



An Interview with Acting Director, DOD Office of Force Transformation

Terry J. Pudas

JFQ: *Could you define “big-T” transformation and explain the mission of the Office of Force Transformation?*

Acting Director Pudas: To begin, transformation is not a destination; it is a continuing process or a journey, and it’s driven by the fact that when you’re in a competition, whether it’s in a global security context or an industry context, you’re striving for creativity, innovation, and improvement. If not, then you find yourself as a strategic fixed target. The emphasis here is to create an organization that focuses on learning—that is, outlearning your competition and being able to turn that into action as a source of your competitive advantage.

Transformation is, first and foremost, about grand strategy. And we define strategy as selecting a competitive space and then facilitating the creation of the processes, the organizations, the capabilities, and forms of policies that influence the scope, pace, and intensity of the competition in that space. So it’s very much about helping create the future that we would all like and trying to understand the emerging strategic context, the emerging threat context, acknowledging the opportunities, and combining those in ways that produce competitive advantage. It’s similar to industry, which is not satisfied with

chasing the emerging market because they want to *create* the next market. In a sense, that is the kind of thinking that we try to do in this office: to create some new logic for those people who actually own the decisions in building within the requirements process, the acquisition process, the personnel management process, and the budgetary planning processes. In essence, that’s a huge focal point of this office: to be a catalyst, a focal point, in those kinds of efforts.

JFQ: *How has transformation changed from when Secretary Rumsfeld first established the office, when network-centric warfare and the revolution in military affairs were terms we were talking about so frequently?*

Pudas: It’s changed significantly. If you go back to the beginning, when we first started talking about transformation as one of the key priorities, it was not well understood. If you ask senior leaders about transformation now, you’ll get a whole different dialogue than you got 4 years ago. It is now better understood why we need to do this, and the effort is in implementing some of these new initiatives using some of the new logic and metrics that people have developed in the last 3 or 4 years. This whole notion, for example, of network-centric operations is no longer a debate.

Debate is now focused on how we implement it, what is the best way to resource it, and what is the return on investment.

JFQ: *People are creatures of habit. How do you make their habit transformation?*

Pudas: One of the things the office has done is to try to focus on those levers that get at organizational culture. We assert or we

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advocate the view that education is a really big deal for our key players. We train for the known, and we educate for the unknown. So the emphasis begins to switch from training for things that we probably aren’t going to do in the future to educating people on how to think about the environment they find themselves in.

JFQ: *Certainly, the people at the pointy end of the spear have a great deal of incentive to innovate and to be ready for the next change in life. Nobody learns faster than someone who’s being shot at.*

The keys to transformation—created by an MIT professor, Eric Beinhocker, and explained in a letter by Admiral [Arthur] Cebrowski on the Office of Force Transformation Web site¹—include focus on core missions; series of small, exploratory jumps; and placing a

On March 3, 2006, Col David H. Gurney, USMC (Ret.), and Dr. Jeffrey D. Smotherman of *Joint Force Quarterly* interviewed the Acting Director of the Department of Defense Office of Force Transformation (OFT), Terry J. Pudas, at his office in Arlington, Virginia. For more information, see the OFT Web site at <www.oft.osd.mil>.

Precision airstrike on insurgent stronghold in Fallujah, Operation Iraqi Freedom



1st Marine Division Combat Camera (Thomas D. Hudzinski)

few big bets. Based on this, we'd like to ask a few questions concerning this post-QDR [Quadrennial Defense Review], ongoing war on terror strategic environment.

Regarding core missions, for example, the Air Force is planning to cut several thousand personnel to pay for current operations and future programs. Closing bases costs millions in the near term for long-term savings. And all four Services are flying or driving Cold War-era vehicles. How can modernization and transformation not be in conflict fiscally?

Pudas: We need to move the discussion away from those old metrics. The way we measure the size of the force is changing; we now want to look to the capability of the force. So if I just counted aircraft, or number of hulls, or number of divisions, or whatever the echelon is, it's probably the wrong metric. You could argue, for example, that the Air Force used to talk about 200 sorties per target in World War II, 50 sorties per target in Vietnam, 1 to 2 for *Desert Storm*, and now, by virtue of things like small-diameter bombs and precision, we now talk about number of targets per sortie. So, yes, we are using the same kinds of platforms, but they're much more capable, so it's hard to say, "We cut so many aircraft, we cut so many of this, so we've reduced the capability." Quantity has a quality all its own, but is there a new metric now by which we should measure the capability of the force as opposed to just the traditional way we used to look at it? I think so.

JFQ: Could you discuss some of the small, exploratory jumps you're taking and the poten-

OFT Goals

- ◆ Make force transformation an integral element of DOD corporate and national defense strategy
- ◆ Change the force and its culture
- ◆ Implement network-centric warfare
- ◆ Get the decision rules and metrics right and cause them to be applied enterprise wide
- ◆ Discover, create, or cause to be created new military capabilities to broaden the capabilities base and to mitigate risk.

tial benefits to the Joint Force and to interoperability within the U.S. Government and between the U.S. Armed Forces and our allies in the war on terror?

Pudas: I get that question a lot because there's concern that we're moving so fast, and our partners and allies have a difficult time keeping up with our rate of change. Each country has its own size defense budget, and the general feeling is that ours is so large that we can cover lots of bets. Of course, they're looking for where to place their bets and what the highest potential is. The answer I usually provide them is, first of all, you've got to pursue those things that make you competent in the information age. Those are things like networking the force, focusing on sensors—a lot of those issues that are dominated by information or sensor type of things become very important. Then you need to look at those things that make you relevant to the security environment. Everyone's force structure doesn't need to mirror-image everyone else's. We need to



Soldier performs maintenance on tactical Micro Air Vehicle, a UAV used as a scout

find the right basis for making common cause on different things. We happen to have a very capital-intensive force structure, while other countries have a more labor-intensive force structure. And those play together very well in many kinds of operations we're doing.

JFQ: We talk about low-intensity conflict at one end and then full-scale war at the other end of the conflict spectrum. We know that the low-intensity conflicts happen with great frequency, and the high-intensity conflicts happen with less frequency. We have been organizing our force for the lower-intensity conflict, or I should say, we have been dealing with a lot of low-intensity conflict and natural disaster issues of late. But when we talk about the "long war," is the United States paying sufficient attention to the far more severe but less common high-intensity conflict, total war, as we focus on the lower-intensity end? We seem to be transforming in that direction with a great deal of focus on the Special Forces, for instance, and dealing with U.S. Northern Command issues such as Hurricane Katrina disaster relief, humanitarian assistance, and things of that nature. How are



JFQ (Jeffrey D. Sincich)

we preparing to fight in the upper end of the spectrum of war?

Pudas: One of the elements of transformation strategy deals specifically with that issue. An element of the strategy is to broaden the capabilities base across the Department in order to deal with a wide range of alternative futures—everything from the high end to the low end to humanitarian relief, all those things you just mentioned—to prevent strategic gaps through which an opponent could maneuver, essentially what happened on 9/11. So if a strategy such as this is implemented, then the capability cycle times must be accelerated as situations emerge and the future competitive environment becomes more certain.

So we can't have programs of record that are measured in decades; we have to have some agility in our capability cycle times. That's another way to deal with the issue you just mentioned: broaden the capabilities base so we can work across those four security challenges;² broaden the national security team to include not only DOD but also other agencies of the government plus our strategic partners and allies; build partnership capacity, which is one of the elements of the QDR; and work very hard on our processes to allow us to have some agility to move among those or to adjust or rebalance as the future becomes more certain or we can see more or understand more. That really moves us toward capabilities-based planning as opposed to threat-based planning.

JFQ: *When you think about force transformation and about how the United States is progressing in that endeavor, do you look at the way other armed forces are trying to anticipate*

requirements and transform themselves? Do we ever exchange views, or do we focus on the measures of merit that other organizations, other militaries, are using?

Pudas: I would point to three or four countries that have really accelerated their efforts in thinking about transformation, in pursuing this information-age construct of network-centric operations. We can look to the United Kingdom and to Australia, who are very engaged in things like network-enabled capabilities, and that is to be expected because we operate with each other all the time and we're very close. We can also look to countries like Sweden, which has taken this whole network-centric business to a really high level.³ Singapore is doing an enormous amount of work. They have something that's akin to a transformation office as well. And of course we've got the Allied Command Transformation, which is stood up, and this NATO Reaction Force.

JFQ: *Since the 1980s, the Armed Forces have shrunk about 40 percent, in weapons, systems, platforms, and people. Deployments have increased steadily throughout the 1990s until the current frantic operational pace, where almost one-third of the Army is deployed at any one time. Where do we find resources and time to transform when the Services are operating at such a high steady-state pace?*

Pudas: I talked before about how we measure the size and capability of the force, and that's one angle of it. Then we can also look at the tough decisions that have been made over the last several years in regard to creating maneuvering room for

forces to transform to the kinds of things they want to do. Think about the debates over the DD-21, Crusader, and Comanche. Those were emotional and tough decisions. The main question was whether there was still a market for those capabilities. The Crusader is a good example. Indeed, some very good stuff came out of that debate, but we had moved to a concept of operations where we could operate in a joint fashion with air-delivered ordnance, where we were networked with the units on the ground. In the end, why would we want to burden ourselves by lugging this thing [Crusader] around the battlefield in a logistics trailer that had been brought with it?

The way we manage risk in our large programs brings about that kind of dynamic. We manage risk with time, ordinarily, which in turn aggravates the other three portions of the risk equation: schedule, cost, and market. Unfortunately, programs drag out, schedules slip, costs increase—and when we finally get ready to field something, the world has changed, and the market for the product isn't there anymore. That's what I was talking about with being able to dramatically reduce the capability cycle times.

Transformation has been accelerated as a result of the war because we saw all these things that had changed: the strategic context had changed, the notion of American security being provided by two great oceans to the east and west and good neighbors to the north and south, and everything happened someplace else—that's changed dramatically. Areas where countries had previously enjoyed an enormous competitive advantage are now being competed with, and that's because information technology and computing power are essentially a free good around the world, which enables lots of stuff: bioengineering, nanotechnology, computer-assisted design, all of these things.

JFQ: *How are we using joint professional military education to transform the mindset and culture of the U.S. joint force community, our allies, and our industry partners?*

Pudas: Joint professional military education is something that came about as a result of our experience in Grenada, where we found it difficult to operate with other Services, and a great deal of attention was

paid to the lessons learned, why this was, how do we do this, and maybe we need to have different organizational constructs. Then, of course, there was the great revelation that part of the issue was dominated by culture. So with the assistance of Congress, we embarked on jointness, where the Services now have a mandated ratio of a different number of officers, and the curriculum is much broader rather than Service-centric, and to rise to senior levels, one needs to have a joint experience and serve with one another. After a generation, the Services now operate much more effectively. There's always some programmatic tension, but that's not necessarily unhealthy. I believe the Services spend between 10 and 15 percent of their human resources budget on education and training because it's so important.

Part of our initiative and our interest in culture brought us to the point where we found it useful to facilitate the creation of transformation chairs at all our academic institutions across the Department of Defense. I think we have 8 or 9 of 13 of them filled now. Stu Johnson is the transformation chair at National Defense University. And that's pretty exciting, but the real exciting part is that [these people] come together quarterly to collaborate and share, which is really very powerful because they're learning from one another. It's become an interesting forum. They've really taken on this notion of collaborating and sharing, which is a different vocabulary than we used to use: we used to use *deconflict* and *coordinate*. Those are industrial age terms, and we must move from that to focusing on collaborating and sharing, which is where the real power is.

JFQ: *Browsing many of your transformation briefings, we see Admiral Cebrowski and business academics quoted, but as frequently or even more frequently, we see Clausewitz, Machiavelli, and other classical strategists quoted in the same discussion. The Joint Staff and Service staffs are organized on lines created by Napoleon, not necessarily optimized for digital communications and reachback or the ability to strike anywhere on the surface of the Earth in a few hours. How do we reconcile transformation's tug forward with a legacy force and insufficient resources to modernize thoroughly?*

Pudas: Transformation should not be equated with plussing up the defense budget. Transformation should be associated

with how we make choices, using a new logic, so it's not necessarily about spending more money. It's really about making better choices. With regard to how we're organized, you can already see that all of

capabilities come in from? That's running on the order of 6 months to 3 years. So we need an architecture that allows us to take these new things and put them into our platforms without spending an enormous amount of

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the Services have undergone some kind of transformation in the way they're organizing for deployment in a lot of cases. The Army has gone to what they call brigade combat teams: in a lot of ways, they're pre-organized for combat, which is a way to remove impediments to speed. The Navy has gone to the notion of expeditionary strike groups, which are flexible and agile and can be put together a number of different ways. The Air Force and Marine Corps as well are looking at those kinds of things. So we have this dynamic of blurring the lines between operations and logistics and intelligence by virtue of information age connectivity. One of the interesting observations is to look at what commanders now want to command. They now want to command bandwidths, which essentially used to be a back-office function. So now this kind of job has been moved to the front office, and we've developed all these corroborative tools for managing and monitoring bandwidth. That's a manifestation of the tensions on organizational constructs as we move further into this transformation business.

JFQ: *What is the most interesting challenge on your agenda?*

Pudas: One of the big impediments facing the Department is interoperability. This comes under the heading of a strategic approach to cost to the Department. There are a number of things under that banner. One problem has to do with the way we buy things. We create a requirement, and then we write a contract. A team is put together, and a whole bunch of capabilities, modules, and applications, as well as hardware, is assembled. Then a large amount of money is spent to integrate all these things. But the problem lies in how to upgrade what we end up with. How do we take advantage of the technology cycle times where all the really exciting technological

money or taking things off line for a long time. That, of course, has become somewhat of a business model.

Another big issue that people are now paying attention to is this notion of our "addiction to oil." It's an enormous issue for the Department to look at. We aren't energy-sensitive; energy is cheap here, so that's an enormous challenge to deal with. In fact, we are cosponsoring an energy seminar series with Acquisition, Technology, and Logistics—the first one is at the end of March. Jim Woolsey is going to be the first speaker, and Congressman Roscoe Bartlett. He's going to try to draw some attention, create some learning, offer opportunities for people to come together and talk about this issue, and perhaps that might inform some broader elements of departmental energy strategy. There's lots of good things going on in different areas, but to try to make this mainstream, to try to make people more energy sensitive, is huge. It has a lot to do with cost, and it has a lot to do, in the end, with tactical agility. **JFQ**

NOTES

¹ See <www.oft.osd.mil/what_is_transformation.cfm>.

² The four security challenges are traditional, irregular, catastrophic, and disruptive. For a full discussion, see U.S. Army, *2004 Army Transformation Roadmap* (July 2004), available at <www.oft.osd.mil/library/library_files/document_386_ATR_2004_Final.pdf>.

³ See Franklin D. Kramer and John C. Cittadino, *Sweden's Use of Commercial Information Technology for Military Applications*, Defense Horizons 50 (Washington, DC: National Defense University Press, October 2005).