

TRAINING: TRANSFORMATION IN ACTION

Dr Paul W. Mayberry
Deputy Under Secretary of Defense
(Readiness)



MT&SN: Could you outline your role in OSD?

Dr. Mayberry: The Secretary of Defense charged Dr. David Chu, Personnel and Readiness Under Secretary of Defense with addressing a transformational agenda. My responsibility is to achieve oversight of our role in the department for the Training Transformation (T2) effort.

The strategic environment has significantly changed over the last several years and continues to evolve and have a tremendous impact on our military forces. Because of that impact, we also need to significantly change the way that we go about conducting training preparation of our forces for deployment.

T2 is the engine of the department to make sure no individual, unit or staff goes into combat without first having truly experienced the rigours and responsibilities of their joint responsibilities in a robust and realistic training environment.

MT&SN: Is the term and use of the word "transformation" going to be replaced in favour of another?

Dr. Mayberry: No, not that I am aware. We are in lockstep with Secretary of Defense Donald Rumsfeld's overarching goal to transform the Department's processes and programmes. When we use the term transformation, we are going beyond simply modernising or upgrading the way we conduct business, - training in this case. We have to ensure that our Service members, when sent into harm's way, never experience, never have to learn a task for the first time in a joint combat operation. That is transformation - it is a process and not a specific endstate.

MT&SN: What are the priorities within T2?

Dr. Mayberry: There are three priorities. The Joint Knowledge Development and Distribution Capability (JKDDC) is focused on how we prepare our forces from the individual's training and education perspective, how we prepare them to be joint earlier in their careers, be joint throughout their careers and provide a training environment that can be anytime, anywhere.

The second, the Joint National Training Capability (JNTC) is preparing our forces at the collective level and has received the preponderance of interest and resources. JNTC is trying to provide the appropriate level of joint contacts to existing Service deployment, exercises and training events to allow our forces at the individual level, at the small unit tactical level and at the operational level to experience the joint requirements that is required in the passing of data services and information.

The third priority for T2 is the Joint Assessment and Enabling Capability (JAEC) which addresses the issue that we must measure that which we intend to manage. We need to know what the value is of our investments to really answer the so what question.

JAEC must include and move beyond the input side of the equation of how many individuals did we train, how many joint training events on an annual basis to get at the hard question of joint performance. That's a challenge as we go forward to capture and characterise the metrics of what difference has it made to our forces as they prepare for deployment.

MT&SN: How is T2 going?

Dr. Mayberry: We have made remarkable progress since we met at the 2002 IITSEC. Working with the Services, Joint Forces Command (JFCOM), Special Operations Command (SOCOM) and other Combatant Commands, the Joint Staff and other DoD agencies we developed a plan to implement T2. Deputy Secretary of Defense, Paul Wolfowitz, approved the Plan in June 2003.

The Joint Management Offices for JKDDC, under the Joint Staff J7, and JNTC, under JFCOM J7, have been activated. We are seeing positive movement and results already. JFCOM developed the Fiscal Year 2004 joint advanced distributed learning and distance learning courseware plan in consultation with the combatant commanders, Services, Combat Support Agencies, and National Defense University, that was subsequently approved by the Chairman of the Joint Chiefs of Staff and endorsed by the Under Secretary of Defense for Personnel and Readiness.

We are preparing to conduct our initial JNTC event in January at the Western Training Range Complex and we will be focusing predominantly on Joint Close Air Support (JCAS) to see how Services can bring together their respective Communications,

An advertisement for SCRAMNet GT by Systran. The background is a gradient of yellow and orange. At the top, it says "The Power of One" with a circular arrow icon. Below that, it says "Infuse your simulation network with the power of SCRAMNet GT". In the center is a photograph of a green circuit board. Below the board, the text reads "SCRAMNet GT" in a bold, italicized font. Further down, it says "Only one real-time network satisfies the speed and precision requirements of today's advanced simulations. By combining 2.5 Gb/sec throughput and microsecond latency, SCRAMNet GT provides your simulation with a single control and data solution. SCRAMNet GT - experience The Power of One." At the bottom left is the Systran logo and the website "www.systran.com". At the bottom right is a circular logo for "COTS" (Commercial Off-The-Shelf) with the text "RUGGED ONE" and "COMMERCIAL GRADE". At the very bottom, it says "The Power of One" again.

Command, Control and Intelligence (C3I) at the staff level but also make sure that co-ordination and planning processes can occur at the tactical level too. JNTC will also focus on Joint Information Exchange and Joint Combat Identification (JIE/JCID), which are two CAS supporting tasks.

Planning continues for other events. The JAEC is moving forward to develop three levels of assessment: Defense-wide T2 integration; if we are bring truly transformational; and to answer "So what?", what true value is provided by JKDDC and JNTC to both individuals and organisations. And we have a budget — approximately \$1.9 billion through our budget outyears to support this programme.

MT&SN: How many JNTC exercises are planned and when will the JNTC system be validated and operational?

Dr. Mayberry: Four events are planned for fiscal year 2004. Planning is under way to conduct a larger number of events in fiscal years 2005 and 2006. Ultimately, these training opportunities will be at both U.S. bases and in overseas venues. Our Capability programme milestones are Initial Operational Capability (IOC) in October 2004 and Full Operational Capability (FOC) in 2009.

MT&SN: How can industry help realise your goals for JNTC? What would you ask of them?

Dr. Mayberry: What I ask of industry is they be responsive to the joint environment. Whatever they develop must not be stovepipe or Service centric but is an open architecture capability that can be deployed, that can be responsive to the way we're redesigning our forces to be lighter, more lethal, more mobile, readily deployable, that it can be adaptive to changing situations and ultimately lead to a mission rehearsal capability.

There must be a blending of the training and operational environments. In training we need to be using tactical communication systems. We need to use the actual systems, processes and procedures in the training environment that they will be using in the operational environment.

We as a department have put forward standards for re-useable content through Shareable Content Object Resource Management (SCORM) and we have pressed for High Level Architecture (HLA) and Testing Enabling Architecture (TEA). There's no one company at IITSEC that has it all.

Not only must we work together as Services but I expect industry to be able to work together as well to come up with creative alternatives for our complex joint problems whether it's joint urban operations, joint information operations and even homeland security.

I need industry to be responsive to the basic pillars we have used to define the JNTC, that we have a realistic joint combat scenario, that there is a co-ordinated adapting opposing force, instrumentation from a joint perspective to get at the gaps and seams between the Services to understand how air components impact ground components.

And then we have a feedback mechanism that is focused on joint issues. Each of the Services have robust accurate After Action Reviews (AAR) but not from the joint perspective. We need similar AARs, lessons learned processes, even reporting to the readiness systems of all from what we get from the joint interactions of the Services.

That is only some of those areas where industry can make a significant contribution to as we seek to turn the initial JNTC event in the January timeframe to become a more routine and persistent capability that would be part of the Services' routine training and exercise cycles.

MT&SN: What comment would you make on the merging of Live, Virtual and Constructive (LVC) domains?



New threats - new responses.
(Source: USMC)

Dr. Mayberry: The LVC environment will be the engine of JNTC. Our January event will take an important first step forward in constructing this environment. Conceptually, live forces at the National Training Center (NTC) at Ft Irwin will be linked to Special Forces' flight simulators at Hurlburt Field, and they in turn, will be connected to staffs being put through their paces with constructive simulations at a Joint or Service command.

And with our increasing requirement to "train in real time" for short-notice missions, we no longer routinely have long-preparation periods before mission execution. The LVC environment will allow our forces to rehearse in these time- and logistically-constrained environments. But we still have a lot of work ahead of us to achieve this objective.

There is an important message that you can deliver to your readers: No one company has the technical solution to achieve this environment. We are looking to the best ideas worldwide to field this training endstate.

MT&SN: What were the joint lessons learned from Operation Iraqi Freedom (OIF)?

Dr. Mayberry: While DoD continues to officially compile its lessons learned from OIF, we are moving forward with incorporating some early observations into JNTC. For example, we saw during OIF, and in Operation Enduring Freedom in Afghanistan, that we need to improve our JCAS mission performance. January's JNTC event will include a tactical JCAS exercise. This will allow us to assess the participating units to defined JCAS Joint Tactical Task conditions and standards.

The Department is also eyeing improvements in other missions, including mountain warfare. This Spring, OSD plans to sponsor a Mountain Warfare and Cold Weather Training Symposium to help us better understand our Forces' challenges and training requirements in this rigorous environment. We are also looking forward — not

exclusively behind us at the lessons learned from previous wars — to help shape our training capabilities. For example, we are very interested in expanding the use of information operations in JNTC events, as well as making joint training more rigorous in urban environments.

MT&SN: *What steps have you taken to boost the readiness of troops rotating through Fort Polk to theatre?*

Dr. Mayberry: The Services have continued to analyse their respective issues from not only Afghanistan to Iraqi Freedom to make their training evolutions more contemporary.

I am very impressed with what the Services are doing in terms of the training at the Joint Readiness Training Centre (JRTC) at Ft Polk and the National Training Centre (NTC) at Ft Irwin. Having battalion and brigade commanders deal with reporters and mayors and role players and interpreters as part of the exercise experience is a tremendous advancement over what we had done in the past.

The Army also upgraded the JRTC at Ft. Polk to allow the newly fielded Stryker combat vehicle to complete its deployment milestones at that venue. Stryker units are starting their initial deployment in Iraq as we speak.

Last week I went to Fort Bragg and saw the preparation of some of the units going to deploy to Iraq. There were tremendous training changes as we saw civilians on the battlefield, a tremendous focus on convoy security, of being able to deal with Improvised Explosive Devices (IED) to even seeing Judge Advocate Generals working Rules of Engagement (ROE) for forces deploying to Iraq.

MT&SN: *Could you outline significant training centre improvements, such as at the NTC for the Army, but also for the other Services?*

Dr. Mayberry: All of the Services are improving their training infrastructure capabilities. The Atlantic Fleet Navy/Marine Corps team began a new era in training when a Marine Expeditionary Unit (MEU) and its supporting naval forces completed pre-deployment exercises in the Florida panhandle. Similar fleet training was heretofore completed at Vieques, Puerto Rico. I give the Navy/Marine Corps team high grades for finding alternative venues to support important live training. And I am also very impressed with the Air Force's progress in fielding its Distributed Mission Training (DMT) programme and the next iteration of this effort, Distributed Mission Operations, at their training centres.

Development of advanced instrumentation and threat engagement representations is advancing as is the identification of the architectures and standards to enable their seamless interoperation. We look forward to the savings and increased efficiencies that these systems will bring to JNTC.

MT&SN: *Are you happy with the readiness levels?*

Dr. Mayberry: The readiness of our forces going into a theatre of operations is exceptional bar none. Part of the reason I went to Ft. Bragg last week was to sit down and talk with individuals going to Iraq, the dedication and attention to detail was phenomenal. In terms of readiness, the Department is providing all the resources required to make sure are forces are trained and ready.

MT&SN: *One simulation and training company suggested there were inefficiencies in the procurement process for products and services from that industry. Are you looking to streamline procurement?*

Dr. Mayberry: While procurement is a policy matter under the OSD Acquisition, Training & Logistics directorate, I would still like to provide an answer on behalf of the Services' training communities. Yes, we definitely need to shorten the procurement cycle and, as important, the fielding time to get modified simulation and training products into the hands of our warfighters. With respect to the procurement process — we need to integrate training requirements into the acquisition process well before any metal is bent for the initial platform. We have an opportunity to shape the training systems for

embryonic programmes: F-35 Joint Strike Fighter, the Littoral Combat Ship, the Future Combat Systems, Joint Tactical Radio System and others that are taking wing. There is another important dimension to this issue — it takes too long to get industry's best solutions into the hands of our warfighters. Our special forces for example, routinely train to support missions with short, usually 36 hour or less, preparation times.

As our forces increasingly conduct asymmetric warfare and other dynamic missions on the 21st century battlefield, our training systems must be more responsive to allow them to support mission rehearsal events in a joint context with minimal advanced notice. So, what does this mean for industry?

Our future training technologies must be integrated into networks; they must support High-Level Architecture (HLA), Sharable Content Object Reference Model (SCORM) and other standards; they must be embedded into our platforms and systems and they must be deployable to meet the requirements of a smaller and more agile force which is capable of quickly deploying and fighting within a joint context and with our coalition partners and other government agencies.

Let me also emphasise that our future systems must better support joint training through interconnectivity and interoperability. There are some magnificent training devices and systems that I have seen at this and previous I/TSECs.

For example the Army is taking delivery of a reconfigurable system, AVCATT-A, to train its Active and Reserve component flight crews on those rotary platforms that will be in service throughout the next several decades. So, one of my interests is making certain that these devices again can be, and are, networked to support joint, and when feasible, coalition training.

MT&SN: *Dr Mayberry, thank you very much for your time!*

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