



Fort Benning, Home of the MCoE



2020 AUSA Chattahoochee Valley/Fort Benning, MCoE, and MCDID Virtual Industry Days

DOTD, 30 APR 20 1400-1530 hrs.
1-480-297-0773 , passcode 229 0110#



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**Directorate of Training and Doctrine
(DOTD)
Virtual Industry Day 30 APR 2020, 1400-1530**

**Virtual Break Out Session
Telecon: 1-480-297-0773, passcode 229 0110#**

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D O T M L P F - P



Task: MCoE/AUSA conducts Virtual Industry Days 27-30 April 20, and DOTD virtual session at 1-480-297-0773 , passcode 229 0110# on 30 Apr 20 from 1400 - 1530.

Purpose: For MCoE DOTD to convey training and education desired capabilities to the defense industry

End State: Quads from industry are submitted for Tier process to determine the MCoE AUSA Engagement Plan and possible other venues.



Directorate of Training and Doctrine



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MISSION STATEMENT

The Directorate of Training and Doctrine (DOTD) develops doctrine and training products, programs, and services to enhance the combat effectiveness of the current and future maneuver force.

Future Capabilities & Requirements

• **2020 Desired Capabilities**

Augmented Reality (AR)/Mixed Reality (MR).
Adaptive Learning Systems.
Soldier & Leader Performance Optimization.

• **Trainability**

- Learnability
- Usability
- Retainability

• Reduced New Equipment Training (NET) footprint (Measure of Effectiveness for Trainability)

• Transition Evolvement with :

Integrated Training Environment (ITE) to
Synthetic Training Environment (STE)

Soldier/Squad Virtual Trainer (S/SVT)

Ground-Reconfigurable Virtual
Collective Trainer (RVCT)

FUNCTIONS

• **Doctrine & Collective Training Division:**

- BCT and lower echelon Field Manuals, Army Techniques Publications, and Training Circulars
- Collective Tasks and Combined-Arms Training Strategies (CATs)
- Manages development and conversion of publications & GTAs to eBooks for mobile devices
- Develops all Army direct fire weapon system training strategies

• **Training & Education Development Division:**

- Programs of Instruction and Lesson Plans
- Digital apps & Interactive Multi-media Instruction (IMI)

• **Individual & Systems Training Division**

- Individual Tasks for 11 and 19 series
- System Training Plans and products
- ITE/STE proponent requirements and support
- Training Systems and Technology



DOTD Desired Capability Areas (2020)



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Desired Capability Area #1: The future force requires a training capability that enables them to train more realistically in operational environments (live and virtual). These environments need to utilize augmented and mixed reality.

This capability will integrate augmented and mixed reality in adaptive learning systems, simulations and system embedded training. It needs to utilize mature artificial intelligence to represent culturally realistic avatar interactions with “virtual humans” and the operational environments. It will emulate current and future equipment with form, fit and function.

Desired Capability Area #2: The future force requires a framework for adaptive learning systems capabilities for use in the operational, institutional and self-development training domains.

This capability will integrate intelligent tutoring as a sub component that readily adapts to the Soldier’s learning style and performance. These adaptive learning systems need to offer applications for Force on Force (FoF) training, simulations, embedded or appended training, and Learning Management Systems (LMS).

Desired Capability Area #3: The future force requires evidence based programs, systems and capabilities to enhance individual Soldier, leader and team performance.

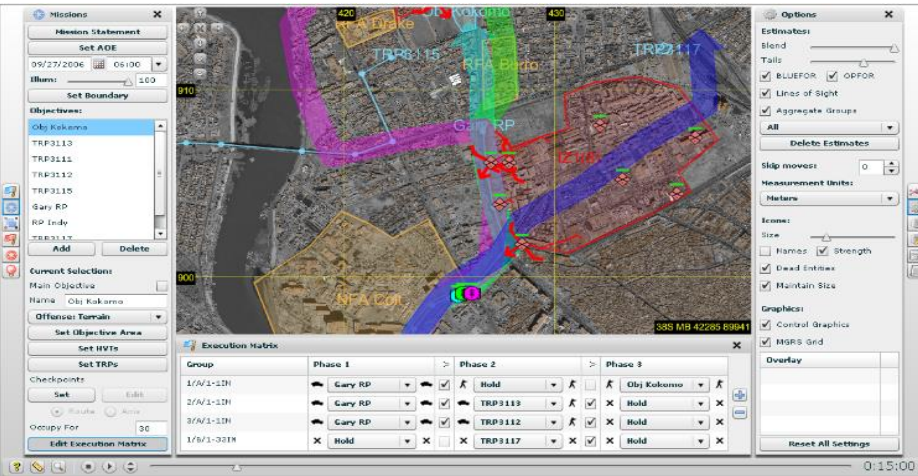
This capability will increase the development of cohesive and adaptable teams, integrate the cognitive, social, and physical domains emphasizing psychology and human factors engineering for Soldier, leader and team optimization.



DOTD Focus Area #1 Augmented and Mixed Reality



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The future force requires a training capability that enables them to train more realistically in operational augmented and mixed reality environments (live and virtual) utilizing mature artificial Intelligence improvements will serve as the gateway for more realistic, low overhead training, to occur at small unit level.



Commanders should be able use these solutions to rehearse military decision making that will provide intelligent friendly and enemy force reactions that can learn, anticipate maneuvers, react, and adapt in complex operational environments. Individual and unit training will incorporate adaptive learning models capable of assessing proficiency and tailoring training models to the training needs of the user.





DOTD Focus Area #2 Adaptive Learning Systems



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The future force requires adaptive learning systems that include intelligent tutoring as a sub-component, also have applications for our future force outside of simulations. A training capability that allows for inexpensive but robust simulations, OE and culturally realistic avatar (enemy, non-combatant, friendly, etc.) interactions with “virtual humans,” and tactically sound reaction of AI forces.

Adaptive learning systems have the potential to be a truly game changing technology for training.

These systems should support training events at the individual up to brigade level. They must be able to provide an after action review capability that will allow the replay of training exercises from individual platforms to mission command systems.



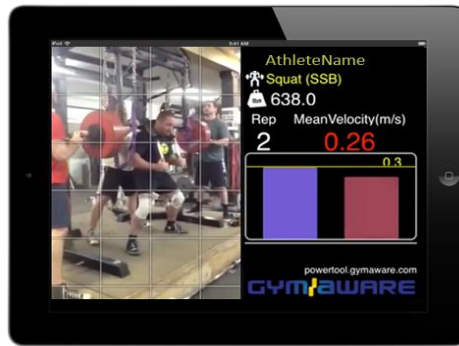
DOTD Focus Area #3 Human Performance Optimization



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The future force requires advances in human sciences for the cognitive, social and physical development and emphasize psychology and human factors engineering in the design of weapons and equipment. As the Soldier progresses through their career, training should include the capability of incorporating the individuals training history into collective training exercises and give commanders a picture of where the individuals, teams, squads, platoons, and companies stand on a readiness level.





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Questions



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BACKUP



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Quad Charts due to MCoE NLT 10 May 19

Email: usarmy.benning.mcoe.mbx.industry-day@mail.mil

Quad Chart Tier Ranking complete

9 August 19

Industry notified of Quad Tier Ranking

NLT 23 August 19

AUSA Annual Meeting and Exposition

14-16 October 19



- Use the Quad Chart Format
- Use Adobe PDF file for submission of QUAD
- Limit 1 recommended solution per PDF file, do not group multiple recommendations within the same PDF file
- Include recommendation title in the subject line of the e-mail
- Business Development Consultants: Specify which companies you represent on which programs



- Tier I: Outbrief to the MCoE CG and MCDID Dir at AUSA National Conference
- Tier II: Outbrief to the Division Director
- Tier III: Outbrief to the Requirement Branch Chief
- Tier IV: This is our requirement area, but does not meet our required capability set; or have previously reviewed
- Tier V: This is not our requirement area; POC to alternate Center of Excellence provided
- Tier Definition: The briefing path selected to best facilitate communication with the MCOE and MCDID

Capability Name:



Picture or graphic

Description: provide a brief description of the Capability. Include Technology Readiness Level (TRL).

Operational Description: Identify how and where the proposed solution will be employed and who will employ it (i.e. echelon, individual operators, staffs, etc.) to address what capability. Include battlefield system interrelationships and dependencies.

Contact Information: Provide the full name and address of the organization submitting the proposed solution. Identify the Business Development POC and Subject Matter Expert POC as required. Provide the name, e-mail address, and phone number of each for follow up.