTORIES BEGIN

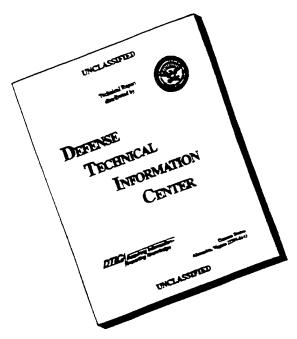
# GENERAL WILLIAM W. HARTZOG COMMANDER TRADOC

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

19970312 026

# DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

### REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data is gathering and maintaining the data needed, and completing and reviewing the collection of information.

collection of information, including suggests Davis Highway, Suite 1204, Arlington, VA 22	202-4302, and to the Office of Management	Meadquarters Services, Directorate and Budget, Paperwork Reduction Pr	for information oject (0704-018	Operations and Reports, 1215 Jefferson 8), Washington, DC 20503.
1. AGENCY USE ONLY (Leave b	(ank) 2. REPORT DATE 1996	3. REPORT TYPE A Quarterly. 1	<b>PD DATES</b> st Oua	COVERED rter FY 96
4. TITLE AND SUBTITLE				ING NUMBERS
Training & Doctrine (	Command 1st Quarter F	Y96 Update	3. 10.10	ING NUMBERS
6. AUTHOR(S)				
7. PERFORMING ORGANIZATION	NAME(S) AND ADDRESSES		<u> </u>	
HQ, U.S. Army Training			8. PERFO	RMING ORGANIZATION
ATTN: ATCS-I	5 - 20012230 00			
Fort Monroe, VA 23651	-5000	•	İ	
•				•
9. SPONSORING/MONITORING A	GENCY NAME(S) AND ADDRESS	(ES)	10 5001	CORING /MONITORNIC
and the same sales			AGEN	SORING/MONITORING CY REPORT NUMBER
•			1	
.•				
11. SUPPLEMENTARY NOTES			<u> </u>	
				•
	-			·
12a. DISTRIBUTION/AVAILABILITY STATEMENT			12b. DISTRIBUTION CODE	
Approved for public	release; distribution	n is unlimited.		
•			'	
13. ABSTRACT (Maximum 200 wo	rds)			·
·		•		,
•	•			
:			÷	
				•
		•		
•				
•			•	
14 (1)01557				
14. SUBJECT TERMS				15. NUMBER OF PAGES
. •		•	-	16. PRICE CODE
17. SECURITY CLASSIFICATION	18. SECURITY CLASSIFICATION		CATION	20. LIMITATION OF ABSTRACT
OF REPORT UNCLASSIFIED	OF THIS PAGE UNCLASSIFIED	OF ABSTRACT		n/a
OMOPWOOTLTED	OUCTUSOILIED	11, 4	1	,

# 1ST QUARTER, FY96, UPDATE TABLE OF CONTENTS

INTRODUCTION	2
DOCTRINE	3
TRAINING	9
LEADER DEVELOPMENT	17
ORGANIZATIONS	18
MATERIEL	22
SOLDIER	31
BATTLE LABS	32
FORCE XXI JOINT VENTURE	32
TRADOC ANALYSIS CENTER	<b>3</b> 8
LOUISIANA MANEUVERS	39
TRADOC REINVENTION CENTER	39
CADET COMMAND	40
ADDITIONAL INFORMATION	41



This is a pivotal time for the Army and the Training and Doctrine Command. Momentous changes in the strategic landscape, changes in our nation, and changes to our force structure present challenges and opportunities for all of us to accomplish the missions required of the U.S. Army. The business of TRADOC is to meet these challenges by identifying, developing, and fielding capabilities which are the right combinations of Doctrine, Training, Leader Development, Organizations, and Materiel to support our Soldiers. Following are some of the Army/TRADOC initiatives that will impact on the Army, our soldiers, and organizations in the not too distant future.

GENERAL WILLIAM W. HARTZOG
COMMANDER
U.S. ARMY TRAINING AND DOCTRINE COMMAND

#### **DOCTRINE**

The Army's doctrine lies at the heart of its professional competence. It is the authoritative guide to how Army forces fight wars and conduct operations other than war. Never static, always dynamic, the Army's doctrine is firmly rooted in the realities of current capabilities. At the same time, it reaches out with a measure of confidence to the future. Doctrine captures the lessons of past wars, reflects the nature of war and conflict in its own time, and anticipates the intellectual and technological developments that will bring victory now and in the future.

FM 100-5, Operations: The latest version of 100-5 was published on the Army's 218th birthday, June 14, 1993. As the Army's keystone manual, it focuses on warfighting, yet it addresses the full range of conditions within which the Army will operate. TRADOC has developed and fielded an education package containing teaching points on new concepts as they pertain to illustrated historical examples used in FM 100-5. The education package contains a CD-ROM disk, 35mm slide presentation, and video tape. TRADOC has distributed the education package down to division level with sufficient copies for each brigade-size unit. Contact or write Joint Visual Information Activity, Warehouse 3, Bay 3, Tobyhanna Army Depot, Tobyhanna, PA 18466-5102, DSN: 795-7937, COMM: (717) 894-7937. FAX DSN: 795-6106 for a copy of the education package. FM 100-5 will be revised in the near future.

#### FM 100-7, Decisive Force:



The Army in Theater Operations: The Army's capstone manual for conducting operational level activities linking tactical level actions to theater objectives. This manual describes the requirement for the Army Service Component Commander (ASCC) to conduct the three strategic and operational level roles: establish joint, combined, interagency, non-governmental agencies, and private voluntary organization linkages; conduct support operations; and conduct operations. (Published May 95.)

FM 100-8, The Army in Multinational Operations: Will be the Army's capstone manual for conducting multinational operations. This manual addresses multinational command and leadership considerations. Discusses factors effecting planning, describes possible coalition/alliance command structures, and functional considerations for the commander at the operational and tactical level. Includes host nation support and a guide for coalition operations. (To be published 2QFY96.)

FM 100-10, Combat Service Support: This is the capstone logistics manual that depicts the Army logistics organizations and describes how they support commanders at all echelons by integrating supply, transportation, maintenance, health services, personnel support, and field services. Provides the basis for subordinate logistics doctrine, materiel, training, and organizational development. (Published Jul 95.)

FM 100-12, Army Theater Missile Defense Operations: This manual will describe roles, responsibilities, requirements and functions for each of the operational elements of TMD. The manual will be developed to comply with approved joint doctrine and will address the threat, active and passive defense, attack operations and C41. Emphasis will also be given to integration of Army TMD efforts throughout the theater of war. (To be published 4QFY96.)

FM 100-13, Battlefield Coordination Element: This capstone manual will provide a current single source document addressing doctrine, organization, training, material, leadership, and soldier support for the Battlefield Coordination Element. (To be published 4QFY96.)

FM 100-15, Corps Operations: The new FM 100-15 will bring corps doctrine in line with

current Army doctrine. The central focus of the manual will be warfighting. The manual also will address force projection operations in war and operations other than war and the structure of the battlefield and battle command of the corps. Finally, it will delineate battlefield responsibilities in the joint environment, to include operations as a JTF/ARFOR headquarters. (Approved for publication Aug 95).

FM 100-16, Army Operational Support: This manual addresses operational level logistics and support functions - CONUS through theater level. It specifically addresses the operational commander's vision of support; keys to operational support; theater organization and structure, operational level CSS functions; operational level support function, force protection and rear operations. FM 100-16 also reflects the current Army focus on contingency operations and force projection. (Published May 95.)

FM 100-17, Mobilization, Deployment, Redeployment, and Demobilization: The manual is a guide for Army commanders and planners. It provides doctrine across the range of military operations for the development of Army policy for planning and executing mobilization, deployment, redeployment, and demobilization (MDRD) operations. The manual describes the process used to mobilize, deploy, redeploy, and demobilize Army elements. Through the use of the required assets (force/units, manpower/individuals, facilities, and logistics), this definitive process implements effectively and efficiently operational plans in support of the national military strategy. The final draft version of the revised FM 100-17 has been staffed throughout the Army. Comments are currently being incorporated. (Revision to be publish 2QFY96)

FM 100-17-1, Army Pre-positioned Afloat: This manual describes Army War Reserve-3 (APA) operations to include missions, capabilities, command relationships, communications, and security. It discusses the organization, responsibilities, and command relationships ranging from the National Command Authorities, Joint Chiefs of Staff, Combatant Commander (CINC), to the Brigade Commander performing the APA mission. (To be published 1QFY96.)

FM 100-18, Space Support To Army Operations: Will be the Army's capstone manual how to use space system capabilities to enhance mission accomplishment across the full range of military operations to include operations other than war. It emphasizes enhancements offered by space system in communications; reconnaissance, intelligence, surveillance, and target acquisition (RISTA); weather, terrain, and environmental monitoring, position and navigation; and missile warning. This manual provides a foundation for leader development, training, and space-related modernization initiatives that support the Force XXI Army's missions and provides soldiers with a decisive advantage worldwide. It is relevant from the highest levels of command to the soldier in the foxhole. (Published Jul 95.)

FM 100-19, Domestic Support Operations: Describes the concept, interface, and process of providing Army assistance to U.S. civil authorities. It serves as a reference for service and professional military education and includes mandated and legislated requirements. It includes considerations and principles for command and staff planning and execution. FM 100-19 incorporates lessons learned from numerous operations and recognizes the requirements dictated by the National Military Strategy. Coordination with DA staff, TRADOC. MACOMs, CINCs, joint staff, and federal, state, and local governmental agencies is being conducted to ensure harmonized actions. Finally, this manual emphasizes the linkages of interagency operations and missions. (Published Jul 93.)

FM 100-23, Peace Operations:



Provides guidance for commanders to conduct the full range of missions in support of international peacekeeping and peace enforcement efforts. This manual addresses the special requirements of these operations, to include planning, force tailoring, command, control, coordination, liaison, logistics and intelligence. It also reviews the unique operational environment of peace operations, including United Nations and non-United Nations' operations, as well as the requirements for operations in the interagency arena and with multinational forces and non-governmental organizations. It applies the principles of operations other than war and tenets of Army operations to peace operations and examines the variables of consent, use of force, and impartiality. (Published Dec 94.)

FM 71-100, Division Operations: This manual addresses tactical operations of the division in war and operations other than war. Focus is on division deployments and war fighting. It will apply new concepts addresses in FM 100-5 to division operations. The new FM 71-100 will be integrated both vertically and horizontally with recently written field manuals such as FM 101-5, Staff Organization and Operations; and TTP manuals FM 71-100-1, Armor and Mechanized Division Operations, FM 71-100-2, Infantry Division Operations, FM

71-3, The Armored and Mechanized Brigade and FM 7-30, the Infantry Brigade. (Approved for publication Aug 95.)

FM 71-3, Armored and Mechanized Infantry Brigade: The U.S. Army Armor Center is proponent for this manual. They are writing it in concert with the U.S. Army Infantry Center and School. The latest version of FM 71-3 incorporates new Army doctrine reflected in the 1993 edition of FM 100-5. The manual will include doctrine and tactics, techniques and procedures for armored and mechanized brigades in conducting operations across the entire range of military operations. (Approved for publication Sep 95.)

FM 71-2, Tank and Mechanized Infantry Battalion Task Force: The U.S. Army Infantry School is lead for this manual; co-proponent is U.S. Army Armor Center. The revised FM 71-2 will incorporate new Army doctrine reflected in the 1993 version of FM 100-5. The focus of this manual will be warfighting with considerations for operations other than war. It will provide TTP for employment of force as it exists and will provide appendixes for digitization of the tank and mechanized infantry battalion task force. (To be published 4QFY96.)

FM 71-1, Tank and Mechanized Company Team: The U.S. Army Armor Center is lead for this manual; co-proponent is the U.S. Army Infantry School. Revised FM 71-1 will provide tactics, techniques and procedures for the M1A2 and Bradley company/team. It will refine mission profiles and provide TTP for heavy/light link-up and operations with task force scout platoons. (To be published 3QFY97.)

TRADOC Pam 11-9, Blueprint of the Battlefield (BOB): The BOB is a comprehensive hierarchical listing of Army battlefield functions and their definitions. It collectively includes their blueprints, one for each level of war, i.e., strategic, operational and tactical. It also serves as a common reference system for field commanders, combat developers, analysts, trainers, and planners for analyzing and integrating operations. It assists staff and field organizations in relating Army needs to Army missions. This pamphlet also provides a basis for describing Army requirements, capabilities, and combat activities at the three levels of war. (To be published 2QFY96.)

(POC Army Doctrine: COL Baldwin, DSN 680-3080 or email BALDWINR@monroe.emh10.army.mil)

#### JOINT DOCTRINE

JP 3-0, Doctrine for Joint Operations: TRADOC has written 12 joint publications that the joint staff has approved and published. The most significant of those is JP 3-0. It is the joint keystone operations equivalent of FM 100-5 and affects most other important pubs in the joint system. (Published Sep 1993.)

JP 3-07, Joint Doctrine for Military Operations Other Than War: Expands the discussions in JP 3-0 of the principles and considerations associated with joint operations below the level of large scale, sustained combat operations. Names many of the operations and provides examples of the principles of OOTW in action. (Published and awaiting distribution.)

JP 3-07.3 JTTP for Peace Operations: Expands work done in the previously approved JP 3-07.3, JTTP for Peacekeeping Operation, to include Peace Enforcement and Support to Diplomacy. Publication of the Program Directive (PD) from J7, Joint Chiefs of Staff tasking the US Army as lead agent is expected by October 1995. (Publication expected in FY 96.)

JP 3-07.6 JTTP for Foreign Humanitarian Assistance: Provides procedures to be used by joint forces in conducting humanitarian assistance in overseas foreign areas. Describes interfaces between the joint task force with non-governmental organizations (NGOs) and private voluntary organizations (PVOs) likely to be operating in such areas. (To be published 3QFY97.)

JP 3-07.7 JTTP for Domestic Support
Operations: Provides procedures to be used
by joint forces in conducting support within the
continental US, Alaska and Hawaii, and
territories and possessions. Applies to major
categories of Military Support to Civil Authorities
(MSCA)and Military Support to Law Enforcement Agencies (MSLEA). (To be published
2QFY97.)

JP 3-09, Doctrine for Joint Fire Support: Clarifies relationships and responsibilities for those fires that assist land and amphibious forces to maneuver and control territory, populations, and key waters. Included are discussions on issues such as FSCL, Joint Targeting Coordination Board (JTCB), and relationships between air, land, and sea components. JP 3-09 supports a series of pubs such as JP 3-09.1, Joint Laser Designation Procedures, JP 3-09.2, JTTP for Radar Beacon Operations and JP 3-09.3, JTTP for Joint CAS. (3rd Draft TBP in Oct 95.)

JP 3-18, Joint Doctrine for Forcible Entry Operations: Provides guidance concerning joint forcible entry operations. This publication addresses forcible entry principles concerning C2, planning, execution, and support, as well as the interface between airborne, special operations forces, and naval expeditionary forces (amphibious forces). Proposed final pub was distributed May 95. (To be published 2QFY96.)

JP 3-18.1, Joint Airborne and Air Assault Operations: Provides guidance on employment of airborne and air assault forces. This publication integrates existing Service doctrine into a single source publication that addresses principles of C2, planning, execution, and support requirements involving airborne and air assault operations. 2nd Draft was distributed May 95. (To be published 2QFY96.)

JP 3-56, Command and Control Doctrine for Joint Operations: This pub sets forth principles, doctrine, and military guidance for establishing command and control in joint operations. Included are discussions on the joint chain of command, information operations to support C2, command relationships, organizing the joint force, and service component contributions to the joint force. (3d Draft circulated for comment; TBP 3QFY96.)

JP 5-00.1, Joint Tactics, Techniques, and Procedures for Campaign Planning:
Provides guidelines for the planning of theater and subordinate campaigns. Expands on guidance currently found in JP 3-0, Joint Operations, JP 5-0, Planning for Joint Operations, and JP 3-56, Command and Control of Joint Operations. Discusses considerations for the application of operational

art, elements of design and the integration of strategic and operational functions. JP 5-00.1 (2nd Draft) was submitted for worldwide review in May 95. (To be published 1QFY96.) (POC JOINT DOCTRINE COL Hammerle, DSN: 680-3153/PROFS HAMMERLR or email Hammerle@monroe.emh10.army.mil)

#### **CINC SUPPORT PROGRAM**

The CINC Support Program represents a major initiative by which TRADOC provides support to warfighting CINCs on behalf of the Chief of Staff of the Army. The concept of the program is to assist CINCs in accomplishing their missions and objectives through a program of focused and responsive support in the areas of doctrine, training, leader development, organizations, material, and soldiers (DTLOMS). The cornerstone of this program is annual visits to supported CINCs. This FY. trips were made to SOUTHCOM, EUCOM, ACOM, PACOM and USFK. TRADOC is scheduled to visit CENTCOM in January 96. Significant issue trends identified include: joint task force organization, training, doctrine, and systems interoperability; corps capability to function as ARFOR and JTF headquarters; need for OOTW doctrine (primarily TTP/TSP); and recognition that CINCs operate in multinational environments. (POC CINC SPT LTC Lewis, DSN 680-2298 PROFS LEWISC email LEWISC@monroe.emh10.army.mil)

#### **FUTURE DOCTRINE**

#### TRADOC PAM 525-5 Force XXI Operations:

The most recent version of TRADOC Pam 525-5, Force XXI Operations, was published on 1 August 1994. The concepts and ideas contained in it are the intellectual basis for the more definitive follow-on doctrine of early 21st century Army operations. It is a living document; a document of ideas derived from leading thinkers in the military and civilian communities. The central theme is a 21st century Army based on quality soldiers and leaders in versatile mission-tailored units. enhanced by the power of information, superior technology and effective battle command. An update of TRADOC Pam 525-5 is currently under consideration and the individual chapters are now being revised. The update will focus on expanding the discussion of the National Security, National Military Strategy, Principles of War, Combat Power Model, and Battle Dynamics and a further analysis of the implications of these concepts and ideas. Information gathered during exercises, symposiums, conferences, and critiques will lead to a possible revision of TRADOC Pam 525-5 as early as the 1QFY96.

FM 100-6 information Operations: FM 100-6 (to be published 1QFY96) will be the Army's capstone manual on how to win the information war in military operations now and into the 21st century. It identifies information as an essential element of military power at the strategic, operational, and tactical levels. It also defines the ways in which information will impact joint, combined, multinational, or interagency operations. It addresses the framework that will enable a commander to influence available information, protect his ability to sense, process, integrate, decide, act on that information, and attack adversary's ability to do the same. (POC Future Doctrine: COL Starry, DSN: 680-4126/PROFS-STARRYM or email STARRYM@monroe.emh10.army.mil)

#### INTERNATIONAL ARMY PROGRAMS

In support of the National Military Strategy and to enhance the U.S. capability for multinational force compatibility, TRADOC remains extensively involved in international activities with allied and friendly armies. Involvement includes bilateral staff talks and conferences with 10 armies, participation in approximately 40 multinational working parties, and several Subject Matter Expert Exchanges (SMEE) with the armies of Japan, Latin America, and European nations. During the 1QFY96. TRADOC will conduct Staff Talks with the Republic of Korea and with Spain. Steering committee meetings, in preparation for Staff Talks, will be held with Germany and France. Several SMEEs, OEPs, and NATO/ABCA working groups are scheduled this quarter and numerous visits by foreign military dignitaries will be hosted. (POC International Army Programs: COL Whittenberg, DSN 680-2741, PROFS WHITTENS or email WHITTENS@monroe.emh1.army.mil)

#### **INTELLIGENCE**

TRADOC Pam 350-12 thru 17, Heavy/Light Opposing Force (OPFOR) Handbooks: are undergoing conversion for publication as the FM 100-60 series. TRADOC fielded the 350 series pamphlets for interim implementation until publication of the FMs. The FMs are:

FM 100-60, Heavy Opposing Force
Organization Guide: This manual breaks
from past traditions of focusing on one country
and provides a flexible capabilities-based heavy
opposing force model that represents various
countries. It is not a fixed order of battle, but it
provides the building blocks to derive a heavy
force order of battle. It is fully adaptive to the
training needs of the force projection Army. (To
be published 2QFY96.)

FM 100-61, Heavy Opposing Force
Operational Art: This manual provides the
Army with an operational overview of the heavy
capabilities-based opposing force. It contains
military thought, strategic operations, offensive
and defensive operations, troop control,
reconnaissance, artillery, NBC and Smoke, air
defense, engineer, logistics, airborne and
special purpose forces. (To be published
4QFY96.)

FM 100-62, Heavy Opposing Force Tactics: This manual provides the Army with a tactical overview of the heavy capabilities-based opposing force. It contains combat formations, troop control, march, reconnaissance, offensive and defensive tactics, fire support (artillery, antitank, air and air defense) NBC and Smoke, engineer, logistics, and radio electronic combat. (To be published 3QFY96.)

FM 100-63, Light Opposing Force Organization Guide: This manual breaks from past traditions of focusing on one country and provides a flexible capabilities-based light opposing force that represents various countries. It is not a fixed order of battle, but it provides the building blocks to derive a light forces order of battle. It is fully adaptive to the training needs of the force projection Army. (To be published 2QFY96.)

FM 100-64, Light Opposing Force Operations and Tactics: This manual provides the Army with an operational overview and the tactics of the light capabilities based opposing force. It contains military thought, organization for combat, combat operations, airborne and air assault operations, naval operations and amphibious landings, partisan operations, logistics, engineer, and rear area operations. (To be published 3QFY96)

FM 100-65, Opposing Force Equipment Guide: This manual provides a description and the capabilities of various types of military and related equipment available on the world arms market. (To be published 1QFY97.)

FM 100-66, Peacetime Operations -Opposing Forces: This manual provides a broad range of conventional and unconventional military threats the Army may face in a peacetime operation environment. It will allow the user to select a specific level of opposing force or tactical environment to meet the training needs of the force. It will not address disaster relief operations, where an opposing force is not present. The manual will describe non-mechanized small unit operations (battalions and below) and continue to the lowest level of the military spectrum: querrilla forces. (To be published 2QFY97) (POC - CTC Support Branch, LTC Jeff Dunham, DSN 680-5419, PROFS DUNHAMJ or email DUNHAMJ@monroe.emh10.army.mil)/ (POC - Threat support Detachment, Mr. Nick Comer, DSN 552-7937, email COMERN@leavenworth.emh1.armv.mil)

#### **TRAINING**



Our challenge is to maintain the essence of our education and training system, the Army University, not the pieces. This means a quality school system, but not necessarily at the current locations. Our training strategy must utilize the best combination of live, virtual and constructive simulations and simulators. This strategy must unite the many ongoing efforts into a clear, coherent vision to produce trained and ready units in the environment of the next century. Some of our efforts in that direction follow.

#### **Operations Group Delta - JTF**

Training: Battle Command Training Program (BCTP), Operations Group D is tasked with the mission to prepare Army organizations for joint command and control roles. They work closely with Army service component commanders and Warfighting CINCs to bring the rigor of BCTP to joint exercises, in which an Army organization is acting as a JTF or ARFOR HQs. The primary training audience is the corps in a joint role, but divisions and ad hoc joint organizations have been supported. The team is capable of providing home station seminars, support to exercises, and support to operational missions. (POC - LTC Weith, DSN 680-5747/e-mail weithg@dcst.monroe.army.mil)

#### Warfighter XXI (formerly Army

**Training XXI):** Today's Army is facing new challenges information age warfare on the digital battlefield, expanding roles and missions for a power projection Army, and operational TEMPO. Simultaneously, the Army is drawing

down and restructuring the force. All of these actions contribute to dangerous levels of turbulence and indicate a need for a new Army training strategy. Warfighter XXI (WF XXI) is TRADOC's and the Army's strategy for individual, thorough Joint Task Force level training, utilizing the best combination of live, virtual, and constructive environments to train the Army of the 21st century. While individual level is included in the strategy, the primary focus is unit collective training.

The five components of the WF XXI campaign plan are: the Standard Army Training System (SATS); Training Support Packages (TSP); Training Aids Devices, Simulations, and Simulators (TADSS); the Standard Army After Action Review System (STAARS); and the Army Training Digital Library (ATDL). SATS (under development by the Army Training Support Center) provides an automated training management system designed to enhance the planning, resourcing, execution and assessment of battle-focused training for the unit and institutional commander. TSPs (brigade and battalion TSPs are under development by the Force XXI Training Program) provide an automated, structured situational training template that generates training events for unit and institutional commanders. TADSS provides integrated, effective tools for the unit and institutional commander to efficiently conduct training. The STAARS provides a standardized, automated storage and distribution system giving the unit and institutional commander a training assessment and resource tool and the Army a doctrinal based information collection system. The ATDL (under development by the Army Training Support Center) stores the data and provides unit and institutional commanders access to data from many information sources necessary to plan, resource, execute, and assess training.

The second semi-annual WF XXI conference was held 31 Jul - 4 Aug 95. This conference provided focus on issues developed at the first conference. WF XXI Campaign Plan (Warfighter - Army Training OPORD 95-01) was distributed at the conference. (POC - COL Marlin, DSN 552-4498/3919/e-mail Marlind@leav.emh1.army.mil)

Warrior XXI: WARRIOR XXI defines those future activities in the TDA Army and the

institutional axis of Force XXI required to train the total Army of the future. WARRIOR XXI has eight lanes of advance. Each of these lanes represent a major initiative which will dramatically change the way we organize and how we manage and train soldiers of the future. These initiatives are: Training Development. Diagnostics, Hub & Spoke, Total Army School System (TASS), Distance Learning, Classroom XXI, Automation/ Digitization, and Advanced Training Strategies including such concepts as "On Demand Training." These initiatives will change the training paradigm for both institutional and self-development training. When combined with WARFIGHTER the main effort, and WARNET XXI, WARRIOR XXI will provide the architectural foundation for the future Army institutional schoolhouses. (POC -Mr. Buckley, DSN 680-5535/e-mail buckleyj@dcst.monroe.army.mil)

#### Warfighter Network (WARNET) XXI:

WARNET XXI is the Army Modernization Training (AMT) piece of Joint Venture and provides for the linkage of materiel acquisition with the training nonsystem and digitization of system training support products. The goals are to: integrate training support needs into system/hardware requirements to ensure a cost of training effective training subsystem is developed and fielded with the system; develop and provide system training support packages (TSP) to support testing, new equipment training (NET), and institutional /unit training needs; and ensure system TSPs and supporting training documentation are digitized in accordance with standards and integrated into the Army Training Digital Library (ATDL). WARNET XXI consists of five components which relate to the corresponding components of Warfighter XXI and Warrior XXI. The five components are: Needs Analysis, Requirements Documentation, Systems/TADSS, Test and Evaluation, and ATDL. The components are sequential and important to ensuring a cost and training effective training subsystem is fielded to support a system's initial operational capability. (POC - Mr. Ronneberg, DSN 927-2546/ e-mail

Ronnebed@dcst.monroe.army.mil)

**Diagnostics:** This system will provide ondemand, on-time assessments and training through electronic delivery of materials anytime, anywhere in the world. Using electronic bulletin boards and other automation equipment, soldiers with a computer and modem will be able to access training from the unit or from home. The potential uses of diagnostics support self-development, institutional training, and unit training. The individual soldier will be able to access training to diagnose strengths and weaknesses, obtain remedial training. improve skills and knowledges, and perhaps earn college credit. Institutions will be able to identify and assess course prerequisites and tailor the courses to the soldier's ability. This will allow soldiers to spend more class time on areas of weakness or to pursue independent study. The unit will be able to assess the incoming soldier's knowledge level, obtain training materials for additional duties in lieu of off-site training, assist Reserve Component units in MOS qualification, and reduce Individual Ready Reserve soldier train-up time. This system began fielding materials in 4th Qtr FY 95 and will continue to add training courses as materials are available. (POC - Ms. Spath, DSN 927-4785/e-mail Spathk@Eustis.emh20.army.mil)

#### TRADOC Staff and Faculty Training

**Program:** The Staff and Faculty Training Program is composed of three major elements: HQ TRADOC (DCST), schools/training battalions, and the Army Training Support Center. While responsible for policy, the DCST is responsible for standardizing, approving, and managing staff and faculty development which is required Armywide, TRADOC-wide, or at multiple TRADOC sites such as instructor training, small group facilitator training, and training development training. DCST offers consolidated centralized training manager training in the Senior Training Managers' Course and the Training Developer Middle Managers' Course. TRADOC and RC schools (training battalions) offer staff and faculty development using the mandated instructor training, the standardized Small Group Instruction Training course, and the Systems Approach to Training course. The TRADOC staff and faculty development elements also provide training to meet local requirements. The ATSC program is a centralized support system to develop and deliver standardized training for Active and Reserve Components (AC and RC) instructors as part of the Total Army School System (TASS). As program manager, the Army Training Support Center (ATSC) will provide standardized training, course design, development, delivery (to

include multimedia technology), certificates, course material reproduction, and student management. Under the TASS concept, AC and RC instructors can be linked via satellite to the proponent responsible for instructor training. ATSC's efforts currently focus on three standardized courses: Small Group Instructor Training Course (SGITC), Total Army Instructor Training Course (TAITC), and Video Teletraining Instructor Training Course (VTTITC). These courses have the option of being delivered in a regular classroom setting or via distance learning technology to facilitate standardized cost effective training Armywide. Currently, the SGITC and VTTITC are available for use. The TAITC should be available in 2d Qtr FY 96. Other selected Staff and Faculty courses will be considered for conversion to delivery using distance learning technology in the near future.

(DCST POC - Dr. Spangenberg, DSN 680-5590/e-mail spangenr@dcst.monroe.army.mil)
(ATSC POC - Mrs. Washington, DSN 927-5361/e-mail

Washing1@Eustis.emh20.army.mil)

#### Standard Army Training System

(SATS): SATS is a computer based software system that automates training management doctrine found in Field Manual (FM) 25-100, Training the Force, FM 25-101, Battle Focused Training, and FM 100-5, Operations. It provides the opportunity to incorporate training plans and products, readiness reporting tools, calendars (3 dimensional), schedules, all unit activities and related data bases at all echelons, and computes associated resources. SATS accesses and feeds all Army Training Digital Library (ATDL) components as well as other Warfighter XXI (WF XXI) components. SATS version 4.0 currently under development, will serve as the keystone Army effort to bring training management into the 21st century. This system combines training doctrine with automation technologies to help trainers develop and manage their training programs. Future SATS (version 4.x) will provide enhancements to better support the needs of both active and reserve component units with a wide array of training management features. Using Microsoft Window, SATS 4.x will be Local Area Network (LAN) and Wide Area Network (WAN) capable, and interfaces with other WF XXI components. (POC - Mr. Lengyel DSN 552-7840 Lengyelr@leav.emh1.army.mil)

#### Training Support Packages (TSP):

TSP is a structured situational training template offering live virtual, or constructive battle staff and collective training events and assists the commander in excuting and assessing training. TSPs (WF) provide task based products (orders, overlays, execution matrices, etc) to plan, prepare and execute battle command/staff (individual through collective) and unit (collective) training.

The Force XXI Training Program (FXXITP) at Fort Knox is the lead effort for WFXXI TSP development FXXITP is focused on the mounted brigade and represents a prototype strategy for transitioning the Army from the way it trains today to how it will fight in the future. FXXITP describes which tasks are to be trained to a given standard using prescribed live, virtual, and constructive simulations. With programs such as SIMUTA. It has pioneered development of structured individual and small group staff training in the form of tables, and exercises based o detailed tasks, conditions, and standards (TCS).

Currently the Combined Arms Center (CAC) is in the early developmental stages of a structured division level staff training program called the Simulations based Division Army Trainer (SIMDART). SIMDART will provide the division commander a staff training vehicle for individual, staff group, and battle staff collective training. (POC - Major Lopez, DSN 552-3919/e-mail Lopez1@leavenworth.emh1.army.mil)

Training Aids, Devices, Simulations, and Simulators (TADSS): Current efforts are focused on completing the DCSOPS approved nonsystem TADSS priorities through the FY 98-03 Warfighting Lens Analysis (WFLA) process. The DCSOPS approved priorities support building the synthetic environment capabilities required to support Force XXI training needs. Simultaneous efforts are ongoing to maintain current Training Mission Area (TMA) funding thresholds for FY 97-01 to ensure transition to required Force XXI training end state capabilities. Continue to scrub and revalidate system TADSS requirements with DCSOPS Force Development and DCSOPS Training. Primary thrust is to gain visibility of system TADSS funding within each weapon system's MDEP. Visibility of system TADSS funding is imperative to integrating and

managing system and nonsystem TADSS requirements across the Battlefield Operating Systems. (POC - Mr. Whitney DSN 927-3841/e-mail whitneyr@eustis-emh20.army.mil)

Standard Army After Action Review System (STAARS): STAARS standardizes all current and future After Action Review systems to provide trainers, training developers, combat developers with Doctrine, Training, Leader Development, Organizational Design. Material, and Soldier Systems (DTLOMS) base information and feedback on performance of systems, students, and units. It provides the training resource manager with usage rates and operating costs of all training resources. In the future, STAARS supports the data collection requirements of the force and material development communities. The data from STAARS must be standardized, irrespective of the environment in which the exercise was conducted (live, virtual, constructive), and provide assessment of the unit's training proficiency, unit readiness, lessons learned. and resource management. future STAARS uses DSI as the Army's information highway to feed information to ATDL. (POC - Major Carpenter, DSN 552-3919/ e-mail Carpentm@leav.emh1.army.mil)

#### Army Training Digital Library (ATDL):

ATDL is the information foundation and the single, common, component between Warfighter XXI, Warrior XXI and Warnet XXI training campaign plans in support of the Force XXI training strategy. When implemented, the ATDL will provide a globally accessible digital repository of training knowledge sets and interactive applications to support the training of individuals and units.

ATSC is developing the ATDL to provide normal library functions, maintain a library information catalog, produce statistical and management information, provide a help desk and transmission of requested information. Objectives include gathering and consolidating Army training information, and to implement smart training technology. These objectives will be met through a broad range of initiatives that include communications, data digitization and collection, establishing file protocols, implementing a distributed architecture of standardized and integrated information.

A Mission Needs Statement and Functional Description have been completed. An action plan laying out developmental milestones has been completed in draft and is being staffed for comment. The ATDL development, and its integration with other Army information systems will be a continuing process. The system is being designed with enough flexibility so that the Army can make use of future technologies. (POC - Mr. Baston, DSN 927-4767/e-mail bastond@eustis-emh20.army.mil)

#### **Classroom XXI and Distance**

Learning (DL): The soldier of the future will have access to knowledge via master instructors, master instruction and an Army Knowledge Network. Training in the future will be conducted in a "classroom without walls." Here DL contributes in two different ways. The technology will bring to the resident classroom external data and environments. This modern classroom will be electronically networked and capable of accessing digitized training materials, archived materials and information from throughout the world. It will possess the ability to bring the battlefield into the classroom using a videoteletraining network, computers, simulations and simulators. Students will be able to participate in horizontally and vertically integrated training scenarios with soldiers from other schools, CTCs, units and eventually other services. The second way the technology will affect Classroom XXI will be that soldiers will no longer have to be physically present to be a part of the "resident" training. They may be located at Unit learning centers, Armories or possibly their own residence. (POC - Mrs. Moore, DSN 680-5527/e-mail

moorem@dcst.monroe.army.mil)

#### **Deployable Range Package (DRP):**

This program is designed to provide deployed U.S. Forces with live fire and force on force training capabilities in the theater of operations. The training concept is to develop a light and heavy DRP to support brigade size elements. These will be configured to meet the commander's training needs and will include MILES, target lifting devices, targets and controlling mechanisms. The DRP is designed to support individual through platoon level training including weapons sustainment and live fire maneuver training. The heavy DRP will support heavy force gunnery through gunnery table XII. The light DRP will support all small arms

qualification and sustainment training. The original concept was tested successfully in Haiti and plans are underway to use a DRP in Southwest Asia this fall. (POC - Mr. Goodman, DSN 927-2320/ e-mail Goodmanw@eustis-emh20.army.mil)

#### **Training Instrumentation Systems:**

Instrumented training, typically confined to the Maneuver Combat Training Centers (CTC), is now beginning to expand beyond that environment. Training instrumentation is used to collect, archive, process, and feedback training event data to provide accurate, timely and unbiased after action reviews to the training unit. The primary training audience is brigade and battalion commanders and staffs. Properly applied, training instrumentation can provide commanders clear and accurate information on unit abilities to conduct assigned missions. Expanding on it's beginnings in the early 1980s at the National Training Center and now also found at the Joint Readiness Training Center and the Combat Maneuver Training Center, training instrumentation is undergoing evolutionary changes that will provide this training capability at home station and in transportable packages that deployed units can use to sustain unit skills, maintain tactical proficiency, and conduct mission rehearsals. Instrumented training, as a prime component of the live simulations environment, is being integrated with the constructive and virtual simulation environments to expand training capabilities and efficiencies for commanders and staffs in combined live and synthetic theater of war exercises. Instrumented support to the training and operational test communities in the development of Force XXI has started the conduct of Army warfighting exercises at the CTC. This support will grow as the test and evaluation community is included in the development of new training instrumentation systems. Concurrently, joint service instrumented training has become a reality with the linking of the National Training Center instrumentation with the Air Force's Air Warrior Measurement Debriefing System. Work continues on the expansion of this joint training success with conduct of the Navy/Air Force Joint Tactical Combat Training System program's study on Interoperability with Army and Marine Corps ground instrumentation systems. (POC - Mr. Letts, DSN 927-4714/ e-mail Lettsc@eustis-emh20.army.mil)

# Multiple Integrated Laser Engagement System (MILES) 2000: The

proponent for this acquisition program managed by the Simulation, Training, and Instrumentation Command (STRICOM) is the Combat Training Support Directorate (CTSD) of the Army Training Support Center (ATSC). The purpose of the program is to replace the ground direct fire basic MILES systems currently in the field at homestation. MILES devices shoot eyesafe "laser bullets" to simulate actual weapons systems and range from the M-16 rifle up to and including the M1A2 tank.

- MILES 2000 devices will incorporate a number of enhanced capabilities over those found in the current system, among them.
- o Each player, to include manworn infantry systems, will transmit Player Identification (PID).
- o Vehicle systems will be subject to multiple levels of kills, (i.e. catastrophic, firepower, mobility, and communications).
- o Combat vehicles will be subject to aspect-angle dependent kills.
- o All players will have the capability to store 500 time-tagged events for downloading and after action review purposes.
- o All systems will incorporate improved manufacturing and power management techniques which promise to reduce support costs. (POC Mr. Lembke DSN 927-4713/e-mail Lemker@eustis-emh20.army.mil)

# Simulated Area Weapons Effects/ Multiple Integrated Laser Engagement System II (SAWE/MILES II): The

proponent for this acquisition program managed by the Simulation, Training. and Instrumentation Command (STRICOM) is the Combat Training Support Directorate (CTSD) of the Army Training Support Center (ATSC). The purpose of the program is to integrate the dire fire MILES force-on-force training capability with area weapon effects: indirect fire (artillery mortars, and naval gunfire), mines, and chemical and nuclear munitions. SAWE/MILES II devices will incorporate a number of enhanced capabilities over those found in the current MILES system, among them:

o SAWE/MILES II incorporates Global Positioning System (GPS) to provide individual player (Vehicle Detection Devices and Manworn Detection Devices) determined position which is used to assess area weapons effects.

- o Vehicle Detection Devices and Manworn Detection Devices provide connectivity to Combat Training Center-Instrumentation System (CTS-IS).
- o Each vehicle transmits Player Identification (PID).
- o Each vehicle console has a built in test capability and provides the crew synthesized voice cues.
- o Vehicle systems will be subject to multiple levels of kills, (i.e. catastrophic, firepower, mobility, and communications).
- o Combat vehicles will be subject to aspect-angle dependent kills.
- o Vehicles will have audiovisual cues to simulate engagement by area weapons.
- o Programmable time of flight for TOW missiles.
- o Manworn Detection Device has a M40 protective mask compatible interface to enforce chemical assessments based upon proper mask utilization.
- o All players will have the capability to store 500 time-tagged events for future downloading and after action review purposes.
- o Mine Effects Simulators simulate antitank and antipersonnel mines.
- o A Chemical Agent Alarm Simulator is provided.
- o Mission Control Station provides a central user and fire mission interface, enabling both red and blue force play.

  (POC Mr. Adkins DSN 927-4631/ e-mail Adkinsd@eustis-emh20.army.mil)

#### <u>Total Army School System (TASS):</u>

TASS is the TRADOC portion of the Chief of Staff, Army (CSA) initiative, the Total Army Training Study (TATS). Per the CG, TRADOC, in consultation with the CSA, the mission of TASS is to "establish a cohesive and efficient Total Army School System of fully accredited and integrated AC (Active Component)/ARNG (Army National Guard)/USAR (U.S. Army Reserve) schools that provides standard individual training for soldiers of the Total Army." TASS will be organized under a regional schools concept. Each region will include six school brigades which will oversee instruction in Leadership, Officer Education, Health Services, Combat Arms, Combat Support, and Combat Service Support. Below the school brigade level will be school battalions functionally aligned with the proponent for specific career management fields, e.g., Fort

Benning-Infantry, Fort Knox-Armor, Fort Sill-Artillery.

The Total Army School System Coordinating Activity (TASSCA) is responsible within TRADOC for the implementation of TASS. In August 1992, TRADOC closed out the data gathering phase of its campaign with a briefing to the CSA. The CSA's guidance: "TRADOC will lead, with the support of FORSCOM, NGB, and OCAR, the effort to establish a first-rate, cohesive and efficient Total Army School System of fully accredited and integrated AC. ARNG, and USAR schools capable of providing standardized individual training and education for the Total Army." TRADOC briefed the CSA again in December 1992. The CSA expressed his view that FAST was on the right path to a Total Army School System and approved the following recommendations: An immediate moratorium on creation of new training institutions and courses. Effective January 1993, TRADOC is the sole accrediting authority for institutions conducting training for which TRADOC is proponent.

Beginning in January 1993, TASSCA established and began testing a prototype Total Army School System model in TASS Region C. which included North Carolina, South Carolina, Georgia, Florida, Puerto Rico, and the U.S. Virgin Islands. In a message dated December 1993, Subject: Total Army School System GOSC, the CSA said, "My expectation is that, ultimately, the component of the school and/or instructor will be transparent to the student. Additionally, I believe that we are making leader development more accessible and less expensive, and that we are making important strides in the integration of America's Army." On 31 October 1994, the CSA advised the CG. TRADOC, "You must pursue the work of TASS. I want to see more active duty soldiers attend 'reserve' schools." A series of five General Officer Steering Committee (GOSC) meetings. chaired by the DCG, TRADOC, have been held during the past year. A Rump GOSC was conducted 28 October 1994 to solidify staff recommendations for the final shape of TASS. The Rump GOSC recommendation (seven TASS regions) was staffed to the CG. TRADOC. CG, TRADOC provided those recommendations to the CSA. GOSC V was conducted 22 February 1995.

A provisional TRADOC Coordinating Element (TCE) is standing up at Fort Monroe, VA. The TCE will become operational 1 October 1995. An overarching Total Army TCE will become operational 1 October 1995. An overarching Total Army School System (TASS) Operations Plan has been developed and distributed to implement the system nationwide. A provisional TRADOC Regional Coordinating Element (RCE) is operational at Leesburg Training Site, Fort Jackson, South Carolina. The RCE's job is to ensure functional alignment of the TASS Battalions, maintain standards by ensuring adherence to policies, and effect coordination to resolve issues at the regional level. They will assist the RCTIs in their transition to school brigades and school battalions thus creating a direct linkage to TRADOC. Seven RCEs are in process of standing up for operation 1 October 1995. The RCEs are to be located at Fort(s) Jackson, Knox, Sill, Lewis, McCoy, Devens, and Lee. Each RCE will have ten full-time personnel (AC/USAR/ARNG). TASS transition begins in FY 96, with full implementation beginning FY 97. (POC - COL Lovett, DSN 680-5579/e-mail lovetth@dcst.monroe.army.mil)

#### **Total Army Training System (TATS)**

**Course**. Development and implementation of TATS courses are objectives of the Total Army School System (TASS). Toward this end, one of the key goals of the TASS is to transition from Reserve Component Courseware (RC3)/Active Component courses into TATS courses. The value of TATS courses lie in the Army's ability to ensure that soldiers in all components are trained to the same performance standard. Specifically, a TATS course is defined as a course designed to train the same Military Occupational Specialty/Area of Concentration (MOS/AOC) skill level, Additional Skill Identifier (ASI), Language Identifier Code. Skill Qualification Identifier, or Skill Identifier within the Total Army. The course ensures standardization by training all course critical tasks to the same task performance standard. It may be trained at different sites and may involve use of different media/methods to train the various phases/modules/lessons. However. all course critical tasks are tested/evaluated to the same performance standard. Unlike RC3, all course critical tasks taught to the AC are taught to the RC community. TATS Implementation Guidelines and Policy will be provided to proponent schools September 1995.

Implementation guidelines include resource implications and key Systems Approach to Training considerations associated with TATS courses. The overall goal is for proponent schools to completely transition from RC3/AC courses to TATS courses in the next 2 years. (POC - Ms. Vallery L. Doe, DSN 680-5587/e-mail doev@dcst.monroe.army.mil)

#### TRADOC Regulation 350-70. The

TRADOC Regulation 350-70, Training Development Management, Processes, and Products, is a consolidation of all training development (TD) and some doctrine policy (15 TRADOC regulations, four TRADOC pamphlets, several TRADOC memorandums, and TD policy extraction from two other training regulations) into one regulation. The regulation covers the TD process (the Systems Approach to Training (SAT); training/doctrine/TD management; Total Army School System (TASS); evaluation/QA/instructor certification; training and doctrine product development (individual, collective, self development); and HQ TRADOC, DCST vision of TD initiatives that support Force XXI. including WARRIOR. WARFIGHTER, and WARNET XXI Training Support Package (TSP) description/components; CTC interface; Classroom XXI; distance learning; automation; etc. The result will be--

- o A reduced number of TRADOC regulations
- o Elimination of duplicative/conflicting/outdated policy
- o Streamlined and easier to read/understand policy (via Information Mapping)
  - o Supporting procedural pamphlets
  - o Process clarifica-

tion/simplification/efficiencies and elimination of duplicate processes.

- o Standardized product formats, individual task numbering system, and task titles/verbs
- o Clarified/aligned individual and collective training strategies and supporting plans.
- o Written and graphic links to other products, process phases, and TD-related systems (e.g., CBRS, PPBES) via flow charts (needed for automation).
- o New TRADOC TD management guidance, including TD workload and and manpower management and use of Foreign Disclosure restriction statements (result of

TRADOC IG inspection) as well as safety, risk assessment/management, and environmental considerations (DA mandate) in all training/products. (POC - Rachel Serio, DSN 680-5576/e-mail serior@dcst.monroe.army.mil)

Gender Integrated Training (GIT): In October 1994 Forts Jackson and Leonard Wood began executing gender integrated Basic Combat Training (BCT) or GIT, as it has become known. Under GIT, female soldiers no longer attend BCT in all-female companies. Female soldiers are now intermixed with males in gender integrated companies (optimum mix 75% male/25% female). The BCT Program of Instruction (POI) and standards have not changed. TRADOC has formed a Steering Committee headed by CG. Fort Jackson. consisting of representatives from Forts Jackson and Leonard Wood, Fort Benning (BCT Proponent), Army Research Institute (ARI), HQ, TRADOC, and HQDA, ODCSOPS to monitor GIT implementation during this first year and develop recommended policy adjustments needed for successful long term implementation. In support of Steering Committee objectives, ARI will conduct a spring study at Fort Leonard Wood and a summer study at Fort Jackson. The committees' final report to HQ TRADOC will be submitted in Dec 95 with any policy adjustments taking place in FY 96. (POC - SFC Blakey, DSN 680-5621/email blakeyc@dcst.monroe.army.mil)

#### Military Training Structure Review

(MTSR): In January 1993 the Services Interservice Training Review Organization (ITRO) initiated a three-year, Joint Chiefs of Staff supported, review of all initial skills training to eliminate training duplication and create savings. During calendar year 1993, Services consolidated Calibration, Helicopter Maintenance and Water Survival training. Services are now implementing the following consolidations/collocations approved in 1994: Welding -Army and Marine Corps at Aberdeen Proving Ground (APG), MD; Food Service - Army and Marine Corps at Fort Lee, VA: Civil/Construction Engineer - six sites/all services. Army sites are: Fort Leonard Wood, MO and APG, MD. In addition, Navy has moved Corrections Training from Fort McClellan, AL to Lackland AFB, TX. Army, Air Force, and Marine Corps are continuing plans to consolidate/collocate Motor Vehicle Operator Training at Fort Leonard Wood, MO in late FY

96. Army/Marine Corps are implementing cost effective changes to the consolidated Petroleum courses at Fort Lee, Va. On 30 May 1995, the ITRO Executive Board approved additional training consolidation/collocation as follows: Small Boat training (USA/USCG) at Fort Eustis, VA, and (USN/USCG) at Great Lakes, IL, Communications training (USA/USAF/USN/USMC) at Fort Gordon, GA, Lackland, AFB, and 29 Palms, CA, and Supply/Logistics training (USN/USMC) at Athens, GA. (POC - Mr Shepherd, DSN 680-5645/e-mail shepherd@dcst.monroe.army.mil)

# Army Corresponding Education and Training System (ACETS): The Army

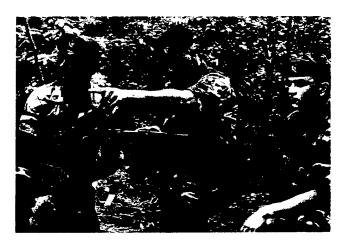
Training Support Center has begun implementation of a program which allows soldiers to obtain college degrees totally through correspondence. For \$37 per semester hour (about \$250 per course including books and administrative fees), both active and reserve component enlisted soldiers and warrant officers will soon be able to obtain degrees from Columbia Union College in Takoma Park, MD. The first degree program will lead to an associate of arts degree in general studies with an emphasis in management. This will be expanded to include a baccalaureate degree.

The Army Institute for Professional Development announces the courses, enrolls students, ships materials, grades submission, and maintains records. Columbia Union College approves all courses, grades the proctored midterm and final exams, provides college credit, and grants the degrees. Currently only four courses are being offered: biology, psychology, principals of management, and mathematics. Other courses are under development and eventually ACETS will offer all the necessary courses leading to associate and baccalaureate degrees.

Most colleges and universities have a 15 semester-hour residency requirement. This program will allow soldiers to acquire credit from one central source and receive a degree from a fully accredited civilian organization, no matter where they live, without a residency requirement. (POC - Paula Dalton DSN 927-5715/2079/ e-mail Daltonp@eustis-emh20.army.mil

External Degree Catalog: The Education and Training Support Division has completed distribution to TRADOC Learning Centers of the External Degree Catalog. The catalog was compiled by DANTES for use by soldiers in selecting degree programs offered by correspondence, with no residency requirement. This edition lists 41 fully accredited colleges and universities offering 360 associate, bachelor's and master's degree programs. All programs are eligible for tuition assistance and use of Montgomery GI Bill-Active Duty. Several colleges are affiliated with Servicemembers Opportunity College Associate Degree (SOCAD) for "contract for a degree" option. Mind Extension University, with its four affiliated institutions, participates in the external degree program. Mind Extension University offers courses delivered via cable television to 7,000 communities nationwide and by satellite. The catalog is a valuable guide for soldiers who want to continue their college education, regardless of duty station or duty schedule, and still receive full tuition assistance or VA benefits, (POC - Mrs. Barbara Davis, DSN 680-5696/e-mail davisb@dcst.monroe.army.mil)

#### LEADER DEVELOPMENT



"Today's Army is growing into the future precisely because we have invested the time, money, human ingenuity, and hard work in leader development over nearly two decades. As we grow we must retain the essence of our leader development process - its warfighting focus. The basics must come first: troop leading procedures; the command estimate process; and intelligence preparation of the battlefield, to name a few." These thoughts

from GEN Sullivan will focus our efforts in the future. We will strive to maintain the finest leader development system in the world in all areas. Some key initiatives are:

Common Core: Common core, common military, and directed/mandated training are being incorporated into a single task list for each leader development course. This common core revision project consist of four phases; Phase I is the development of vertically aligned common core task lists, Phase II is the horizontal alignment of tasks across officer. warrant officer, and noncommissioned officer courses and the approval of common core task lists. Phase III is the revision/development of task summaries and training support packages/products (TSP) and training implementation, Phase IV is the conversion of TSP and task summaries to CD-ROM. Training will be developed and implemented by levels. First priority is entry, precommision, preappointment, platoon level - PLDC, BNCOC, ANCOC, WOCS, WOBC, and OBC. Second priority is company level - FSC, WOAC, and OAC. Third is battalion level - BSNCOC, SMC, CSMC, WOSC, WOSSC, CAS3, and CGSOC. The goal is to implement training 31 Dec 96. (POC -Mr. Ligon, DSN 680-5661/e-mail ligonj@dcst.monroe.army.mil)

Captain's Professional Military

Education (PME): TRADOC is leading a study of the timing and methodology for training Captains to ensure synchronization of training with assignments, i.e. SELECT-TRAIN-UTILIZE. Advanced Courses appear to be timed about right (normally after the first operational assignment). However, while CAS3 produces a superb product, there are two concerns. First, given the current OPTEMPO in our units, the 9 week TDY during operational assignments concerns many senior field commanders. Secondly, Captains are currently attending CAS3 during their second or third operational assignments; after they have held positions that needed CAS3 training. Goal is to brief a new concept to the CSA during 1st QTR. FY 96 with implementation during FY97. (POC LTC Kichen 680-5618/e-mail kichenl@dcst.monroe.army.mil)

#### **ORGANIZATIONS**



We have observed through constructive and virtual simulation that significant increases in lethality, survivability, and tempo are possible in existing organizations using current doctrine when digital communications are integrated horizontally and vertically across combined arms teams.

Top Down Force Design and Organization Modularity: Based on the recently approved Modularity Concept, TRADOC will continue development of modular. functionally-based force that can better support the current force and are aligned with Force XXI development initiatives (examples of modular organizations are provided below). The Top Down Force Design concept focuses on development of organizations designs that eliminate redundant "Cold War" Headquarters and streamline other force C2 structure and organizations. Near term Top Down Force Design/Modularity efforts are designed, evaluated and approved through the semi-annual Force Design Update (FDU) process and executed in the Total Army Analysis (TAA) process. Far term Top Down Force Design/Modularity efforts will be integrated into Force XXI development initiatives. Goal is to field an "Adaptable" Force with improved force tailoring, adaptive packaging and deployability. (POC - CPT Healy, DSN 552-8686/emaii HEALYS@leav-emh1.army.mil)

<u>a. Proposals:</u> Following proposals were developed by their respective proponents and staffed/briefed worldwide to all CINCs, ABCC, Corps and DA Staff by the Force Design

Directorate. The six month process culminated in a decision brief to the BCSA to approve the proposed organizational concepts as Army requirements. Approval of an FDU proposal initiates TOE development for subsequent resourcing competition in the Total Army Analysis (TAA) process.

(1) EPW Brigade Liaison Detachment (BLD): Proponent: Military Police School. The purpose of this concept is to consolidate the existing EPW Battle Command capability into one brigade, thus reducing overall manpower requirements. The BLD concept calls for modular twelve member detachments to expand the EPW brigade commander's span of control, staff planning, coordination, and supervision capabilities beyond current doctrinal limitations. The anticipated impact on Total Army personnel requirements is a reduction of 169 spaces due to consolidation of the Army's EPW Command and two EPW Brigades into one EPW Brigade with modular BLD Detachments. Concept approved. (POC: MAJ Uphoff, DSN 552-8638/email uphoffb@ leav-emh1.army .mil)

(2) Enhanced Army Special Operations Forces (ARSOF) Logistics Support: Proponent: Special Operations Command. The purpose is to enhance ARSOF CS\CSS through modularity by providing mortuary affairs, fabrication and renovation, and laundry and bath services to support ARSOF units. Doctrinally, the Army service Component Commander (ASCC) is responsible for providing CSS to deployed ARSOF units. In those increasing situations where the ASCC is unable to provide all necessary CSS to ARSOF units, the Special Operations Support Battalion (SOSB) must deploy adapted CSS asset packages. The SOSB is not adequately structured to provide a full support package and, therefore, must be augmented. This proposal will add one 43-man General Support Co to the 526th SOSB. Enhanced ARSOF Logistics Support (GSC) concept approved. Concept approved. (POC: MAJ Long, FDD, DSN 552-8659/ email longk@leav-emh1.army.mil)

(3) Enhanced Army Special Operations Forces (ARSOF) Signal Support: Proponent: Special Operations Command. Provides increased communications support to overseas presence SOF. Currently, two of the three overseas presence SOCs do not have dedicated

SOF communications support. This proposal will add three 15-man and one 4-man signal detachments to USASOCs 112th Signal Battalion. The concept calls for each signal detachment to be forward stationed, attached to ASCC, and OPCON to the SOC. Concept Approved. POC: MAJ Long, FDD, DSN 552-8659/ email longk@leav-emh1.army.mil).

- (4) Fire Support Element (FSE) for EAD Aviation Brigade: Proponent: Field Artillery School. Purpose is to create a corps attack regiment FSE in each corps aviation brigade to enable synchronization of fire support planning, fires coordination and execution for the corps aviation attack assets. Each 6-man FSE will be documented as a modular derivative to the Corps Artillery HHB and will be attached to meet specific MACOM or theater requirements. Concept approved. FSE for Corps Aviation attack Regiment. Concept approved. (POC: MAJ Engebretson, DSN 552-8677/email engebres@leav-emh1.army.mil)
- (5) MI Reserve Component (RC)
  Redesign: Proponent: MI Center. The purpose is to modularly redesign the RC MI organizations as a follow-on to the AC MI FDU, approved January 1993. The proposed design moves away from fixed company/battalion team structure and moves toward a large number of small modular teams which are oriented by region to augment AC organizations. Teams are modular and can be force packaged by derivative. UIC to support force projection operation. Reduction in personnel equipment requirements and modernization efforts will be realized. MI RC Redesign. Concept approved. Concept approved. (POC: Miss Rose, DSN 552-8672/email roseb@leav-emh1.army.mil)
- (6) Movement Control Reorganization:
  Proponent: Chief of Transportation. Purpose is to design an adaptable movement control structure for ARFORs, corps and divisions with required deployable command and control capability.
  Existing movement control teams will be modularized with increased interoperable capability supporting movement control for force deployments and theater operations. The reorganization provides primary staff for EAC and corps movement control battalions and movement control teams capable of 24-hour operations.
  Concept approved. POC: CPT Sampson, FDD, DSN 552-8631/email

sampsonk@leav-emh1.army.mil)

- (7) EOD Reorganization (Modular): The EOD Reorganization changes the organization and designation of the Explosives Ordnance Detachment Control Team (EODCT) to Ordnance Battalion. It also changes the organization and designation of the Ordnance Detachment to Ordnance Company. This reorganization strengthens the battalion command and control functions, changes team composition and improves the EOD battlefield capability and mobility by increasing the number of EOD response teams and by eliminating unessential/burdensome team equipment. (POC: CPT Sampson, DSN 552-8631/email sampsonk@leav-emh1.army.mil)
- (8) Mortuary Affairs Support Designs (Modular): This concept/design provides peacetime and wartime support to search, recover, identify, evacuate, and when required, temporarily inter, disinter, and re-inter deceased personnel. Implementation of this program will eliminate the six current nonstandard unit designs and replace them with two MA Collection Company designs that provide modular support to a force projection Army tailored to theater requirements. (POC: Mrs. Peterson, DSN 552-8626/email peterss1@ leav-emh1.army.mil)
- (9) Shower, Laundry, and Clothing Repair Concept: Proponent: Quartermaster School. The purpose is to provide deployable shower, laundry, and clothing repair services to soldiers forward from corps to brigade. Rear areas will be supported by Host Nation Support, and/or quartermaster field service companies. The quartermaster field service company will be able to support a force of 21,000 personnel with a minimum of one shower and a maximum of 15 pounds of laundry per soldier per week to be delivered in 24 hours. A modular field service section can support a BDE size element of 3500 personnel. This proposal increases laundry capability and reduces personnel and water requirements by taking advantage of equipment modernization efforts when the Laundry and Dry Cleaning System (LADS) replaces the current M85. (POC: Mrs. Peterson, DSN 552-8626/email peterss1@ leav-emh1.army.mil)
- <u>b. FDU 95-2:</u> These proposals were developed by their respective proponents and

approved for field staffing by the TRADOC Deputy Commander:

- (1) Aviation Modularity (Split based Operations). Proponent: Aviation School. The purpose is to implement modularity so aviation units can conduct and sustain two separate simultaneous operations (Split Based Operations). and to identify all personnel and equipment needed to support employment of aviation elements below battalion level (Aviation Modularity). Split Based Operations requires the elimination of critical single density personnel and equipment in Aviation brigades, battalions, and support organizations. It also requires moving the Class III/V handling assets in Light and Airborne Division Aviation Brigades into the battalions. Aviation Modularity requires changing aviation organizations to provide TOE visibility of the elements needed to perform Split Based Operations. This Aviation Branch Chief approved proposal documents MSTs designed to support the smallest deployable unit (SDU) which is usually a company-level organization. Documentation change will not generate significant personnel or equipment bills. (POC: MAJ Engebretson, DSN 552-8677/email engebres@leav-emh1.army.mil)
- (2) GS Electronic Maintenance
  Reorganization. Proponent: CASCOM. Purpose is to consolidate three separate TOE (43549LH, 43549LJ, 43549LJ) into one GS Electronic
  Maintenance platoon. Current structure does not allow the flexibility needed to provide electronic repair support for contingency and follow on forces. The placement of automated test equipment (ATE) is only in one of the three platoons, although all platoons require this test equipment. The new structure supports modularity, improves repair capability and deployment planning, does not change doctrine and saves 329 spaces. (POC: Mrs. Peterson, DSN 552-8626/email peterss1@ leav- emh1.army.mil)
- (3) Transportation Rail Reorganization. Proponent: CASCOM. Purpose is to design a modular rail structure capable of deploying only a minimal force in order to provide rail operation in theater. Converts existing battalion's four single function companies to multifunctional Rail Operating Companies each capable of providing total rail operations over 40-60 miles of track. The rail battalion is a one of a kind organization that falls in on and operates existing infrastructure in

- theater. All force structure is in the USAR. There is no increase in personnel or equipment, but the funit becomes more deployable and more capable. (POC: CPT Trauger, DSN 552-8625/email traugert@leav-emh1.army.mil)
- (4) Light Infantry Division Maintenance Reorganization. Proponent: CASCOM. Purpose is to provide the Light Infantry division with full MARC to make the LID self-sufficient for DS maintenance. LID maintenance TOE were severely constrained due to Army of Excellence strength and sortie limitations. The LID TOE (43217L AND 43218L) were reviewed and full MARC applied, resulting in a growth of 59 soldiers. Savings from Corps level maintenance plugs that had offset the AOE capability shortfall resulted in total savings of 578 spaces. LID reorganization has been approved by TOE Review Board pending FDU results. Proposal is consistent with all Force XXI divisional CSS redesign efforts, so will still be operative in a Force XXI Army. Implementation decision will be on hold pending Force XXI Division Design decision. (POC: CPT Sampson, DSN 552-8631/email sampsonk@ leav-emh1.army.mil))
- (5) Diving Reorganization. Proponent: Engineer School. This concept provides commanders with the required engineer diving forces at theater Army through brigade level. Converts existing teams into modular, more deployable Heavy and Light teams. Heavy teams orient toward port areas, Light teams (much more mobile) operate in the Corps area. The diving forces will dominate and thoroughly exploit the underwater environment (battle space) from the theater/corps ports, harbors, and coastal zones to the most forward rivers in a brigade's area of operation. The concept provides updated doctrine and revised organizations to support offensive, defensive, retrograde, river crossing, riverine, joint riverine, deception, port terminal, logistics over-the-shore, joint logistics over-the-shore, transportation watercraft, area damage control, and post-conflict operations. (POC: MAJ Lepley, DSN 552-8621/email lepleyd@leavemh1.army.mil)
- (6) MLRS Battalion Fire Direction Officer and Battalion Motor Officer. Proponent: Field Artillery School. Purpose is to improve the capability of the non-divisional MLRS Bn to coordinate joint, deep fires by adding a Bn Fire direction Officer (O3), due to the increased range

and lethality of the MLRS Family of Munitions (MFOM) and proliferation of long range sensors. Purpose is to improve the capability of the MLRS Bn to perform maintenance and sustainment operations, since the Bn S4 must focus more on management of MFOM. Standard FA battalions currently have these positions. Adds 2 slots per Bn. Bill is 24 AC, 16 RC. (POC MAJ Hardin, DSN 552-8666/email hardind@leav-emh1.army.mil)

- (7) Q-37 Target Acquisition Detachment for Corps Artillery. Proponent: Field Artillery School. Purpose is to provide Corps with organic Target Acquisition capability by adding a Q-37 TAD per Corps. Uses the TOE of an existing, effective organization to provide the capability. Each CTAD consists of 1 officer, 2 warrant officers and 36 enlisted soldiers. QTADs to support four light divisions are already on the ground. Provides Corps commander with a wide variety of METT-T driven employment options. Army owns sufficient equipment to support requirement. Organization could replace a non-standard TAB in Europe, saving spaces in Europe. Bill is 117 AC/39 RC. Strongly supported by DCSOPS. (POC MAJ Hardin, DSN 552-8666/email hardind@leav-emh1. army.mil)
- (8) Increased Division Advanced Quick Fix. Proponent: MI School. Purpose is to increase the number of AQFs at Division from 3 to 4. There is no procurement issue in fielding the AQF, as the plan is to redistribute existing assets. (POC: Miss Rose, DSN 552-8672/email ROSEB@leav-emh1.army.mil)
- (9) Division Command Post Security and **Division Central Collection Point Operations.** Proponent: Military Police School. Purpose is twofold: (1) Fill the void created by the elimination of the Band's secondary mission of augmenting Division MPs in the conduct of Division CP security and Division Central Collection Point (DCCP) operations, and (2) Correct AOE deficiencies in MP force structure. HQDA approved a new mission statement that eliminated the Band security augmentation mission, implemented to offset MP force structure reductions in AOE. Proposal standardizes all divisional GS MP platoons at 30 personnel (3x9 soldier squads, and a 3 soldier platoon HQ). This proposal restores MP force structure consistent with mission requirements. TRADOC command position is to restore the divisional bands secondary security mission or

failing that, to recommend this proposal. (POC: MAJ Uphoff, DSN 552-8638/email uphoffb@leav-emh1.army.mil)

(10) Theater Tactical Signal battalion. Proponent: Signal Center. Purpose of this ISC-sponsored, Signal-supported proposal is to redesign two battalions (86th & 40) of the 11th Signal Brigade, Ft Huachuca. Design objective is to convert an EAC CONUS-based contingency Signal Battalion and a Command Operations Battalion into functional and modular-oriented signal units. The redesign converts non-standard units into standard TOE battalions, improves training and operation, fixes Desert Storm/Shield deficiencies, improves deployability, minimizes excessive task organization, and provides a bridge to future signal designs. Battalions will be better able to meet long term communication and information needs of Army Service Component Commanders, JTF Commanders, ARFOR Commanders, CINCs. Minor equipment requirement is manageable through redistribution of existing excess equipment, and there's no personnel bill. (POC Mr Wittenburg, DSN 552-8685/email wittenbd@leav-emh1.army.mil)

(11) Civil Affairs/PSYOPs Planners at Corps and Division. Proponent: USASOC. Purpose is to provide minimum manning levels required for Corps and Division commanders to effectively plan for, integrate, and conduct CA and PSYOP throughout the full range of military operations. Results from lessons learned from previous operations and the new operational environments the Army faces in the future. Traditional augmentation from US Army Civil Affairs and Psychological operations Command (USACAPOC) is not adequate and does not reach units in a timely manner. Anticipated increase in personnel is 34 AC/24 RC based on 4 corps and 10 divisions. (POC MAJ Long, DSN 552-8659/email longk@leav-emh1.army.mil)

#### **MATERIEL**

Continued budget cutbacks and downsizing of our force have made it imperative that the Army analyze future warfighting capabilities of the force by evaluating, identifying, and prioritizing "Critical" battlefield systems that best support the Army's "Vision of the Future Battlefield." TRADOC, as the architect of the future Army, has the responsibility to provide an organized, trained, and well equipped modern force capable of maintaining the battlefield edge and to achieve Land Force Dominance as the Army transitions into the 21st century. A means of achieving this goal is the leveraging of technology and modernization of our future organizations, so necessary if we are to maintain the combat superiority we now enjoy. In the next few years, you will see a multitude of system upgrades and fieldings. Some of the materiel improvements are:

M4 Carbine: A shortened variant of the M16A2 rifle which will replace all M3 .45 Caliber Submachineguns and selected M16A2 rifles and M9 pistols. Eighty percent commonality of parts with M16A2. FUE FY95. (POC: Mr. Schmidt, DSN 680-2415/ email Schmidth@Monroe-emh10.army.mil)

Medium 7.62mm Machine Gun

Upgrade: The Army is conducting a test and evaluation to select a more reliable weapon to replace M60 machine guns in Active Component infantry units. Primary candidates are the M60E4 from SACO Defense or the M240E4 from FNMI. Both of these models are modified versions of an existing weapon. Providing production funding is secured, first unit equipped for the upgraded 7.62mm MG is scheduled for 1QFY97. (POC: Mr. Schmidt, DSN 680-2415/ email Schmidth@Monroe-emh10.army.mil)

M113A3 (Upgrades): These improvements will allow the M113 mobility, matching the rest of the maneuver forces. Upgrades to the M113 consist of external fuel tanks, A3. Reliability Improvement of Selected Equipment (RISE) Power (engine and cross drive transmission upgrades), enhanced armor protection, ramp and belly armor, and improved driver controls. FUE FY94; completion FY02.

(POC: SFC Bridier, DSN 680-4078/ email Bridieri@Monroe-emh10.army.mil)

Bradley Modernization: The A2 ODS and the Bradley A3 will evolve from the A2. ODS (FUE FY96) addresses required fixes identified during Operation Desert Storm. Those fixes include a combat identification system, GPS/POSNAV, driver's thermal viewer and missile countermeasure device. The Bradley A3 (FUE FY00) is the objective system. Planned A3 improvements are core electronic architecture, 2d generation FLIR acquisition, command and control software, commander's independent viewer and ballistic fire control. POC: MAJ George Conrad, DSN 680-4083/email Conradg@Monroe-emh10.army.mil)

**Bradley Stinger Fighting Vehicle -**Enhanced (BSFV-E): Enhanced BSFV is a series of modifications to upgrade the current BSFV to an automated air defense system. The enhancement means that the BSFV will no longer be an armored taxi for manportable Stinger gunners (MANPADS) but an actual fire unit akin to the Avenger. The BSFV-E will have a four-missile Standard Vehicle Missile Launcher (SVML) to replace the TOW launcher. Other modifications will include a Stinger reticle in the Integrated Sight Unit (ISU) and various other improvements that will permit launching of Stinger missiles against cued aerial targets without the need for the gunner to dismount. Eight BSFV-E weapon systems and two BSFV- E Platoon Leader Vehicles will participate in the Brigade 97 AWE. FUE FY97. (POC: Mr. Ebner, DSN 680-2948/ email Ebneri@Monroe-emh10.army.mil)

Thermal Weapon Sight (TWS)

AN/PVS-13: A replacement for the AN/PVS-4,AN/TVS-5 and AN/PAS-7, this sight uses thermal technology which performs well in severe darkness, adverse weather and obscurant. It has one main body and three interchangeable front optics which change field of view, power, and range. FUE FY96. (POC: SFC Bridier, DSN 680-4078) / email Bridierj@Monroe-emh10.army.mil)

Multi-Purpose Individual Munitions/Short Range Assault Weapon (MPIM/SRAW): The Army has entered into

a cooperative program with the USMC to develop a shoulder-fired multipurpose weapon to replace the AT4 and the M72 LAW. The Army's warhead developed in the tech base Multi-Purpose Individual Munitions (MPIM) program is connected to the flight module developed by the USMC for their SRAW. The Army's MPIM/SRAW will weigh about 20 lbs and be about 36 inches long in the launch container. It is a fire and forget, inertially guided, fire from enclosure system with very high probability of hitting a bunker at ranges up to 300 meters. FUE is FY00. (POC: CPT Siegmund, DSN 680-2980/ email Siegmuni@Monroe-emh10.army.mil)

Improved Mortar Ballistic Computer (IMBC): Replaces current 23 MBC. The IMBC will use state-of-the-art technology to provide digital message capability and mortar firing data communications. Funding for FP1 only; FUE FY97. (POC: CPT Siegmund, DSN 680- 2980/email Siegmunj@Monroe-emh10.army.mil)

#### Commercial Space Package (CSP):

The concept behind the CSP is to field a limited, but affordable, near-term space support capability in each of our fielded corps and divisions, today. CSP is one of several initiatives in TRADOC intended to transition the Army into the 21st century. CSP consists of commercial satellites and ground terminals networked to provide JTF/Army commanders with robust communications, weather, and multi-spectral imaging capability. FUE FY95. (POC: MS Laine Brickhouse, DSN 680-2204/email Brickhol@Monroe-emh10.army.mil)

Air Volcano: UH-60 mounted mine launcher, can dispense 960 mines in less than 30 seconds. FUE FY95. (POC: Mr. Morison, DSN 680-2285) email Morisona@Monroe-emh10.army.mil)

KIOWA WARRIOR: Advanced Armed Reconnaissance Helicopter capable of flying in day or night: Weapon systems consist of Hellfire Missiles, 2.75" rockets and .50 Cal MG. Congress has approved the buy of 383 Kiowa Warrior's to be fielded in cavalry units and Light Division Attack Helicopter Battalions. Currently, 48 percent of the units are fielded, to include much of the XVIII Airborne Corps. Fielding

should be complete by FY98 (POC: CPT Lowery, DSN 680-3992/ email Loweryj@Monroe-emh10.army.mil)

Combat Identification: This horizontal technology initiative is a multi-phased program to field combat identification devices to complement improvements in DTLOMS. Combat Identification program is being worked with other services and Allied/Coalition partners. Program combines situational awareness and improved target identification to reduce fratricide risk. Quick-fix devices, employing currently available technology (NVG and thermal), will be followed by battlefield combat identification system (BCIS). BCIS is a millimeter wave question-and-answer friendly identification device. Integration of BCIS and mid/far-term program with digitized battlefield being worked. BCIS currently in EMD testing with fielding decision to follow Task Force XXI. (POC: Mr. Hammond, DSN 680-5864/email Hammondb@Monroe-emh10.army.mil)

Longbow Apache: The Longbow Apache consists of a Multi-Millimeter Wave Fire Control Radar, a Radio Frequency Interferometer and Longbow Hellfire missile. System provides a true fire-and-forget adverse weather capability. Results of this system show quantum improvement in combat effectiveness. FUE is FY97. (POC: MAJ Neely, DSN 680-2300/ email Neelyc@Monroe-emh10.army.mil))

Advanced Field Artillery Tactical
Data System (AFATDS): A lightweight,
distributed architecture computer network that
provides command, control and fire direction
functions for FA and coordination and planning
functions for FS agencies. FUE FY96. (POC:
MAJ Burke, DSN 680-2820/ email
Burkew@Monroe-emh10.army.mil)

XM915/916 Dual Purpose Improved Conventional Munitions (DPICM),
105mm Cartridge: DPICM projectile has a submunition payload of 42 dual purpose XM80 submunitions with improved lethality and self-destruct fuse. XM915 is compatible w/M119A1 Howitzers and XM916 is compatible w/all 105mm Howitzers. FUE N/A. IOC 4QFY97. (POC: MAJ Burke, DSN 680-2820/ email Burkew@Monroe-emh10.army.mil)

#### Firefinder (FF) AN/TPQ-36 Block II:

The Block II Program consists of upgrades to HMMWVs and a Lightweight Multi-Purpose Shelters (LMS). Improvements will reduce emplacement/ displacement, drive on/off C-130 capabilities, self survey, reduced crew size (8 to 6) and remote operations. Self survey capabilities improves survivability through mobility. FUE 2QFY96. (POC: SFC Phillips, DSN 680-2177/ email phillip3@Monroe-emh10.army.mil)

Meteorological Measuring Set (MMS)

AN/TMQ-41: MMS is a mobile, fully automated non-radiating artillery meteorological (Met) system capable of hourly atmospheric soundings and Met computations of the atmosphere up to 30km. The system will be capable of multi-radio sound tracking. FUE 1FY96. (POC: SFC Phillips, DSN 680-2177/email phillip3@Monroe-emh10.army.mil)

**Hydrogen Generator (HG)** 

AN/TMQ-42: The HG will be a mobile system capable of producing 150 cubic feet of hydrogen gas per hour for filling meteorological balloons used by field artillery meteorological sections and store 300 cubic feet. FUE 3QFY96. (POC: SFC Phillips, DSN 680-2177/email phillip3@Monroe-emh10.army.mil)

**Army Tactical Missile System** (ARMY-TACMS) Block la: A modification of the current Army-TACMS Block I, Block la will provide the capability to attack targets at ranges in excess of 300km. The payload will be reduced from 950 M74 anti-personnel, antimateriel (APAM) bomblets to approximately 275, which more than doubles the Block I range using the same motor. Block I guidance is inertial, utilizing a ring laser gyro and is totally autonomous after launch. The Block la missile will incorporate a global positioning system (GPS) receiver as well, to update missile position in flight and increase accuracy to maintain effectiveness at greater ranges. FUE FY98. (POC: Mr. Hurst, DSN 680-2178/ email Hurstj@Monroe-emh10.army.mil)

M109A6 Self-Propelled (SP) 155mm Howitzer (Paladin): A product improved M109A2/A3. Incorporates all A4 and A5 improvements plus provides self-locating, self-laying, on board automated fire control, increased range, responsiveness, reliability, and crew survivability. Complete fielding FY99. (POC: MAJ Burke, DSN 680-2829/ email Burkeg@Monroe-emh10.army.mil)

M109A4 SP 155mm Howitzer: A

product improved M109A2/A3. Intermediate step required before or simultaneously applied during conversion to M109A5. Materiel Change improves NBC and RAM. FUE 1QFY90, conversions ongoing. (POC: MAJ Burke, DSN 680-2820/ email Burkeg@Monroe-emh10.army.mil)

M109A5 SP 155mm Howitzer: A

product improved M109A2/A3/A4. Materiel Change adds a modified armament systemsame tube as Paladin (M109A6) allowing M109A5 to fire M203 charge and obtain same range as Paladin--30km. Conversions ongoing. (POC: MAJ Burke, DSN 680-2780/ email Burkeg@Monroe-emh10.army.mil)

M119A1 Towed 105mm Howitzer: Air transportable and air dropable with increased range (19km) and responsiveness. Fires all 105mm ammunition plus new M913 HERA and XM 915 DPICM. Complete fielding 4QFY95. (POC: MAJ Burke, DSN 680-2820/ email Burkeg@Monroe-emh10.army.mil)

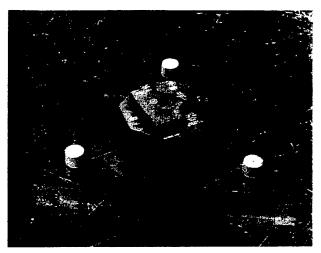
**Joint Tactical Ground Station** 

(JTAGS): An air transportable, information processing system which receives and processes in theater, direct down-linked data from Defense Support Program Satellite-based sensors. Disseminates warning and alerting of ballistic missile launches, predicts impact point and time, and estimates launch point. Provides data to TMD Active Defense, Attack Operations and Passive Defense Operations. FUE FY97. (POC: Mr. Woolever, DSN 680-2932/ email Wooleve2@Monroe-emh10.army.mil)

120mm Battalion Mortar System: Will replace 4.2 inch mortar. Max range 7200 meters/min range 200 meters. System procured in two configurations, towed version (M120) and carrier version (M121) mounted in M1064. FUE (M120) 4QFY93; FUE (M121) 3QFY95. (POC:

CPT Siegmund, DSN 680-2980/ email Siegmunj@Monroe-emh10.army.mil)

#### Wide Area Munitions (WAM):



WAM is a ground emplaced munition which detects and then attacks vehicles from the top at ranges of up to 100 meters. The hand emplaced version (HEWAM) will be fielded in FY97. (POC: Mr. Morison, DSN 680-2285/email Morisona @Monroe-emh10.army.mil

Javelin: A man-portable anti-tank system for the U.S. Army and U.S. Marine Corps. The system provides high lethality against conventional and reactive armor and will replace the Dragon. The Javelin is comprised of two major components: a reusable command and launch unit (CLU) and a missile sealed in a disposable launcher container. The CLU incorporates an integrated day/night sight and provides target engagement capability in adverse weather. The CLU may be used in stand-alone mode for battlefield surveillance and target detection. FUE FY96. (POC: CPT Siegmund, DSN 680-2980/ email Siegmuni ❷Monroe-emh10.army.mil)

**Enhanced Tactical Radar Correlator** 

(ETRAC): A tactical mobile ground processor (normally at Corps) for receiving advanced synthetic aperture radar system (ASARS) data received from U2R via a direct data downlink. ETRAC's major function is to provide ASARS imagery to Modernized Imagery Exploitation System (MIES) for exploitation, situation and target development. It is C-130 self-deployable. XVIII Airborne Corps received the first ETRAC in May 1995. The second system is slated for

V Corps in FY96. (POC: Mr. Waller, DSN 680-3441/email Walleri@Monroe-emh10.army.mil)

**Modernized Demolition Initiators** 

(MDI): MDI represents the military application of commercial shock tube technology to detonate explosives. MDI will be the primary system used to prime and detonate military explosives. It offers increased safety and simplicity compared with current systems. Conventional blasting caps and detonating cord will be retained for special applications not suited for MDI. Will begin procurement and fielding in FY95. (POC: Mr. Morison, DSN 680-2285/ email

Morisona@Monroe-emh10.army.mil

Deployable Universal Combat
Earthmover (DEUCE): A combat support
dozer that will be fielded to combat engineers in
the Light Infantry and Airborne units and will
displace these units; M9 Armored Combat
Earthmover (ACE), D5B, D7F, D7G dozers and
associated prime movers with trailers. DEUCE
will be fielded in August 1997. (POC: Mr.
Morison, DSN 680-2285,/ email
Morisona@Monroe-emh10.army.mil)

Selectable Lightweight Attack
Munition (SLAM): A lightweight, multipurpose munition which can be used as a magnetically fused mine, a tripline activated offroute mine, a timed demolition charge or as a command detonated device. When used as a mine, it has a self destruct function. Will be procured in limited quantities for light forces in FY96. (POC: Mr. Morison, DSN 680-2285/email Morisona@Monroe-emh10.army.mil

Patriot Advanced Capability - 3

(PAC-3): Patriot is a high/medium advanced surface-to-air guided missile air defense system. PAC-3 is a major upgrade to the Patriot system, consisting of integrated, complementary improvements that will be implemented by a series of phased, incrementally fielded materiel changes beginning in FY96. PAC-3 will increase battlespace and lethality by enhancing current detection and engagement capabilities. The PAC-3 missile (ERINT) is a key component of the overall improvements to the Patriot system. It will provide essential increases in battlespace, accuracy, and kill potential against TBMs. Total PAC-3 capability projected to be

completed by end of FY98. (POC: Mr. Woolever, DSN 680-2932/ email Woolver2@Monroe-emh10.army.mil

M1A2: Deliveries of the M1A2 upgrade tank system for the U.S. Army began in the fall of 1994 and are scheduled to continue through the turn of the century with a production of 1079 tanks FUE is scheduled for 1CD 1QFY96. By year 2005, the technology used to develop and build the M1A2 will be nearly 20 years old. The armor community is developing a campaign plan for modernizing the tank force for the foreseeable future. This plan includes a midterm (2005/2005) tank system currently known as Tank 1080. (POC: MSG Fletcher, DSN 680-4497/ email Fletcher@Monroe-emh10.army.mil

**Up-Armored HMMWV (M1114):** This HMMWV vehicle (M1114) will be produced in a Scout, Military Police, and an Air Force variant. System will possess increased ballistic protection against 7.62 AP small arms fire, 155/152MM artillery airburst, small antipersonnel mines, light anti-armor mines, and unexploded artillery submunitions for the crew compartment. Limited user testing was completed in March 1995. Ballistic testing was conducted May 1995. User assessment testing is scheduled for August 1995. Currently thirty (30) XM1109 Up-Armored HMMWV variants are deployed to Haiti with 2ACR(L) and five (5) XM1109's are in Bosnia with the UN Commander of UNPROFER. FUE is March/April 1996 with 2ACR(L). (POC: MAJ Stevens DSN 680-3124/ email Stevens1@Monroe-emh10.army.mil

Armored Gun System (AGS): The AGS is a lightweight 105MM mobile gun system that is air deployable/low velocity air dropable (LVAD) and more lethal, survivable, deployable, and supportable than the current M551A1 Sheridan. The AGS is a three-man crew, autoloader (21 ready rounds), day/night thermal sight, with increased ability to acquire and engage targets to maximum effective range of weapons systems. AGS is currently in EUT&E at Fort Pickett, VA. LRIP is scheduled for FY98. FUE FY99 to 3/73rd Armored Battalion and FY01 to 2ACR(L). (POC: MAJ Stevens DSN 680-3124/ email Stevens1@Monroe-emh10.army.mil

Long Range Advance Scout Surveillance Systems (LRAS3): This system will provide the Maneuver Commander timely, accurate battlefield information. LRAS3 is a Scout mounted, target acquisition system, man portable, day/night, all weather system that will allow Scouts to identify/acquire enemy targets outside the enemies engagement ranges. Current funding is for 650 systems. FUE FY01. (POC: MAJ Stevens DSN 680-3124/ email Stevens1@Monroe-emh10.army.mil

Improved Target Acquisition System (ITAS): ITAS is an upgrade to current ground TOW and HMMWV TOW target acquisition and fire control systems. ITAS improves target detection and acquisition range. Pathfinder for 2d GEN FLIR technology and ITAS will allow for growth for follow-on to TOW missiles or Advanced Missile System - Heavy (AMS-H). First prototypes were delivered January 1995. LUT started in May 1995 and OTRR started on 18 May 1995 at Yuma Proving Grounds, AZ. (POC: MAJ Stevens DSN 680- 3124/ email Stevens1@Monroe-emh10.army.mil

Army PREPO Afloat - Army War Reserve - Three: The Army War Reserve Three (AWR-3) includes sustainment supplies and equipment for a contingency corps, a humanitarian effort, a combat brigade, and a port opening capability. Supplies include all classes needed to sustain deployed contingency corps units up to C+30. Humanitarian support and port opening ships provide watercraft, trucks, forklifts, cranes, container handlers, food, and shelter items. Combat brigade ships have equipment and 15 days of sustainment supplies for 2 mechanized and 2 armor battalions. The Combat Brigade Afloat is on station and ready for deployment. (POC -Mr. Sova, DSN 680-3005, email-Sovaj@Emh10.Monroe.Army.Mil)

Improved Fox - NBC Reconnaissance System (NBCRS): NBCRS is an armored reconnaissance vehicle equipped to detect, sample, identify, mark, and report the presence of NBC hazards. NBCRS will rapidly and accurately determine extent and nature of NBC contamination hazard over a specified area with expeditious transmission of information to supported units. Planned improvements will allow for digital communication to disseminate critical information to supported units via the Maneuver Control System (MCS). First Unit Equipped (FUE) is FY98 to Force Package 1 units. (POC - LTC Bechtold, DSN 680-2808, email Bechtolm@Emh10.Monroe.Army.Mil)

**UH-60Q MEDEVAC Helicopter:** The UH-60Q will provide significantly improved medical, navigation and communication capabilities over the currently employed MEDEVAC (UH-1/UH-60A) aircraft. Enhanced medical capabilities are needed to provide wounded or injured soldiers with state-of-the-art medical care to increase their survival chances on the extended future battlefield. The mission of the UH-60Q is to: evacuate casualties from forward locations; conduct combat search and rescue; transport emergency medical teams and supplies; and perform ship-to-shore medical evacuation. UH-60Q aircraft will be fielded to Force Package 1 "first-to-fight" divisions starting in FY98 if funding is approved. (POC - CPT Cournoyer, DSN 680-3158, email Cournoyr@Emh10.Monroe.Army.Mil)

Aircraft Nondestructive Test **Equipment (NDTE):** NDTE will provide Army Aviation Maintenance with state-of-the-art commercial equipment capable of inspecting aircraft components and structures for materiel defects/damage without aircraft disassembly. NDTE will greatly simplify inspection procedures, reduce time required to perform inspections and also be capable of inspecting composite materials found on modern Army aircraft. The NDTE program includes Eddy current, Ultrasonic, Harmonic Bond, and X-Ray test equipment. All divisional and non-divisional AVIM units (FP 1-4) will receive NDTE systems. Aviation Powertrain Repairman (MOS 68D) with an Additional Skill Identifier (ASI) of N2 will be designated operators of the NDTE equipment. Initially a 9 week resident training course conducted by the U.S. Air Force at their training facilities will train selected 68D personnel. The N2 ASI will be awarded to those 68D's who successfully complete the course. Fielding to Force Package I units will begin in Feb 96. NDTE fielding will be completed by Feb 97. (POC - Mr. Holm, DSN 680-2184, email Holms@Emh10.Monroe.Army.Mil)

Integrated Family of Test Equipment (IFTE) Base Shop Test Facility

(BSTF): The IFTE BSTF is Automatic Test Equipment (ATE) used at the Direct Support and General Support levels of maintenance, to test and isolate faults in weapon system line replaceable units (LRU) and shop replaceable units (SRU). It is designed for state-of-the-art testing of digital, hybrid, and RF electronics, including spread spectrum technology. The station is either housed in a standard Army S-280 shelter, forming the BSTF, or floor mounted in a free standing version. The BSTF is transportable by a 5 Ton truck. Initial FUE was FY92, with continuous fieldings through FY02. The BSTF is currently planned to support ASAS, AVENGER, DGM, DRAGON/TOW, GBS, HAWK, KIOWA WARRIOR, MLRS, NBC-FOX, PALADIN, TTC/TTY-39, AN/VRC-12, and BRADLEY TOW II. (POC - Mr. Marsico, DSN 680-3155, email Mariscow@Emh10.Monroe. Army.Mil)

**Biological Integrated Detector** System (BIDS): BIDS will quickly and reliably detect and identify the presence of biological warfare agents. The BIDS is a detector suite contained in a shelter mounted on a heavy HMMWV and included a trailer mounted generator. BIDS will incorporate existing long-range secure voice communications and data transmission systems to rapidly report vital information to mitigate large-area BW effects. System improvements are planned for the FY99/FY03 timeframe which will make the BIDS even more effective. The system is UH-60, CH-47D, and C-130 deployable. There will be one active BIDS platoon and one USAR company fielded with 7 systems by 3Q FY96. (POC - LTC Bechtold, DSN 680-2808, email Bechtolm@ Emh10.Monroe.Army.Mil)

XM56 and XM58 Smoke Generation Systems: The XM56 and XM58 are large area, mobile smoke generator system which produces visual or infrared smoke. Future improvements will include millimeter wave (MMW) obscurant capability. The smoke generator is modular in construction including a power module, visual module, IR module, and future MMW module. The power module uses a gas turbine to disseminate obscurants. The XM56 is HMMWV mounted and the XM58 is mounted in a M113 tracked vehicle. The

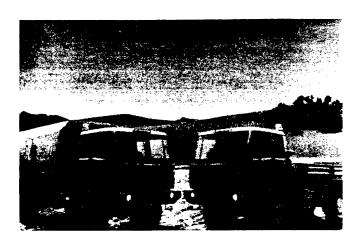
system requires only two fuels: Vehicle/turbine fuel, and fog oil. These systems will be fielded to Force Package one units begining in May 97. (POC - Mr. Dixon, DSN 680-4413, email Dixonw@Emh10.Monroe.Army. Mil)

Remote Sensing Chemical Agent
Alarm (RSCAAL): RSCAAL is a remote sensing chemical agent alarm that detects nerve and blister agent clouds at distances up to 5 KM. This system is passive infrared sensor with an onboard microprocessor. It uses line-of-sight and scans along a 60 degree arc from the detector. RSCAAL components consist of detector, retractable tripod, transit case, vehicle mount, and standard military power source. The basis of issue is one per NBC Reconnaissance Team and fielding will begin in late 95. (POC: LTC Bechtold, DSN 680-2808email Bechtolm@Emh10. Monroe.Army.Mil)

Combat Service Support Control System (CSSCS): Provides the logistics commander and staff the ability to rapidly collect, analyze, and disseminate critical logistics, medical, financial and personnel information. CSSCS will provide timely situational awareness and force projection information to determine the capability to support current operations and sustain future operations. Fielding begins in Nov 96 to III Corps COSCOM and then to other III Corps units. (POC - Mr. Van Alstine, DSN 680-3019, email Vanalstp@Emh10.Monroe.Army.Mil)

Corps and Theater ADP Service
Center-Phase II (CTASC-II): Provides
the commander with the capability of mobility
and interoperability of split-based logistical
operations to sustain an operation. Provides
increased ADP capability to rapidly and
efficiently satisfy wartime information
requirements, provides greater survivability
through mobility and standardization of
hardware and software systems. Fielding to
XVIII Corps COSCOM began in Nov 95 and
fielding will continue throughout the Army. (POC
- Mr. Van Alstine, DSN 680-3019, email
Vanalstp@Emh10.Monroe.Army.Mil)

## Family of Medium Tactical Vehicles (FMTV):



FMTV is a family of medium trucks sharing common design and components with two payload classes: 2-1/2 tons and 5 tons. FMTV will provide ground transport for personnel, cargo and weapons systems, while reducing operations and support costs for the medium truck fleet. FUE is scheduled for Dec 95 to selected units of the 82nd Airborne Division. (POC - Mr. Clapp, DSN 680-2609, email Clappt@Emh10.Monroe.Army.Mil)

### Combat Service Support Automated Information Systems Interface

(CAISI): Fills a current shortfall by providing a capability for the STAMIS to be packet capable. CAISI is a user-owned and operated capability that allows CSS automation devices to exchange information via tactical and commercial communications networks to include automation systems within the sustaining base. CAISI connects existing incompatible devices to networks. Fielding to XVIII Corps COSCOM began in Nov 95 and fielding will continue throughout the Army. (POC - Mr. Van Alstine, DSN 680-3019, email Vanalstp@Emh10.Monroe.Army.Mil)

#### All Source Analysis System (ASAS):

A mobile, automated intelligence processing, fusion and dissemination system designed to provide timely, accurate and relevant all source intelligence and targeting support to battle commanders and staff (BN through EAC). ASAS Block I is now fielded to 12 high priority corps/divisions. ASAS-Extended is proven ASAS software on commercial hardware.

Currently now fielded at I Corps, USFK, PACOM, 10th ID and CENTCOM. ASAS Block II software capability package one (CP 1) is expected to be delivered to 2AD in 1QFY96. (POC: CPT Harris, DSN 680-4269/email Harrisb@Emh10.Monroe.Army.Mil))

#### Guardrail Common Sensor (GRCS):

A corps/EAC airborne reconnaissance, intelligence, surveillance and target acquisition (RISTA) signals intelligence system. GRCS is capable of detecting, identifying, and accurately locating high payoff C4I targets and weapons systems from the FLOT to at least 300 kms forward of the FLOT or national boundary. Location accuracies are within target location error (TLE) specifications for the Army tactical missile system (Army TACMS) and multiple launch rocket system (MLRS). Time critical reporting is accomplished via the Commanders' Tactical Terminal (CTT) to Army and Marine Corps ground commanders and Navy and Air Force C2 nodes. (POC: Mr. Helderman, DSN 680-3273 email Halderman@Emh10.Monroe.Army.Mil)

**Commanders Tactical Terminal** 

(CTT): Provides dedicated communications for the rapid dissemination of perishable intelligence to aviation, artillery, air defense, and maneuver C2 and execution nodes and intelligence centers. Through the CTT, in-time reporting is also accomplished to Marine Corps, Navy, and Air Force C2I nodes (ashore/afloat/airborne). Timely reporting is generated by Army, Navy, and Air Force airborne RISTA systems (e.g., Army Guardrail Common Sensor, Air Force U2R, and Navy EP3), and national centers and systems. Perishable reporting is accomplished via UHF relays located on the airborne platforms through the Tactical Reconnaissance Intelligence exchange System (TRIXS) interactive network, and via satellite relay through the Tactical Information Broadcast Service (TIBS) interactive network. (POC: Mr. Helderman, DSN 680-3273/ email Halderman@Emh10.Monroe.Army.Mil)

Integrated Meteorological System (IMETS): A mobile tactical automated weather data receiving, processing, and dissemination system designed to provide timely weather and environmental effects

forecasts, observations, and decision aid information to multiple command elements at rechelons where USAF weather teams provide weather support to the Army. IMETS is an Army-furnished system (standard shelter/vehicle, common hardware/software (CHS), and communications that will be operated by USAF personnel and maintained within planned Army support for system components. Two systems were fielded to Korea in Mar 95. Two additional systems are planned to be fielded to FORSCOM units during 1QFY96. (POC: Ms. Hanks, DSN 680-4077/email Hanksj@Emh10.Monroe.Army.Mil)

Digital Topographic Support System/Quick Response Multicolor Printer (DTSS/QRMP): Capable of receiving, (re) formatting, creating, storing, retrieving, updating, merging, and manipulating digital topographic data and hardcopy reproduction of topographic products. DTSS/QRMP combines two separate systems into one downsized system. The system provides the theater commander and his staff automated and integrated terrain products to enhance and compress the decision making process across the operational continuum. The fielding scheduled calls for first unit equipped (FUE) in FY98. The Project Director is attempting to get the prototype to the field in FY97. (POC: Ms. Hanks, DSN 680-4077/ email Hanksj@Emh10.Monroe.Army.Mil)

"Hunter" Joint Tactical Unmanned Aerial Vehicle (JT-UAV): Capabilities include: 250kms+ range, 8-hour mission time, and forward looking infrared radar/televised (FLIR/TV) real time imagery. Future payloads include communications/data relay, moving target indicator (MTI) radar, and minefield detection. Hunter is the first of a family of UAVs which include Endurance UAV at JTF/EAC and Close Range "Maneuver" UAV at maneuver brigade and LID. The first of 24 Army bound Hunter UAV RISTA systems for Corps, Division (except LID), and ACRs began flight operations at Ft Hood TX in the 15th AEB, III Corps on 18 Aug 95. (POC: Mr. Undercoffer, DSN 680-3274/ email Undercoj@Emh10.Monroe.Army.Mil)

TROJAN Special Purpose Integrated Remote Intelligence Terminal

(SPIRIT) II: A HMMWV mounted intelligence dissemination satellite communications system which provides access to national and other level intelligence data bases. TROJAN SPIRIT II provides all-source dissemination capabilities, including secure voice, data and fax. It receives, displays, and transmits digital imagery, weather and terrain products, templates, graphics and text between CONUS/OCONUS bases and deployed forces. It supports force projection and split-based operations. Will be fielded in FY 96. USMC currently has several systems fielded. (POC: Mr. Hurst, DSN: 680-4347/ email Hurstj@Emh10.Monroe.Army.Mil)

TROJAN Transportable Mini Switch

(TTMS): A preplanned product improvement of the TROJAN SPIRIT II system. It provides a material solution to eliminate a single source of failure at the Fort Belvoir Switching Center. TTMS will further eliminate dual satellite hops and provide TROJAN SPIRIT II connectivity for an intra- and inter-theater digital voice switching capability. TTMS is employed at theater level and handles up to 12 TROJAN SPIRIT IIs. The system has been fielded in I Corps. (POC: Mr. Hurst, DSN: 680-4347/ email Hurstj@Emh10.Monroe.Army.Mil)

Joint Surveillance Target Attack Radar System (Joint STARS): A joint Army and Air Force program consisting of an Air Force E-8C aircraft and Army ground station modules (GSMs). The E8C uses a multi-mode radar, MTI and SAR, to collect data on moving and stationary ground vehicles, slow moving rotary and fixed wing aircraft, and rotating antennas. The GSM receives and analyzes processed radar imagery from the E8C. The system supports situation development, intelligence and targeting functions with near real time interactive displays. The multi-service operational test and evaluation (MOT&E) is scheduled to begin in Nov 95. The first production aircraft is scheduled to be delivered 2QFY96 with initial operational capability (IOC)

2QFY97.(POC: MAJ McNeill, DSN: 680-3443 /

email Mcneillw@Emh10.Monroe.Army.Mil)

**Ground Based Common Sensor-**Light/Heavy (GBCS-L/H): A next generation divisional system to intercept, locate and process raw signal data in support of intelligence collection, targeting, and electronic attack. The GBCS provides target detection, identification and location reports in near real time to brigade and division commanders. GBCS can also jam enemy tactical communication emitters. It is capable of passing targeting data to TACFIRE in support of a 'quickfire' or sensor-to-shooter link. GBCS-L supports light divisions/brigades and GBCS-H supports heavy divisions/brigades. The range capability of the GBCS-L/H can be extended by the use of the aerial system known as Advanced QUICKFIX (AQF). AQF, in conjunction with GBCS, provides highly accurate location data via its precision location subsystem. All the components of these three systems are the same with the exception of the vehicle and antennas. FUE is scheduled for FY96. (POC: Mr. Floyd, DSN: 680-3667 / email Floydw@Emh10.Monroe.Armv.Mil)

**Digitization:** The application of information technologies to acquire, exchange, and employ digital information throughout the battlespace. Leverages digital technology and moves digital data between combat platforms by adding seamless connectivity from the foxhole to the NCA. Digitization operationally enhances the situational awareness and force synchronization on the battlefield, while enhancing target acquisition and revolutionizing direct and indirect fire roles. Army objective to digitize a brigade in FY97. (POC: Mr. Poynter, DSN 680-3874) email Poynter@Emh10.Monroe.Army.Mil)

**Global Positioning System (GPS):** 

Space-based POS/NAV system provides accurate three-dimensional position, velocity and time information. Fielding of precision location GPS receivers (PLGR) is ongoing. FOC 3QFY97. (POC: Mr. Gassaway, DSN 680-5858) email Gassaway@Emh10.Monroe.Army.Mil)

Enhanced Position Location
Reporting System (EPLRS): A low-tomedium speed data transmission device with a
position navigation capability. EPLRS supports

the Army Tactical Command and Control System concept by providing the data communications connectivity between battlefield functional area automated systems. EPLRS fielding started 2QFY95 to 1st CAV DIV and will be fielded to 1st CAV, 24th ID, and TFXXI NLT 4QFY96. (POC: Mr. Gassaway, DSN 680-5858) email Gassaway@Emh10.Monroe.Army.Mil)

**Command and Control Vehicle** 

(C2V): Objective of the program is to develop a vehicle that facilitates coordination and execution of the battle on-the-move. Mission Module permits mobile operations, functionally similar to stationary operations. Commanders and staffs remain mounted, supported by a robust intercom, data distribution, and communications system. Program successfully passed through ASARC I/II decision December 1994. Currently, program is in Engineering and Manufacturing development phase. Low Rate Initial Production (LRIP) is scheduled for 4QFY96. (POC: CPT Richards, DSN 680-289) email Richards@Emh10.Monroe.Army.Mil)

#### **SOLDIER**



The Army's most valuable resource is the Soldier. Regardless of how superior our leadership, weapons, and technologies might be, it is the soldier who is the backbone of the Army. We are providing a comprehensive program to modernize the soldier as a battlefield system and to maximize warfighting capabilities by enhancing lethality, command and control

### SOLDIER ENHANCEMENT PROGRAM FORCE PROVIDER

Enhanced Land Warrior (ELW): The total Army program for modernizing the soldier as a system. It includes all soldiers and provides for acquisition of all items worn, carried or consumed by soldiers for individual use in a tactical environment. The ultimate result of ELW will be greatly enhanced combat capabilities, as well as full integration of the soldier into the digitized battlefield. ELW will produce three major variants of an integrated fighting system: Land Warrior for dismounted soldiers. Air Warrior for air crewmen, and Mounted Warrior for armored vehicle crewmen. The dismounted system includes a modular weapon with thermal sight, improved ballistic protection, a soldier computer/radio, combat ID and other capabilities. Initial fielding of the dismounted Land Warrior System is programmed to begin in FY00. (POC: Mr Stefaniw, DSN 680-3117, email Stefani@Emh10.Monroe.Army.Mil).

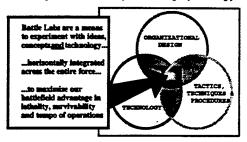
Soldier Enhancement Program (SEP): A quick reaction program initiated by Congress in 1990 to expedite modernization of infantry soldier equipment. The program has since been expanded to include all soldiers, and to address quality of life issues in the field. The focus is on nondevelopmental solutions which can be ready for procurement in 36 months or less. By the end of 1994, 148 projects were initiated and 41 completed. Eight new starts are programmed for FY96, including the XM2 Selectable Light Weight Attack Munition and the 40mm Grenade, Less than Lethal. The program includes small arms, optics, munitions, clothing and individual equipment, and individual combat rations. (POC: CPT Germain, DSN 680-2633, email Germainj@Emh10.Monroe.Army.Mil)

Force Provider (FP): Transportable complex of kitchens, showers, laundries, billets, latrines and morale support items. Designed to improve a soldier's quality of life in the field, FP also supports OOTW. One module can support approximately 550 soldiers/personnel, while six modules configured together can support a brigade sized element. One module is currently providing support at Guantanamo Bay; two interim support packages (ISP), each capable of supporting a brigade-sized element, also exist. One is prepositioned afloat in the Pacific

and the other is located at Sierra Army Depot. (POC: CPT Hamilton, DSN 680-3039, email Hamiltona@Emh10.Monroe.Army.Mil)

#### <u>BATTLE LABS</u>

Maximizing our soldiers' battlefield advantage by breaking paradi;



Battle Labs are a United States Army TRADOC innovation to experiment with changing methods of warfare beginning with battlefield dynamics and with soldiers and leaders as the center of focus.

The program was publicly announced in April 1992 and began in May 1992. The name is meant to convey the image of soldiers experimenting with warfighting concepts in order to generate battlefield insights.

Battle Labs conduct holistic appraisals of critical operational capability requirements needed to meet the changing nature of warfighting across all of the TRADOC domains—doctrine, training, leader development, organization design, materiel, and soldier systems. The appraisals are holistic in that they examine the needs of the entire combined arms and services team in a wide variety of relevant current and future scenarios. This, in turn, facilitates horizontally integrated requirements definition conducted concurrently with concept development which dramatically streamlines the entire process of fielding new capabilities.

Warfighting concepts generated from TRADOC Pamphlet 525-5, Future Full-Dimensional Operations, drive Battle Lab experiments. The experiments, labeled Advanced Warfighting Experiments (AWE), are progressive and iterative mixes of constructive, virtual and live simulations conducted with field soldiers and units in tactically competitive environments.

There are six battle labs--Early Entry Lethality and Survivability Battle Lab, Fort Monroe, VA; Mounted Battle Space Battle Lab, Fort Knox,

KY; Dismounted Battle Space Battle Lab, Fort Benning, GA; Depth and Simultaneous Attack Battle Lab, Fort Sill, OK; Battle Command Battle Lab, with elements at Fort Leavenworth, KS, Fort Gordon, GA, and Fort Huachuca, AZ; and the Combat Service Support Battle Lab, Fort Lee, VA.

A Memorandum of Agreement between FORSCOM and TRADOC aligns designated units to each battle lab to facilitate experiments. A Memorandum of Understanding between TRADOC and the Marine Corps Combat Development Command (MCCDC) ensures full participation by the USMC in appropriate battle lab experiments. Battle Labs have also established close ties with the Air Combat Command, Air Mobility Command, Military Sealift Command, Naval Doctrine Command, and several allied armies. (POC: BATTLE LABS LTC EWING, DSN 680-5895/ email Ewingj@Emh10.Monroe.Army.Mil)



FORCE XXI JOINT VENTURE. Force XXI Joint Venture uses TRADOC Pamphlet 525-5, Force XXI Operations, as its conceptual underpinning for the design of the 21st century Army. To meet the 21st century warfighting challenges, the Army will take aim at future doctrinal, structural and materiel needs without losing focus on today's strategic security requirements. The Army, through Force XXI, will examine organizational and technological alternatives and explore new ideas to ensure success on future battlefields. Key ingredients to implement this change are quality soldiers and leaders.

Joint Venture is one of the three axes in the Force XXI Campaign Plan; it will focus on the redesign of the operational Army. Joint Venture is the main effort in the Force XXI campaign plan and the CG TRADOC is CINC, Joint Venture. The TDA/Institutional Army axis and Assimilation/Acquisition axis are supporting efforts to the Joint Venture axis. Joint Venture's

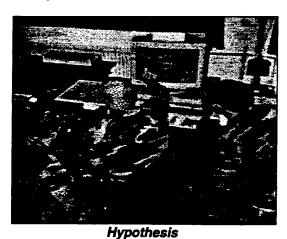
mission is to develop and execute an Armywide joint venture to attain Force XXI fielding decisions by FY2000. Joint Venture will design and validate Force XXI operating force elements by continuing robust Advanced Warfighting Experiments (AWE). Joint Venture will serve as the focal point for integration efforts directed towards developing the basic organization and operational concept for Force XXI and will inform the Army of the implications of full-dimensional operations. Joint Venture will do this on two axes of advance, a Conceptual axis and an Experimental axis.

- a. Conceptual Axis. The Conceptual Axis is rooted in concepts outlined in TRADOC PAM 525-5. This pamphlet, "Force XXI Operations" will be the conceptual underpinning for all Force XXI experiments. The centerpiece of TRADOC PAM 525-5 is a 21st century Army, based on quality soldiers and leaders, in versatile mission-tailored units, enhanced by the power of information, superior technology, and effective battle command. As Force XXI is designed, considerable attention must be focused on a force that is modular in design and tailorable to meet contingencies from OOTW to conventional war. These concepts will result in the redesign of the operating forces, starting initially with the division redesign and working up and down to examine and redesign all echelons, as necessary. Other key elements in the concept axis include the Army Battle Command System (ABCS) and a reengineering of the Land Warfare University.
- b. Experimental Axis. The Experimental Axis initially follows the conceptual axis and each will inform the other through the course of Force XXI. Based on the results of Battle Lab experiments to date and the emerging Force XXI Division Organization and Operation Plan, Advanced Warfighting Experiments (AWE) will be conducted to validate organizational designs. Participation by Battle Labs, the Experimental Force (EXFOR). other units and analytical agencies beginning in FY95 will be critical. These hands-on experiments will address the full range of operations to include joint and combined operations. The results of LAM GHQx excursions, Advanced Concept Technology Demonstrations (ACTD), Advanced Technology Demonstrations (ATD) and Operational Tests also will be integrated into the Joint Venture effort and will influence organizational redesign and materiel fielding decisions.

Battle Labs experiment using constructive, virtual and live simulations to examine warfighting concepts across doctrine, training, leader development, organizational design, materiel and soldier systems (DTLOMS). The Battle Lab holistic approach to experimentation encompasses the entire joint combined arms and services team. This facilitates vertical and horizontal integration concurrently with concept development, thereby streamlining the acquisition process. The warfighting concepts generated from TRADOC Pamphlet 525-5 drive Battle Lab experiments. The Battle Labs conduct AWEs using a combination of constructive, virtual and live simulations with field soldiers and units in tactically competitive environments, under a broad range of relevant scenarios. The following provides a synopsis of the AWEs for FY 95 in the Joint Venture Campaign Plan.

#### ADVANCED WARFIGHTING EX-PERIMENTS (AWE)

PRAIRIE WARRIOR/MOBILE STRIKE FORCE (PW/MSF) 95:



If improvements in Organization, TTP and Battle Command processes accompany application of new technological capabilities to tactical forces,... then significant increases in deployability, lethality, surviv-

 PW/MSF 95 AWE, conducted by the TRADOC Battle Labs, will inform the design of the operating forces for Force XXI. This AWE will experiment with a staff of officers from the Command and General Staff College fighting a simulated 21st Century division during the PRAIRIE WARRIOR

ability and tempo will be achieved.

Battle Command Training Program's exercise at Fort Leavenworth. The MSF will assist in building a land combat force from Battle Lab and BOS input. MSF will use organizational, materiel, and operational concepts derived from TRADOC Pam 525-5 that may not exist today in order to significantly increase lethality, survivability, and tempo of land combat in the 21st Century. MSF 95 capitalizes on leaders who will be senior leaders and commanders of 21st Century Army units. It will derive insights using an iterative process and constructive simulation to experiment with the output of Battle Labs across DTLOMS. The insights and conclusions from this AWE will inform Senior Army leadership on future investment decisions and focus the industrial base for the future. Additionally, it will assist in the streamlining of staff functions and provide insights to new operational relationships for Force XXI. PW/MSF 95 will evaluate the impact of 21st Century technologies within the context of an operational concept based on information age processes. The following are the objectives of PW and MSF, respectively.

#### PW

- Set conditions allowing examination of:
  - Title 10 responsibilities.
  - DA crisis response in a joint environment.
  - UCP
- Prepare 21st century leaders.
- Validate division design principles.
- Provide an experiment for technical, doctrinal, and organizational innovations to be assessed and studied. Set conditions for the investigation of Joint Venture issues.
- Provide initial experience with STOW technology and system development in PW 95 and set stage for full use in PW 96.

#### MSF

- Validate division level Force XXI design principles.
- Evaluate division level Force XXI Battle Command capabilities and identify selected Battle Command requirements.
- Evaluate division level Force XXI Combat Service Support concepts both internal and external.

PW/MSF 95 capitalizes on leaders who will be senior leaders and commanders of 21st

Century Army units. It will derive insights using an iterative process and constructive simulation to experiment with the output of Battle Labs across DTLOMS. Insights will inform Senior Army leadership on future investment decisions and focus an industrial base for the future. Additionally, it will assist in the streamlining of staff functions and provide insights to new operational relationships for Force XXI. PW/MSF was conducted 15-25 May 1995. Insights from this experiment can be found on the PW/CAAT Home Page. The Internet address is

HTTP://CALL.ARMY.MIL:1100/PW95.

#### **WARRIOR FOCUS 96-02:**



#### Hypothesis

If different technologies and doctrine are properly integrated within existing organizational structures and BOS relationships of Light/Heavy and SOF units in the areas of Battle Command Maneuver, Intelligence, Fire Support, and CSS,... then increases will be gained in lethality, survivability, and tempo.

WARRIOR FOCUS 96-02 will establish a baseline for the digitization of the dismounted soldier in a light-heavy-SOF Task Force organized with a light infantry battalion as its central element. The Dismounted Battlespace Battle Lab (DBBL) through this AWE will look across all the Battle Field Operating Systems and concentrate on warfighting benefits to support Force XXI doctrine, equipment and tactics. Warrior Focus will experiment using digitized systems linking the Company Commander to the Battalion and establishing digital links across the BOS's. The AWE will also employ Own the Night equipment to

evaluate the impact of this technology on the fighting capability of light forces. ATD/ACTD linkages in this experiment include RFPI, Digital Battlefield Distributed Simulation (BDS-D), Battlefield Combat Identification (BCID), Digital Battlefield Communications (DBC), Anti-Armor (A2) and Combined Arms Command and Control (CAC2). It will capitalize on major initiatives and lessons learned from NTC rotation 94-07. The AWE will be conducted at the JRTC, Fort Polk, LA, 6-18 November 1995. The experiment objectives include:

- Improve capability to mass fires and effects
- Increase force effectiveness, lethality, survivability, and tempo.
  - Improve situational awareness.
    - - Intelligence
    - - Battle Command
    - - Rounds on Target
    - - Reduced Fratricide

#### **FOCUSED DISPATCH:**



#### Hypothesis

If Procedural, Functional and Organizational changes in fire support, intelligence, logistics and battle command are implemented as a result of digital connectivity... then significant enhancements in lethality, survivability and tempo will result.

Advanced Warfighting Experiment (AWE)
Focused Dispatch represented a continuation of
AWE 94-07. The experiment was conducted
from 14 -31 August 95. The experiment
evaluated processes and functions of digital
connectivity between Fire Support, Intelligence,
Combat Service Support and Battle Command
in a Battalion Task Force which will provide

Tactics, Techniques, and Procedures (TTP) insights for TF XXI. AWE NTC 94-07 provided many valuable insights and lessons learned that Focused Dispatch used to further develop the mounted battle dynamic and its interaction with other combat arms and services. The Objectives for Focus Dispatch were:

Maximize info connectivity between Combat Arms (CA), Combat Support (CS), and Combat Service Support (CSS) units.

Determine survivability, lethality and tempo can be increased by organizational changes as a result of digitization.

Examine changes in command processes and functions as a result of digitization.

Determine optimum organization of the Combat Unit XXI Battalion TF as a result of inserting digital systems into Battle Command, CS, and CSS processes.

Focused Dispatch used constructive, virtual and live simulations in its experimentation. Pre/Post Janus and SIMNET exercises were used to develop and refine TTP and organizational design associated with digitized, information aged warfare. Focused Dispatch deliverables included:

Doctrine/TTP for Mounted Bn/TF of TF XXI.

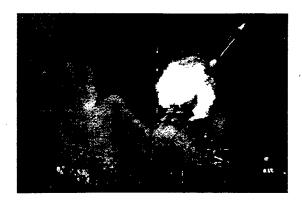
Training support packages for digitized units.

Recommendations/Insights for TF XXI Experimentation.

Refined digital requirements. Insights across DTLOMS.

A "HOTWASH" AAR was conducted on 5 Sep 95. A final report will be produced on/about 1 January

#### **THEATER MISSILE DEFENSE:**



#### Hypothesis

If national, joint and Army capabilities are integrated into a cohesive tactical missile defense force that counters enemy across multiple phases of operations (pre-attack, attack and post-attack) by melding attack operations, active defense and passive defense operations together using a robust BMC3I system...then the synergy attained provides strategic level effects allowing no sanctuary for conventional and unconventional tactical and ballistic missile threat operations; thereby, enhancing force survivability and lethality while minimizing casualties.

The Theater Missile Defense (TMD) AWE is a holistic review that will integrate National, Joint and Army capabilities into a cohesive tactical missile defense force able to counter the enemy across multiple phases of operations (preattack, attack and post-attack). TMD combines attack operations, active defense and passive defense operations with a robust C4I system. The

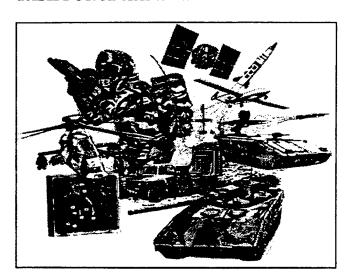
synergy attained provides strategic effects, allowing no sanctuary for conventional and unconventional tactical and ballistic missile threat operations. TMD will use technology insertions from ATDs and ACT II such as: Common Ground Station (CGS), Digital Battlefield Communications (DBC), Battlefield Distributed Simulation (BDS-D), Anti-Armor (A2) and Ferret Simulations. The TMD has the following objectives:

- Develop the holistic TMD concept supporting JCS Doctrine.
- Assess current (FY 95) and future capabilities and recommend adjustments in investments.

- Leverage Joint exercises and CINC experiments:
  - Roving Sands 95
  - CENTCOM's Optic Cobra 95
  - USAF Operational Concept Demonstration III
- Take insights and conclusions and link to other AWE's

TMD AWE provides insights to other AWEs and TF XXI which will further enhance the survivability of Force XXI operating forces. It is being conducted by the Depth and Simultaneous Attack Battle Lab with participation from other battle labs and over 30 agencies. The culminating event occurred during Exercise Roving Sands at Fort Bliss, TX, 28 April-8 May 1995

#### TASK FORCE XXI AWE



#### Hypothesis

If information-age battle command capabilities/connectivity exists across all BOS/Functions within and to a brigade task force, then significant enhancements in lethality, survivability and tempo will be achieved

Task Force XXI will inform the design of the operating forces for Force XXI through experimentation with a fully modernized brigade. The brigade will have digital information-age capabilities and connectivity to all battlefield operating systems within a brigade task force and connectivity to all external elements normally associated with a brigade in

combat operations. It will also use new organization concepts and develop, refine and analyze new information-age TTPs. TF,XXI goals are:

- Develop an easily tailorable, modular force designed around info capable of extending operations from OOTW to War as part of a Joint Multinational force.
- Determine the implications of TTP, Organ and Tech enhancements on Soldiers/ Leaders as it relates to training and the Land Warfare University.
- Simultaneously experiment and integrate technology insertions, organization (combinations of CA, CS, and CSS) and TTP changes to gain insights for Div XXI AWE.
- Determine the appropriate TTP associated with an information age force.
- Experiment with enhanced Battle Command capabilities and connectivity to increase tempo, lethality, and survivability.
- Analyze Force XXI Battle Command Bde and below (FBCB@) appliqué and software with sufficient rigor to make subsequent acquisition recommendations.

The AWE will conduct a series of experiments using the EXFOR in constructive, virtual and live simulations. The Task Force XXI will consist of four major phases. The first phase will consist of experimentation in FY95 to develop TTP for brigade task force fulldimensional operations; refine information-age battle command processes; determine required organizational changes; identify training and leader development voids/implications; and provide feedback on digital technology needs. Phase two will use the FY95 experimentation results to field a brigade-size force (TF XXI) from the EXFOR that is fully digitized with appliqué and embedded systems. Phase three is the execution of an NTC rotation in late 1996 or early 1997 to answer the Task Force XXI hypothesis. Phase four consists of feeding the results back into the Force XXI process leading to Force XXI design and fielding decisions and division full-dimensional operations.

#### THE EXPERIMENTAL FORCE

**PURPOSE:** Provide information concerning design and equipping of 2d Armored Division at Fort Hood as the Experimental Force (EXFOR).

Experiment. Intent of EXFOR is to field a force guiding our Army to Force XXI. Force XXI will be organized, equipped, and trained to execute full-dimensional operations. Efforts will be an evolutionary process. EXFOR will be one of the primary means for force design, selection and integration of technology, and development of Tactics, Techniques and Procedures (TTP)/ doctrine for full-dimensional operations. EXFOR will be an ongoing experiment, where results of one experiment leads to next as we evolve requirements for the future. The EXFOR will experiment with future war and operations other than war (OOTW), feeding lessons learned back into Doctrine, Training, Leader Development, Organization, Materiel and Soldiers (DTLOMS) process. EXFOR will be the primary means for experimenting with divisional redesign issues leading to objective force design for Force XXI.

The Force. The Force XXI division will be more lethal and survivable. Having the ability to operate over a wider geographic area (battle space) with a smaller density of forces; improved battle command characterized by increased leader to led ratios, digitized battle command, reduced staffs, and robust communications and intelligence acquisition capability. Improved deep operations capability, coupled with enhanced infantry capable of close combat, security, and OOTW missions will add to lethality and OPTEMPO of Force XXI. Force XXI will be capable of rapid deployment and employment with improved versatility to execute operations ranging from war to OOTW. Force XXI organizations will promote flexibility with an increased capability to tailor the force, accepting additional CS/CSS assets as situations develop.

Force XXI divisions will be capable of the entire range of division missions under Corps or JTF control, retain joint and coalition interoperability, and be interoperable with those Army elements executing current Air Land Operations (FM 100-5, June 93) doctrine. While the primary purpose for EXFOR is experimentation, the force will be capable of deploying and executing war or OOTW operations in support of major regional contingencies (MRC) or other operations.

**Experimentation and Testing:** The EXFOR will conduct experiments and operational tests in support of TRADOC and OPTEC. EXFOR

itself is a division-size experiment in the Army's future doctrine, full-dimensional operations. Experiments, primarily in application of high technology and modernizing across DTLOMS remain the primary effort of the EXFOR. Experiments will be conducted examining Battle Lab initiatives; equipment, force design and TTP, providing input to future doctrine. organizations, TTP and acquisitions. Analytic support from various agencies (OPTEC, TRAC, etc.) will provide quantitative and qualitative insights and conclusions for Force XXI experiments. (POC: FORCE XXI JOINT VENTURE, LTC Greer/MAJ McFadden DSN 680-4472/5749/ email Greerj@Emh10.Monroe.Army.Mil)/email Mcfaddew@Emh10.Monroe.Army.Mil)

#### Force XXI "How to Fight" Seminars:

Joint Venture continues with concept development and experimentation leading to operational force design decisions for the Army of the 21st Century. As Joint Venture moves forward, requirement for an overarching operational concept for How to Fight Force XXI is clear. The How to Fight concept will form the basis for all CBRS efforts across DTLOMS as the Army designs and builds the Army of the Future. To attain this goal, TRADOC will conduct a series of seminars Fall of 1995 to develop warfighting concepts for Force XXI; i.e., How will the Army and, more specifically the division, fight in the early 21st Century? The output will be the operational concept for the next FM 100-5 and drive the redesign of the division for Force XXI.

How to Fight seminars will refine those operational concepts that have emerged from experimentation. The seminars will result in a holistic approach to operations, derived from TRADOC PAM 525-5 consistent with the Force XXI design principles and executable during the first decade of the 21st century.

Initial seminar at Fort Knox provided the framework for the Fall sessions. Seminar objectives included; understanding of CG, TRADOC's vision/intent, scenario/Corps OPLAN agreement, start point for division design agreement and understanding of Joint Vision 2010 as the concept within which the Army develops Force XXI. Future Fall seminars will focus on the following:

Seminar #2 (26 Sep 95). Operational functions of "Shape the Battlespace...Set the Conditions" and "Decisive Operations."

Seminar #3 (6 Oct 95). Operational functions of "Gain Information Dominance" and "Project the Force."

Seminar #4 (3 Nov 95). Operational functions of "Sustainment" and "Protect the Force."

Fall seminars will conclude with a TRADOC-wide How to Fight IPR (12 Dec 95). IPR will review and identify issues associated with the integrated Force XXI operational concept and make adjustments to the Force XXI interim division design.

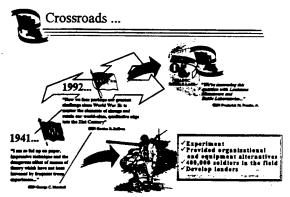
#### TRADOC Analysis Center (TRAC)



During the past quarter, TRAC's efforts have focused on support of Advanced Warfighting Experiments (AWE), Joint operations, COEA's and scenario development. As the Army analytic lead for the Joint Venture Task Force, TRAC is nearing completion of the analytical reports on Prairie Warrior/Mobile Strike Force 95, Theater Missile Defense (TMD), and Focused Dispatch AWE's. The analytic report on Warrior Focus should be completed in March of 96. TRAC is currently analyzing FXXI division and brigade design alternatives to inform the interim division design decision in December 95. To support the Joint community. TRAC provided model support for the Naval War College's GLOBAL 95 senior warfighter exercise, and fielded a Contingency Analysis and Planning System (CAPS) to the EUCOM and CENTCOM staffs. TRAC is currently supporting over 15 COEA's. Work on the AH-64D Longbow, Joint Surveillance Target Attack Radar System (JSTARS), Advanced Field Artillery Tactical Data System (AFATDS) and TMD COEA's was recently completed. Work is also ongoing on a CENTCOM 1.0 theater resolution scenario, two SOUTHCOM

scenarios, a high resolution mechanized attack in Northeast Asia, and a high resolution scenario depicting the relief of refugees.

#### **LOUISIANA MANEUVERS**



GEN Sullivan looked at the situation facing the Army of the 1990's and realized there was a parallel with the situation that faced GEN Marshall in 1941. The reality GEN Marshall faced then--

- Imminent entry into WWII.
- Large, untested Army.
- Growing resources.
- Difficulties with Congress, the
- Executive branch, and popular support.

Today's reality that GEN Reimer faces, while differing in detail, is just as wrenching--

- World's preeminent Army.
- New National Military Strategy
- Force Projection Army.
- Drawdown, declining resources.
- Ambiguous threat.

The tough challenge facing today's Army is meeting those realities while maintaining a strong and ready force. The Louisiana Maneuvers (LAM) of the 1990's provides the catalyst and focus for the difficult changes the Army is undergoing. The Chief of Staff is the Director of LAM and the TRADOC Commander is the Deputy Director. The Army's senior leadership provides direct input into the new LAM through their membership in the Board of Directors (BoD), the governing body chaired by the CSA. By this mechanism, the major concerns of the senior leadership receive the necessary attention and action. Charged with managing the process, the LAM Task Force is

the linchpin for the process, coordinating and synchronizing the efforts of the agencies investigating LAM issues. LAM is a process; a means to an end. Issues are approved by the BoD and proponents are assigned from MACOMs. Each proponent studies the assigned issue using available simulations:

- Live (CTCs, FTXs).
- Constructive (computer models).
- Virtual (SIMNET is prime example).

The LAM process also incorporates lessons learned from real world operations. Basing their findings and recommendations on solid empirical evidence, the proponents assemble decision packages for their issues for the BoD, to whom they present courses of action. The BoD recommends a decision for each issue to the Chief of Staff for his approval and order for implementation. With the advent of Force XXI, the CSA revised the scope for both the LAM process and the Task Force. Force XXI is geared toward the redesign of the operational force, the reengineering of the Title 10/TDA Army, and the programmatics of horizontal technical integration of the digitization of the Army. The LAM process is now primarily dedicated to the Force XXI vision, focusing the efforts on issues that will materially aid the move to Force XXI. The Task Force is the CSA's executive agent for Force XXI and is charged with managing the Departmental Force XXI synchronization and the BOD process to actually bring change into reality as the move is made to fully embrace information-age technology. (POC: Louisiana Maneuvers Task Force Initiatives Group, LTC Thomson, DSN 680-5327/ email

Thomsonm@Emh10.Monroe.Army.Mil)

#### **TRADOC Reinvention Center:**

Since it's inception, TRADOC has continuously applied the precepts of reinvention even before it became the buzzword of the nineties. The Secretary of the Army designated TRADOC a Reinvention Center. These authorities will be the major catalyst in the command for attaining the TRADOC Commander's objectives identified in the Strategic Plan 1995. Reinvention Center designation will enhance current authorities to enable sound, calculated risk-taking necessary to reach defined capabilities early in the 21st century. Official

designation will also enable fulfillment of the TRADOC Commander's directive to "change the way we change." Bold and audacious change requires better tools to overcome impediments. As an Army Reinvention Center, TRADOC will have the tools to restructure or eliminate traditional barriers, outmoded laws, regulations and policies to transform the Army's training, doctrine, and combat development processes. These fundamental changes will become the platform from which TRADOC projects new innovations for the Army. (POC: Mr. Parmenter, DSN 680-3279/ email Parmentr@Emh10.Monroe.Army.Mil)

#### **U.S. Army Cadet Command**



During the summer of 1995 Cadet Command focused on the execution of a series of successful camps. During the period, three training cycles of Camp Challenge, the ROTC Basic Camp, were conducted at Fort Knox, Kentucky. A total of 1,858 individuals completed that six week training session, and came one step closer to gaining admission into ROTC Advanced Course.

Additionally, the two ROTC Advanced Camps were also in full operation during that same period. This year's Advanced Camps were hosted by Fort Lewis, Washington and Fort Bragg, North Carolina. A total of 4,695 cadets completed this training, which was a significant milestone on their road to becoming an officer. Of that total, 2,241 cadets graduated from the Fort Bragg Advanced Camp and 2,454 cadets completed their training at the Fort Lewis Camp.

Although the primary Advanced Camp mission remains the training of ROTC cadets, both locations provided valuable assistance to the National Guard Officer Candidate School (NGOCS) Program. At the Fort Bragg Camp, 391 personnel in this category received training, with an additional 232 undergoing instruction at Fort Lewis. Additionally, a contingent of 32 British cadets had the opportunity to participate in training provided at the Fort Bragg Advanced Camp.

Safety was of paramount concern during all aspects of the ROTC summer camps. That emphasis on safety paid tangible dividends. During the TRADOC-level safety surveys of the ROTC Camps no shortcomings were noted. When reporting the results of that review, the TRADOC safety official noted that "No Installation, School or TRADOC Activity has ever had such a great performance."

In other areas, efforts continue to ensure the Command makes the most effective use of available resources. That effort includes a procedure which reviews the viability of all ROTC battalions and led to the Secretary of the Army's approval to close 16 college- level programs at the end of School Year 1995-96. In addition, Cadet Command will close one brigade during the summer of 1995 and two additional brigades during the summer of 1996.

Additionally, Cadet Command continues its vital mission of helping high school students to become better citizens -- through the JROTC program. As part of that process, the JROTC program has experienced a period of unprecedented growth in the last several years. By FY97, it is anticipated that approximately 1,400 Army JROTC units will be in operation around the globe.POC MAJ Freeman DSN 680-4253/email Freemanb@Emh10.Monroe.Army.Mil)

COPIES OF THE UPDATE WERE MAILED TO EACH TRADOC INSTALLATION CHIEF OF STAFF AND COMMANDANTS OF TRADOC SCHOOLS ON NON-TRADOC INSTALLATIONS. LOCAL REPRODUCTION OF THIS UPDATE IS AUTHORIZED.

THE UPDATE IS ELECTRONICALLY AVAILABLE TO TRADOC INSTALLATIONS IN THE OV/VM "BULLETIN BOARD" UNDER "HQ TRADOC NEWS" AND "CG TRADOC BULLETIN". IN ADDITION THE UPDATE IS POSTED TO THE FOLLOWING INTERNET NEWSGROUP: tradoc.qtr-update ON THE MONROE-EMH4.ARMY.MIL NEWSGROUP SERVER.