The New US Strategic Framework and Capabilities-based Planning: Application to Strategic Force Planning

By Stephen W. Zavadil, Ralph L. Tindal and Jerome H. Kahan Systems Planning and Analysis, Inc.

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Summary

The New Strategic Framework announced in the US Quadrennial Defense Review (QDR) has moved force planning, including strategic forces, from a threat-based, country-specific approach to a non-country-specific continuum of capabilities from minimal force to nuclear weapons. This transformation has changed the basic US force planning philosophy to a capabilities-based planning approach (CBP), although new planning methodologies still need to be fully developed.

Development and refinement of CBP methodologies is underway in a number of venues. A concept for applying CBP principles to strategic force planning, developed by Systems Planning and Analysis, Inc. (SPA) for the Advanced Systems and Concepts Office (ASCO) of the Defense Threat Reduction Agency (DTRA), is discussed.

The New US Strategic Framework

As has been discussed extensively in workshops, periodicals and the press, the current US Administration has been unusually successful in both articulating a national security strategy and then using that strategy as the basis for its decisions regarding matters of national defense and the resulting planned future force levels and capabilities. The *National Security Strategy* issued by the White House in September 2002, the *Quadrennial Defense Review (QDR)* completed in September 2001, and the *Nuclear Posture Review (NPR)* completed in January 2002, along with the current *Defense Planning Guidance (DPG)*, represent a well-integrated body of direction.

The top-level policy goals of "Assure, Dissuade, Deter, and Defeat," or ADDD, lead to a useful set of criteria against which to assess the content, capacity and concept of operations (CONOPS) of different force options. The NPR provided a fresh approach to basic concepts of strategic forces by including not only the classic nuclear Triad of forces, but also adding a spectrum of non-nuclear strike capabilities, defenses, a responsive infrastructure and adaptive planning to the strategic planners' toolkit.

This approach to strategic force definition appears to be both a sincere effort to reduce reliance on nuclear weapons to deter the broad spectrum of potential adversaries that exist in the current and projected world environment, and a vigorous pursuit of non-nuclear means for assuring allies, dissuading or deterring potential adversaries, defending the US against attack and swiftly defeating anyone who is not otherwise deterred.

The "New Triad" of strategic strike, defenses and a responsive infrastructure, coupled with adaptive planning and C4ISR, is designed to respond to a wide range of contingencies in a more flexible manner. Having US strategic force planners now actively consider non-nuclear means to achieve strategic effects will provide alternatives to nuclear posturing, especially against terrorist and rogue nation targets where the use of weapons of mass destruction (WMD) are threatened. As a result, the strategic strike force available to the planners has shifted from a Triad of nuclear forces on alert or available to be generated, to a mixture of nuclear and non-nuclear (including both kinetic and non-kinetic) strike capabilities. Some of the capacity of the US to develop consequent strategic effects is kept ready to be employed in response to immediate contingencies or unanticipated challenges as a specific element of dissuasion. The remainder of the US capacity relies upon a responsive infrastructure in order to be brought into readiness over a longer period of time in response to changing political or military challenges.

The "Defenses" component of the "New Triad" is an element with significant capabilities still under development. Although passive defensive measures are available to both military and the general population to some extent, development of effective active defensive measures remains a significant challenge.

Responding to the Strategic Threat of Global Terrorism

During the Cold War, the potential circumstances where strategic forces might be used were narrow, and the capabilities to be applied were generally restricted to nuclear weapons. The most significant threat to US security is now global terrorism, including the potential use of WMD. Prudent responses to terrorist WMD threats increase the need for having the capability to provide non-nuclear strategic responses. The new strategy and its components make up this response.

The multiple Major Regional Contingency (MRC) basis for Cold War force planning has given way to a more limited and focused set of critical operational goals and a new risk paradigm. The US has chosen to accept the risk of not being fully ready to engage at all levels of conflict in multiple MRCs. Instead, the US has elected to defend its homeland, deter forward in four areas of the world to provide assurance, be prepared to swiftly defeat attacks in two of these areas, and win decisively "at a time and place of our choosing" in one of these areas. Of note, none of the four areas of the world addressed in this strategy has a focus on Russia.

This "1-4-2-1" approach to defining operational goals and acceptable risk is applied across all forces, and includes a reduced level of implied specialization for strategic capabilities. Drawing upon kinetic and non-kinetic non-nuclear capabilities to address strategic challenges is allowing strategic capabilities to become but one component of a spectrum of potential strategic responses to global terrorism and rogue nations, rather than a separate level of capability.

The Changing Planning Paradigm

Strategic force planning during the Cold War focused on specific threats from specific countries. Planning centered on bringing a correlation of strategic forces to bear that were predicted to crush the enemy under all circumstances of warning and defenses. Nuclear force planning focused on showing, through arsenal exchange model results, that employment of strategic nuclear forces was, indeed, foolish. Both sides believed that a state of Mutually Assured Destruction (MAD) existed.

Integration of strategic nuclear planning with conventional warfare planning was largely absent during the Cold War, except where tactical nuclear weapons were being considered as an ultimate last resort when conventional forces were clearly insufficient to preclude defeat. Even in such circumstances, tactical use of nuclear weapons was seen as either transitory, or resulting in a strategic response by the adversary, hence a strategic response from the US. A fragile balance was sustained throughout this period.

Strategic force planning is now integral to overall force planning. With planning no longer country-specific, but representative of multiple contingencies and geographies, a diverse set of capabilities needed to deal with plausible adversaries emerges. The total capability of resulting forces can be viewed from the point of view of content, capacity and concept of operations (CONOPS). The CBP approach should allow nuclear forces to be addressed within common planning methodologies, rather than being treated separately.

An Approach to Capabilities-based Planning

The current Administration's desire to reduce reliance on nuclear weapons has been skillfully implemented by demanding that the planning for strategic forces simultaneously assess the utility and consequences of using a broad spectrum of strike capabilities, both nuclear and non-nuclear, against potential adversaries. Finding useful planning methodologies to use when addressing multiple potential circumstances, geographies, and adversary capabilities has proven far more challenging than planning during the Cold War. Nonetheless, some useful approaches are starting to emerge.

An approach recently developed under the sponsorship the Advanced Systems and Concepts Office (ASCO) of the Defense Threat Reduction Agency (DTRA) contains several components. As suggested earlier, the total capability of forces can be viewed from the point of view of content, capacity and concept of operations (CONOPS).

"Content" would look at performance at the individual system level, "Capacity" would assess performance across the force structure, and "CONOPS" would address how the force would be employed. These three attributes are central to the analytic approach.

In order to be non-country-specific, an "Alternative Futures" framework is postulated that contains a spectrum of potential general global situations that plausibly capture or bound the space into which the world will evolve. These alternative worlds are not sufficient to define potentially desirable capabilities. Hence, the method next defines a set of operational situations (OPSITS) within each of these worlds, reflecting the spectrum of targets, geographies, constraints and cultures that are contained within them.

A rehearsal of these OPSITS defines the capabilities required to respond to each OPSIT. The simple sum of all of these capabilities can often far exceed a rational force level. A means for managing risk across the worlds and adversaries is used to derive requirements that provide an adequate level of capability within an acceptable level of risk. This step includes considering such things as political constraints, adversary risk tolerance, and operational guidance, such as damage limitation.

Developing force structure recommendations from this set of desired capabilities requires assessing various existing and projected platforms, delivery systems and warheads based upon an evaluation of acquisition factors, political factors and operational factors. This step provides a common basis for a risk-based prioritization of options.

Finally, candidate force structures are examined to identify gaps in capability that must be addressed by finding alternative means (new "Content") and to identify deficiencies in capability robustness where additional scope is needed (more "Capacity"). The goal of this step is to identify balanced force structure options that can adequately meet the challenges of the OPSITS defined within the Alternative Futures, and meet the national policy goals as well as operational needs.

Application of the Approach

Although much work has been done over the past year or so to develop and refine useful approaches to CBP, much work must still be done. Demonstrated tools and methodologies appear to allow kinetic strike planning to use CBP in a useful way, but the application of CBP has treated nuclear weapon planning in isolation thus far. The community of planners must now move beyond the prototype level and attempt to successfully address the entire force structure in a useful, balanced way.

The next challenge is multi-faceted. Using effects, planners must first finally bridge the chasm between the two schools of planning, nuclear and conventional, while also adding new disciplines, such as Information Warfare and Special Operations Forces, to the strategic strike options. Then they must successfully factor in the impact of

defenses, both active and passive, and of adaptive planning. Finally, they must address supporting infrastructure issues, both responsive and long-term.

Closing

The "New Strategic Framework" recognizes that we now live in a world with less confrontation among major powers, but one within which we must address the increasing risks of global terrorism. This important philosophical change has set the stage for significant changes in the reasons for and the way capabilities are developed, and how necessary forces are planned.

Although considerable progress has been made toward developing useful CBP tools and methodologies, US force structure planning is not yet being significantly impacted by the new CBP approach. Nonetheless, the tools and methodologies developed thus far have started to impact how planners think about force planning, and have allowed planners to respond effectively to the US government's stated goal of reducing reliance on large stores of nuclear weapons for its security.

Figure 1 – The New Strategic Framework

Figure 2 – Alternative Worlds

Figure 3 – Developing the Futures Framework

Figure 4 – DTRA Study Approach