Programming and Resourcing Tomorrow's Army Today: A Conversation with Major General John Ferrari, Director, Program Analysis and Evaluation Office, Deputy Chief of Staff (G8), U.S. Dept. of the Army

The U.S. Army stands at a pivotal point in history, challenged to reshape its force into one that is leaner, yet more capable of meeting national defense priorities. As the Army shapes a force focused on meeting the nation's strategic land power requirements in an uncertain strategic environment, the reality of current and potential budget reductions continues to challenge the optimal path for balancing the requirements of a ready and modern Army.

The Army's approach to budget reductions is to resource near-term readiness under affordability constraints. Guided by the Secretary of the Army's priority for balance and transition, several decisions are leading to change that will sustain land power in new ways, expending fewer resources. The Army's deputy chief of staff, G-8, and its Program Analysis and Evaluation Office play an integral role in shaping the Army's plans for adapting to an increasingly uncertain environment while remaining the most professional and proficient land force in the world.

Major General John Ferrari, Director, Program Analysis and Evaluation, Office of the U.S. Army's deputy chief of staff, G-8, joined me on The Business of Government Hour to discuss the mission of his office, the U.S. Army's key strategic and operational objectives, how the Army is restructuring its aviation portfolio, and much more. — Michael J. Keegan

On Developing Programs and Defining Missions

The U.S. Army's Office of the Deputy Chief of Staff, G-8, is military-speak for structure, modernization, and resources. It oversees the resourcing and modernization of the equipment in the Army, our combat weapon systems, and platforms. It does warfighting assessments and analysis. We have an organization at Fort Belvoir that performs this function. Next is the part of the G-8 that I work for, which is called Programs Analysis and Evaluation; this is really about the intersection of resources, policy, and strategy. Basically, we take the Army's budget and parse it out. My area also works to build and explain the Army's program. Each year we look five years out and allocate resources among manpower, modernization, and readiness.



My mission and function is to help the Army and its leadership to build that program, submit it to the Secretary of Defense, and then undergo a several-month review. We have two other functions; one is PA&E, which holds the authoritative resource database that supports program and budget development. My third mission is to provide Army leadership with an independent assessment of the program. We synchronize the program, but then we also provide an independent assessment of the staff priorities and their costs.

The political leadership sets the mission for the department through the defense strategic planning guidance. They tell us our priorities and the level of resources available to us over the next few years. More often, it turns out that our budget is never quite what is needed to do the missions that have been assigned. We work with Army leadership to identify the best use of resources relative to defined priorities. In the end, you have to understand the interaction between the laws of physics and getting things done, the money, and the mission.

Just to reiterate, our core functions are to:

- build and explain the Army program and Future Years Defense Program (FYDP),
- assess, integrate, and synchronize the program,
- develop and maintain the Army's authoritative resource position database, and
- coordinate programming and budgeting phases to ensure an effective transition to the Army budget.

On Challenges

The biggest challenge we face is fiscal uncertainty. Managing the budget realities is very difficult on a year-to-year basis because like any organization, you need a reasonable level of certainty in the funding levels in order to make long-term decisions.

The second challenge involves the uncertainty in the world today and the changing threat environment. We have missions and the resources to meet them, and even though the resources are uncertain, so are the missions. For instance, about 12 to 18 months ago when the defense strategy was set, there were many assumptions made. We were going to focus our resources and our troops in the Pacific. Now, there is ISIS, the Russians in the Ukraine, and Crimea. Today, the United States Army would have eight of its 10 division headquarters engaged around the world. We've had troops going to Africa to deal with the Ebola outbreak, which we hadn't anticipated. There is uncertainty in the mission and how you allocate the resources therein. This is our reality and it's a challenge: how do you take the uncertainty in the mission, the uncertainty in the money, and make long-term decisions? We're making decisions on weapon programs that are 10 or more years out, stationing forces, force mix and training, and ultimately it is our job to help senior leadership to balance them all ... accept the uncertainty, anticipate the surprises, and use finite resources as efficiently and effectively as possible.

On the U.S. Army Operating Concept: Winning in a Complex World

One of our most important duties as Army professionals is to think clearly about the problem of future armed conflict. That is because our vision of the future must drive change to ensure that Army forces are prepared to prevent conflict, shape the security environment, and win wars. In December 2014, the Army Operating Concept (AOC) was released. It describes how future Army forces will prevent conflict, shape security environments, and win wars while operating as part of our Joint Force and working with multiple partners.



Just a quick history lesson: if you think back to the '80s during the Cold War when I came in, we had what was called the Air/ Land Battle Doctrine, which was really focused on defeating the Soviet threat in case of an attack. It was a large mass army, hundreds of thousands lined up from the north of Germany to the south, ready to defend against the Soviet threat. What we then went to in the 2000s with the operations in Iraq and Afghanistan was different, but similar in that we put a large part of the Army into one country. However, instead of operating as a very large unit to defend a very large nation state attack, the Army was operating in a very decentralized manner against a more insurgent type threat, but it was still 150,000 people in one country focused on a single mission, operating decentralized and in small units rather than a large unit.

The AOC guides future force development by identifying first-order capabilities that the Army needs to support U.S. policy objectives. It provides the intellectual foundation and framework for learning and for applying what we learn to future force development. The purpose of the Army Operating Concept is to ask big questions, not focus on small answers. This concept focuses on three big questions: what level of war is the concept going to address, what is the environment we think Army forces will operate in, and what is the problem we are trying to solve? It is our mission to be ready for those unknown contingencies.

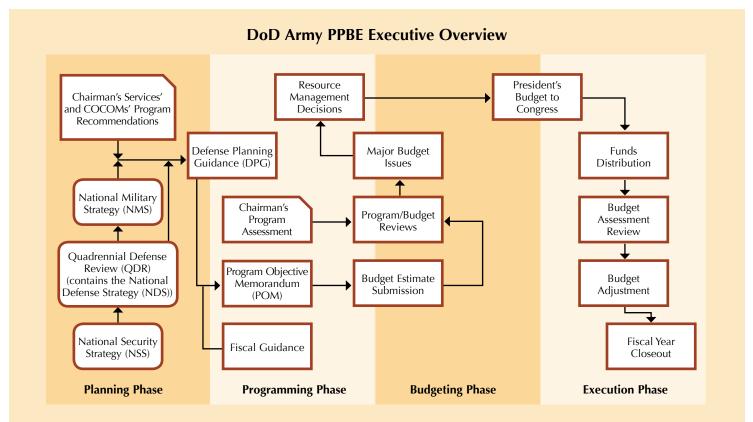
On Informing Army Senior Leadership Decision Making

Our job is to provide senior leadership with the best possible information, so that they can make the best

possible decision. I wouldn't be able to do this without talented people. You need people with a wide range of skill sets who can think analytically, understand how to use data, and how resourcing and politics work, or you won't get to an answer.

We also have a number of different quantitative and qualitative tools at our disposal. These tools and our talent come together to look at the challenges and the mission sets. We work to understand and decompose the problems faced into actionable decisions. We boil down the problems faced to a key set of issues. We're then able to take data, either wargaming analysis, data from the resourcing database, or readiness data, and marry together the relevant information for the related decision. Doing this provides senior leadership with the best available information that can inform their decisionmaking process across a wide array of programs.

To illustrate further, we look across three broad portfolios and try to seek balance. The first portfolio is manpower. The Army is different than the other services in that other services man their equipment. In the Army, we equip our



The PPBE process consists of four (4) distinct but overlapping phases:

- 1. **Planning:** The Planning phase of the PPBE Process is the definition and examination of alternative strategies—the analysis of changing conditions and trends, threat, technology, and economic assessments in conjunction with efforts to understand both change and the long-term implications of current choices.
- 2. **Programming:** The Programming phase of the PPBE process defines and analyzes alternative force structures, weapon systems, and support systems together with their multi-year resource implications and the evaluation of various tradeoff options.
- **3. Budgeting:** The Budgeting phase of the PPBE process includes formulation, justification, execution, and control of the budget. The primary purpose is to scrutinize the first one or two years of a program's budget to ensure efficient use of resources.
- **4. Execution:** The Execution phase of the PPBE process is the real world application of the Planning, Programming, Budgeting and Execution process.

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manpower, so the Army is people. We are soldiers; soldiers supported by a civilian workforce that organizes, trains, and enables it to go out and conduct operations. Generally, the initial step is to figure out what structure the Army needs to accomplish its missions and how many people it will take. Manpower takes up roughly half of the Army's budget. Once the force structure is defined, then capabilities, modernization efforts, and types of equipment needed to meet the missions are determined. We also need to manage the investment portfolio. The investment portfolio makes updepending upon the budget cycle—roughly 18 percent to 22 percent of our budget. The other 30 percent of the budget goes toward readiness funding. This includes everything from training to education to the logistics that are needed to support the force and the installations needed to conduct operations.

In PA&E, the analysis we conduct always tries to find the balance and explores what balance even means. For example, Army leadership made decisions based on one proposed budget number, but now needs to respond to a 20 percent budget reduction from that original number. This reality presents significant challenges and requires serious



trade-offs and the balancing of risks, posing such questions as, do we take away from readiness or modernization?

We're in the process of shrinking the Army from 570,000 down to 490,000 at the end of this year. Over the last four years, we will have taken 80,000 soldiers out of the force. This is a long-term decision because once manpower and structure are taken out, it takes years and years to build them back. That said, we need to avoid becoming a "hollow" Army; that means not getting a phone call from the president that says he has to put a soldier in harm's way and that soldier hasn't been properly trained or hasn't been properly equipped, or we put soldiers in and we don't have enough of them. We can't get this wrong because we recognize that the soldier pays the price.

On Planning, Programming, Budget, and Execution

Former Secretary of Defense Robert McNamara established the DoD Planning, Programming, and Budgeting System (PPBS). Though often a maligned process, it has survived for a very long time because it does what it's supposed to do: it crafts a long-term planning horizon.

In theory, the planning phase gets it done and hands it to the programming phase, where I sit. It is our job to take the resources we have and marry them with specific programs. Many hard decisions and trade-offs are made during the programming phase of the Planning, Programming, Budget, and Execution (PPBE) process. From September to December, it is always an interesting time at the Pentagon because of program review. It is during these reviews when programs either get money or don't. Once that phase is complete, we then make the transition to the budget phase when the DOD comptroller gets the program and incorporates it as part of the department's overall budget. The president submits the overall budget and our budget determination is appropriated by Congress. Once the appropriation is done by Congress, it comes back to DOD and enters the execution phase of the process. This is the real-world application of the PPBE

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Over the last four years, we will have taken 80,000 soldiers out of the force. This is a long-term decision because once manpower and structure are taken out, it takes years and years to build it back." process. It matches planned programs with actual resources, measures performance, and provides feedback for more efficient and effective future execution.

What makes this process a four-dimensional chessboard is that today we're doing planning for what we call Program Objective Memorandum (POM) 18, which forecasts for 2018 to 2022. While we're planning for POM 18, we're building POM 17, which contemplates 2017 to 2021. At the same time we're doing that, we're in the budget phase for POM 2016, so we're on Capitol Hill talking about what we want to do in 2016. At the same time we're doing that, we're executing the FY 2015 budget. When you lay out the PPBE, it looks like it runs sequentially, but it actually runs stacked and synchronized. It can be confusing, because you're programming against the planning that was done last year, not the planning that is being done this year, which is for the program for next year. It makes it difficult. The PPBE allows for long-term forecasting; it affords the ability to connect budgetary decision-making with strategic outcomes. It allows visualizing trade-off options as needs and costs are considered simultaneously.

On the Army Program Objective Memorandum

The Program Objective Memorandum is the primary document used by the services to submit programming proposals. The POM includes an analysis of missions, objectives, alternative methods to accomplish objectives, and allocation of resources. It presents planned activities and the personnel and obligation authority required over a five-year period to build, operate, and maintain the proposed program.

POM is one of these great government acronyms that nobody outside of government would recognize. It considers resourcing decisions that align strategy and policies to actions. It looks five years into the future, but it also looks beyond. It takes the programs, manpower, and weapons systems and it makes sure the service can live within the fiscal constraints that it faces. We then subject it to war games and scenario development to see if the force we're building for 2020 and 2025 can actually accomplish the anticipated missions. It's a very complex undertaking that's integral to the entire planning, programming, and budgeting process.

In summary, Army funding has decreased significantly since 2012 and future program funding carries significant risk, due to reforms and inflation. The proportion of Army funding going to the reserve components has been increasing over the past 15 years. Manpower continues to decline, since 2001 (Regular Army end strength has declined by 6 percent). As Army capacity is reduced, maintaining a high state of readiness is



imperative. Reduced funding will make it difficult to begin new programs. The Army continues to balance resources across the total force to achieve the required outcomes; there is limited flexibility to rebalance across components.

On Surprises

What I think has surprised me the most is that we've gone this long without a resolution to the fiscal environment in the country and the deficit dealing with that. I think that early on, if everybody just remembers back to 2013, we went through the furloughs and then we went through the government shutdown and I think that everybody anticipated we would have to go through that, but we would come out the other end with certainty of the fiscal situation because to some extent, you can't predict the certainty of the world.

The fiscal uncertainty as a nation, we do control. So it is a surprise that it has lasted this long and there doesn't appear to be a path in the next couple years to solve it, so we'll be making multi-year decisions with a year-by-year thought process on how to do it.

To learn more about the U.S Army's Program Analysis and Evaluation Office (G8), go to www.g8.army.mil/organization/program_analysis_and_evaluation/.

To hear *The Business of Government Hour* interview with Major General John Ferrari, go to the Center's website at www.businessofgovernment.org.

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