

AMCS (Medium Flail)
(version 3.0)

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MScOE - MANSCEN

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This System Training Plan (STRAP) is preliminary.
Front end analysis (mission, task, job) is ongoing. MSCoE - MANSCEN will amend
and update this STRAP as details solidify.

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1.0 System Description

The Area Mine Clearance System (AMCS) is a manned vehicle designed to clear minefields and Unexploded ordnance (UXO) from a large area. It provides area clearance by detonating or destroying explosive devices. The AMCS consists of a horizontal, rapidly rotating rotor mounted on a vehicle by two arms. Fist-sized hammers are attached to the rotor shaft by chains (flails). The rotor's rotation causes the flails to continuously and violently strike the ground. The strikes of the flail mimic a person or vehicle passing over the mines causing them to detonate, but in a safe manner that does little damage to the flails or the vehicle. During the mine clearing process, the vehicle is operated in the direction opposite (in reverse) to the normal driving direction. The AMCS will be capable of clearing a path width of 3.5 meters to a maximum ground penetration depth of 500 millimeters (19.68 inches) and be deployable by air, sea, rail and highway to provide a rapid response into and within a theater of operations. First Unit Equipped (FUE) is February FY 12 and Initial Operating Capability (IOC) is May FY 12.

2.0 Target Audience

General Purpose: Users are the primary Military Occupational Specialty (MOS) assigned to the Organization receiving a particular configuration of equipment. These users shall include Officers, Warrant Officers, Noncommissioned Officers (NCO), and lower Enlisted Soldiers assigned to Route and Area clearance companies, EOD Teams, and CBRNE Teams.

a. Operators: MOS 12B, (Combat Engineer), 89D (Explosive Ordnance Disposal), and any General Purpose Users (GPU) as designated by unit Commanders.

b. Maintainers: MOS 91L (Construction Equipment Repairer), 919A (Engineer Equipment Repair Technician) and 91B (Wheeled Vehicle Mechanic).

c. Supporting MOSs: MOS 91W (Metal Worker), 91E (Allied Trades Specialist) 94M (Radar Systems Repairer), 21U (Digital Maintainer), 12A (Combat Engineer Officer).

3.0 Assumptions

- The AMCS will be institutionally trained at the United States Army Engineer School (USAES), Maneuver Support Center of Excellence (MSCoE).
- The AMCS will be institutionally trained at the Combine Arms Support Command (CASCOM), Sustainment Center of Excellence (SCoE).

- There shall be no increase in force structure, operators, maintainers and supporters.
- The Program Manager (PM) shall resource New Equipment Training (NET) requirements to support operational testing, First Unit Equipped (FUE), and all subsequent NET.
- Funds will be available to support Training and Doctrine Command's (TRADOC) participation in training development, Integrated Logistic Support Management Team meetings, in-process reviews, Post Fielding Training Effectiveness Analysis (PFTEA), and contractor training in support of developmental and operational tests, Instructor and Key Personnel Training (I&KPT), and NET.
- An Integrated Process Team (IPT) shall be established to monitor status, provide guidance and manage the overall training program. Training IPT meetings shall be scheduled in accordance with (IAW) key training, Integrated Logistics Support (ILS) and/or program events rather than on a calendar basis to effectively manage the Training program. A lead representative may schedule a special IPT meeting as required. As a minimum the Training IPT shall consist of representatives from MSCoE, USAES, Capabilities and Integration Directorate (CDID) Requirements Development Division (RDD) Assured Mobility (AM) System Training and Integration Division (STID), Training Developers (TNGDEV), Contractor Representative, SCoE, CASCOM, PM Representatives, TRADOC School TNGDEV that this system impacts, Design Engineers, Total Army Personnel Command Representatives, PEO STI Representatives, Systems Safety Representatives, and Sub-contractors as required or appropriate.
- Front-end analysis (mission, tasks, job...) is mature enough to allow development of an effective Training Strategy.
- Training equipment and materials identified in the NET Plan will be developed and available in time and in sufficient quantity to support training.
- The required resources, such as instructors, training developers, Training Aid, Devices, Simulators and Simulations (TADSS), ranges, and facilities identified in this document, will be made available to support and maintain the AMCS training programs.
- All software developed to facilitate system training will meet US Army acceptance criteria for continuous testing of Sharable Content Objective Reference Model (SCORM) V1.2 conform and courseware.
- Contractor Logistic support is anticipated until field level has been transitioned to organic.

- The TRADOC Deputy Chief of Staff of Operations and Training (DCSOPS&T) will resource MSCoE/STID&USAES with instructors to conduct Doctrine, Training and Techniques (DTT).

4.0 Training Constraints

Manpower: Present TRADOC policy restricts the growth of institutional courses. The inability to increase the course training time could have an impact of the quality of training given due to complexity of system.

Recommendation: Recommended if it is not institutionally trained due to it is a low density piece of equipment, all qualified training to be accomplished at the unit.

Training: TRADOC is minimizing the use of military assets in support of the dedicated New Equipment Training Teams (NETT).

Recommendation: Recommend that the Material Developer (MATDEV) continue to finance the deployment of NETT as needed. Based on available resources, Doctrine and Tactics Training (DTT) will include minimum use of available manpower, maximum use of embedded and multi-media training and Distributed Learning (DL).

Ranges: Installations must have sufficient land resources to operate and train the AMCS. This includes an area sufficient for flailing operations without causing damage to other training areas, personnel, vehicles or the environment.

5.0 System Training Concept

The MATDEV shall develop a complete NET multi-media Training Support Package (TSP) and respective training products to support all phases of training for the AMCS. The MATDEV shall provide I&KPT to all individuals who may require it. Reserve Component (RC) personnel shall receive the same training as Active Army (AA) personnel. The AMCS training program shall be implemented and accomplished in three phases: NET, Institutional and Unit sustainment training. The training events and activities as defined in the Systems Approach to Training (SAT) process, or current approved Army training system, will be executed in the development of training for the AMCS. The MATDEV shall provide the test agency a complete TSP with training support products included 90 days before Operational Test (OT). Training for 12B/91B/91C and 91L will be taught at the respective skill level identified by the TNGDEV upon conducting the task analysis. Training for company grade

engineer officers and 919A MOS's shall be integrated into existing institutional training. Development or updating of Interactive Multi-media Instructions (IMI) for the AMCS may be required. The program shall be designed so that the training can be accessible through computer diskette, CD-ROM (threshold) and the World Wide Web (objective). The program shall provide a management system for tracking the student's progression through lessons, exercises, and evaluations. The MATDEV will maintain and update the training materials throughout the system's life cycle. The MATDEV shall network with the Institutional Trainers and update the training programs as required.

Unit training:The NETT shall provide instructors, training aids, and digitized technical publications to teach the Train-the-Trainer concept to selected unit personnel on operation/operator maintenance, trouble shooting procedures and will follow two level maintenance concept and provide field and sustainment level maintenance classes to fielded units. Operator and all maintenance classes shall be conducted on the AMCS chassis. Once NET is completed, unit sustainment becomes a command responsibility. The unit shall conduct all AMCS sustainment training utilizing the stay behind digitized TSP (technical manuals, lesson plans, training aids, instructor and student guides) provided by the NETT.

MSCoE CDID/RDD-AM/STID shall take the NET digitized TSP provided by the contractor and MATDEV to produce a complete Training Test Support Plan (TTSP) for AMCS. The NET manager will develop the task list for AMCS operators and maintainers at appropriate skill levels. The TTSP shall consist of Programs of Instruction (POI), Soldiers training publications, mission training plan, lesson plans, training schedule, target audience description and the task list as well as the operation and operator maintenance training provided by the contractor.

5.1 New Equipment Training Concept (NET)

NET is required for Operators and Maintainers to support the initial fielding of the system. NET development and funding is the responsibility of the MATDEV. This training will include equipment familiarization (capabilities and limitations), Tactics, Techniques and Procedures (TTP), maintenance, safety, and Manpower and Personnel Integration (MANPRINT). A NET TSP will be developed by the MATDEV and validated by MSCoE and the SCoE. The MATDEV, Tank-automotive and Armaments Command (TACOM) will provide a NETT. The NETT will follow two level maintenance concept and provide field level maintenance classes to fielded units. The NETT will have total responsibility for training Soldiers on the operation and maintenance of the AMCS during fielding.

- The AMCS training program will be implemented and accomplished in three phases: NET, Institutional and Sustainment training.
- The NETT will provide a complete package of digitized training materials that includes technical manuals, lesson plans, instructor and student guides to each Field Level Maintenance receiving AMCS. NET training (operator, unit and sustainment support) will be coordinated by TACOM NET and with MSCoE and the SCOE identifying MOS's requiring training.
- The NETT will provide instructors, training aids, and digitized technical publications to teach selected personnel on operator and field level maintenance of the Train-the-Trainer concept.
- Once NET is completed, unit sustainment becomes a command responsibility. The unit will conduct all sustainment training with the stay behind digitized training support package (technical manuals, lesson plans, instructor and student guides, training aids) provided by the NETT.
- RC may be equipped with the AMCS (pending further determination of organization and distribution). The training concept for these components will be the same as AA however; RC unit training time is limited due to monthly drills, Active Duty Training (ADT), Unit Training Assemblies (UTAs), and Annual Training (AT) cycles.
- The NET, DTT and IMI program combined will serve as a "leave-behind" training package for sustainment training for all units that receive the AMCS.
- The NET training will utilize the actual system and TADSS. DTT will be developed by MSCoE TNGDEV and presented concurrently with NET. Media will be in a digital format with the final approved version being level three interactive IMI capable of being archived in the Army Doctrine and Training Library (ADTDL), Army Learning Management System (ALMS) or Blackboard.

5.2 Displaced Equipment Training (DET)

There is no equipment to be displaced at this time.

5.3 Doctrine, Training, and Techniques (DTT)

DTT includes the concept of operations, capabilities, and limitations of the AMCS. This training provides the unit leadership with detailed knowledge of the system, allowing them to effectively integrate new capabilities into the unit. No new doctrine will be developed for the AMCS. Current established TTPs will be adjusted to incorporate the AMCS capabilities. TTPs will be an evolving process through the change in the operational areas that the AMCS will be employed. DTT will be developed by MSCoE/STID&USAES. It is assumed

that the TRADOC Deputy Chief of Staff of Operations and Training (DCSOPS&T) will resource MSCoE/STID&USAES with instructors to conduct DTT. DTT will follow NET.

5.4 Training Test Support Package (TTSP)

A NET program is first prepared by the PM and MATDEV in accordance with AR 350-1, Army Training and Leader Development, 18 Dec 2009, to support training development for new materiel and information systems, including conduct of test and evaluation of new equipment and software. Based on the NET program, the Program Executive Office /PM/MATDEV prepares, as appropriate, a NET TSP. The NET TSP is provided to the TNGDEV and testers. It is used to train player personnel for Developmental Testing (DT) and to conduct training of I&KPT who train player personnel for operational testing. The TNGDEV uses the NET TSP to develop the TTSP. The NET TSP must be delivered to the proponent TNGDEV for the development of the initial TTSP.

The Initial TTSP contains the System Training Plan (STRAP), Training Certification Plan and Training Data Requirements (TDR).

The final TTSP: NLT 90 days after I&KPT the MATDEV will provide the final NET TSP. The TNGDEV will complete the final TTSP containing: Training Schedule, POI for each MOS, TADSS, embedded training components, Target Audience Description (TAD), Soldier training publication or changes, lesson plans required for training, critical task lists and ammunition, targets and ranges required for training.

6.0 Institutional Training Domain

It is envisioned that the AMCS will be institutionally trained as a stand-alone system. An Area Clearance course, which will include all assets in the Area Clearance Platoon, may be developed and institutionally trained as well.

Integration of this training into the engineer's Professional Military Education (PME) courses and a resident course that trains the AMCS operators will be defined once task analysis is completed. Institutional training courses for maintainers will be integrated into an existing maintenance course. Distributed Learning (DL) AR 350-1, Army Training and Leader Development, 18 Dec 09, based instruction for operators, maintainers and leaders may supplement some residential training. The MATDEV will provide the PME and resident courses with a complete TSP delivered during NET. Soldier Training Publications (STP) will be produced under the guidance outlined in TRADOC Regulation 350-70, Systems Approach to Training Management.

6.1 Institutional Training Concept and Strategy

The training approach for the AMCS is to develop an Integrated Training Concept that uses several complimentary instructional methods and media to present knowledge and skills of increasing complexity. This Integrated Training Concept is capable of supporting fielding, operations, and sustainment of the systems to fielded units, and meeting the training needs of the institutions. This strategy includes training requirements for operators and affected functional areas above the operator and maintainers. Personnel resources for the AMCS training must come from AC and RC resources. The TADSS must be provided in sufficient quantities and within the appropriate time frames to support operational testing and fielding. Curriculum is to be developed and implemented within one (1) year after the FUE per TRADOC Regulation 350-70. The employment of the AMCS requires an institutional training strategy to be developed. Employment and operational planning of the AMCS, will be incorporated into 12B MOS, Noncommissioned Officer Education System (NCOES), 12A Officer Education System (OES), 919A, as well as 91L; these courses will receive classroom instruction on the limitations, capabilities, and employment techniques of the AMCS. AMCS training for the RC will be supportable within their annual training cycle. A comprehensive training analysis is required to determine the impacts on the 12B/919A/91L/91B/91C series MOSs.

It is envisioned that all personnel being assigned to a Clearance Platoon will attend an Additional Skill Identifier (ASI) producing course at USAES. Institutional training will consist of a functional course having a mix of conventional training methods, interactive multi-media as well as training on actual Area Clearance Family of Systems (ACFOS) for both operators and maintainers. Institutional training at the supervisory level will focus on familiarization on operation, capabilities, current TTP's, joint use, maintenance, and safety procedures. Training will be conducted prior to the Soldier arriving at the unit. Institutional training for RC personnel will follow the same POI as the Total Army Training System (TATS) courseware and should address monthly and annual training cycles.

6.1.1 Product Lines

The Product Lines for the AMCS include courseware, courses, training publications and training support packages. Courseware will focus on the Interactive Courseware (ICW) package developed by the PM. Professional Military Education (PME) courses will be revised by the proponent and sub-proponent schools to support the addition of the AMCS in the current curricula. The TNGDEV will update appropriate training publications. Training

Support Packages supporting individual and collective training will be developed by both the MATDEV and the TNGDEV. Officer Education System.

- Noncommissioned Officer Education System
- Soldier Training Publications
- Training Circulars
- TSPs for collective tasks
- TSPs for individual tasks
- Training Test Support Package
- Interactive Courseware
- Interactive Multimedia Instruction (IMI)
- Web-based instruction

The operator and maintenance TMs must follow the standard military design using a two-level maintenance system. The TM and TSP will be used for initial and unit sustainment training. Commercial Off-The-Shelf (COTS) manuals, if used, will be in accordance with MIL-STD 40051 (DoD Standard Practice: Manual Preparation, 31 Jul 1996) [MIL-HDBK-1221 (NOTICE 4, 17 Oct 1996), Department of Defense Handbook for Evaluation of Commercial Off-The-Shelf (COTS) manuals].

- Technical Manuals
- Interactive Electronic Technical Manuals (IETM)

6.1.1.1 Training Information Infrastructure

All Distributed Learning (DL) training products and courseware design will be developed in accordance TRADOC 350-70 System Approach to Training (SAT) and TRADOC Pam 350-70-12, Distributed Learning - Managing Courseware Production and Implementation 29 March 2004 and with Total Army Distributed Learning Program standards and standardized design tools. Upon USAES approval, the complete AMCS TSP will be placed on the Army Doctrine and Training Digital Library (ADTDL) for units to use during sustainment training.

6.1.1.1.1 Hardware, Software, and Communications Systems

All Materials developed in support of NET and DTT will be maintained with the MSCoE CDID/RDD-AM/STID. These products will be used to aid the TNGDEV and units in courseware development.

6.1.1.1.2 Storage, Retrieval, and Delivery

Training packages, TMs, and other forms of media are to be developed IAW TRADOC Reg 350-70 for access by authorized users. These products will be available through means such as Army Digital Training Library (ADTL), Distributed Learning (DL) repositories, Center for Army Lessons Learned (CALL) repositories, and Video Tele-training (VT). These products will be written IAW the SAT and placed into the appropriate database.

6.1.1.1.3 Management Capabilities

TADSS will be managed IAW Department of the Army Pamphlet 350-9, through the Training Support-Material Armywide Tracking System (TS-MATS). TADSS developed in support of the AMCS will be issued a device number IAW DA PAM 350-9 (Index and Description of Army Training Devices, 12 May 2010). Materials produced by the NET manager and USAES, DOTLD will be required to be in the current training development format SAT or current approved Army training program. The Digital Training Management System (DTMS) will be the primary means used for the delivery of training products to the operational forces. Those products will be validated by the TNGDEV and provided on viable digital media.

6.1.1.1.4 Other Enabling Capabilities

No other enabling capabilities at this time.

6.1.1.2 Training Products

TSPs will be based off the critical task lists for the skill levels being instructed. The instructional methods/media for operators, (including operator maintenance) and functional areas above the operator are: classroom, conference/lecture/demonstration, and practical exercises with equipment. The training plan will include Computer Based Interactive Training (CBIT) software to maximize student understanding prior to any equipment practical exercise requirements.

- Noncommissioned Officer Education System
- Soldier Training Publications
- Training Circulars
- TSPs for collective tasks
- TSPs for individual tasks

- Training Test Support Package
- Interactive Courseware
- Interactive Multimedia Instruction (IMI)
- Web-based instruction

6.1.1.2.1 Courseware

The goal for the MATDEV is to produce a New Equipment Training Support Package (NETSP) that shall be web based. All courses described under paragraph 6.1.1.2.2. shall be available in IMI as exportable media, supporting Computer Based Training (CBT), or as web-based training hosted on the Army Learning Management System . The IMI package must be SCORM compliant and meet as dL requirements as outlined in TRADOC Reg 350-70.

6.1.1.2.2 Courses

The AMCS will be incorporated into:

- 12B MOS, Noncommissioned Officer Education System (NCOES)
- 12A Officer Education System (OES)
- 91L, as well as 919A

These courses will receive instructions on the limitations, capabilities, and employment techniques of the AMCS. AMCS training for the RC will be supportable within the annual training days for the RC.

6.1.1.2.3 Training Publications

Publications will be available in digitized formats and be capable of archiving in the Army Knowledge On-line (AKO) website.

- STP
- DA Technical Manuals (DATM)
- COTS manual

Possible Manuals

- TC

6.1.1.2.4 Training Support Package (TSP)

Training Support Packages for all courses will be developed in accordance with TRADOC Regulation 350-70, SAT.

6.1.1.3 TADSS

The TNGDEV envisions a complete ACFoS in conjunction with Live and or Virtual Partial Task Trainers (PTT) to teach basic equipment and component operations: simulators to replicate functions, gauges, instruments and controls needed to operate the specific components of each AMCS within the ACFoS. The AMCS training device strategy will provide the capability to train and sustain individual and collective critical tasks. Training will be conducted by the use of IMI and other training TADSS. Accordingly, all AMCS platforms/modules will optimize these training devices for unit sustainment and force level training. It is envisioned that the following capabilities will be trained.

- Operator Training
- Maintenance Training
- Individual/Unit Performance Data Storage/Retrieval
- Battlefield Damage and Repair Training

6.1.1.3.1 Training Aids

Graphic Training Aids (GTA) to support institutional and sustainment training will include the publication of operator/maintainer smart books, Quick Reference Guides (QRG), and Leader guides for the AMCS. Prior to Fielding maintenance repairs are performed, it shall be determined if any maintenance TADSS are needed or required.

6.1.1.3.2 Training Devices

Training devices are required for operational and sustainment training.

An Explosive Effects Kit configured to simulate a Small, Medium, Large, and Extra Large explosive signature.

Prior to Fielding maintenance repairs are performed, it shall be determined if any maintenance training devices are needed or required.

6.1.1.3.3 Simulators

Simulators help train Soldiers and provide a better understanding of operation of the system before actually operating the live system. MSCoE and

USAES require a drivers simulator (similar to the Common Driver Trainer (CDT) platform) to train Soldiers during the operators phase of the AMCS training. It allows the training to be conducted when environmental conditions will not allow for safe operation/training of the system on training areas that have undisturbed soil. The simulator shall replicate an actual minefield for the operator to clear without facing safety restrictions of actual environment. The simulator will provide some degree of motion to train Soldiers driving during various environmental conditions such as ice, mud, rain, snow, day and night. The simulator shall provide driving in different types of terrain such as sand, tank trails, trees, dense vegetation, hills, hard surfaces, railhead and Heavy Equipment Transport (HET). The driver simulator is cost effective because it reduces the OPTEMPO hours of the actual AMCS and other like systems while reducing maintenance cost of the system. This shall allow the Soldier to go out on the actual system and operate it more proficiency. Soldiers having difficulty operating the live system can use the simulator to assist in retraining tasks. Basis of Issue (BOI): Institution - TBD, USARC/NGB 1-2 platforms per Area Clearance Platoon. These simulators will be critical to USARC/NGB operator training since it is almost impossible to operate the AMCS in flailing mode without environmental studies and dig permits at all locations. It would be next to impossible for units to be expected to work these issues out for a weekend drill exercise. Therefore these types of units would only be able to operate the AMCS in flail mode during their Annual Duty Training (ADT) events. This limited exposure to the AMCS is not enough for a Soldier to attain a proficiency level of operation. This is why it is imperrative that a simulator be developed and fielded to these units for MOS levels of operation and training in a simulated environment with follow-on hands on training during the ADT training periods annually.

6.1.1.3.4 Simulations

Simulations which allow leaders to train, plan, prepare, and conduct missions using the AMCS are required to ensure knowledge transfer. These simulations are preferred to be embedded into the following;

- Joint Conflict And Tactical Simulation (JCATS)
- Brigade Battalion Battle Simulation (BBBS)
- Corps Battle Simulation (CBS)
- Virtual Battle Space 2 (VBS2)
- Vitual Clearance Training Suit (VCTS)

6.1.1.3.5 Instrumentation

Requirement for data-capture instrumentation is not currently envisioned in the institutional domain.

6.1.1.4 Training Facilities and Land

The initial analysis shows that a minimum requirement for a training area shall be 5 km by 5km. This is required to safely accomplish all tasks for equipment operation, maintenance, and storage. Prior to establishing a training area for the AMCS:

- The land provided should have enough area to allow the operators to safely conduct flailing operations and provide sufficient maneuver areas.
- A site specific environmental and safety assessment shall determine if current training facilities and land are sufficient enough to provide a safe standoff distance for flailing operations.

6.1.1.4.1 Ranges

If a training area is not available, a range can be re-purposed for training. The initial analysis shows that a minimum requirement for a range shall be 5 km by 5km. This is required to safely accomplish all tasks for equipment operation, maintenance, and storage. Prior to establishing a range for the AMCS:

- The land provided should have enough area to allow the operators to safely conduct flailing operations and provide sufficient maneuver areas.
- A site specific environmental and safety assessment shall determine if current training facilities and land are sufficient enough to provide a safe standoff distance for flailing operations.

6.1.1.4.2 Maneuver Training Areas (MTA)

Not applicable at this time.

6.1.1.4.3 Classrooms

Current classroom configurations and quantity will not change. Traditional classrooms will be required for group instruction. Classroom XXI access will

be used for student-centered multimedia environment access digital training for AMCS training materials.

6.1.1.4.4 CTCs

AMCS will not be fielded to the CTCs. Units deploying to CTCs must bring their organic systems. The CTCs must possess the capabilities to replicate environmental conditions under which units may employ the AMCS. After rotations, AARs will be forwarded to the institutions with recommendations for training improvements. If the CTC has environmental or safety restrictions that prohibits the use of the AMCS the simulator can be utilized.

6.1.1.4.5 Logistics Support Areas

The institution is responsible for storing, processing, supporting, and staging training products and systems, both classified and unclassified. The support concept will be compatible with standard Army Logistics and Two-Level Maintenance systems and, when appropriate, consistent with commercial industry support concepts and practices. Contractor Logistics Support (CLS) will initially provide logistics and maintenance support while support transitions to the standard Army Logistics and Maintenance Systems. Contractor support should not be lower than Field Level. The AMCS shall be supportable and sustainable at the Field Level. The AMCS shall use common components to the maximum extent possible to facilitate worldwide supportability. The MATDEV will provide the life cycle management and develop the supportability strategy by coordinating with the CBTDEV at MSCoE and CASCOM. The MATDEV in coordination with the MSCoE and CASCOM CBTDEV will identify the ILS management and technical effort to identify and acquire the elements of support for operations and sustainment. There may be a future requirement for additional motor pool hardstand area to accommodate the increased quantity of systems over time due to any future Army Force Structure increases.

6.1.1.4.6 Battle Command Training Centers (BCTC)

Capabilities and employment doctrine will need to be updated at the Battle Command Training Program (BCTP) to incorporate the AMCS.

6.1.1.5 Training Services

Before TADSS's are turned over to the TADSS manager of the installation or the unit, device numbers must be assigned by Army Training Support Center (ATSC)

and entered into the MATS system for accurate tracking and accountability.

6.1.1.5.1 Management Support Services

PM in conjunction with MSCoE, CDID/STID and CASCOM will develop IMI modules which support individual training for institutional, operational and/or self-development domains. The three training modules (operational, maintenance and employment) are included in the TSP fielded during NET. These modules can be used as either stand-alone mode or web-based training over the internet. The IMIs must meet DL requirements and be capable of operating on Clearance Training Services Simulation platforms. Courseware must comply with SCORM requirements.

6.1.1.5.2 Acquisition Support Services

All TADSS development and training support services will be handled and managed through MSCoE Requirements Determination Division- Assured Mobility (RDD-AM) STID, Program Executive Officer- Systems Training Integration (PEO-STRI) and existing contracting mechanism and business practices.

6.1.1.5.3 General Support Services

Typical general support services (such as distribution and replication) will be required to support training in the Institutional domain; any requirement for additional support services such as video production services and TADSS development, procurement, distribution is yet to be determined.

6.1.2 Architectures and Standards Component

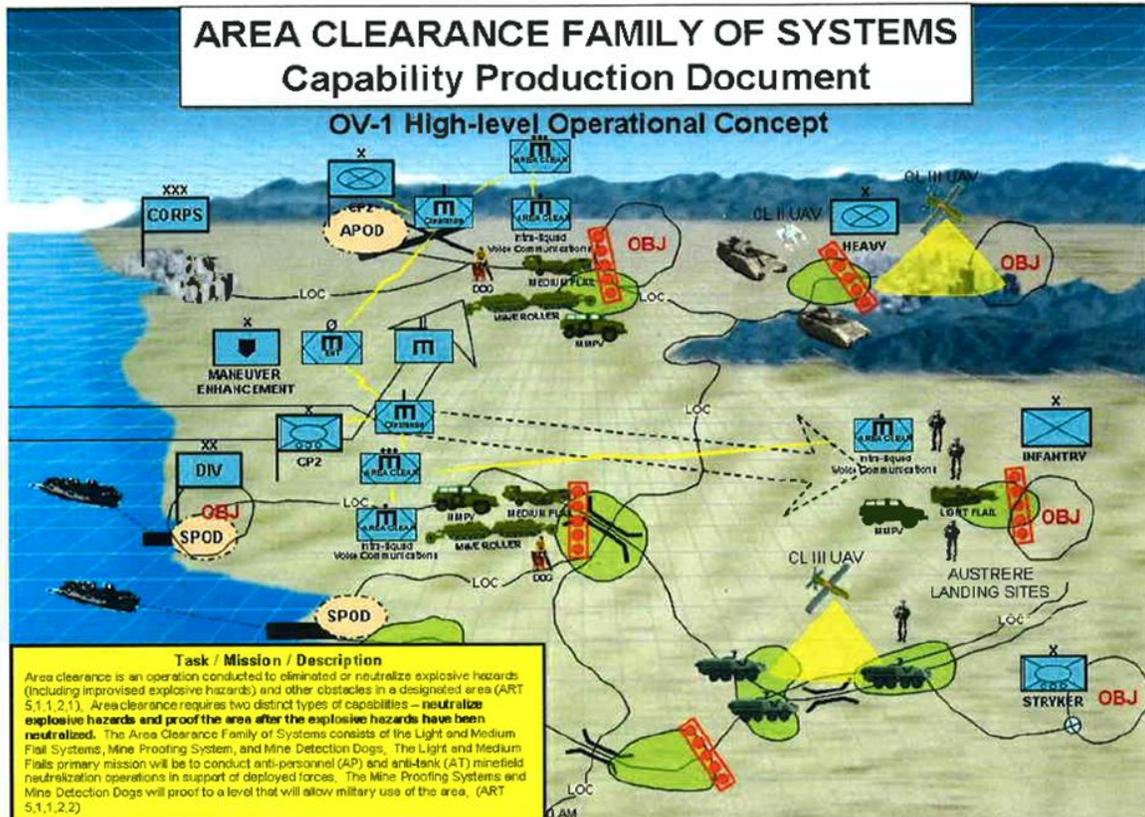
The system does not have a Command, Control, Communication, Computers, Intelligence and Interface (C4I) with any other system or capability. The Capabilities Production Document (CPD) defines the System as not NET Ready. Communications security requirements shall not exceed that of host vehicles and/or standard vehicular voice radios.

6.1.2.1 Operational View (OV)

The AMCS is designed to counter the effects of explosive hazards, such as improvised explosive devices, unexploded ordnance and booby traps, that could impede the mobility of friendly forces, destroy systems or cause personnel casualties. It will not operate in threat environments that require additional

protection against direct and indirect fires. The AMCS will utilize manned and unmanned mechanical systems and mine detection dogs to clear areas, such as sea and aerial ports, support areas, staging bases and forward operating bases, of explosive hazards for military operations. The mechanical systems will be designed for survivability against explosive hazards blasts. The manned mechanical systems will provide protection for the operator and crew to survive the effects of explosive hazards blasts.

AREA CLEARANCE FOS CPD [OV-1 High Level Operational Concept]



6.1.2.2 Systems View (SV)

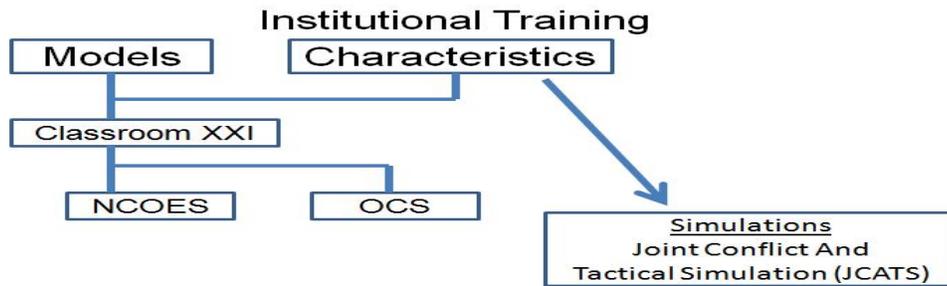
Battle simulation centers must be updated with the AMCS characteristics and capabilities. Maximum use of CBIT capabilities for training is recommended.

6.1.2.3 Technical View (TV)

Not Applicable.

6.1.3 Management, Evaluation, and Resource (MER) Processes Component

Area Mine Clearance System (AMCS) SV



USAES must accomplish necessary documentation and resourcing actions to ensure that equipment utilized by the Engineers for clearance operations is also made available for the institutional training site.

The Quality Assurance Office (QAO) will conduct periodic surveys to obtain feedback on the effectiveness of the AMCS training material at the institution and how it impacts the unit level missions. This information will be used to analyze and update training and doctrine at the institution.

6.1.3.1 Management

USAES Directorate of Training and Leader Development (DOTLD), and Director Of Training (DOT) CASCOTM will manage the institutional AMCS effort as the TNGDEV. TNGDEV within each of these organizations is charged with ensuring all aspects of training are identified and implemented. Both organizations will participate in strategy development with regards to tactical operations and training. Both organizations will monitor, comment on, and attend concept development and experimentation meetings dealing with the AMCS.

6.1.3.1.1 Strategic Planning

MSCoE, CDID-RDD/AM STID, in coordination with the USAES DOTLD will manage the AMCS as the Combat Developer (CBTDEV) and TNGDEV. TNGDEV in the CDID/RDD will ensure that all aspects of training are identified and implemented. Both organizations will participate in strategy development with regards to tactical operations and training. Both organizations will monitor, comment on, and attend concept development, experimentation meetings, I&KPT and Initial Operational Testing (IOT) dealing with the AMCS.

6.1.3.1.2 Concept Development and Experimentation (CD&E)

No concept analyses conducted.

6.1.3.1.3 Research and Studies

System research studies are being conducted.

6.1.3.1.4 Policy and Guidance

Documents pertaining to policy and guidance are listed in [Appendix B](#), References.

6.1.3.1.5 Requirements Generation

There is no requirement generation beyond the ACFOS Capabilities Production Document (CPD).

6.1.3.1.6 Synchronization

Development and production of TADSS must be synchronized with end item acquisition in order to meet the goals of the Unit Set Fielding (USF).

6.1.3.1.7 Joint Training Support

Joint training support is not anticipated at this time.

6.1.3.2 Evaluation

MSCoE, USAES DOTLD will evaluate the TSP, I&KPT, IOT, and NET to ensure the quality of training provided by the institutional NCOES and OES will focus on the use of task trained, proper application of tasks, and identification of tasks not trained, but needed. Internal evaluations will focus on the presentation of the tasks at the institution, course content, and the instructor presentation of the material. A PFTEA, funded by the PM will ensure that the AMCS training capabilities trains Soldiers, leaders, and units to standard.

6.1.3.2.1 Quality Assurance (QA)

MSCoE Quality Assurance Office (QAO) will use proven techniques to determine the quality of training provided by the institution. External evaluations will focus on the use of tasks trained, the proper application of those tasks, and identification of tasks not trained but needed. Internal evaluations will focus on the presentation of the tasks at the institution, the course content,

and the instructor presentation of material.

6.1.3.2.2 Assessments

A PFTEA ensures AMCS training capabilities trains Soldiers, leaders, and units to standard. MSCoE, CDID, in RDD-AM in conjunction with TRADOC Resource Analysis Center (TRAC) White Sands Missile Range (WSMR) (TRAC-WSMR) will conduct a PFTEA approximately one year following the FUE. The timeline will depend on unit availability and OPTEMPO. The PFTEA shall be funded through the PM.

6.1.3.2.3 Customer Feedback

Soldiers and leaders will assess AMCS training products, processes, and services every time they are used to conduct institutional training. Their assessments will address the usefulness of the systems training products in providing a relevant training environment.

6.1.3.2.4 Lessons Learned/After-Action Reviews (AARs)

The USAES DOTLD Lessons Learned/Analysis element will collect and consolidate input from external organizations, such as Combined Arms Center Lessons Learned, Battle Command Knowledge Network, and collaboration groups. This data will be assessed and, if warranted, distributed to the USAES training developers for consideration of incorporation in new or existing courses.

6.1.3.3 Resource

Institutional resources must be capable of exercising all AMCS capabilities. These capabilities are: (1) Mine neutralization by use of mechanical flails; (2) Sufficient range space to provide a minimum safe distance as per guidance in appropriate TM, environmental or safety assessment.

Item Resourced	Prior	FY12 Yrs or \$K	FY13 Yrs or \$K	FY14 Yrs or \$K	FY15 Yrs or \$K	FY16 Yrs or \$K	FY17 Yrs or \$K
Manpower - TD							
Contractor		1MY					
Civilian		2MY	2MY	2MY	2MY	2MY	
Enlisted		1MY	2MY	2MY	2MY	1MY	
Warrant		1MY	1MY	1MY	1MY	1MY	
Civ Pay			\$302K	\$330.2K	\$363.02K	\$399,302K	
Travel/Per Diem		\$84K	\$168K	\$168K	\$168K	\$84K	

Rationale: TNGDEVs are needed to develop JCIDS documents, programs of instruction and other outputs of the TDC process. Military Subject Matter Experts (SME) will be used in different areas within the training program, Primarily for Doctrine Tactics Techniques, training (DTT). Travel/Per Diem represent's cost to attend various training requirements and training events based on the number of individuals and key personnel to evaluate the training prior to operational testing traveling at various training locations.

Item Resourced	Prior	FY12	FY13	FY14	FY15	FY16	FY17
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		Yrs or \$K					
New Equipment Training/DTT							
NETT Instructor		\$780K	\$780K	\$780K	\$780K	\$780K	
Contract/Spt			\$125K	\$125K	\$125K	\$125K	
Travel/Per Diem		\$100K	\$100K	\$100K	\$100K	\$100K	
Classrooms			\$7K	\$7K	\$7K		
Equipment Support			\$60K	\$60K	\$60K		
AC/ Power			\$1K	\$1K	\$1K		
Printing		\$15K	\$35K	\$35K	\$35K		

Rationale: Contract support, Vendor Equipment and POL Products in support of NETT and DTT. To sustain a quality training environment a portable or standard classroom is needed. Dozer is needed reconstitute the training area.

Item Resourced	Prior	FY12 Yrs or \$K	FY13 Yrs or \$K	FY14 Yrs or \$K	FY15 Yrs or \$K	FY16 Yrs or \$K	FY17 Yrs or \$K
Training Products							
Training Pubs		\$15K	\$35K	\$35K	\$35K	\$35K	
IMI		\$400K	\$740K	\$150K	\$150K	\$150K	
ETM		\$40K	\$40K	\$40K	\$40K	\$40K	
TC			\$150K	\$50K	\$50K	\$50K	

IETM		\$200K	\$200K	\$200K	\$200K	\$200K	
Printing		\$15K	\$35K	\$35K	\$35K	\$35K	
Distribution			\$1K	\$1K	\$1K	\$1K	

Rationale: Cost to develop, revise, maintain, and distribute Training Products i.e.; TSP, NET/DTT, institutional, operational, and self-development domains.

Item Resourced	Prior	FY12 Yrs or \$K	FY13 Yrs or \$K	FY14 Yrs or \$K	FY15 Yrs or \$K	FY16 Yrs or \$K	FY17 Yrs or \$K
TADSS							
Simulators		\$250K	\$3M	\$5M			
Training Equip*			\$560K	\$5K	\$5K	\$5K	
Shipment			\$10K	\$10K	\$10K	\$10K	
Sustainment				\$45K	\$45K	45K	

Rationale: Cost to procure and sustain.

Item Resourced	Prior	FY12 Yrs or	FY13 Yrs or	FY14 Yrs or	FY15 Yrs or	FY16 Yrs or	FY17 Yrs or
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		\$K	\$K	\$K	\$K	\$K	\$K
Eval/QA							
Civilian			1MY	1MY	1MY	1MY	
Enlisted			1MY	1MY	1MY	1MY	
Warrant							
Trvl/Per Diem			\$12K	\$12K	\$12K	\$12K	

Rationale:

6.1.3.3.1 Resource

- Additional Operations and Maintenance-Army Funding Requirements will be included after the contract has been awarded.
- Operational costs for DTT/Training Developers over the life of the system are shown in table 6-1 below. These costs are estimates and depend on the system maturity to develop.
- Development and procurement for TADSS will be included after contract is awarded.
- Operator New Equipment Training (OPNET) and Field Level Maintenance New Equipment Training (FLMNET) estimates will be included after the contract is awarded.
- New Material In Brief (NMIB) and System de-processing will be included after the contract is awarded.

Resources for Mine Clearing System Self-Propelled Training (AMCS) NET and DTT dataI in paragraph 6.1.3.3

7.0 Operational Training Domain

The objective of operational training is to maintain combat readiness through the reinforcement of AMCS related individual skills and integration of AMCS capabilities into the Clearance Platoon.

7.1 Operational Training Concept and Strategy

The NET support materials (leave-behind package) will provide a basis for the development of unit-level training. Unit sustainment training will be accomplished using the leave-behind package and all applicable TMs. The unit will train Soldiers in unit deployment of the AMCS. Leaders at all levels: crew, platoon, company, battalion, and brigade are responsible for attaining and maintaining unit proficiency. As such, TNGDEV and commanders must ensure that all new training requirements for the AMCS are integrated into effected unit Combined Arms Training Strategy (CATS). Training events and frequency of training required for proficiency will be determined by the USAES, DOTLD. Collective training will be conducted and evaluated against the Training&Evaluation Outline (TE&O) found in the CATS and be developed, maintained and stored in the current Digital Training Management System (DTMS).

Unit members will receive the training necessary to attain proficiency in all critical tasks required to accomplish the unit mission. This will include operation, maintenance, and supervisor tasks. Unit commanders are responsible for providing the training guidance, time, and resources for individuals to maintain the level of proficiency required by the appropriate STP. The unit will conduct sustainment training at the squad, platoon, and company level. Clearance sections that utilize the system shall train on collective tasks by integrating them into collective training events. Exportable training packages, videotape lessons, and individual programmed texts for skill maintenance will be embedded in the host units. RC Training will follow the same training concept and POI as the AA units. RC fielding and training will occur during monthly drills and Annual Training cycles. Training will follow the same training concept and POI as the AA units.

7.1.1 Product Lines

The MATDEV will provide units with a complete individual and collective/crew TSP, dL based IMI during NET.

7.1.1.1 Training Information Infrastructure

Under the four areas below the Training Information Infrastructure (TII) requires further analysis; however, preliminary analysis for these areas and findings are described in the respective paragraphs.

7.1.1.1.1 Hardware, Software, and Communications Systems

Multimedia disks developed in support of NET will be maintained at the Unit Training Assistance Program (UTAP). These and other training materials developed for conduct of NET training will be left with the unit for use in follow-on operational training.

7.1.1.1.2 Storage, Retrieval, and Delivery

Training packages, collective and individual tasks, TMs, and other forms of media are to be developed in ASAT or the current approved Army automated system IAW TRADOC Regulation 350-70 for access by authorized users. These products will be available through means such as Reimer Digital Library (RDL), dL repositories, Center for Army Lesson Learned (CALL) repositories, and Digital Training Management System (DTMS).

7.1.1.1.3 Management Capabilities

Refer to para [6.1.1.1.3](#)

7.1.1.1.4 Other Enabling Capabilities

No other Enabling Capabilities identified.

7.1.1.2 Training Products

The instructional methods and media for operators, (including operator maintenance) and functional areas above the operator are: Classroom XXI, conference, lecture, demonstration, practical exercise with the equipment. The training products for operators include but are not limited to, Simulations, Computer Based Training (CBT), virtual and Part Task Trainers (PTT) if access for unit sustainment training is not readily available. Collective, individual training and doctrinal information that is delivered to units will be available to individual Soldiers through the RDL and the Army Training Digital Library (ATDL). The ASAT database is a working repository of training material, developed by the institution, which includes the above information as well as CATS, POIs, TSPs, Lesson plans, etc.

Any unit that is fielded this equipment needs to ensure that all affected unit CATS will have the sustainment training requirements integrated into the current unit CATS.

7.1.1.2.1 Courseware

Level III IMI/dL products will be required to support operator and maintainer training for the AMCS. IMI products will include operation, maintenance, employment, and troubleshooting/diagnostics for all crew positions and organizational mechanics. IMI shall continue to be an integral part of the unit sustainment "leave behind package" at the conclusion of unit NET.

7.1.1.2.2 Courses

Appropriate courses, both officer and enlisted, will be modified or developed to include the AMCS characteristics, doctrine and tactics, capabilities, operation, survivability, maintenance and communications. This training will support the AMCS and will be based on input from contractor produced Logistics Support Analysis (LSA) data, contractor training, results from the AMCS operational testing and Subject Matter Experts (SME).

TSPs intended for unit use in sustainment training will be available through the RDL. Collective, individual training and doctrinal information that is delivered to units will be available to individual soldiers through the RDL and the ATDL. The ASAT database is a working repository of training material, developed by the institution, which includes above information as well as CATS, POIs, TSPs, lesson plans, etc.

7.1.1.2.3 Training Publications

The STP should be reviewed and updated to incorporate AMCS tasks, if appropriate.

- STP 5-12B1-SM, Soldier's Manual, MOS 12B, Combat Engineer, Skill Level 1, 18 Oct 2002.
- STP 5-12B24-SM-TG, Soldier's Manual and trainer's Guide, MOS 12B, Combat Engineer, Skill Levels 2/3/4, 28 Oct 2003.

Unit CATS must be updated to incorporate individual and collective tasks to support the AMCS.

7.1.1.2.4 TSP

Sustainment training in units will be managed and executed by command selected NCOs trained during NET. Lesson plans and student guides will be provided in a format that provides information required to execute initial and sustainment training. Multimedia TSP will be developed by the MATDEV and validated by CDID/RDD-AM/STID which shall be designed to support unit sustainment training as well as NET and institutional training. NCO trainers will leverage digital TSPs for both individual and collective training.

7.1.1.3 TADSS

TADSS such as training aids, job aids, CBIT software, and video training media will be provided to support operational sustainment training, and will be provided to the unit as a leave-behind package at the NET. Training/job aids will include a smart book (graphical training aid) for the AMCS.

7.1.1.3.1 Training Aids

Graphic Training Aids (GTA) to support operational and sustainment training will include the publication of operator/maintainer smart books, Quick Reference Guides (QRG), and Leader guides for the AMCS.

7.1.1.3.2 Training Devices

NET support materials, IMI (leave-behind package) will provide a basis for the development of unit-level collective training. The unit will train Soldiers in unit employment. Leaders at all levels, platoon, company, battalion, and brigade are responsible for attaining and maintaining unit proficiency. Collective training will be conducted and evaluated against the TE&O found in the Unit CATS.

7.1.1.3.3 Simulators

Refer to para [6.1.1.3.3](#)

7.1.1.3.4 Simulations

Refer to para [6.1.1.3.4](#)

7.1.1.3.5 Instrumentation

No instrumentation is envisioned at this time.

7.1.1.4 Training Facilities and Land

The initial analysis shows the unit will need a minimum requirement for a training area shall be 5 km by 5km. This is required to safely accomplish all tasks for equipment operation, maintenance, and storage. Prior to establishing a training area for the AMCS:

- The land provided should have enough area to allow the operators to safely conduct flailing operations and provide sufficient maneuver areas.
- A site specific environmental and safety assessment shall determine if current training facilities and land are sufficient enough to provide a safe standoff distance for flailing operations.
- RC units not situated on or near an installation will need to travel to an installation with adequate land area for training the AMCS.

7.1.1.4.1 Ranges

Refer to para [6.1.1.4.1](#)

7.1.1.4.2 Maneuver Training Areas (MTA)

The initial analysis shows that a minimum requirement for a range shall be 5 km by 5km. This is required to safely accomplish all tasks for equipment operation, maintenance, and storage. Prior to establishing a range for the AMCS:

- The land provided should have enough area to allow the operators to safely conduct flailing operations and provide sufficient maneuver areas.
- A site specific environmental and safety assessment shall determine if current training facilities and land are sufficient enough to provide a safe standoff distance for flailing operations.

This includes an area that will suffice for flailing operations without causing damage to other training areas, personnel, vehicles or the environment.

7.1.1.4.3 Classrooms

No new classrooms are currently required for operational training.

7.1.1.4.4 CTCs

Units deploying to CTCs must bring their organic systems. The CTCs must possess the capabilities to replicate environmental conditions under which units may employ AMCS. After rotations, AARs will be forwarded to the institutions with recommendations for training improvements.

7.1.1.4.5 Logistics Support Areas

The Unit is responsible for storing, processing, supporting, and staging training products and systems, both classified and unclassified. The support concept will be compatible with standard Army Logistics and Two-Level Maintenance systems and, when appropriate, consistent with commercial industry support concepts and practices. Contractor Logistics Support (CLS) will initially provide logistics and maintenance support while support transitions to the standard Army Logistics and Maintenance Systems. Contractor support should not be lower than Field Level. The AMCS shall be supportable and sustainable at the Field Level. The AMCS shall use common components to the maximum extent possible to facilitate worldwide supportability. The MATDEV will provide the life cycle management and develop the supportability strategy by coordinating with the CBTDEV at MSCoE and CASCOM. The MATDEV in coordination with the MSCoE and CASCOM CBTDEV will identify the Integrated

Logistics Support (ILS) management and technical effort to identify and acquire the elements of support for operations and sustainment.

7.1.1.4.6 Battle Command Training Centers (BCTC)

Operational capabilities, employment doctrine and unit SOP will need to be updated to incorporate the AMCS at the Battle Command Training Program (BCTP).

7.1.1.5 Training Services

Key personnel will perform all unit sustainment training. Unit members will receive the training necessary to attain proficiency in all critical tasks required to accomplish the unit mission. This will include operation, maintenance, and supervisor tasks. Unit commanders are responsible for providing the training guidance, time, and resources for individuals to maintain the level of proficiency required by the appropriate STP.

7.1.1.5.1 Management Support Services

Before TADSS are turned over to the TADSS manager of the installation, device numbers must be assigned by ATSC and entered into the MATS for accountability and accurate tracking. The strategy must ensure that the AMCS modules remain safe, effective and supportable throughout their life cycle. The strategy must match the unique operational and support environments for the TADSS. The MATDEV in coordination with the MSCoE and CASCOM CBTDEV will identify the ILS management and technical effort to identify and acquire the elements of support for operations and sustainment.

7.1.1.5.2 Acquisition Support Services

No acquisition support services are anticipated for conduct of operational training.

7.1.1.5.3 General Support Services

Typical general support services (such as distribution and replication) will be required to support training in the Operational domain; any requirement for additional support services such as video production services and TADSS development, procurement, distribution has yet to be determined.

7.1.2 Architectures and Standards Component

Refer back to para [6.1.2](#)

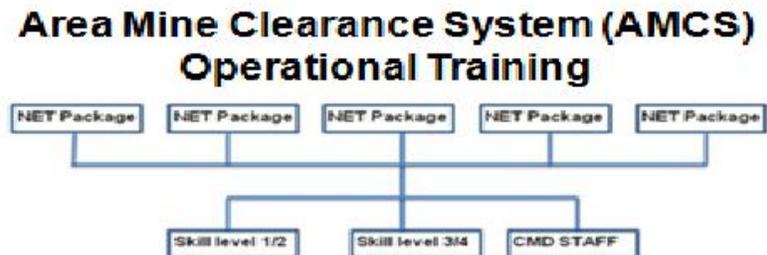
7.1.2.1 Operational View (OV)



7.1.2.2 Systems View (SV)



7.1.2.3 Technical View (TV)



7.1.3 Management, Evaluation, and Resource (MER) Processes Component

Training development will focus on producing products that are capable of being used both in the operational training domain and focused on CLS and 12B tasks. Trainee and instructors will be routinely asked to evaluate training sequences, training events, and training equipment (systems, components, and devices) to determine how best to improve the quality and efficiency of instruction and training events to provide the best quality training.

The QAO, MSCoE and USAES DOTLD will conduct periodic surveys to obtain feedback on the effectiveness of the AMCS NET leave behind package material at the units and how it impacts the unit level training/mission.

7.1.3.1 Management

The MSCoE/CDID/RDD-AM/STID&USAES, DOTLD, will manage the AMCS effort as the TNGDEV. TNGDEV within each of these organizations are charged with ensuring all aspects of training are identified and implemented. Both organizations will participate in strategy development with regards to tactical operations and training. Both organizations will monitor, comment on, and attend concept development meetings dealing with the AMCS.

7.1.3.1.1 Strategic Planning

The MSCoE, STID, in coordination with the USAES DOTLD will manage the AMCS as CBTDEV and TNGDEV. TNGDEV in the CDID RDD will ensure that all aspects of training are identified and implemented.

Soldiers assigned to units that are being fielded with the AMCS will receive their initial training from the NET team during the fielding effort. The AMCS equipped units will utilize a leave-behind package provided by the NET team to conduct sustainment training. Both organizations should participate in strategy development with regards to tactical operations and training.

7.1.3.1.2 Concept Development and Experimentation (CD&E)

The AMCS requirement is based in the Operational Needs Statement (ONS).

7.1.3.1.3 Research and Studies

See paragraph immediately above.

7.1.3.1.4 Policy and Guidance

Documents pertaining to policy and guidance are listed in [Appendix B](#), References.

7.1.3.1.5 Requirements Generation

There is no requirement generation beyond the ACFOS Capabilities Production Document (CPD).

7.1.3.1.6 Synchronization

Distribution of TADSS will be synchronized with USF fielding plans.

7.1.3.1.7 Joint Training Support

No Joint Training Support projected at this time.

7.1.3.2 Evaluation

Area Clearance personnel are encouraged to acquire any CALL documentation on the AMCS. Through repositories, newsletters, and the CALL website; there are numerous documents about how the AMCS is currently being used in theater

operations and lessons learned from operators and leaders who have recently been deployed. This data will be collected, reduced and analyzed.

7.1.3.2.1 Quality Assurance (QA)

The QAO, MSCoE, USAES and DOTLD will evaluate the quality of sustainment training. External evaluations will focus on the use of task trained, the proper application of those tasks, and identification of tasks not trained but needed. This information will be used to analyze and update training, critical tasks and doctrine.

7.1.3.2.2 Assessments

MATDEV shall fund a PFTEA which will validate unit sustainment training to ensure that mission requirements are met. Evaluation guidance will be given from the TNGDEV in the form of on-site surveys, AAR from the gaining units. The post fielding evaluation will provide findings and actions taken by the TNGDEV to correct deficiencies for gaining Commanders.

7.1.3.2.3 Customer Feedback

Leaders will assess the AMCS training products, processes, and services every time they use them to conduct training. Copies of their assessments will be provided to USAES DOTLD. Their assessments will consider:

- The usefulness of AMCS training products in providing a relevant training environment
- The cost for use and ownership
- The condition and availability of the product, process, or service
- The outcomes achieved

7.1.3.2.4 Lessons Learned/After-Action Reviews (AARs)

Sources of lessons learned that can be incorporated into operational training include CALL archives, Center for Engineer Lessons Learned, newsletters, training aids, etc. Units will conduct AARs after training events and submit relevant lessons learned to USAES for appropriate documentation.

7.1.3.3 Resource Processes

Operational resources must be made available to exercise all AMCS capabilities. These capabilities are: (1) Mine neutralization by use of mechanical and robotic flails; (2) Sufficient range space to provide a minimum safe distance as per guidance in appropriate TM. The PM will request resourcing for the training enablers, infrastructure for the installations through the Program Information Group (PIG). Resources for self-development training domain are included in the overall resources data in paragraph 6.1.3.3

7.1.3.3.1 Resource Processes

8.0 Self-Development Training Domain

Individual skills shall be integrated into the training of the AMCS into a clearance platoon to support maneuver and sustainment operations as a part of the Army Training Information System (ATIS).

8.1 Self-Development Training Concept and Strategy

The NET support materials (leave-behind package) will provide a basis for the Self-development of individuals for unit-level training. Leaders at all levels: crew, platoon, company, battalion, and brigade are responsible for attaining and maintaining to their unit proficiency. Training events and frequency of training required for self-development will be at the commanders discretion. Unit members will receive all information to accomplish the training necessary to attain proficiency in all critical tasks required to accomplish the unit mission. This will include operation, maintenance, and supervisor tasks. Unit commanders are responsible for providing the training guidance, and resources for individuals to maintain the level of proficiency required by the appropriate STP. This strategy applies to enlisted, noncommissioned officer, warrant officer, and commissioned officer.

RC Training: RC training will follow the same training concept and POI as the AA units. RC fielding and training will occur during monthly drills and AT cycles.

8.1.1 Product Lines

The MATDEV will provide units with a complete TSP and dL based IMI during NET. The NET leave behind package will provide a basis for the unit to sustain a

self-development resource, AKO links will provide additional assets for the self-development program as described in the following paragraphs.

8.1.1.1 Training Information Infrastructure

Under the four areas below the TII requires further analysis; however, preliminary analysis for these areas and findings are described in the respective paragraphs.

8.1.1.1.1 Hardware, Software, and Communications Systems

Multi-media disks and other training materials developed for conduct of NET training will be left with the unit for use in follow-on operational and self-development training.

8.1.1.1.2 Storage, Retrieval, and Delivery

Training Packages, TMs, and other forms of media are to be developed IAW TRADOC Reg 350-70 for access by authorized users. These products will be available through means such as RDL, DL repositories, CALL repositories, AKO, DKO and VT. These products will be written IAW the SAT process and formatted in an ASAT POI/TSP format.

8.1.1.1.3 Management Capabilities

Refer to para [6.1.1.1.3](#)

8.1.1.1.4 Other Enabling Capabilities

No other enabling capabilities are envisioned at this time.

8.1.1.2 Training Products

TSPs will be based off the critical task lists for the skill levels being instructed. The instructional methods for operators, (including operator maintenance) and functional areas above the operator is the NET leave behind package which includes: operator and Maintenance level TSPs, CBIT software, and the DTT TSPs. The self-development training plan will include the CBIT software to maximize student informational understanding of the AMCS capabilities and characteristics.

8.1.1.2.1 Courseware

Self-development courseware will be designed using methods which facilitate learning. Examples include: contractor provided ICW, IMI, and/or Web-based instruction. All courseware will be developed using the approved TRADOC learning management system and the SAT process.

8.1.1.2.2 Courses

TSPs intended for unit use in sustainment training will be available through the RDL. Collective, individual training and doctrinal information that is delivered to units will be available to individual Soldiers for Self development through the RDL and the Army Training Digital Library (ATDL). The ASAT database is a working repository of training material, developed by the institution, which includes above information as well as CATS, POIs, TSPs, lesson plans, etc.

8.1.1.2.3 Training Publications

The STP should be reviewed and updated to incorporate AMCS tasks, if appropriate.

- STP 5-12B1-SM, Soldier's Manual, MOS 12B, Combat Engineer, Skill Level 1
- STP 5-12B24-SM-TG, Soldier's Manual and trainer's Guide, MOS 12B, Combat Engineer, Skill Levels 2/3/4.

8.1.1.2.4 Training Support Package (TSP)

During NET training, lesson plans and student guides will be provided in a format that will provide all information required for unit training to help sustain Self-development. Multimedia TSP(s) will be developed by the MATDEV and validated by the RDD-AM/STID, which shall be designed to support self-development training as well as NET and institutional training.

8.1.1.3 Training Aids, Devices, Simulators and Simulations (TADSS)

TADSS such as training aids, job aids, CBIT software, and video training media will be developed to support operational sustainment training, and provided to the unit as a leave-behind package at the NET. Training/job aids will include a smart book (graphical training aid) for the AMCS. These TADSS can be used for Self-development, unit and Institutional training.

8.1.1.3.1 Training Aids

Graphic training aids to support self-development training will include the publication of operator and maintainer smart books for the AMCS.

8.1.1.3.2 Training Devices

Refer to para [7.1.1.3.2](#)

8.1.1.3.3 Simulators

A CBIT will be developed to support the AMCS. A computer based level one simulation shall familiarize the Soldier on the components, characteristics, operation and maintenance of the AMCS. The CBIT module will also focus on team development and the choreography necessary to safely employ and retrieve the AMCS. This will be part of the NET leave behind package. CBIT will be SCORM compliant and meet all TRADOC learning management system requirements.

8.1.1.3.4 Simulations

8.1.1.3.5 Instrumentation

Refer to para [7.1.1.3.5](#).

8.1.1.4 Training Facilities and Land

Refer to para [7.1.1.4](#).

8.1.1.4.1 Ranges

Not applicable at this time.

8.1.1.4.2 Maneuver Training Areas (MTA)

Not applicable at this time.

8.1.1.4.3 Classrooms

No new classrooms are currently required for operational training.

8.1.1.4.4 CTCs

Not applicable

8.1.1.4.5 Logistics Support Areas

The institution is responsible for storing, processing, supporting, and staging training products and systems, both classified and unclassified.

8.1.1.4.6 Battle Command Training Centers (BCTC)

Capabilities and employment doctrine will need to be updated at the Battle Command Training Program.

8.1.1.5 Training Services

Key personnel shall perform OPNET and DTT training. Unit members will receive the training necessary to attain proficiency in all critical tasks required to accomplish the unit mission. This will include operation, maintenance, and supervisor tasks. Unit commanders are responsible for providing the training guidance, time, and resources for individuals to maintain the level of proficiency required by the appropriate STP.

8.1.1.5.1 Management Support Services

Refer back to [7.1.1.5.1](#)

8.1.1.5.2 Acquisition Support Services

Requirement for acquisition support services for the self-development training domain is yet to be determined.

8.1.1.5.3 General Support Services

Typical general support services (such as distribution and replication) will be required to support training in the self-development domain; any requirement for additional support services such as video production services and TADSS development, procurement, distribution is yet to be determined.

8.1.2 Architectures and Standards Component

Refer back to para [7.1.2](#)

8.1.2.1 Operational View (OV)

Refer back to [7.1.2.1](#)

8.1.2.2 Systems View (SV)

Refer back to [7.1.2.2](#)

8.1.2.3 Technical View (TV)

Refer back to [7.1.2.3](#)

8.1.3 Management, Evaluation, and Resource (MER) Processes Component

The MSCoE/RDD-AM/STID&USAES, DOTLD, will conduct periodic surveys to obtain feedback on the effectiveness of the AMCS NET leave-behind package training material at the units and how it impacts the unit level training/missions. This information will be used to analyze and update training, critical tasks and doctrine.

40-50 hrs of IMI products developed and self-sustainment materials will be accessible through Blackboard, ESKN and funded by the MATDEV during fielding. Resources for the self-development training domain are included in the overall resource data in paragraph 7.1.3.3.

8.1.3.1 Management

The MSCoE/RDD-AM/STID&USAES, DOTLD, will manage the AMCS effort as the TNGDEV. TNGDEVs within each of these organizations are charged with ensuring all aspects of training are identified and implemented. Both organizations will participate in strategy development with regards to tactical operations and training. Both organizations will monitor, comment on, and attend concept development and experimentation meetings dealing with the AMCS. DOT required approval of training products. USAES/DOTLD will maintain training products and manage storage and access to these items.

8.1.3.1.1 Strategic Planning

The self-development strategic planning should not be different than operational domain. Refer to [7.1.3.1.1](#).

8.1.3.1.2 Concept Development and Experimentation (CD&E)

8.1.3.1.3 Research and Studies

8.1.3.1.4 Policy and Guidance

Documents pertaining to policy and guidance are listed in [Appendix B](#), References.

8.1.3.1.5 Requirements Generation

Requirements documents for the AMCS are listed in [Appendix B](#), References.

8.1.3.1.6 Synchronization

Development and production of TADSS must be synchronized with end item acquisition in order to meet the goals of the USF, TRADOC, ATSC-STID and integration into TRADOC PAM 350-9.

8.1.3.1.7 Joint Training Support

Joint training is not anticipated at this time, information will be updated if/when any proposed training plans are requested.

8.1.3.2 Evaluation

Refer to para [6.1.3.2](#)

8.1.3.2.1 Quality Assurance (QA)

The QAO, MSCoE and USAES/DOTLD will evaluate the quality of self-development training. External evaluations will focus on the use of task trained, the proper application of those tasks, and identification of tasks not trained but needed. This information will be used to analyze and update training, critical tasks and doctrine.

8.1.3.2.2 Assessments

A PFTEA ensures the AMCS training capabilities trains Soldiers, leaders, and units to standard. USAES will conduct a PFTEA approximately one to two years following the FUE. The timeline will depend on unit availability and OPTEMPO. The PFTEA will be funded through the MATDEV.

8.1.3.2.3 Customer Feedback

Leaders will assess the AMCS dL training products, processes, and services every time they use them to conduct sustainment training. Copies of their assessments will be provided to USAES DOTLD. These assessments will be used to monitor the effectiveness of the self-development training.

8.1.3.2.4 Lessons Learned/After-Action Reviews (AARs)

IMI products developed for self-development will include End of lesson questions and a AAR will be completed and digitally stored. An analysis of AARs will be conducted by USAES to ensure current training strategies are updated and relevant to any new doctrine changes in tactical environments. The self development domain is based off the assets of the unit sustainment package, and will be updated accordingly.

8.1.3.3 Resource Processes

40-50 hrs of IMI products will be developed for self-development. These materials will be accessible through Blackboard, ESKN and funded by MATDEV during fielding. Resources for the self-development training domain are included in the overall resource data in paragraph 6.1.3.3.

8.1.3.3.1 Resource Processes

A Milestone Annex

Individual Training Plan	
Milestone:	Date
1. Initial Individual Training Plans (ITP) submitted.	15 Oct 2011
2. Annotated task list submitted.	15 Aug 2011
3. Course Administrative Data (CAD) submitted.	
4. Training Program Worksheet submitted.	10 Oct 2011
5. TSPs submitted.	19 July 2011
6. POIs submitted.	19 July 2011
7. Digitized copies archived.	19 July 2011
8. Resident courses start date. (If required)	
Field Manuals	
Milestone:	
1. Requirements identified.	27 Mar 2007
2. Draft FM changes validated.	27 Mar 2007
3. FM outlines approved.	27 Mar 2007
4. FM coordinating draft completed.	27 Mar 2007
5. Print/digitization request initiated.	27 Mar 2007
6. Approved digitized Camera Ready Copy (CRC) submitted.	27 Mar 2007
7. Replication/distribution completed.	27 Mar 2007
Army Training Literature (Note: Includes the SM, TG, and ARTEP products.)	
Milestone:	
1. Analysis completed.	27 Mar 2007

2. Draft SM, CATS, ARTEP, and TG.	27 Mar 2007
3. U.S. Army Training Support Command (ATSC) staffing.	Jul 2010
4. Digitized/CRC submitted.	27 Mar 2007
5. Replication/distribution completed.	27 Mar 2007
Interactive Multimedia Instruction/Distance Learning	
Milestone:	
1. Requirements identified and submitted for approval.	10 Aug 2011
2. Requirements approved by ATSC and TRADOC.	10 Aug 2011
3. Resources identified.	10 Aug 2011
4. Courseware developed and validated.	
5. Master materials to ATSC for replication and distribution.	
6. Replication/distribution completed.	
Training Effectiveness Analysis (TEA)	
(Conducted in-house, by contract, Training Development and Analysis Activity, TRADOC Analysis Center, or PM)	
1. Interim TEA developed.	N/A
2. TEA updated for Milestone Decision Review A	N/A
3. TEA updated for Milestone Decision Review B	N/A
4. TEA updated for Milestone Decision Review C	N/A
5. PFTEA planned.	N/A
Army Visual Information Production and Distribution Program	
Milestone:	
1. High-risk tasks and jobs identified.	10 Aug 2011
2. Storyboards validated.	
3. DAVIPDP requirements submitted to ATSC.	
4. Requirements approved by the Department of the Army.	
5. Production initiated.	

6. Replication/distribution completed.	
TADSS	
Milestone:	
1. High risk, hard-to-train tasks identified.	18 Nov 2011
2. Need for TADSS identified.	18 Nov 2011
3. TADSS concept validated.	18 Nov 2011
4. TADSS incorporated into the STRAP (part of the CATS).	18 Nov 2011
5. Analytical justification using the TEA provided.	18 Nov 2011
6. Training ORD developed, if required.	18 Nov 2011
7. TADSS effectiveness validated.	18 Nov 2011
8. TADSS incorporated into the ORD.	18 Nov 2011
9. MOS-specific milestones/requirements for TADSS developed and incorporated in the integrated training strategy.	18 Nov 2011
Facilities	
Milestone:	Date
1. Range and facility requirements identified.	
2. Identification of construction requirements completed.	
3. Construction requirements submitted to Major Command (MACOM).	
4. Requirements validated and updated.	
5. Supporting requirements identified and availability coordinated.	
6. Installation and other construction requirements submitted to ACOM.	
7. Refined construction requirements and range criteria forwarded to ACOM.	
8. Construction initiated.	

Training Ammunition	
Milestone:	
1. Ammunition identified.	10 Nov 2011
2. Initial ammunition requirements validated.	
3. Requirements included in the ORD.	
4. Ammunition item developed.	
5. Validation and test completed.	
6. Ammunition requirements identified in the ITP.	
7. Requirements provided to installation/MACOM manager.	
8. Requirements included in DA Pam 350-38.	
9. Production entered.	

TRAINING DEVELOPMENT MILESTONE SCHEDULE - SHEET A		PAGE 1 OF PAGES 1	REQUIREMENTS CONTROL SYMBOLATTG- 55
SYSTEM The Mine clearing system Self-Propelled	ACAT	OFFICE SYMBOL ATSE-TD-WM-E	AS OF DATE
POINTS OF CONTACT	NAME	OFFICE SYMBOL	TELEPHONE
MATERIEL COMMAND	Program Manager		
TRADOC PROPONENT	USAES		
TSM			
CD:	Frank Hugelma	DCD- USAES	(573)- 563-3989 DSN 676- 3938
TNGDEV	Martel Goldman	DCD- USAES	(573)563 -8215 DSN 676-

				8215
SUPPORTING PROPONENTS:		COL Tony Skinner	RDD, USAES	
ATSC:		John Beauford	ATIC-DSSP	(757)87 8-2910 ext 2068
ITEM	DATE	RESPONSIBLE AGENCY/POC		TELEPHONE
MNS: (Mission Need Statement)				
SMMP: (System MANPRINT MANAGEMENT PLAN)		Robert Clark	DCD- USAES	(573)563 -5912 DSN 676- 5912
Supportability Strategy:		Shawn McGee	TACOM-RI	(309)782 -3163 DSN 793- 3163
ILSMP: (Integrated Logistacle Maintance Plan)		Shawn McGee	TACOM-RI	(309)782 -3163 DSN 793- 3163
TTSP: (training test support package)		Martel Goldman	RDD, USAES	(573)563 -8215 DSN 676- 8215
QQPRI: (Qualitative and Quantitative Personnel Requirements Information)				
BOIP: (basis of issue plan)		Cynthia Dotcherman	TACOM	
NETP: (New Equipment Training Plan)		Jeff Robertson	TACOM	

SYSTEM SCHEDULE MILESTONE SHEET B (TRADOC REG 350-9)				PAGE 1 OF 2				REQUIREMENTS CONTROL SYS ATTG-55																
SYSTEM: The Mine clearing system Self-Propelled				TRADOC SCHOOL: USAES				AS OF DATE:																
COMPLETED BY: Mr. Martel Goldman				OFFICE SYMBOL: ATZT- DT-WM-E				TELEPHONE: (573) 329- 1924																
TRAINING PACKAGE ELEMENT/PRODUCT:																								
LEGEND:		MILESTONE BY QUARTER																						
	FY08				FY09				FY10				FY11				FY12				FY13			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
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11.																								
12.																								
01. NET Contract Due to SAM: 02. NET Contract Approval: 03. NET Contract Award: 04. NET Contract Start of Work Meeting: 05. Contractor Start of Work Meeting:																								

06. IKPT 01:
07. NET POI(s)/TSP(s) Development:
08. Government NET POI(s)/TSP(s) Review:
09. Contractor NET POI(s)/TSP(s) Updates:
10. Government Acceptance of NET POI(s)/TSP(s):
11. IKPT 02/POI(s) Validation:
12. First Unit Equipped:

TRADOC FORM 569-1- R-E, Aug 89	SYSTEM MILESTONE SCHEDULE-SHEET B (TRADOC REG 350-70)	PAGE 2 OF PAGES 2	REQUIREMENTS CONTROL SYS ATTG-55				
	SYSTEM: The Mine clearing system Self- Propelled	TRADOC SCHOOL: USAES	AS OF DATE:				
	COMPLETED BY: Mr. Johnson	OFFICE SYMBOL: ATZT- DT-WM-E	TELEPHONE: 573-329-1924				
	TRAINING PACKAGE ELEMENT/PRODUCT:						
	LEGEND:	MILESTONE BY QUARTER					
		FY10	FY09	FY11	FY12	FY13	FY14

Courses Affected by the Mine Clearance System Self-Propelled							

Functional and Professional Courses	Engineer School	Signal School	Ordnance School
12 B Combat Engineer	X		
91L Construction Equipment Repairer			X
91B Wheeled Vehicle Mechanic			X
91C Utilities Repairer Mechanic			X
919A Engineer Equipment Repair Technician			X
ALC	X		
SLC	X		
Pre-Command Course	X		X

B References

Area Mine Clearing System (Medium Flail) Study, 12 Aug 02.

AR 70-1, Army Acquisition Policy, 31 Dec 03.

AR 70-75, Survivability of Army Personnel and Materiel, 2 May 05.

AR 71-9, Material Requirements, 30 Apr 97.

Capstone Concept for Joint Operations V2.0, Aug 05.

CJCSI 6212.01E, Interpretability and Supportability of Information Technology and National Security Systems, 20 May 03.

CJCSI 3170.01G, Joint Capabilities Intergration and Development System, 1 March 2009.

CJCSM 3500.04F, Universal Joint Task Manual, 1 June 2011.

DOD Architecture Framework, Ver 1.0 Vol 1, 9 Feb 04.

DOD Architecture Framework, Ver 1.0 Vol I1,,9 Feb 04.

FM 20-32, Mine/Countermine Operations, Change 5,1 Apr 05

FM 21.16, Unexploded Ordnance (UXO) Procedures, 30 Aug 94.

FM 3-0, Operations, 14 Jun 01.

FM 3-34, Engineer Operations, 2 Jan 04.

FM 3-34.2, Combined Arms Breaching Operations, Change 3, 11 Oct 02.

FM 3-34.170, Engineer Reconnaissance, Change 1, 25 March 2008.

FM 3-90, Tactics, 4 Jul 01.

FM 3-100.38, UXO Multiservice Tactics, Technics, and Procedures for Unexploded Ordnance Operations, 23 Aug 01.

FM 5-34, Engineer Field Data, Change 5, 19 Jul 05.

FM 5-71-2, Armored Task Force Engineer Combat Operations, Change 2,4 Sep 97.

FM 5-71-3, Brigade Engineer Combat Operations, Change 1, 13 Nove 97.

FM 5-100-15, Corps Engineer Operations, 6 Jun 99.

FM 5-250, Explosives and Demolitions, change 1, 30 Jun 99.

FM 7-15, Army Universal Task List, 31 Aug 03.

FM 71-100, Division Operations, 28 Aug 96.

FM 101-5-2, U.S. Army Report and Message Formats, 29 Jun 99.

Future Engineer Force White Paper, 20 Apr 04.

Functional Area Analysis Explosive Hazards Defeat, 1 Dec 03.

Functional Needs Analysis Explosive Hazards Detection and Neutralization. 18 Nov 03.

Functional Needs Analysis for Future Force (Engineer), 26 Nov04.

Functional Solutions Analysis Explosive Hazards Detection and Neutralization, 8 Nov 03.

Functional Solutions Analysis for Future Force (Engineer) 26 Nov 04.

ICD for Explosive Hazards Defeat, 24 Nov 04.

ICD for Marine Air-Ground Task Force Mine Counter-Measures, 26 May 05.

Joint Area Clearance operational Demonstration 2, Final Report, Nov 03.

Joint Forcible Entry Operations Joint Integrating Concept, Sep 04.

JP 3-0, Doctrine for Joint Operations, 27 February 2008, W/C 1, 22 February 2011.

JP 3-15, Joint Doctrine for Barriers, Obstacles and Mine Warfare, 24 Feb 99.

JP 3-34, Joint Engineer Operations, 12 February 2007.

JP 4-0, Doctrine for Logistic Support of Joint Operations, 6 Apr 00.

Joint Technical Architecture Army, Version 6.0, 8 May 00.

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Joint Vision implementation Master Plan, 15 Apr 01.

Life Cycle Cost Estimate for Medium Flail System, 24 Oct 05.

Stability Operations Joint Operating Concept, 9 Sep 04.

Joint Operation Environment: The World through 2020 and Beyond, Aug 05.

TRADOC Pam 525-3-0, The Army in Joint Operations: The Army's Future Force Capstone Concept 2015-2024, 7 Apr 05.

TRADOC Pam 525-3-25, Maneuver Support Operational Concept for Assured Mobility, Dec 03.

TRADOC Pam 525-3-34, Future Engineer Force Operational and Organizational Concept (Draft), Change 3, 15 Sep 04.

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TRADOC Reg 350-70, Systems Approach to Training Management, Processes, and Products, 9 May 99.

Unit of Employment (UE) Operations, White Paper, Version 3.5, 16 Jul 04.

C Coordination Annex

Organization/POC (Date)	Summary of Comments Submitted (A/S/C)			Comments Accepted/ Rejected						Rationale for Non-Acceptance - S, C	
				Accepted			Rejected				
	A	S	C	A	S	C	A	S	C		
v2.2.9 Paul Huszar 2013/02/28 - 2013/03/08	Document Accepted As Written			0	0	0	0	0	0	-	
v2.2.8 Paul Huszar 2013/02/11 - 2013/02/22	No Comments Submitted			0	0	0	0	0	0	-	
v2.2.4 Approvals - CPT Debbie Lovelady 2012/04/18 - 2012/04/25	Document Accepted As Written			0	0	0	0	0	0	-	
v2.2.3 Approvals - CPT Debbie Lovelady 2012/04/04 - 2012/04/11	Document Rejected			0	1	0	0	1	0	0	0
v2.2 Army - USASOC 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-	
v2.2 Army - USAREUR 2011/06/10 - 2011/07/10	1	0	0	1	0	0	0	0	0		
v2.2 Army - USARC G7 (US Army Reserve Cmd) 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-	
v2.2 Army - USAACE - Aviation School 2011/06/10 - 2011/07/10	Document Accepted As Written			0	0	0	0	0	0	-	
v2.2 Army - US	No Comments			0	0	0	0	0	0	-	

Joint Forces Command Net-C2 2011/06/10 - 2011/07/10	Submitted							
v2.2 Army - TRADOC_ARCIC 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TRADOC G-3/5 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TRADOC Command Safety Office 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TCM- Transportation 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TCM- Live 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TCM dL 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - TCM ATIS 2011/06/10 - 2011/07/10	Document Accepted As Written	0	0	0	0	0	0	-
v2.2 Army - Space&Missile Defense Command 2011/06/10 - 2011/07/10	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - SIGCoE	Document	0	0	0	0	0	0	-

- Signal School 2011/06/10 - 2011/07/10	Accepted As Written									
v2.2 Army - SCoE 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - PEO- STRI Customer Support Group 2011/06/10 - 2011/07/10	4	0	0	4	0	0	0	0	0	
v2.2 Army - PEO Missiles and Space (IAMD) 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - PEO Aviation 2011/06/10 - 2011/07/10	1	0	0	1	0	0	0	0	0	
v2.2 Army - MSCoE - MANSCEN 2011/06/10 - 2011/07/10	2	1	0	2	0	0	0	1	0	
v2.2 Army - IMCOM 2011/06/10 - 2011/07/10	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - ICoE - Mil Intelligence School 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - Human Resource Command (HRC) 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - Field	1	0	0	1	0	0	0	0	0	

Artillery School 2011/06/10 - 2011/07/10										
v2.2 Army - FCoE - Field Artillery 2011/06/10 - 2011/07/10	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - Combined Arms Center 2011/06/10 - 2011/07/10	6	2	0	6	1	0	0	1	0	
v2.2 Army - Brigade Modernization Cmd (BMC) 2011/06/10 - 2011/07/10	1	0	0	1	0	0	0	0	0	
v2.2 Army - AVNCoE Aviation Logistics School 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - ATSC TSAID 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - ATSC Fielded Devices 2011/06/10 - 2011/07/10	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - ATSC 2011/06/10 - 2011/07/10	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - ARNG- RMQ-RA 2011/06/10 - 2011/07/10	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - AMEDD Center&School	No Comments Submitted			0	0	0	0	0	0	-

2011/06/10 - 2011/07/10								
v2.1 Peer - USARC G7 (US Army Reserve Cmd) 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - Transportation School 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - TRADOC_ARCIC 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - TRADOC Command Safety Office 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - TCM- HBCT 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - SCoE 2011/03/04 - 2011/04/03	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - PM-HBCT 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - PM DCGS-A 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - PEO- STRI Customer Support Group	Document Accepted As Written	0	0	0	0	0	0	-

v2.1 Peer - FCoE- ADA School 2011/03/04 - 2011/04/03	6	6	1	6	5	0	0	1	1	
v2.1 Peer - Combined Arms Center 2011/03/04 - 2011/04/03	11	3	0	11	3	0	0	0	0	
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v2.1 Peer - BCT CoE - Fort Jackson, SC 2011/03/04 - 2011/04/03	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - USAACE - Aviation School 2011/03/04 - 2011/04/03	1	0	0	0	0	0	1	0	0	
v2.1 Peer - ATSC ETSD 2011/03/04 - 2011/04/03	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - ATSC 2011/03/04 - 2011/04/03	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - ATEC 2011/03/04 - 2011/04/03	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - ARNG- RMQ-RA 2011/03/04 - 2011/04/03	Document Accepted As Written			0	0	0	0	0	0	-
v2.1 Peer - Army Research Laboratory (ARL)	No Comments Submitted			0	0	0	0	0	0	-

2011/03/04 - 2011/04/03										
v2.1 Peer - Army National Guard 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	0	0	-
v2.1 Peer - Army Material Command (AMC), G3 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	0	0	-
v2.1 Peer - AMC G-8 2011/03/04 - 2011/04/03	No Comments Submitted	0	0	0	0	0	0	0	0	-
v2.1 Peer - MSCoE - MANSCEN 2011/01/26 - 2011/02/25	19	0	0	18	0	0	1	0	0	
v2.1 Peer - MSCoE - MANSCEN 2010/12/01 - 2010/12/31	1	0	0	1	0	0	0	0	0	

Key	
Completed Review with Comments	
Completed Review, No Comments	
Active Review Occurring	



DEPARTMENT OF THE ARMY
U.S. ARMY MANEUVER SUPPORT CENTER OF EXCELLENCE
320 MANSCEN LOOP STE 141
FORT LEONARD WOOD, MISSOURI 65473-8929

REPLY TO
ATTENTION OF

ATZT-CDR

19 March 2012

MEMORANDUM THRU Director, Directorate of Training Development, United States Army Engineer School, Fort Leonard Wood, MO 65473

FOR U.S. Army Training Support Center, Army Training Modernization Directorate (ATIC-STIDD), Fort Eustis, VA 23604-5166

SUBJECT: Request Approval for Final Army Approval – Area Mine Clearance System (AMCS) System Training Plan (STRAP)

1. References:

- a. TRADOC Regulation 350-70, System Approached to Training Management, Processes, and Products, 9 March 1999
- b. AR 70-1, Army Acquisition Policy, 31 December 2003.
- c. The Capability Production Document (CPD), for the Area Clearance Family of Systems (ACFoS), was approved April 2007 with a CARDS # of 06049.

2. The STRAP supporting the ACFoS CPD is enclosed for your approval for Final Army Approval staffing.

3. Point of contact for this action is Mr. Ronnie King, Functional Manager for Route Clearance Vehicles, system Training Integration and Devices Team at (573) 563-6200 or Ronnie.r.king@us.army.mil