SCENARIO PLANNING AND STRATEGY IN THE PENTAGON

Michael Fitzsimmons

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FOREWORD

The 2018 *National Defense Strategy* laid out a case for change in how the United States views its security challenges and for corresponding changes in its priorities for military planning and capabilities development. Implementing this vision demands renewed rigor in examining not only the substance of emerging military challenges but also the Department of Defense's (DoD) processes for supporting strategic planning.

Thus, Dr. Michael Fitzsimmons's new monograph is a timely contribution, taking a close look at the important but underexamined topic of scenario planning and analysis in the Pentagon. The basic idea of developing defense strategy and force structure priorities based on analysis of future scenarios of military operations could hardly be more intuitive. In his reviews of the recent history of Pentagon scenario analysis and the literature on strategic planning, Dr. Fitzsimmons demonstrates how uncertainty and complexity converge with the unique bureaucratic features of the DoD's decision-making to subvert the otherwise straightforward imperatives of scenario planning.

His recommendations for reorienting the Support for Strategic Analysis (SSA) enterprise should set the table for productive debate among Army strategists, planners, and the broader joint community.

DOUGLAS C. LOVELACE, JR.
Director
Strategic Studies Institute and
    U.S. Army War College Press

ABOUT THE AUTHOR

MICHAEL FITZSIMMONS is currently a visiting research professor at the Strategic Studies Institute (SSI), U.S. Army War College (USAWC), Carlisle, PA. He is on leave from the Strategy, Forces, and Resources Division at the Institute for Defense Analyses, Alexandria, VA, where he conducts studies on defense strategy and force planning for the Department of Defense (DoD). Dr. Fitzsimmons has served as an advisor to the Deputy Assistant Secretary of Defense for Strategy and on operational and strategic headquarters staffs in Iraq. He has also been an adjunct professor of public policy from the University of Maryland and previously worked as a management consultant at Bain & Company in the United States, Russia, and the United Kingdom. Dr. Fitzsimmons holds advanced degrees in international affairs and business administration from Columbia University, New York, and a Ph.D. in international security policy at the University of Maryland, College Park, MD.

SUMMARY

Students and practitioners of national security policy have long understood that uncertainty about the future is a central challenge of strategy. Scenario planning should be one of the Department of Defense's (DoD) most important tools for developing strategy under uncertainty. Since 2002, the DoD has employed a formalized, joint scenario planning process to support strategy and force development, but that process has proven less influential than intended for strategic decision-making.

Explaining the challenges facing scenario planning and analysis in the Pentagon is the main purpose of this monograph. After presenting a brief history of the DoD's scenario planning experiences, it argues that the formalized, joint scenario planning process has been most effective in supporting capability and program development, where its emphasis on detailed data development and bureaucratic pedigree has proven most valuable. Where the approach has fallen short is in shaping strategy and force structure, in part because of those same areas of emphasis. Detailed data, bureaucratic pedigree, and the mechanics of formal processes more generally fit poorly with the way senior officials deliberate, debate, bargain, and reason about their strategic choices. The monograph shows that the reasons for this are numerous and are rooted in intrinsic, structural characteristics of decision-making in large organizations, especially the DoD.

The monograph concludes with recommendations for rejuvenating scenario planning that aim to build on the real achievements of the current process; separate the functions of decision support relevant to strategy and force structure development and

capability and program development; and rebalance analytic resources toward less emphasis on scenario and data development and greater emphasis on strategic analysis.

SCENARIO PLANNING AND STRATEGY IN THE PENTAGON

STRATEGY, UNCERTAINTY, AND SCENARIOS

Invocations of profound uncertainty about the future have become something of a mantra among civilian and military leaders. Many seem to believe that this old-fashioned problem is today worse than usual—or maybe worse than ever. Emblematic of this view is then-Chairman of the Joint Chiefs of Staff General Martin Dempsey's opening sentence in his preface to the 2015 *National Military Strategy*: "Today's global security environment is the most unpredictable I have seen in 40 years of service."[1] His successor, General Joseph Dunford, concurred, telling an audience in 2016 that the world is in the most uncertain time since the end of World War II.[2] In a similar vein, former Defense Secretary Robert Gates was fond of remarking that "when it comes to predicting the nature and location of our next military engagement since Vietnam, our record has been perfect. We have never once gotten it right."[3] Former Defense Secretary Donald Rumsfeld's famous ruminations on "known unknowns" and its counterparts were of the same genre.[4]

Such judgments are not new, of course. Students and practitioners of national security policy have long understood that uncertainty about the future is a central challenge of strategy.[5] Interestingly, two of the pre-eminent contemporary scholars of military strategy have made this point an important theme of their career-synthesizing work in recent years. In five books published over the past decade, Lawrence Freedman and Colin Gray tackle the history, theory, and practice of strategy and defense planning at great length.[6]

Their verdicts on the subject of uncertainty and strategy are very similar and simply summarized as: we are usually wrong when we predict the future of war.

If the difficulty of predicting future conflicts is a truism among strategists, then practical advice on what to do about it is more elusive. For example, Freedman wraps up his history of predicting wars with a warning against expecting either too much or too little continuity in current security trends, and he concludes that many predictions about the future of war "deserve to be taken seriously," but all should "be treated skeptically."[7] In a similar vein, Gray concludes his study of "Meeting the Challenge of Uncertainty" with a list of admonitions that defense planners may find sound but also intuitive. Examples include: "try only to make small mistakes," "the most important quality in defence planning is prudence," "history is . . . the most useful source of education for defence planners," and "beware the curse of presentism."[8]

So how, after all, does the most powerful military in history currently handle the fundamental challenge of making strategic choices for the future in the face of deep uncertainty? In theory, one of the Department of Defense's (DoD) most important tools for strategy development under uncertainty is scenario planning. Peter Schwartz, who pioneered scenario planning in the context of multinational corporate strategy, defined it as a "tool for ordering one's perceptions about alternative future environments in which one's decisions might be played out."[9] In the military context, scenario planning is generally treated as distinct from operational planning, which focuses on applying existing capabilities to today's threats. In keeping with the spirit of Schwartz's definition, scenario planning

instead aims to explore a wider range of possible challenges several years or even decades into the future. Scenario analysis can then provide tests of prospective capabilities, concepts, and policies through wargaming, computer simulation, and other analytic techniques.

Scenario planning has a long history in the U.S. military, going back at least to the early 20th century, when the predecessor to today's Joint Staff developed a set of "color plans" to explore potential conflicts with such rivals as Japan (War Plan Orange), Germany (War Plan Black), and the United Kingdom (War Plan Red).[10] In the early Cold War, Herman Kahn at the RAND Corporation pioneered scenario planning methods for studying nuclear war, and scenario analysis continued to inform defense planning throughout the Cold War, often (though not always) with a focus on fighting the forces of the Soviet Union and Warsaw Pact.[11] In the 1990s, the Office of the Secretary of Defense (OSD) published a set of illustrative planning scenarios as appendices to its *Defense Planning Guidance* documents, intended to provide analytic inputs to the DoD as it confronted a range of post-Cold War challenges.

Then in 2002, the DoD established for the first time a formalized joint scenario planning process for supporting strategy and force planning. This process was known originally as the Analytic Agenda, and it was subsequently renamed as Support for Strategic Analysis (SSA). Its codified purpose is to "support deliberations by DoD senior leadership on strategy and planning, programming, budgeting, and execution system (PPBES) matters, including force sizing, shaping, and capability development."[12] More recently, Congress has come to recognize the potential value

of this process, directing in a recent round of legislation on Pentagon strategic planning that the *National Defense Strategy* should identify its "assumed force planning scenarios."[13]

However, despite its intended importance to DoD planning processes, the SSA enterprise is actually far less influential than it could be on senior leaders' decision-making. Pentagon leaders seldom mention scenario planning in speeches, congressional testimony, or press interactions. You will search many hundreds of pages in vain for any reference to the SSA process in the memoirs of Defense Secretaries Donald Rumsfeld, Robert Gates, and Leon Panetta.[14] And discussion of SSA in professional literature is almost entirely confined to the defense analytic community.[15] Policy and strategy debates, by contrast, frequently include general discussions of scenarios, but almost never deal with how military leaders and organizations should or do apply scenarios in their decision-making.[16]

Overall, scenario planning in the DoD has not fulfilled its promise as a fulcrum for strategic planning. Explaining why is the main purpose of this monograph. Its central argument is that the DoD's approach to generating and using planning scenarios has limited their utility to strategic decision-making. This approach has been based on the goal of providing analytic support to both strategy and force structure development and for capability and program development through the same set of processes and products. For a variety of reasons detailed here, this goal has proven untenable over the years. A new approach could build on the real achievements of the current process, separate the functions of decision support relevant to strategy and force structure development and capability and program development, and rebalance

analytic resources toward less emphasis on scenario and data development and greater emphasis on strategic analysis.

This monograph lays out these arguments in three main steps. First, it provides a brief history of the DoD experiences with SSA over the past 15 years. Second, it diagnoses SSA's most significant challenges in achieving its intended influence on defense strategy and capabilities. Third, it offers a few recommendations for reform of the process.

This monograph was written with three audiences in mind. The first is today's and tomorrow's leaders of national security organizations who would benefit from understanding the promise and the pitfalls of scenario planning in the Pentagon. The second is readers with experience inside the DoD's scenario planning and analysis enterprise who may already know much of this story but may find value in its articulation and the analyses' reckoning with problems and potential solutions. The third audience is readers in the broader policy, planning, and analysis communities with a more general interest in decision-making and management in the DoD, for whom the story of scenario planning offers an instructive example of conceptual and bureaucratic challenges to strategic planning.

These audiences are also directed to one other recent publication on this subject in particular. "Capabilities for Joint Analysis in the Department of Defense: Rethinking Support for Strategic Analysis," by Paul Davis of the RAND Corporation, was released in 2016 in fulfillment of a congressionally-mandated assessment of the DoD's "joint analytic capabilities . . . to support strategy, plans, and force development and their link to resource decisions."[17] Davis's report is unique in the literature in providing a detailed description and assessment of the SSA process and

performance. This monograph aims to complement his work in its scope and analysis.

Finally, a word on this monograph's sources is in order. In addition to the documentary research cited in the notes, it is based in part on the author's observations as a participant in the activities described here, both as a staff member in—and as a consultant to—OSD. This monograph also benefited from not-for-attribution interviews, as well as feedback on earlier drafts, provided by more than a dozen former and current senior and mid-level officials with Pentagon scenario planning experience.[18]

A BRIEF HISTORY OF SUPPORT FOR STRATEGIC ANALYSIS

Foundational Principles, Processes, and Debates

The Pentagon's current joint scenario planning enterprise was born in 2002. The directive codifying the new initiative—known for its first several years as the Analytic Agenda—announced:

> The Department shall institute a comprehensive and systematic process to provide data for strategic analyses, using approved scenarios and ensuring that data are available, easily accessible, integrated, pedigreed, sufficiently detailed, and synchronized with Planning, Programming, and Budgeting System cycles.[19]

The OSD officials who created the Analytic Agenda were motivated in large part by three shortcomings they perceived in strategy, force planning, and supporting analysis. These challenges and the intended solutions are summarized in table 1.[20] While the mechanics of implementing the solutions listed in the table have evolved in various ways since 2002,

these three points reflect principles that have generally endured and guided governance of the process over time. (The Analytic Agenda was renamed Support for Strategic Analysis [SSA] in 2010. For convenience, this analysis will use the acronym SSA to refer to periods before and after the change.)

Problem	Intended Solution
In developing and justifying capability requirements, each military Service and other Department component generally used its own scenarios, assumptions, threat assessments, concepts of operations (CONOPS), data, and analytic models.	Centralize development of scenarios, assumptions, threat assessments, CONOPS, and data so that force planning analyses can be based on a common, joint framework.
Strategic planning did not adequately account for uncertainty, either in the types of scenarios the Joint Force might face or in various parameters within scenarios. Capability requirements were based predominantly on a single 2 major theater war scenario pairing (Iraq and North Korea).[21]	Build a wider range of scenarios that covers the full spectrum of important military missions and depicts alternative assumptions about key variables.
DoD senior leadership had limited involvement in or awareness of development of scenarios used for strategy and force planning analysis.	Base joint scenario products on scenarios and assumptions selected and approved by senior leaders.

Table 1. Strategic Planning Problems and Intended SSA Solutions

In moving to centralize scenario development, the founders of SSA were not seeking to dictate the assumptions or data that should be used in strategic analysis, but rather to establish a common, transparent baseline that different organizations would use as a starting point for analysis. A related goal, which they recognized would be necessary to enable the other

goals, was to effect a cultural change in the DoD's analytic and planning organizations.[22]

Organizationally, the new joint scenario process was to be collaboratively governed by OSD and the Joint Staff and would involve contributions from throughout the DoD. The main roles and responsibilities that prevailed for most of SSA's first decade were as follows:

- Office of the Undersecretary of Defense for Policy (OUSDP): Select and develop scenarios, including an overall description of adversary intent, U.S. strategic objectives, and major assumptions and planning factors.
- Chairman of the Joint Chiefs of Staff:[23] Develop detailed U.S. CONOPS and force lists for selected scenarios to serve as starting points for analysis.
- Program Analysis and Evaluation: Develop and maintain "analytic baselines," comprising scenarios, CONOPS, and data sets suitable for use in wargames, campaign simulation, and other modeling.[24]
- Defense Intelligence Agency: Provide data and detailed assessments on the capabilities and courses of action of potential adversaries and other potential scenario participants.
- Other Components (most notably the Services and combatant commands): Provide extensive input to all of the above processes and products.

At first glance, these principles and processes likely appear uncontroversial. To a layperson—a taxpayer or member of Congress, for example—it may seem to be simple common sense for the Pentagon to determine future capability needs by examining a diverse range

of future missions defined by the DoD leadership in a joint context, and to evaluate alternative means of achieving those missions.

But the logic underpinning the Pentagon's joint scenario planning is not as straightforward as it appears. Why did the process turn out to be so difficult? This monograph will return to this question in more detail in the next section, but it is useful to frame the basic history of the activity in terms of some of its defining challenges. Six debates, in particular, have complicated execution of scenario planning in the DoD over the years. They are summarized here as dilemmas or opposing principles. In theory, these pairs of principles are not logically incompatible or mutually exclusive. A process with centralized management and ample resources could potentially accommodate them all in tandem.[25] In practice, however, these principles have been manifest in competing priorities among the DoD's stakeholders.

1. Likelihood versus plausibility as an appropriate planning factor. How likely does a scenario need to be to compel planning? And how likely is any given scenario in the first place? Despite the use of much scientific-sounding arguments on the subject, and despite superficial deference to the intelligence community as an authority on the subject of likelihood and plausibility, the answers to these questions are entirely subjective and unverifiable. Everyone has an opinion, and few can be disproved. This means that, despite the scenarios' purpose to serve as test cases rather than predictions, a nearly endless number of uncertainties can be cause for legitimate debate in making scenario assumptions, from the large (Would the United States really deploy combat forces to that continent?) to the small (Would that ally provide that percentage of ramp space at that commercial airport?). This is a

problematic feature of a process like SSA, which is largely dependent on extensive collaboration and consensus-based resolution of major issues.

2. High-resolution analysis of a small number of cases versus low-resolution analysis of a large number of cases. Should the scenario planning process focus on studying a few scenarios in-depth or many scenarios with less detail? The uncertainty of the future security environment demands an examination of a substantial range of scenarios. Indeed, this is the core motivation for scenario planning in the first place. On the other hand, understanding combat outcomes is a complex endeavor, requiring specification of many, many factors from conflict warning times to basing access to weapons systems performance, to name just a few. Even in the Pentagon, resources for planning and analysis are limited, so trade-offs are required between depth and breadth. Consensus on the proper balance here is always fragile. The analytic and bureaucratic cultures of the DoD organizations tend to exert a strong pull toward greater elaboration of fewer problems, a tendency that works against efforts to better account for uncertainty.[26]

3. Long, structured timelines for data development and analysis versus the need to be responsive to senior leader guidance. The more complex scenarios and associated data become and the more organizations required to review and approve the content, the longer it takes for the system to produce and approve those products. This is a challenge regardless of which end of the spectrum identified in the previous point the system tends toward (i.e., many simple scenarios or few complex scenarios). A small number of highly detailed scenario products generates a significant workload and requires long, structured timelines for

development, but so does a large number of less-detailed scenario products. This presents a real challenge in making the scenario products responsive to the inputs of the most senior officials. New ideas and changed priorities from the DoD's leaders inevitably disrupt timelines for data development and analysis, compromising the timeliness of SSA products.

4. Transparent, collaborative process versus innovative exploration of new concepts and capabilities. It is no secret that bureaucratic processes are enemies of innovation. As scholar James Q. Wilson noted in his landmark study on how bureaucracies work, "We ought not to be surprised that organizations resist innovation. They are supposed to resist it."[27] In the case of SSA, the natural dynamics and politics of developing collaborative products across multiple organizations with differing incentives tend to produce compromises that elide difficult strategic choices rather than confront them and suppress experimental ideas rather than nurture them. Is there a debate over whether the Army or the Marines should be assigned a mission? Assign some to both. Are swarming drones the best way to prosecute a particular target? Perhaps, but since current doctrine does not address drone swarms, another method must be chosen. SSA products have often borne the mark of such compromises and tend to hew closely to conventional, established thinking about threats and strategic and operational approaches to scenarios. Yet, there is not a simple solution to this problem. SSA scenarios are bound by the need to foster a transparent, collaborative process for at least two reasons. First, the issues addressed require the expertise of a diverse range of organizations. Second, the viability of the scenarios' ostensible role in shaping programs and budgets depends on a certain degree of institutional credibility that is conferred

by the transparent, collaborative process. While transparency and collaboration do not logically require consensus across participants, in practice, seeking consensus is often the price of achieving transparency and collaboration in the Pentagon.

5. Appropriateness of operational plans versus scenarios as the basis for strategy development and force planning. In theory, strategy and force planning should account for military needs arising from current plans and potential future contingencies in an integrated fashion. In fact, because operational planning (focused on near-term employment of existing capabilities) and force planning processes (focused on supporting budgets and programs well into the future) are so segregated, the claims of operational plans and future scenarios often end up being more competitive with each other than complementary when it comes to strategic resource allocation.[28] Clearly, having force planning either solely focused on current plans or unrelated to current plans would be inappropriate. Nevertheless, the DoD often struggles to strike a deliberate balance in this regard.

6. Prerogatives of civilian planning guidance versus military operational art. Finally, the SSA process has experienced a constant struggle, as do many Pentagon processes, in defining a boundary between those prerogatives and judgments for which civilian guidance predominates and those in which military operational expertise predominates. Both perspectives are essential to the process, but it is often ambiguous whether and when one's deference is due to the other.

The point of enumerating these tensions is not to criticize any particular position an organization might take on the substance of the issues. Rather, it is to

illustrate the fundamental structural impediments to designing an effective scenario planning process to support strategy and force planning. Any such process would need to balance these principles and make trade-offs, whether deliberate or accidental, among worthy but competing goals. Indeed, the history of SSA over the past decade and a half is punctuated by modifications made by OSD and Joint Staff officials to try to redress perceived imbalances across some of the competing priorities outlined above. Some brief examples follow.

Making more scenarios (Part 1): After SSA's initial launch, more time was spent than anticipated focusing on only a few traditional major combat operations scenarios. An effort was made to increase the number of scenarios being produced, especially those depicting "smaller-scale contingencies," similar to the types of engagements that had occupied U.S. forces in the 1990s in Bosnia, Kosovo, Haiti, Somalia, and elsewhere.

Simplifying the scenarios: In 2005, officials in OUSDP decided to reduce significantly the length and level of detail contained in the scenario products it produced. The rationales for this change were that the detail had become too prescriptive, encouraged false precision in subsequent analysis, and made it difficult for senior leaders to engage with the scenarios. As part of this change, OUSDP also ended the practice of defining variables and specifying alternative variable settings, a feature that had been prominent in the first generation of scenarios. The rationale for this change, in addition to simplifying the scenarios, was a judgment that joint analyses had failed to take advantage of the variables, and, consequently, that their inclusion was unnecessary. Some participants lamented this change as akin to conceding defeat of the process,

given the importance of varying assumptions to the broader objective of addressing uncertainty.

Shifting more CONOPS development to the Joint Staff: In conjunction with the initiative to shorten the scenario products for which OUSDP was responsible, the balance of responsibility for developing scenario CONOPS shifted toward the Joint Staff. Originally, the Policy-developed scenarios themselves contained CONOPS. This was a point of persistent friction between civilian and military staffs regarding whose expertise and prerogatives were best applied to developing hypothetical military CONOPS. After this shift, OUSDP's scenario products restricted themselves to more limited guidance, providing objectives, assumptions, and "strategic concepts" or "strategic approaches" to guide subsequent CONOPS development by the Joint Staff.

"Going to the DAWG:" In 2006, SSA leadership decided that the DoD's most senior leaders were not sufficiently involved in and aware of the selection, development, and use of scenarios. To address this problem, they altered the scenario development process to include two early consultations with the then-new Deputy's Advisory Working Group (DAWG). This forum, co-chaired by the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs, would be used to solicit leadership guidance on scenario selection and content.[29]

Making more scenarios (Part 2): After the publication of the 2006 *Quadrennial Defense Review* (QDR), which introduced the distinction between "steady-state" and "surge" contingency requirements into the DoD's force planning construct, a new library of scenarios was built.[30] The "Steady State Security Posture" was designed to redress the continuing deficiency

of the existing scenario set in covering a sufficiently diverse range of operational challenges, especially those of smaller scale and irregular character (such as counterterrorism, counterinsurgency, and security cooperation).

Integrated scenario sets: On the heels of the Steady State Security Posture's creation, the concept of an "integrated security posture" gained traction, reflecting the need to analyze scenarios (and therefore to build them) in relationship to each other in terms of their global context, overlaps in timing, and force management implications. This concept evolved into the Integrated Security Constructs (ISCs) and became the centerpiece of SSA work for the subsequent few years. The ISCs posited three alternative futures with different combinations of scenarios arrayed over decade-long timelines. Together, these sets formed the basis for the new force planning construct advanced by the 2010 QDR.[31]

Spiral development: In conjunction with the ISCs, the SSA community renewed its commitment to including the DoD's most senior leaders in scenario development decisions. The new "spiral development" scheme was intended to be faster and more agile and to give senior leaders more frequent points of intervention in the process. In practice, the process changed little in this regard, apart from replacing the DAWG briefings with packages of scenario products sent to the Secretary of Defense for approval.

Throughout its first decade, SSA activity gradually expanded and produced dozens of new scenarios and related products that gained a growing user base throughout the DoD. By some accounts, SSA's influence reached a peak around 2009 and 2010, when it

played a significant role in refining the force planning construct and providing the analytic basis for the 2010 QDR deliberations (as noted earlier).[32]

In 2011, however, SSA sustained a major setback when the Director of OSD's Cost Assessment and Program Evaluation (CAPE) office, Christine Fox, decided to significantly curtail the office's participation in scenario development. Specifically, CAPE announced that it would stop producing "analytic baselines," the most detailed versions of scenario data sets, as outlined above. CAPE also disbanded its team that was dedicated to "campaign analysis," a team whose work was more focused than any in OSD on employing scenarios to support strategy and force planning.[33]

Fox's moves were driven in part by a desire to realign internal resources. But another central motivating concern was a sense that the entire scenario planning enterprise was irretrievably beholden to analysis using opaque, overly complex models and simulations. According to this view, such techniques require data and assumptions to be specified for so many variables that not even the modelers themselves, much less senior officials consuming the analysis, could fully understand the model results. But the concern extended beyond the potential for mere confusion and lack of transparency. Many believed that the highly complex scenario analysis too often served as a convenient means to justify the programmatic priorities already held by the Services and other components, rather than a means to investigate and determine those priorities. As a result of this issue, many also saw the influence of scenario analysis at senior levels to be too minimal to justify its costs.[34]

The extent to which these analytic limitations compromised the DoD's scenario planning more generally was a matter of debate, and CAPE's decision proved

controversial. Nevertheless, the decision's impact was clear. Without the support of the Secretary of Defense's chief analytic organization, the SSA process began to lose traction in marshaling the considerable resources of time and workforce required to produce new scenarios and analysis.

This development was effectively a one-two punch for SSA, not only depriving the process of resources and expertise but also sending a signal of ambivalence or skepticism from some of the DoD's most senior leaders. As a result, much of the ongoing analytic work on strategic and force structure questions migrated back to Service staffs. Analytic support to subsequent strategic reviews became less integrated and joint. As one of the Navy's most senior analysts wrote shortly after the completion of the 2014 QDR:

> The DoD-wide joint analytic process has actually gone backward over the last several years, with the OSD/[Joint Staff]-chaired joint analytic steering committee falling into disuse and DoD-wide campaign analysis being abandoned. Big program and force structure decisions are being made too often on the basis of individual topical and nonjoint analysis, if analysis is used at all.[35]

In recent years, advocates of scenario planning have continued to sustain SSA activity, even resulting in a 2014 push by then-Deputy Secretary of Defense Robert Work to rejuvenate focus and interest in the process. However, as of early 2018, SSA's decline has continued. In 2017, the Joint Staff disbanded the team that had been dedicated to developing scenario CONOPS. One official averred that SSA had "completely unraveled." While still in existence, its remaining influence as of this writing, including on the new *National Defense Strategy*, is felt mainly

idiosyncratically through individual studies of scenarios and data already in the DoD's library. Senior officials in the Donald Trump administration have not made public any particular views on scenario planning.

The dynamics of the challenges described here are exemplified by the process of preparing the 2012 Defense Strategic Guidance. The next section turns to this experience.

A Case Study of Scenarios in a Major Strategic Review: 2012 Defense Strategic Guidance

In 2011, planning in the Pentagon took a turn toward consideration of major strategic choices. A fresh look at strategy and force structure was prompted by budgetary pressures: first by President Barack Obama's direction in April to find an additional $400 billion in savings over 10 years, and then by the slightly larger bogey established in August by the now-infamous Budget Control Act. In response, the DoD launched a major effort to define exactly what sets of missions were feasible under expected budget constraints, and what force structure and resource allocation would best serve those missions.[36]

This decision environment was exactly the type for which the SSA enterprise was designed. The questions spanned the full range of missions and of the DoD's resources, and required analytic products that could characterize data on force structure and force management that was integrated and aggregated in a digestible way for senior leadership. The new ISCs were purpose-built to support analyses just like these. If there was ever a time when SSA would be directly relevant to the most important decisions facing the

Secretary of Defense, this should have been it. But even in these favorable circumstances, SSA products never became the centerpiece of senior leader deliberation and supporting analyses. Why not?[37]

In the first few months of these deliberations, the Comprehensive Review process initiated by Defense Secretary Gates proceeded, with analytic support being led in two parallel, essentially competitive efforts: one by the Joint Staff (the J-8 directorate), and the other by CAPE. Neither used SSA scenarios as the basis for its analysis. Instead, both used combinations of operational plans and data from current operations and global force management activities. These were not choices made by working-level analysts but, rather, by J-8 and CAPE leadership. Nor were these decisions made out of ignorance regarding SSA. To the contrary, as noted in the previous section, J-8 and CAPE are two of the three organizations responsible for creating SSA products and managing its process. Their behavior in the Comprehensive Review reflected a deliberate, explicit judgment that mission needs and data from current operations and plans were more appropriate bases for future force planning decisions than SSA scenarios and data.

In the midst of the Comprehensive Review, Panetta decided to release an abridged Defense Planning Guidance. As is customary, the draft Defense Planning Guidance made reference to SSA products in describing how future capability needs should be assessed. In the final editing of the draft, however, all references to SSA were removed. So, even though the ISCs that were created under the SSA process were nominally the definitive instantiation of the 2010 QDR force planning construct, Panetta promulgated his 2011 planning guidance with no reference to them at all.

The analyses completed by J-8 and CAPE in support of the Comprehensive Review apparently turned out to be less than fully persuasive to the DoD leadership. In the fall of 2011, newly promoted Deputy Defense Secretary Ashton Carter launched a new planning effort under the combined leadership of the Joint Staff and OUSDP, called the Strategic Choices Working Group. OUSDP had advocated greater use of SSA scenarios during the Comprehensive Review, but with little success. This new role for OUSDP in the Strategic Choices Working Group presented an opportunity to reintroduce SSA to the strategic analysis picture.

Even in these circumstances, however, the use of SSA products in senior deliberations increased only marginally. A few factors continued to work against SSA's relevance. First, many Strategic Choices Working Group participants continued to view missions and capabilities through the lens of current operations and plans. This was particularly true, understandably, among the combatant commanders and their staffs. But the analytic work in J-8 and CAPE also remained mostly focused on current plans and operations. Second, many Strategic Choices Working Group participants were openly skeptical of the validity of the SSA scenarios. Again, skepticism was particularly strong among combatant commanders, but was not limited to them. Third, some senior leaders wanted to add new versions of hypothetical conflicts into their deliberations, scenarios that differed from both current plans and from SSA scenarios. Fourth, the complexity of the ISC's multiple sets of multiple integrated scenarios was difficult to accommodate in a process centered on serial meetings of a couple dozen senior leaders.

Ultimately, the Strategic Choices Working Group deliberations culminated in a tabletop wargame discussion among all DoD leadership, chaired by the Secretary and the Chairman of the Joint Chiefs. A few scenarios were specified for the purposes of this event, whose details were cobbled together from multiple sources, including, but not limited to, the SSA scenarios. By the time this event had finished, it was already November, and time to close out the Fiscal Year 2013 (FY13) budget and start drafting a new strategic guidance document to articulate the impact of the Budget Control Act reductions in spending.

So it seems fair to ask at this point: In a decision environment arguably tailor-made for the use of SSA's scenarios and related products, what influence did SSA have on the FY13 budget and the Defense Strategic Guidance that emerged from strategic review deliberations? The answer is: not much. Why did the scenarios not gain more traction? After all, the ISCs implemented at least two significant advancements over previous generations of scenario products. For the first time, a rich diversity of scenarios and types of operations were integrated into a single, analytic framework and tied directly to the DoD's force planning construct. Additionally, data on the allocation of U.S. forces to scenarios included both "preferred demand" and "contingency demand" versions, the latter of which established a more realistic reflection of how force management decisions would be made in the event of stressing simultaneous worldwide combat operations than had ever been available in joint analytic products before.

However, even these conceptual steps forward were not enough to overcome the cumulative effects of SSA's inherent challenges that were outlined in

the previous section. Few, if any, senior leaders were expert in the scenario products, and their complexity—a necessary feature for supporting detailed analysis—made them unwieldy to work with in support of large discussions among those leaders. Moreover, to the extent that senior officials were familiar with SSA products, there seemed to be prevalent opinions of them as either lowest-common-denominator products of bureaucratic logrolling, unrealistic inventions of OUSDP staff, inferior and speculative versions of operational plans, or some combination thereof.

The antidote to such skepticism regarding SSA products was supposed to be the imprimatur of the secretary himself and his explicit association of SSA scenarios with the DoD's force planning construct through classified and unclassified guidance alike. But, in fact, of the three ISC documents that were sent to Secretary Gates for signature between the summer of 2010 and the spring of 2011, he signed none. In all three cases, the documents were signed by his deputy, Bill Lynn. In theory, this signature carries as much weight as the secretary's and this may appear to be a trivial bureaucratic detail. But, in fact, it is an indicator that, ultimately, Gates did not view SSA products as a high personal priority or a key point of leverage in his management of the DoD. And Gates was the one who approved the complicated 2010 QDR force planning construct and was known to be very analytically minded. Secretary Panetta, as already noted, did not even see the need to refer to SSA in the planning guidance he issued in 2011.

The strategic planning activities which led up to the 2012 Defense Strategic Guidance are presented here to illustrate perhaps the most fundamental and enduring challenge for scenario planning in the Pentagon: commanding the focus of the DoD leaders. It

is not clear that any defense secretary has ever spent a great deal of time on SSA issues. As noted in this monograph's first section, it is telling that no mention of the activity is made in any of the memoirs of recent defense secretaries.

Also, it is instructive to consider the contrast between this limited attention and the attention the secretary devotes to the oversight of current operations, global force management decisions, and the review of operational plans. In these contexts, the secretary is very regularly engaged with his most senior staff, from combatant commanders to Service chiefs to civilian advisers, in examining questions of appropriate strategic objectives, connections between military capabilities and mission requirements, resource trade-offs, and the like. It should be no surprise, then, if the secretary's mental model for these types of questions and decisions is derived from his daily engagements, and if the planning scenarios set several years in the future, which arrive on his desk for review and approval a few times a year, have a difficult time gaining purchase on his worldview.

In the past, scenario planning advocates in the DoD have recognized the persistent challenge of engagement with senior leadership and, as described earlier, have made concerted attempts to improve it. But the role that SSA products did and did not play in decision support during the DoD's senior leadership deliberations in 2011 strongly suggest that SSA simply was not a central element of strategy development. The next section of this monograph offers some explanations for these shortcomings and a broader evaluation of scenario planning's strengths and weaknesses as practiced in the Pentagon.

INHERENT CHALLENGES OF SCENARIO ANALYSIS IN STRATEGIC PLANNING

This section presents an overarching assessment of scenario planning in the Pentagon, arguing that its successes have been focused on supporting the DoD's capability and program development, while its greatest challenges have come in supporting strategy and force structure development. To help explain this judgment, it also explores the roots of scenario planning's challenges, not only in the considerable peculiarities of Pentagon management, but also in the nature of strategic decision-making in large organizations more generally.

Strategy and Force Structure Development versus Capability and Program Development: Different Audiences, Different Needs

The official purpose of SSA is stated in DoD Directive 8260.05 as follows:

> It is DoD policy that SSA products shall: (1) Support deliberations by DoD senior leadership on strategy and planning, programming, budgeting, and execution system (PPBES) matters, including force sizing, shaping, and capability development. (2) Provide a starting point for studies that support: (a) Development and implementation of defense strategy and policy. [and] (b) The DoD PPBES.[38]

Herein lurks the source of SSA's greatest difficulty: the need to create products that support both "development . . . of defense strategy and policy" and PPBES, the Department's formal apparatus for integrating programming and budgeting. At first glance, this seems unremarkable; should not "defense strategy

and policy" be subsumed within the "planning" portion of PPBES? This may be true in theory, but in practice, there is an enormous gulf between what can be roughly categorized as "strategy and force structure development" and "capability and program development." These terms can be interpreted in different ways, so it is important to specify what is meant here by this distinction.

Strategy and force structure development comprise the questions that preoccupy the DoD's most senior leaders, especially the secretary and the chairman. These questions address the largest elements of force structure, major resource trade-offs, global posture, alliance relationships, rationales for technology investment strategies, and the like. Problems in these areas are extremely complex and unstructured. As a result, decision-making on strategy and force structure tends to follow a highly inductive path. Decision-makers faced with these questions must think very broadly and consider many potential variations in strategic-level assumptions. In part due to these requirements of breadth and variation, the level of analytic detail that is relevant or even digestible on such questions is sharply limited. Decision-makers involved in strategy and force structure development need to be able to think creatively and consider a full range of possible solutions to strategic problems relatively unconstrained by current doctrine, official intelligence estimates, and programs.

In capability and program development, much of the DoD's planning and analytic activity is not focused on the broad questions of strategy and force structure, but on the generation of capability requirements and determining the best programmatic and acquisition solutions to those requirements. This set of activities

includes the formal joint requirements generation process (the Joint Capabilities Integration and Development System), "analyses of alternatives" conducted to compare competing concepts for acquisition, as well as the construction of detailed programs and budgets conducted inside each Service and other Department components.[39] Questions addressed in this arena are narrower than those in strategy and force structure development; they are focused on individual mission areas and capabilities, detailed systems features, characteristics, and costs.

The DoD's senior leaders are involved in these activities as well, of course. However, the nature of the decisions in the requirements and acquisition arena tends to grant a much greater role and influence to technical experts in the DoD's various components. Often, decision-making on such topics follows a more deductive path, requires considerable detail and depth and, as a result, can only accommodate a small amount of variation in the strategic-level assumptions. The substance of the questions lies at more operational and tactical levels. Capability and program development decisions must also be relatively conservative about the constraints imposed on any given program. In order for a particular program to be effective, it must work in the context of all other programs, budgets, and doctrine (existing or planned). Programs gain advantage in the contest for resources if they are tied to intelligence estimates about the future operating environment that have some institutional acceptance.

Table 2 summarizes these differences in decision-making environments. This is clearly a coarse simplification of a highly complex decision-making environment. In fact, decisions and supporting analyses exist on a spectrum rather than in two distinct

categories. Of course, there is no intent to imply here that, for example, depth is irrelevant to strategy and force structure development, or that capability and program development is mere algebra. The point here is only that there are significantly different needs generated by different types of decisions being made in the DoD processes nominally supported by "strategic analysis."

	Strategy and Force Structure Development	Capability and Program Development
Emphasis on breadth or depth	Breadth	Depth
Required level of detail	Low	High
Need for variability in strategic assumptions	Relatively High	Relatively Low
Appropriate degree of constraint from current doctrine, intel, programs	Relatively Low	Relatively High
Predominant analytic approach	Inductive (What does it all mean?)	Deductive (Given Y, solve for X)

Table 2. Contrasting Characteristics of Strategy and Force Development and Capability and Program Development

Decision support across this spectrum of activity is essential, of course. But the Pentagon's experience with scenario planning over the past 15 years demonstrates that the same system for developing scenarios, assumptions, CONOPS, and forces data cannot simultaneously and effectively support the different audiences who work at different points along the spectrum; their needs are too diverse.

Two additional challenges specific to the DoD's SSA experience are worth noting briefly. First, as described earlier in this monograph, SSA has frequently been hampered by arguments that operational plans are more important or more valid drivers of force planning than are hypothetical future scenarios. Ideally, plans and scenarios would both be used in an integrated analytic framework to inform force planning. However, this goal has proven unachievable due in part to the inherent complexity in doing so, and in part to the very distinct bureaucratic processes for generating plans and scenarios. As a result, scenarios end up competing with plans rather than complementing them in the context of senior deliberations on strategy and force structure. This dynamic is illustrated clearly in the earlier case study of preparations for the 2012 Defense Strategic Guidance.

Second, at times, more energy and resources have been devoted to developing the scenarios and data to support strategic analysis than to the strategic analysis itself. The managers of the SSA process frequently defended various assumptions made in SSA scenarios with the admonition that the products "are just starting points for analysis," not judgments on which assumptions are most appropriate or most likely to be true. But despite this mantra, assumptions are constantly and vigorously contested by various organizations as if they were to be fixed in concrete once the scenario products were published. The products are regularly delayed during development and coordination by disagreements over key assumptions. Objections come both from the Service participants, who may feel they are being unduly constrained by the assumptions, and from the SSA managers themselves, who may feel that CONOPS or force allocations are padded with excess capacity by Service planners.

Why all the argument if the products are simply "starting points for analysis"? The answer is that, in too many cases, the "starting points" also become the ending points and, therefore, carry undue weight.[40] The reason for this is that not nearly enough time and attention is devoted to conducting the strategic analysis that is meant to be SSA's reason for being.

As already noted, the DoD defines strategic analysis as any "analysis conducted to inform senior leader deliberations and other studies on strategy, policy, and PPBES matters."[41] This definition, however, is too inclusive to be useful here, since it conflates the two categories of decision support needs outlined above. By the terms of that distinction, capability and program development and the elaboration of the detailed data and assumptions required for such analysis too often crowd out analysis that would otherwise support strategy and force structure development. Strategic analysis in this latter sense—where the analysis is broad; is relatively low-resolution; incorporates a high degree of variability in key assumptions; and is unconstrained by current doctrine, programs, and intelligence—is relatively scarce. A recently renewed emphasis on wargaming in the DoD has mitigated this challenge to some extent in recent years, though wargaming itself is best employed in concert with other analytic techniques.[42] In a sense, a shortage of strategic analysis has emerged in recent years, in part as an unintended opportunity cost of the extensive human resources devoted to running and staffing the scenario planning process.

Importantly, evidence for the limits of scenario analysis in supporting strategy and force structure development is not limited to the recent history of SSA. To the contrary, these experiences resonate with a wide body of academic and policy literature

regarding strategy and decision-making. A detailed review of this literature is beyond the scope of this monograph, but the rest of this section briefly high-lights insights from two broad areas of scholarship: contrasts between rational and cognitive models of strategic decision-making, and concepts regarding the importance of bureaucratic politics and internal bar-gaining in the management of large organizations like the DoD.

Limitations on Analysis and Rational Decision-Making

Over the past 60 years, social science research has steadily undermined the concept of the rational actor as the dominant model of human decision-making. As far back as 1955, scholar Herbert Simon proposed the idea of "bounded rationality" to account for the many limits on rationality imposed by complexity, imper-fect information, time, and the like.[43] Over the next few decades, scholars such as Daniel Kahneman and Amos Tversky—two psychologists awarded the 2002 Nobel Prize in economics—demonstrated how deci-sion-making, in fact, is systematically influenced by a wide variety of biases and cognitive short cuts.[44]

Political scientist John Steinbruner authored an early and influential application of these kinds of theories to foreign policy and national security decision-making. He contrasts the rationalist "ana-lytic paradigm" of explaining presidential and cab-inet level decision-making with cognitive models of decision-making, and concludes, "the analytic deci-sion process is not the most natural or empirically dominant mechanism of decision under complexity."[45] A key to Steinbruner's analysis is the central role of

complexity and uncertainty in policy decision-making, a point that makes his findings particularly germane to scenario planning in defense strategy development. His argument in this regard is that decision-makers tend not to:

> engage in sophisticated outcome calculations with any degree of regularity or consistency…[Rather,] the decision maker—primarily and necessarily engaged in buffering himself against the overwhelming variety which inheres in his world—simply avoids direct outcome calculations . . . The psychological effects of uncertainty are therefore held to a minimum.[46]

Describing decision-making as limited in this way is not necessarily a criticism, however. Another important line of argument in decision-making literature notes that intuition and judgment are not necessarily inferior substitutes for rationality. To the contrary, for problem-solving in areas where creativity is important, and many competing goals of incommensurate value may be at stake (as in strategy development), informed intuition might, in fact, be superior to analysis as a basis for decisions. Management theorist Henry Mintzberg has emphasized the importance of combining analysis and intuition in planning, an idea popularized by Malcolm Gladwell's bestseller, *Blink*.[47] Together, these concepts paint a picture that diverges sharply from the classical model of decision-makers voraciously consuming information and choosing optimal behavior based on calculation of the effects of various scenario outcomes on a set of explicit criteria.

The literature on strategic planning in the field of management theory also provides useful insights that resonate with the Pentagon's scenario planning experiences.[48] The central thesis of Mintzberg's seminal work on corporate strategy, *The Rise and Fall of*

Strategic Planning, is that strategy and planning are distinct activities with distinct characteristics and requirements, a contrast that tracks well with the contrast made above between strategy and force structure development and capability and program development in the DoD. According to Mintzberg, the key quality of planning is that it is a formalized procedure that is made necessary in large organizations by the need to coordinate internally and take account of the future in a rational manner.[49] This description certainly fits the Pentagon's scenario planning enterprise over the past 15 years. However, according to Mintzberg's study:

> the key, if implicit, assumption underlying strategic planning is that analysis will produce synthesis: decomposition of the process of strategy making into a series of articulated steps, each to be carried out as specified in sequence, will produce integrated strategies. . . . [This] has proved to be patently false.[50]

He finds that a central problem in linking analysis to strategy development is the increasing aggregation of data required as bigger and bigger picture questions are considered. This problem introduces greater subjectivity and implicates more and more variables and uncertainty. What is required in response to this dynamic, according to Mintzberg, is more inductive and creative thinking, whereas:

> people oriented to the analytical approach . . . tend to favor convergent, deductive thinking, to search for similarities among problems rather than differences, to decompose rather than to design. . . . [T]he analyst tends to want to get on with the more structured step of evaluating alternatives and so tends to give scant attention to the less structured, more difficult, but generally more important step of diagnosing the issue and generating possible

alternatives in the first place. The result tends to be conservative problem solving, heavily biased toward the status quo: problems are approached as they have always been conceived, in terms of the alternatives already available.[51]

In a similar vein, management scholar Richard Rumelt argues:

Treating strategy like a problem in deduction *assumes that anything worth knowing is already known*—that only computation is required. . . . To generate a strategy, one must put aside the comfort and security of pure deduction and launch into the murkier waters of induction, analogy, judgement, and insight [emphasis in the original].[52]

Overall, Mintzberg concludes, "[B]ecause analysis is not synthesis, strategic planning is not strategy formation."[53]

It is critical to emphasize that the point here is not that analysis is incompatible with or irrelevant to strategic decision-making. To the contrary, good decision-making depends on analysis. However, analysis conducted through formalized, bureaucratic processes and dependent on highly detailed data, fits poorly with the predominant modes of strategic management in large organizations, both inside and outside government.

Bureaucratic Politics

Another area of relevant scholarly work addresses strategic decision-making inside the U.S. Government's foreign policy and defense institutions. A major theme of this literature is the defining role of competition among organizations within the federal bureaucracy and the importance of bargaining as a

means of navigating that competition. Bargaining in this context occurs not only between different organizations, but also between politically appointed agency leaders and career civil servants within those agencies.[54] As Arnold Kanter succinctly put it, "[T]he president cannot routinely command obedience from the members of the national security bureaucracy. Rather, he must bargain for it."[55]

In Pentagon decision-making, it is nearly impossible to overstate the importance of the independent power of the military Services and the rivalry this generates with the Secretary of Defense.[56] Management of the DoD throughout its history has been marked by constant tension among the centralizing prerogatives of presidents, defense secretaries and their staffs, and the independent cultures and policy preferences of the Army, Navy, Air Force, and Marine Corps.[57]

To be sure, helping to manage and overcome these institutional rivalries was part of the original motivation for the invention of SSA in the first place. But scholars who have studied previous Pentagon efforts to employ analytic leverage as a tool for more centralized strategic management have uncovered important insights about the limitations of such approaches. Defense Secretary Robert McNamara's introduction of PPBS and systems analysis during the 1960s is the most prominent—and best studied—historical example of such an initiative.[58]

Two separate studies conducted in the decades after McNamara's reforms compared the relative success he enjoyed in debates over major force structure and program decisions with that of his predecessors (in the Dwight Eisenhower administration) and his successors (in the Richard Nixon administration). Both studies reached the same conclusion: that

McNamara's employment of more centralized, formal processes and analyses to support decision-making yielded neither more nor less power than others had enjoyed in bureaucratic battles. The reasons for these findings are instructive and directly relevant to the role of scenario planning and analysis in support of strategy and planning.

Laurence Lynn and Richard Smith compared McNamara's tenure with that of Nixon's first defense secretary, Melvin Laird, and their conclusion merits quoting at length.

> [McNamara's and Laird's very different] management approaches mattered far less to the results each achieved than their personal efforts to influence specific decisions. In the end, both accomplished similar results. Both succeeded in exercising limited influence over weapons design, procurement, and performance through becoming involved, either themselves or through their deputies and assistants, in individual weapons projects. . . . The explanation for this finding is to be found in the character of the budget and weapons acquisition processes. These processes are characterized by their decentralization, an extraordinary amount of technical and programmatic detail, and the dominance and relative inflexibility of service and staff bureaucracies. It takes enormous amounts of time and effort to influence that process, and there are practical limits to what any official can accomplish. . . . It is unlikely that any group of top officials will be able to change these processes fundamentally. Too many pressing issues compete for their time. Moreover, there is no internal organization, management system, or management philosophy that by itself will solve the problem of controlling defense resource allocation. The civilian leader's best hope for exerting influence over military capabilities is to make a selective and determined attempt to accomplish a few major goals in reforming weapons costs and performance where the economic, political, and military stakes are overriding.[59]

In another study, Arnold Kanter compared McNamara's experience with that of Eisenhower's defense secretaries. He concluded that, in spite of the introduction of PPBS and a new philosophy of decision-making, the John Kennedy and Lyndon Johnson administrations suffered through the same kinds of bureaucratic battles as their predecessor, and that:

> Neither public disclaimers of unavoidable resource limitations nor new management techniques which remained insensitive to organizational dilemmas and participants' incentives produced the consequences sought by their proponents.[60]

Kanter also identified an important linkage between the dynamics of Pentagon decision-making and the particular characteristics of each administration's prevailing defense strategy. Under Eisenhower's "new look" strategy, capabilities for conventional deterrence of the Soviet Union were deliberately de-emphasized in favor of nuclear deterrent capabilities, which were less expensive in aggregate. Kennedy was dissatisfied with this trade-off and shifted U.S. strategy toward "flexible response," an attempt to strengthen conventional deterrence and provide capabilities to meet a wide range of Soviet military challenges. Kanter pointed out how the relative simplicity of the new look strategy strengthened the bargaining power of defense secretaries, while flexible response had the opposite effect in the decade following.

> Eisenhower's strategic doctrine redistributed bargaining advantages by clearly distinguishing between those defense programs which served his ends and those which did not. Claims for increases in conventional forces did not have to be rejected on an individual basis; their proponents bore the heavy burden of being required

> to attack the foundations of the authoritative strategic doctrine. . . . Whatever its merits as a strategic doctrine, flexible response did little to distribute burdens of proof in the decision-making process: it could not be convincingly invoked to block consideration of any defense program on its face. All of the military services could, and did, claim that their highest-priority programs contributed options and flexibility to the country's military posture. The president's agents were compelled to confront and refute these challenges on a case-by-case basis, each time increasing the mutual irritation, weariness and bitterness.[61]

This dynamic Kanter described from the 1960s mirrors closely what has happened in the Pentagon over the past 2 decades as strategic guidance has increasingly emphasized the military's need to address a great diversity of security challenges. Successive attempts by senior leaders to advance reform agendas under such labels as "transformation," "capabilities-based planning," "irregular warfare," or "Third Offset," to name a few, have at times been appropriated by military Services to advance priorities that those Services advocated anyway. This is not to say that Service priorities and reform agendas have always been at odds. But it does seem evident that when secretaries do mount counterarguments to Service programmatic priorities, those efforts are complicated by recent defense strategies' calls to maintain capabilities across an increasingly diverse spectrum of security challenges.[62]

As a final example of the limitations of formal, analytical processes in shaping the Pentagon's strategic decision-making, consider former Defense Secretary Donald Rumsfeld's apparent disposition toward the Pentagon's planning processes. Rumsfeld famously labeled the Pentagon bureaucracy, "an adversary that poses a . . . serious threat to the security of the

United States" and "the world's last bastion of central planning . . . that stifles free thought and crushes new ideas."[63]

Rumsfeld seemed to hold PPBS in particularly low regard. In 2002, he wrote a brief note (a "snowflake") on the subject to the rest of the DoD's senior leadership. In reference to a complicated process flow diagram depicting PPBS, he wrote, "When I saw it, I asked if it was a joke. It turns out it is apparently not meant to be a joke. It struck me that those of us in the Senior Review Group ought to think about whether maybe it is a joke, even though it is not intended to be one."[64] Rumsfeld's comment demonstrates considerable skepticism, even disengagement, from one of the DoD's supposedly central resource planning mechanisms.

These anecdotes and selected scholarly findings are not presented here to serve as a general critique of PPBS or any other formal planning process.[65] Rather, they serve to illustrate some important limitations faced by formal processes and analysis in influencing decision-making at the highest levels of the DoD and other large organizations. These limitations identified in the various bodies of literature outlined here help to explain the challenges that the DoD's SSA enterprise has faced, and indeed, the challenges any scenario planning process in the Pentagon would face.

RECOMMENDATIONS

In early 2018, the DoD had just completed several strategic reviews and reports, including a new *National Defense Strategy*, *Nuclear Posture Review*, and *Missile Defense Review*. With the culmination of this round of official strategizing, the time is ripe for senior officials,

congressional overseers, and defense professionals to take stock of how well the processes were or were not served by scenario planning and analysis, and to take the opportunity to revitalize this useful tool for strategic planning.[66] What should be the top priorities in such an effort?

Preserve SSA's Achievements to Date

The first consideration for any new approach to SSA is the preservation or reconstitution of its most important achievements to date. Two points in particular stand out, and they correspond to two of the three original goals for the process.

First, a new approach should reinvest in SSA's feature of common, joint data development. Specifically, the design of joint CONOPS and force allocation for each scenario is valuable for a wide variety of analyses throughout the DoD. This process is time-consuming and generates much of the criticism leveled at the process for being subject to parochial manipulation by program advocates. Nevertheless, its benefits outweigh its drawbacks. As with the original motivation for creating SSA, the value here is not in seeking consensus (which can be pernicious) but, rather, in establishing a common, well-informed baseline for analysis. Additionally, the benefits extend beyond the products of the process themselves. As Paul Davis notes in his report to Congress, this process also helps greatly in building and sustaining intellectual capital, cross-functional and joint expertise, and cross-organizational relationships. These activities have diminished in recent years and, with them, some of their benefits. Rejuvenating work here will likely require greater investment of time, management attention,

and staff resources from CAPE and from the Joint Staff in particular.

Second, any new approach should preserve SSA's achievements in linking force planning requirements to a wide range of operational missions, not just a few notional major combat scenarios designed to exercise the most sophisticated or preferred capabilities and technologies. Enabling exploration of a variety of potential strategic and operational challenges remains essential to accounting for uncertainty in planning.

Tailor Scenario Planning Processes to Decision-Making Needs

The DoD should significantly revise the way SSA has operated to date by dividing its scenario planning efforts into two related but distinct activities. Each activity should be designed to focus on the needs of one of the two types of decision contexts defined earlier; that is, one activity to support capability and program development, and another to support strategy and force structure development. The shape of those separate activities in terms of products, content development, and roles and responsibilities could be arranged as described here.

Capability and Program Development Scenarios

- *Products*: The main capability and program development scenario product would be the equivalent of the current scenario versions produced by the Joint Staff, which include detailed CONOPS and force estimates (the "multi-service force deployment (MSFD)" documents). For these scenarios, the shorter scenario versions traditionally produced by OUSDP (the "defense

planning scenarios [DPS]") would no longer need to be produced. The most detailed versions of the scenario data ("analytic baselines") could follow a similar convention as they have in the past, with a small subset of the total scenario set being selected for detailed analytic study on an as-needed basis. The results of these analyses would be made available for DoD-wide use in the same way as earlier analytic baselines.

- *Scenario Selection and Development:* The list and content of capability and program development scenarios could be derived in part—though not exclusively—from the most current set of operational plans, including theater campaign plans, which include noncombat activities, such as security cooperation and exercises with foreign partners. Modifications would be made to operational plans to align assumptions, threat assessments, and capabilities, with expectations for important changes to occur between current and future timeframes. Additional scenarios could also be added to the set, as directed by DoD leadership.
- *Roles and Responsibilities*: The Joint Staff would lead the development of capability and program development scenarios. OUSDP's role would shift from scenario authorship to coordination on relevant assumptions, modification of operational plans, and active oversight of analysis.

One of the principal benefits of this approach is the time, effort, and coordination cycles saved through the elimination of the policy-produced DPS versions of the scenarios. Resources freed in this way would be available to support studies and analysis. Additionally, tightening the linkage between the scenarios and

related operational plans could help to integrate operational and force planning without subordinating one to the other.

Strategy and Force Structure Development Scenarios

- *Products*: Strategy and force structure development activities could use SSA capability and program development scenarios and data as starting points and modify them as necessary in order to accommodate any given analytic or planning need. With this approach, there likely would not be any scenario "products" generated by this process, beyond the results of the studies, games, tabletop exercises, and the like that are conducted to support strategy and force structure development.
- *Scenario Selection and Development:* Scenarios selected for use in this context would be ad hoc and based only on emerging needs. Modifications to capability and program development scenarios might be made for any number of reasons, such as examining alternative assumptions, updating threat assessments, testing alternative force structures or concepts of operations, or inventing new scenarios.
- *Roles and Responsibilities*: The adaptation of scenario products for use in strategy would typically be led by OUSDP, given that office's core set of responsibilities. Of course, any organization could and would conduct its own strategy and force structure development studies. Importantly, resulting products would not be formally coordinated or require any prescribed set of approvals.

Potential Critiques

While these proposed changes are not radical, they may generate criticism on a few fronts. Below are brief rebuttals to the most likely critiques.

- *Critique 1 — It is unwise to de-link strategy and force structure from capability and program development*: This proposal does not de-link strategy and force structure from capability and program development. The proposal does loosen the linkage between the specific products used for analysis in these different contexts. However, as this monograph has tried to show, any coherent linkage that does exist today between these activities is achieved largely through subjective integration by senior leaders, not by well-integrated bureaucratic and analytic processes. Implementation of the changes proposed here would be very unlikely to weaken that linkage, and may improve it by allowing more time and resources to be allocated to analysis.
- *Critique 2 — Linking planning scenarios to operational plans privileges a short-term view over a longer-term view*: Clearly, both short-term and long-term perspectives are important to planning, although, using plans as a starting point for scenarios need not privilege the former over the latter. The planning scenarios would not be constrained by the plans; plans would just be their starting point. As noted, the scenarios would be adjusted and augmented to reflect expected changes in future capabilities and operating environments. One could argue that short-term thinking would still be privileged due to bureaucratic and organizational factors.

But this argument is not a good defense of the status quo, since, in practice, the short-term bias already affects decision-making today. In fact, the proposal presented here is designed to enhance the influence of the longer-term perspective in two distinct ways. First, tying capability and program development scenarios more closely to operational plans offers the promise of helping combatant commanders feel more invested in the scenarios, thereby reducing their hostility toward the official planning scenarios' role in program planning. Second, it provides OSD with more freedom and flexibility in conducting its own long-term-focused scenario analysis without that work being held hostage to laborious and politicized coordination processes.

- *Critique 3 — Decreasing OUSDP's role in capability and program development scenarios could empower parochialism*: The premise of the proposed changes is that OUSDP oversight could be more effectively applied in the context of studies and analysis than in scenario and data development. OUSDP staff resources would be available to increase their participation in joint analysis because of their reduced role in scenario development. While the proposed process is, indeed, vulnerable to manipulation intended to protect parochial interests, so is the current process, and so is nearly any imaginable process. Moreover, much of the burden of guarding against such manipulation falls on the Joint Staff and CAPE (and acquisition officials in downstream requirements analysis) anyway, both under the status quo and under the new approach. So the

proposed shift in OUSDP's role would not present a great risk in this regard.

- *Critique 4 — The proposed approach allows for no systematic way of linking force sizing guidance to planning scenarios*: It is true that the proposed approach does not provide a single way to dictate the linkage between force sizing guidance and planning scenarios. This point gets to the heart of the matter at issue in Pentagon scenario planning. The fact is that, despite a decade and a half of fitful attempts to do so, the DoD has failed to make force sizing decisions conform to a formula, no matter how apparently straightforward (e.g., "2 major theater wars") or sophisticated (the Integrated Security Constructs [ISC]) they have been. It does not follow from this observation that the DoD should not have a force planning construct; it should. But the history of SSA does suggest that establishing and enforcing a specific, prescribed combination of scenarios to define exactly how the force planning construct will be translated into force structure decisions is not an effectual approach. The DoD would be better served by analytic and decision support processes focused on high-quality exploratory analysis than by one focused on elaborating a force sizing formula.

Note that the recommendations presented here are relatively modest in scope and avoid detailed discussion of two important but often fraught topics: organizational changes and analytic methods. This is a deliberate choice, but not because organizational and analytic methods are unimportant to the success of

scenario planning. To the contrary, these methods are very important. Consider each briefly in turn.

Some studies in the past several years have suggested organizational reforms to help improve the conducting of analysis and decision support in the DoD. Notable examples include:

- Chris Lamb's proposals to create permanent "cross-functional teams" in the Pentagon to improve policymaking and decision support;[67]
- Kathleen Hicks's proposal to reorganize OSD to create a Director for Strategy, Execution, and Assessments, whose staff would assume some of the functions currently spread among OUSDP, CAPE, and other OSD offices;[68] and,
- Paul Davis's proposal to create an "elite team or task force" co-led by OUSDP and CAPE representatives that would oversee scenario analysis.[69]

These proposals all share the premise that decision support for strategic planning requires diverse expertise and skill sets that must be provided by cross-functional teams drawing from different organizations across the DoD. However, as the advocates of these reforms acknowledge, implementing such organizational change is very difficult. Assessing the likelihood of achieving such changes is beyond the scope of this monograph. But the recommendations presented here do proceed from the premise that measures to improve scenario planning should not depend on such major changes in the DoD functions and organizational proclivities. These recommendations aim to make scenario planning work better within a framework that more closely approximates the existing bureaucratic structure and culture.

Similarly, with respect to methods and tools relevant to scenario analysis and strategic planning, potential improvements to current practices are legion, and they have been addressed elsewhere with verve and erudition.[70] But the most senior leaders in the Pentagon—indeed, in most large organizations—are not often particularly interested in analytic methods and tools. This fact does not make all tools and methods equally useful or valid, of course. However, it does strongly suggest the need to design a decision support mechanism for strategy development that is not wedded to or dependent on a particular analytic approach. Analytic tools and methods will always be evolving, and they should be tailored to individual questions and decision needs. The recommendations here are intended to accommodate a diverse and continually evolving set of analytic methods.

CONCLUSION

In its introduction, this monograph noted the indivisible marriage between strategy and uncertainty and posed the question: How does the most powerful military in history currently handle the fundamental challenge of making strategic choices for the future in the face of deep uncertainty? The answer, not surprisingly, turns out to be complicated. Scenario planning offers a unique and conceptually straightforward means for studying the future of war and framing the development of defense strategy under uncertainty. But the task of systematically tying scenario planning and analysis to the DoD's most important decisions is anything but straightforward.

In summarizing the Pentagon's experience with scenario planning, it is useful to consider SSA's

performance with respect to its original three objectives (as detailed in table 1).

- *Build a common, joint framework for analysis*: This is the area where SSA has been most successful. This success has been manifest not only in scenarios and data products, but also in what Paul Davis calls analytic "infrastructure," such as expertise, intellectual capital, and habitual relationships oriented around strategic-level joint analysis and planning.[71] Improvements fostered by SSA across various organizations within the Pentagon have been significant. However, progress in these areas has suffered some backsliding in recent years.

- *Analyze a wider range of scenarios*: This is also an area where SSA largely succeeded over its first decade. But this has been a goal in need of constant advocacy in the face of significant impediments, and progress has stalled in recent years.

- *Expand senior leader involvement in scenario development*: This objective is where SSA has faced its greatest struggles. Despite repeated efforts by SSA leaders to tie the process more closely to the needs and priorities of the secretary and other senior leaders, interest at that level in scenario planning has remained inconsistent at best. Even leaders within CAPE and the Joint Staff with nominal responsibility for managing the process were sometimes skeptical of its value. Even initially sympathetic defense secretaries, such as Rumsfeld (who launched SSA) and Gates (who approved the ISC concept) seem to have grown frustrated with the process's apparent capture by bureaucratic interests.

So the track record of scenario planning in the Pentagon, as implemented through the SSA enterprise, presents a mixed record of successes and failures in helping the DoD's leadership navigate strategy and uncertainty. This monograph has argued that where SSA has been most effective is in supporting capability and program development, where its emphasis on detailed data development and bureaucratic pedigree has proven most valuable. Where it has fallen short is in shaping strategy, in part because of those same areas of emphasis. Detailed data, bureaucratic pedigree, and the mechanics of formal processes more generally fit poorly with the way senior officials deliberate, debate, bargain, and reason about their strategic choices. As this monograph has attempted to show, the reasons for this are numerous, and are rooted in intrinsic, structural characteristics of decision-making in large organizations, especially the DoD.

It was noted earlier that Freedman concluded his recent book on the history of predicting wars with the view that many forecasts about the future of war "deserve to be taken seriously," but all should "be treated skeptically."[72] Finding a way to heed this advice for navigating uncertainty is the role of scenario planning in the Pentagon. The future commands close study, but complexity in both the global security environment and the nature of decision-making in large bureaucracies strains any system designed for such study. Fortunately, the DoD's experience with scenario planning over the past 15 years offers helpful lessons for continued improvement in the difficult task of building defense strategies for an uncertain future.

ENDNOTES

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9. Peter Schwartz, *The Art of the Long View: Planning for the Future in an Uncertain World*, New York: Doubleday, 1991, p. 4. For another influential discussion of scenario planning in the private sector, see Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance*, New York, The Free Press, 1985, Chap. 13. For a more recent discussion of scenario planning applied to foreign policy, see Michael F. Oppenheimer, *Pivotal Countries, Alternate Futures: Using Scenarios to Manage American Strategy*, Oxford, UK: Oxford University Press, 2016. For a skeptical perspective on scenario planning in national security, see Major General Bob Scales, USA (Ret.), *Scales on War: The Future of America's Military at Risk*, Annapolis, MD: Naval Institute Press, 2016, pp. 37-42.

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11. For example, see Herman Kahn, *On Thermonuclear War*, Princeton, NJ: Princeton University Press, 1960. See also Davis, "Institutionalizing Planning for Adaptiveness," pp. 15-27.

12. Department of Defense Directive (DoDD), No. 8260.05, *Support for Strategic Analysis, SSA*, Washington, DC: Department of Defense, July 7, 2011, p. 1.

13. United States Code (USC) 10, 2016, Section 113.

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18. Individuals providing input included Dan Chiu, Eric Coulter, Paul Davis, Christine Fox, Jacob Heim, Kathleen Hicks, Quentin Hodgson, Chris Lamb, Andrew May, Jim Mitre, Mark Phillips, Russell Rumbaugh, Jim Stevens, and Al Sweetser. The views expressed in this monograph, and any errors or omissions

herein, are those of the author alone. Note that brief portions of this monograph appeared earlier in Michael Fitzsimmons, "Challenges in Using Scenario Planning for Defense Strategy," *Strategic Insights*, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, January 30, 2018.

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24. The Weapons System Acquisition Reform Act of 2009 changed this office's name from PA&E to Cost Assessment and Program Evaluation (CAPE).

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26. See Davis, *Capabilities for Joint Analysis in the Department of Defense: Rethinking Support for Strategic Analysis*, pp. 16-19, 25-32, 65-66.

27. James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It*, New York: Basic Books, 1989, p. 221.

28. For a brief overview of this phenomenon, see Robert A. Gleckler, "Why War Plans, Really?" *Joint Force Quarterly*, 4th Quarter, 2015, pp. 73-75.

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30. *Quadrennial Defense Review Report*, Washington, DC: Department of Defense, February 6, 2006.

31. Ibid., February 2010, pp. 41-43. For a more detailed explanation of the ISCs and the force planning construct, see Kathleen H. Hicks and Samuel J. Brannen, "Force Planning in the 2010 QDR," *Joint Force Quarterly*, Iss. 59, 4th Quarter, 2010.

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35. Barber. Also see Davis, *Capabilities for Joint Analysis in the Department of Defense: Rethinking Support for Strategic Analysis*, p. 2.

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