

# Transformation - a journey not a destination

By Maj. Gen. Daniel M. Dick, USAF

Ask any 12 people to define transformation and depending on what they have read, you will likely get 12 very different answers. So to start, let us define transformation and lay some groundwork about how we may view it within the Department of Defense. In the Transformation Planning Guidance (April 2003) Secretary Rumsfeld defined transformation as, *"a process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people, and organizations that exploit our nation's advantages and protect against our asymmetric vulnerabilities to sustain our strategic position, which helps underpin peace and stability in the world."*

I think the important message to take from Secretary Rumsfeld's statement is that transformation is not about technology, but about changing culture, processes and our capabilities. It is not just building new, but finding new ways to work with what we have. It is easy to be dazzled by new toys and equipment. But when we do things like we have recently done with the Predator unmanned aerial vehicle, where we put Hellfire missiles on a surveillance platform, we have to rethink how we identify targets, assess risk and collateral damage, and determine release authority, because, we just reduced the time from sensor to shooter by an order of magnitude. So, are our decision systems ready for that kind of immediacy? Are our leaders prepared for those types of decisions? These are areas that we will have to look at as part of our transformation.

The Air Force's transformation theme states, "A journey, not a destination." As the premier military in the world today, it is easy to ask why we must transform. These quotes allude to the reality that the world does not stand still.

*"The threats and enemies we must confront have changed, and so must our forces."*  
- 2002 National Security Strategy

*"Over the past decade, potential adversaries sought to compensate for U.S. conventional military superiority by developing asymmetric approaches and capabilities across the full range of military operations."*  
- Transformation Planning Guidance

Therefore, our military cannot stand still. We must adapt to our current, and anticipate our future threats so that we have the right force mix, the right doctrine, the right skill sets, the right materials, along with our people trained to a razor's edge with latitude for creativity. In this way, we will meet our adversaries and be ready, able, and willing to defeat them anytime, anyplace.

And our transformation cannot be limited to just the military. We need to look across the government so that we can tap into the many methodologies, systems, and tools necessary to resolve our conflicts. Some of those tools, expertise, and systems may reside in other government departments such as State, Treasury, Justice, Labor or Interior. We have to be able to bring all the tools of government together in a holistic way to achieve the nation's goals while maintaining our security.

The question then before us, is how do we conduct our transformation? Well, first, we need to scope the areas we want to trans-

form. Secretary Rumsfeld wants the Department to focus on three areas as we transform.

The first area is transforming how we fight. As I will discuss later, Joint Forces Command is responsible for developing warfighting concepts and integrated architectures that will influence the capabilities that we will need in the near through far future. These capabilities will lead our discussions in how we change our Doctrine, Organizations, Training, Material, Leaders, Education, Personnel, and Facilities to insure we take maximum advantage of the assets we have now and invest in those capabilities we will need tomorrow.

The second area is transforming how we do business. As Secretary Rumsfeld has said on several occasions, we must find ways to speed up the acquisition processes so that we get capabilities to the field sooner. The days of allowing aircraft development to linger for years and years must come to an end. I was a major on the Tactical Air Command staff 20 years ago when the first studies for the replacement aircraft for the F-15 were initiated. Now here we are, more than 20 years later and we only have a handful of F-22s on the ramp. We must do better than that. It is not just a function of the warfighter need, but also the fiscal reality of the costs for such systems. As an engineer, I am reminded of the engineer's philosophy of whether the solution needs to be good or perfect. We have to get a product that is good enough and then invest in product improvement over time. We need a way to implement a rapid acquisition system with spiral development. We need to build a little, test a little and build a little bit more. We need to better integrate our operators and engineers so they understand each other and give us the product we need.

To go with these changes in acquisition processes, we must develop better business practices that provide planning and resource allocation processes. The Secretary envisions a more entrepreneurial, future oriented, capabilities-based process that supports our future warfighting concepts. He wants a way to measure our success in providing those capabilities and allow for spiral development to improve those capabilities over time. This is not an easy task. We have a very regulatory based, statutory mandated system to insure we spend our tax dollars as Congress directs. So, we are looking at some very real challenges here.

Our third and final scope is transforming how we work with others. The reality is every organization has friction. The United States government is no different. For proof, all you need to do is read a newspaper at anytime in our history. The key is we must overcome our parochialism. We must find ways to integrate our governmental efforts. As I mentioned above, every department has tools in their area of expertise that we need to tap so that we can exercise a holistic solution to each crisis and conflict. Today, we see tremendous efforts across many departments trying to rebuild Iraq. Recently, Joint Forces Command experimented and validated the concept of a Joint Interagency Coordination Group that we are in the process of briefing through the Joint Requirements Oversight Council process. Do we have the perfect solu-

tion? No. But we are well on the road to a good start. With our problem scoped, we must focus on the strategy directing our transformation under the Transformation Planning Guidance. Our strategy will conduct a three-prong advance: 1) Transformed culture through innovative leadership; 2) Transformed processes for risk adjudication using future operating concepts; and 3) Transformed capabilities through force transformation.

By encouraging innovative leadership, we will achieve our most difficult challenge — cultural change. Almost all management theory shows that cultural change does not tend to move from within the corporate structure, but is driven by the leadership. The keys are to find ways to promote innovation and promote those that implement change and eliminate barriers. While we find our innovative leaders, we must improve our processes and find the right balance between risk and reward. In this case, reward is the future capability and the risk is today's capability. The keys include a reformed capabilities identification process that helps us define our requirements to support our joint operating concepts and a transformed strategic analysis that looks over time to compare many disparate threats across the multiple levels of war or conflicts while taking into consideration the level of uncertainty. Again, it is about finding the balance of what we have today versus what we want tomorrow.

Certainly the most talked about part of our transformation strategy is force transformation. All the Services are already working on their own road maps for force transformation. Some of the keys include strengthening joint operations, exploiting our intelligence advantages, experimenting with new warfighting concepts, and developing new transformational capabilities. This area has gained new focus as we realize a paradigm shift in our doctrine. Under the Goldwater-Nichols Act, we moved closer to joint operations, but defined them at the Air Wing, Naval Battle Group, Marine Amphibious Group, and Army Corps level. Today, we are seeing joint warfighting at the team, aircraft, ship and tank level. This change has some tremendous consequences in our doctrine, training, leadership, education, material and programs. Now we must adapt our forces to integrate at a wholly new level.

In answer to some of these challenges, Joint Forces Command assumed responsibility for the Joint Battle Management Command and Control (JBMC2) mission area to oversee and bring to the warfighter from the operational through tactical level of war, systems that are integrated and interoperable with the appropriate doctrine, training, leader development, and support systems to insure we have capabilities to meet our joint warfighter concepts. I'll go deeper into our JBMC2 responsibilities later.

As we work through our transformation strategy, we must use some pillars to build a foundation for that strategy — the four pillars envisioned in the Transformation Planning Guidance are shown in Figure 1. The key area I want to focus on is Strengthening Joint Operations. We have made a paradigm shift in doctrine. Today, we can no longer afford to think in Service-centric terms of warfare, but must look from a joint warfare perspective to maximize our capabilities. We have over 200 years of fighting the nation's wars as loosely joint integrated operations. In truth, we did not really fight our first joint actions below the strategic level of war until World War II. However, Operation Iraqi Freedom showed us that we are now going to fight wars as a jointly integrated team at the tactical level with squad leaders requesting

## The Four Pillars of DoD Transformation

### •Strengthening Joint Operations

- Near-term (2-3 years) Joint Operations
- Mid-term (4-7 years) Joint Concepts
- Linked Integrated Architectures to a Reformed Capabilities Identification Process
- Far-term (15-20 years) Joint Vision

### •Exploiting U.S. Intelligence Advantages

### •Concept Development and Experimentation

- Wargaming
- Modeling and Simulation
- Joint National Training Capability
- Operational Lessons Learned

### •Developing Transformational Capabilities

- Actionable Transformation Roadmaps
- Transformational Research, Development, Test & Evaluation
- Transformation of Training
- Transformation of Joint Education

Figure 1.

and coordinating fires that may come from any of the Services. We are not too far away from Army Apache-Longbows under Marine control protecting Navy ships in coastal waters with Air Force Combat Air Patrol. In fact, we could do that today. Not as well as we would like to conduct those operations, but we have the means and capabilities to execute those kinds of missions.

The next area, Exploiting our Intelligence Advantages is also key to future joint warfighting capability. We have the best intelligence platforms and systems in the world. But there is still much that goes on during a crisis or war that we don't know or understand. We saw that during Operation Iraqi Freedom. Future transformation in this area is about netting our systems together in a system of systems environment for shared and better situational awareness. We need to get the right information to the right person — at the right time. Just as important is getting better intelligence and getting better at understanding what we do know. JFCOM's operational net assessment prototype that we experimented with during Millennium Challenge 2002 will allow us to do just that. It brings together all the knowledge of the diplomatic, information, military and economic areas to get a true understanding of the enemy.

Next, we see Concept Development and Experimentation and Developing Transformational Capabilities. JFCOM's J9 and J7 are heavily involved in transformational experimentation and improving joint training for all our forces. That includes working JSIMS [Joint SIMulation System], developing the Joint National Training Capability, running the DoD center for lessons learned, as well as influencing the curriculum for the joint education our folks receive throughout their careers. As far as the Actionable Transformation Roadmaps, each Service already has some form of a Transformation Roadmap, but now we are charged to take their Service centric roadmaps and bring them together into a Joint Transformation Roadmap to eliminate duplication and synergize our efforts.

Upfront I said that JFCOM is charged with Transforming the Department of Defense. As you can see from these pillars from the DoD Transformation Planning Guidance, JFCOM is leading that

## Ten Top Priorities

- Successfully Pursue the Global War on Terrorism
- Strengthen Joint Warfighting Capabilities
- Transform the Joint Force
- Optimize Intelligence Capabilities
- Improve Force Manning
- New Concepts of Global Engagement
- Counter Proliferation of WMD
- Homeland Security
- Streamline DoD Processes
- Improve Interagency Focus, Process and Integration

Figure 2.

charge in almost all the critical areas. Our mission has four essential tasks. USJFCOM will:

- ◆ Discover promising alternatives through joint concept development and experimentation
- ◆ Define enhancements to joint warfighting requirements
- ◆ Develop joint warfighting capabilities through joint training and solutions
- ◆ Deliver joint forces and capabilities to warfighting commanders

Joint Forces Command is already aligned from a mission perspective with where the Secretary of Defense wants to go. We are the Joint Force trainer. Figure 2 shows where Joint Forces Command plays in the DoD's Top Ten priorities. Our primary focus areas fall within the two highlighted priorities. We also provide forces to the Secretary's number one priority, but for this article, I want to remain fixed on bullets two and three.

When we talk about the Transformation Planning Guidance, here is a list of Joint Forces Command's areas of responsibilities.

- ◆ Develop Joint Concepts
- ◆ Develop Integrated Architectures for Supporting Operations
- ◆ JBMC2 integrated architecture
- ◆ Joint Experimentation Assessment
- ◆ Joint Experimentation Plan
- ◆ Develop the Integrated Interoperability Plan
- ◆ Develop the Joint Transformation Roadmap
- ◆ Joint Rapid Acquisition Programs
- ◆ Joint National Training Capability

When we talk about Joint Concept Development and Joint Experimentation, whether assessment or plan, at JFCOM, we are talking about Maj. Gen. Jim Dubik who leads our experimentation efforts. He is a gifted leader and will bring some great insights to this area. The Integrated Architectures for JBMC2 come under my auspices. Mr. Steve Derganc is thoroughly engaged in working those issues and, I must tell you, every day is a challenge. I am also responsible for the Integrated Interoperability Plan.

The Joint Transformation Road Map comes under Brig. Gen. Jim Warner. Trying to kludge the Services Road Maps with an overarching Joint Road Map is a big challenge. The Transformation Planning Guidance also gives me oversight of the Joint Rapid Acquisition Program. This program is funded to help accelerate the implementation and fielding of projects employing newly matured technologies to meet the immediate needs of the warfighter. These projects will be the results of our experimentation, ACTDs [Advanced Concept Technology Demonstration] or other exercises.



Figure 3.

Our J7, Maj. Gen. Gordon Nash is leading Joint Forces Command's Joint National Training Capability effort. Gordon got a little bit of a jump on the rest of us with that mission, but he has numerous challenges ahead to make that into a reality. When you talk to our allies, they cite our training regime as one of the finest in history and the leading reason for our current military supremacy.

Of course, the real key to all these transformation goals is resources — money and people. As Alan Shephard once said, "No bucks, no Buck Rogers." Although we have some very daunting tasks before us, they are not insurmountable, but we must find the right talent to help us work through these tasks to find new ways of looking at our concepts, designing our capabilities, refining our requirements, and speeding the processes to bring them to the warfighter and that is where you all can help.

As the Department headed toward publishing the Transformation Planning Guidance, JFCOM experienced some real growth in missions. The list below came about prior to the signing of the TPG and, in many cases, without the resources necessary to oversee and implement changes in these critical areas. We are committed to making a difference for the joint warfighter, but you cannot produce results without resources. That is why we are very determined to match the Secretary's desire for transformation particularly in the resource allocation to joint warfighter requirements.

- ◆ Joint National Training Capability (JNTC)
- ◆ Joint Battle Management Command & Control (JBMC2)
- ◆ Joint Interoperability and Integration (JI&I)
- ◆ Standing Joint Force Headquarters (SJFHQ)
- ◆ Joint Urban Operations (JUO)
- ◆ Joint Deployment Process Improvement (JDPI)
- ◆ Interoperability Technology Demonstration Center (ITDC)

To illustrate the complexity of some of our challenges, I want to walk you through the JBMC2 area. Figure 3 shows the programs that we currently envision being a part of JBMC2. By no means is this an all-inclusive list, but it gives us a starting point on what we are trying to integrate. Some of these acronyms may be very familiar such as the Global Command and Control System or GCCS or the Standing Joint Force Headquarters. Others may not be as familiar such as the Joint Fires Network, Deployable Joint Command and Control or Single Integrated Maritime Picture.

## Management Initiative Decision 912 Provides:



Figure 4.

All of these systems will play a part in the command and control of joint forces in the operational through tactical levels of war. Each program is big in its own right, but the netting together of these programs in a system of systems; network-centric environment is where true transformation will take place. This past January, the Deputy Secretary released a document known as Management Initiative Decision 912 giving Joint Forces Command primary responsibility for the Joint Battle Management Command and Control mission area. As Secretary Rumsfeld has asked, who organizes, trains, and equips the Joint Warfighter? This document is a first step in answering that question and gives JFCOM an ambitious mandate to try and find solutions to that issue in the area of joint command and control. The items listed under the second bullet, "Expands USJFCOM role," give you an idea of the areas that we are working to integrate, coordinate, and facilitate in bringing JBMC2 into focus and making it into a process that quickly meets the Joint Warfighter's requirements.

- ◆ Strengthens Department's fielding of JBMC2 capabilities by improving the Department's ability to organize, train, and equip joint forces
- ◆ Expands USJFCOM role in establishing JBMC2 mission/capability area requirements and system-of-systems capability requirements
- ◆ Joint influence (USJFCOM-led, in conjunction with Combatant Commanders, Services and Agencies)
- ◆ System-of-systems engineering
- ◆ Service/Agency implementation (sustain current acquisition life-cycle responsibilities)
- ◆ Funding stability for JBMC2 capabilities

If we implement this right and with proper resources, MID 912 allows Joint Forces Command to fill our previous question mark with capabilities listed in Figure 4. Key to these capabilities is meeting the Combatant Commander needs by establishing Joint Forces Command as the Combatant Commander with the single focus to harmonize priorities and requirements.

Although the MID 912 gives Joint Forces Command a wide range of authorities and responsibilities, we need to keep our tasking in line with our resources. In our effort to gain insight, skills, and command capabilities, we are taking charge of the following programs in the near term.

- ◆ The Deployable Joint Command and Control, also called DJC2,

is a Navy-led joint program that will bring a deployable command suite to the Joint Force Commander and provide the material piece to the Standing Joint Force Headquarters.

- ◆ The Single Integrated Air Picture, or SIAP, is another joint program that gives us a common air picture to assist the Joint Task Force Commander to control air assets and coordinate fires in his air space to achieve tactical and operational objectives.

- ◆ The Joint Fires Network is a task given to Joint Forces Command to look at all the Service ISR management systems to determine the way ahead for a joint integrated system that will eliminate redundancy while integrating across the Services and incorporating in a more joint fashion ISR and fires to support the Joint Task Force Commander's objectives.

Next year, Joint Forces Command will assume responsibility for the Family of Interoperable Operational Pictures or FIOF. An Air Force led Program, FIOF will bring all the common operating pictures together allowing the Joint Task Force Commander to gain a consistent picture of operations with access to all the data sources that will allow him to have information dominance in a format that allows him to see the battlefield and direct actions to achieve his objectives.

Looking at the JBMC2 beyond next year, Figure 4 shows some of the systems we are studying to add to our portfolio of programs that we will share oversight and directive authority over to insure we continue to build systems that are born joint. Only then can we achieve a level of joint interoperability that will support the paradigm shift I mentioned at the beginning where we have truly joint integration at the individual and system level.

Before closing, I want to put some challenges before you. I truly think it is imperative that we, the government, must be better at articulating to industry what we are doing and where we are going. We cannot afford proprietary systems that are stovepiped and expensive to integrate with other systems. We need to put industry engineers and our operators together earlier in the acquisition and development cycle. We need to spiral our development where we build a little, test a little and build a little more.

We need capabilities compliant with DoD standards supporting joint interoperability rather than pursuit of individual proprietary products resulting in battlespace stovepipes. Lastly we need your help to give us systems that are born joint and fit in a network-centric environment. Transformation is all about better, truly seamless interdependent joint warfighting.

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