SPECIAL REPORT

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Framing the Problem of PPBS

SUMMARY:

Following is the first BENS Tail-to-Tooth Commission report on the U.S. Department of Defense's Planning, Programming and Budgeting System (PPBS) comparing the Pentagon's process with approaches to strategic planning currently used by other organizations in both the public and private sectors. The report suggests that, although PPBS has generally served DoD well, because of internal practices and external demands over the past several years it has become bureaucratized to the point where it is insufficiently agile to perform its intended purposes of:

- Forecasting and describing the most likely future strategic environment and defining the military capabilities it requires
- Allocating resources to meet identified missions according to established priorities
- Integrating the military service programs
- Formulating the annual defense budget

Every organization, from the smallest privately owned enterprise to the largest corporation, has a strategic planning process. For the small firm, this process may be no more elaborate than the owner's thoughts at the end of the day on necessary actions needed to increase future revenue, reduce rising costs, or meet emerging competition. For larger organizations, the corporate Chief Executive Officer (CEO) and other officers will provide similar guidance on these same topics, but detailed planning, analysis, and the development of options and strategies are commonly left to a strategic planning staff. Despite these differences in scale and formality, the necessity of planning for the future is widely accepted for numerous reasons.

In his widely read 1994 book, *The Rise and Fall of Strategic Planning*, Harvard Business Professor Henry Mintzberg identified several motivations that corporations, and their planners, have for establishing and maintaining strategic planning processes. Organizations must plan to: (1) coordinate their activities; (2) ensure that the future is taken into account; (3) be rational; and (4) establish control. Of these considerations, the second is the most significant for all organizations, particularly those in highly competitive and dynamic markets, who want to ensure they are preparing for inevitable changes, preempting those that are undesirable, and controlling those that are controllable.1 Actions taken in the pursuit of these objectives inevitably involve a degree of coordination, rationalization, and control by the corporate core. Nonetheless, such actions need not necessarily result in either desired or desirable results.

After carefully dissecting its components, Mintzberg describes a strategic planning process as, "a formalized procedure to produce an articulated result, in the form of an integrated system of decisions." This definition accurately describes the aspiration of the strategic planning process of the American Department of Defense (DoD), the Planning, Programming, and Budgeting System, commonly know in the defense community as "PPBS." Since first installed in the Pentagon in 1961 by Defense Secretary Robert S. McNamara, PPBS has endured without fundamental change for over thirty-eight years and through eight administrations, both Democrat and Republican. It has grown in size and complexity while continuing to provide the fundamental structure and process under which military strategy is developed and laboriously translated into an annual defense budget, one that dwarfs any other on the planet. To some, the process is a marvel of management; to others a classic case of bureaucratic excess.

Strategic Planning Processes

In a recent *Harvard Business Review* article, one expert on corporate planning processes asked and answered a key question: "Is no planning better than some planning? In my experience, the answer can be yes. Bad planning actively destroys value. It wastes people's time and money."3 In other words, although the fundamental purpose behind strategic planning is to strengthen the organization by identifying major issues, developing realistic options, facilitating informed decision-making, and enhancing efficiency and value, a poorly designed or managed strategic planning process can impede as much as facilitate the achievement of such objectives. It is, therefore, a major responsibility of senior management periodically to review their planning process to determine if it is meeting their needs for identifying and satisfying the near and longer term objectives of the organization.

The purpose of this study, conducted by the Business Executives for National Security and sponsored by the Smith Richardson Foundation, is to examine the PPBS process in a holistic way to determine if it is meeting the needs of senior

Defense Department officials in establishing a longer term defense program reflected in an annual budget. Specifically, the study examines what the process is intended to do, what it actually does, and whether it should be retained, modified, or replaced in favor of some newer management construct. If the PPBS process is serving a useful, valuable service in meeting defense objectives, its role needs to be better articulated. By contrast, if it has become a ponderous and unwieldy mechanism inappropriate for making decisions in a rapidly changing world, it needs to be substantially modified or conceivably replaced by a more agile, adaptive approach.

Report Structure and Time Line

The report of the study will consist of three sections. The first section is titled, "Framing the Problem." In it we will describe the functions PPBS is supposed to provide directly to the Secretary of Defense, and indirectly to the President, the Congress, and ultimately the American people. Although many believe that PPBS is simply the Pentagon's budget formulation and accounting mechanism, in concept it serves a much broader role. In practice, however, it has become increasingly focused on its budget function allowing its planning phase to grow somewhat disjointed and its programming phase increasingly unstructured. These trends, which have accelerated since the end of the Cold War, have resulted in a program that is not well integrated, and a budget that is more tenuously connected to military strategy than desired. This paper will comprise the first section of the final report.

The second section of the report will identify and discuss possible solutions to the problems detailed in the first section. These options will include alternatives used by other strategic planning processes in both the private and public sector organizations. For example, numerous discussions were held with strategic planners of corporations having, like the Defense Department, large holdings, diverse activities, and international operations. Such companies have internal processes that identify future opportunities, evaluate market dynamics and trends, and suggest alternative strategies for expanding business and increasing shareholder value. Similarly, major agencies in federal, state, and local governments have procedures for evaluating future needs, prioritizing the most promising, and preparing budgets supporting such varied activities as roads, schools, hospitals, policemen, firefighters, and Medicare. In addition, most must submit their plans and budgets to the scrutiny of an elected body for final approval. This second section of the report will be released in early 2000.

The final section of the report will suggest ways in which PPBS can be improved. Recommendations in this section will only be limited by practicality. Should it be the view of the study group that PPBS should be completely replaced by a more contemporary process, and such a major move can be implemented practically and efficiently, such drastic action will be recommended. If the objectives and functions of PPBS can be satisfied through less draconian measures involving changes in procedures, timing, and staffing, appropriate modifications will be recommended. This final section of the report, packaged with the first two, will be released in mid-2000 as the final product of the study. It has hoped that the report will be a useful addition to the next Presidential election, and serve as the basis for changes to defense management in the next Administration.

Everyone agrees that the Defense Department must have a strategic planning process that is both effective and efficient in assisting the Secretary of Defense to meet his statutory obligations. As one former Secretary of Defense wrote:

planning for defense is unavoidable, and, despite the difficulties, greater success has been achieved in defense than in some areas which appear better to lend themselves to planning. However, inherent difficulties are great. The final measure of success is to stumble fewer times and in less important ways that one's national rivals.4

By this standard, the PPBS has functioned relatively well for four decades and although there have indisputably been some occasional "stumbles," they have not been catastrophic. The successes American forces achieved in deterring nuclear conflict during the Cold War, ultimately prevailing in that lengthy struggle, and subsequently on numerous battlefields around the world, offer powerful evidence that the process has played a positive role in the recent past. The question to now be addressed is how it can play a similar role in the immediate future.

The Purpose of PPBS

Background on PPBS

Providing for the common defense is a constitutional responsibility of the federal government. Meeting national security objectives is a shared duty of the executive branch, where the President serves as Commander-in-Chief of the armed forces and the initial architect of their annual budgets; and the Congress with its enumerated responsibility to "raise and support armies" and "provide and maintain a Navy."5 Despite this clarity of effort, and division of labor, meeting these responsibilities has always created contention among the armed forces, within the executive branch, between the President and Congress, and even between the Congress and the public over how the nation was to be defended, and how much the resulting bill should be.

Throughout the difficult years of the Cold War, when the dark shadow of the Soviet Union focused American national security policy and strategy, there was still great debate over how much to spend on defense and how to allocate it. President Eisenhower discussed the difficulty of funding a large defense program, and the opportunity costs paid by the public, during a major address in 1953:

The cost of one modern heavy bomber is this: a modern brick school in more than 30 cities. It is two electric power plants, each serving a town of 60,000 population. It is two, fine, fully equipped hospitals. It is some 50 miles of concrete highway. We pay for a single fighter plane with a half million bushels of wheat. We pay for a single destroyer with new homes that could have housed more than 8,000 people.6

By the time President Eisenhower left office, warning of the dangers of the "military-industrial complex," there was a substantial debate over not only the appropriateness of his national security strategy but the force structure and force balance that had been created to execute it. Among those returning to Washington in 1961 with the newly elected Kennedy Administration was retired Army Chief of Staff Maxwell Taylor who had complained in his widely read book *The Uncertain Trumpet* that:

The maintenance of the rigid percentage distribution by service of the budgets since 1953 is clear proof of the absence of flexibility in our military preparations. This frozen pattern could only be justified if the world had stood still since 1953 and I doubt that anyone would say that it has.7

Taylor's argument was essentially that the world was changing significantly with new political groupings and technological advancements, but the United States military was not changing to adequately address emerging threats such as the "wars of national liberation" promised by communist leaders.

Robert S. McNamara arrived at the Pentagon as Defense Secretary in early 1961 determined to make significant changes in the way the defense establishment operated. Having enjoyed enormous success at the Ford Corporation, he intended to use many of the management techniques developed there to make the Defense Department more responsive to changing strategic needs while better coordinating and integrating the programs of the three military services.

There is a saying favored by financial mangers that, "You can't manage what you can't measure."8 An immediate problem perceived by McNamara and his management team, which within a year included General Taylor, was the absence of an accounting system capturing the full range of costs associated with various forces and weapons systems. As McNamara complained at the time his problem was, "the absence of essential management tools needed to make sound decisions on the really crucial issues of national security."9 Furthermore, he sensed a tenuous connection between national security objectives and the defense budget.

McNamara desired to solve this by establishing program objectives that needed to be satisfied not by the individual service, but by the department as a whole as if there was a "uniformless military."10 This was consistent with the National Security Act of 1958 that had strengthened the role of the Secretary of Defense. Although accounting categories existed for preparing and presenting budget requests to Congress, these were not standardized among the services. Research and procurement costs of weapons were available, but more detailed costs such as longer-term operating, manning, maintenance, training, and facilities costs, were not. Nor was there any basis for comparing the effectiveness and costs among weapons in different services that performed the same, or similar, missions. What Secretary McNamara sought was a fully integrated process producing a true *defense* budget reflecting the requirements of the *Defense* Department rather than the separate, often differing, perspectives of the individual military services. As Mintzberg summarized the effort, "PPBS represented a formal attempt to couple strategic planning with programming and budgeting in a single system."11

In their widely read book on the establishment of PPBS, *How Much Is Enough*, Alain Enthoven and Wayne Smith, two of McNamara's best known *whiz kids*, observed that before adopting PPBS, defense budgets were, "largely unrelated to military strategy. The two were treated as almost independent activities."12 In their view, "This gap between strategy and forces, on the one hand, and budgets, on the other, posed a serious obstacle to rational decision-making."13 Jack W. Carlson, an official in the Bureau of the Budget (the predecessor to OMB) in the mid-1960s, and an advocate of proliferating the PPBS approach throughout the entire Federal Government, argued that PPBS would address this problem by providing, "an approach to decisionmaking designed to help make as explicit as possible the costs and consequences of major choices and to encourage the use of this information systematically in making public policy."14

The initial efforts establishing PPBS created some controversy, but in general the initiative was well received. James R. Schlesinger, a noted defense authority at the time and himself a future Secretary of Defense, wrote in 1966 about McNamara's early efforts that, "His aspirations were high. Much has been achieved, even more has been attempted. In

handling defense issues, the United Sates has broken out of the prior mold in which rigid preplanning oscillated with impulsive *ad hoc* changes in programs."15 Schlesinger concluded that:

There is no question that most of the program-budgeting structure will survive, as it should. It is not only another way of structuring budgets, it is an improved way. I myself doubt whether the same attention will be paid to the long-range program and the accompanying documentation requirements, as at present. Nonetheless, the output-ordering of expenditures represents an enormous structural improvement.16

The PPBS was, and is, a process intended to set defense objectives derived from national security strategy, develop alternatives for satisfying them, analyze their comparative costs and effectiveness, and provide a structure for decisions providing the most defense for the fewest dollars. In essence, the intent is to distribute risks in a structured way so that national security is maximized while the opportunity costs paid by the public are minimized. Again, according to Schlesinger, the strategic planning intent of PPBS and the resultant increased direction flowing from the Office of the Secretary of Defense (OSD) was clear:

The broad objectives of defense reorganization, which prominently featured increased control of the Office of the Secretary of Defense, are widely understood. One objective was to achieve better coordination of interrelated decisions than that which 'bargaining' among the services could provide. The other main objective was to improve choices in general: (a) by looking at full costs rather than down-payment implications of alternative policies, (b) by costing in terms of programs or 'outputs' rather than inputs, and (c) by systematically considering alternatives and tradeoffs in terms of cost-effectiveness.17

This description reflects most of the key characteristics of strategic planning previously described by Mintzberg. Since the mid-1960s, however, PPBS has lost a great deal of its original aura and is now, in the view of many, a less expansive and decisive process. This is reflected in the more modest description of the process contained in the current Department of Defense Directive governing PPBS which describes it as:

... a cyclic process containing three distinct but interrelated phases: planning, programming and budgeting. In addition to establishing the framework and process for decisionmaking on future programs, the process permits prior decisions to be examined and analyzed from the viewpoint of the current environment and for the time period being addressed.18

If functioning as intended, PPBS would perform four basic functions for the DoD. First, it would be the department's strategic planning process, predicting and describing the most likely future strategic environment and defining the military capabilities it requires. Second, it would be the department's resource allocation process, assigning assets to meet identified missions according to established priorities. Third, it would be the department's program integration process, identifying and analyzing mission shortfalls and duplications and suggesting alternatives for minimizing or eliminating them. Fourth, it would be the department's budget formulation process, producing an annual budget for presentation to the Congress linking missions to requested funding. It is increasingly questionable whether PPBS is presently performing all these functions in a meaningful manner.

Although the PPBS process has changed over the years, its basic structure has continued. Despite efforts to make it a biennial process, because of Congress's insistence on an annual budget, PPBS has remained an annual process continually updating planning guidance, programming detail, and budget content. The defense budget currently allocates an enormous annual sum of over \$270 billion of taxpayer money to pay the salaries of more than three million employees (47% active duty military, 29% reserve military, and 24% civilians), fund worldwide operations, support major training efforts, maintain hundreds of major facilities and many thousands of pieces of equipment, invest in new weapons, and militarize increasingly exotic technologies.

Each year the Secretary of Defense provides his Defense Planning Guidance (DPG) intended to provide direction and priorities to the military services and defense agencies. Using this guidance, the services produce Program Objective Memoranda (POMs) distributing the funds allocated to them among their various personnel, operational, and investment activities. The POMs allocate funds six years into the future and use a "mission-based" structure constructed around eleven Major Force Programs (MFPs) containing nearly five thousand Program Elements (PEs). An example of an MFP is "Strategic Forces", with an embedded PE that, for example, aggregates the R&D, shipbuilding, manpower, and other operating costs of the Navy's fleet of Trident submarines. The service and agency POMs are submitted to OSD where they are subjected to a lengthy review for compliance with guidance, and to evaluate whether they contain undesirable duplications or omissions. Where deemed necessary, changes to the POMs are directed by a Program Decision Memorandum (PDM) approved by the Secretary of Defense.

After the POMs are adjusted, they are resorted into the functionally related appropriations construct required by the Congress for its annual budget review and approval process. These Budget Estimate Submissions (BESs) are again submitted to OSD for a second lengthy review. Changes are directed in a series of Program Budget Decisions (PBDs) intended to refine the two-year budget to be submitted to Congress ensuring it reflects the latest inflation assumptions, other "real world" changes since the POMs were prepared, and conforms to the current fiscal targets of the administration. Although in odd-numbered calendar years Congress receives two budgets, for instance in February 1999 budgets were submitted for Fiscal Years 2000 and 2001 (FY00 and 01), it only appropriates funds for a single year. Accordingly, DoD goes through a slightly modified process the following year to adjust and resubmit the un-appropriated second year. For example, in calendar year 2000 DoD will review, reconsider, reconstruct, and resubmit its previous submission for FY01.

While the PPBS is centrally directed and controlled, its execution is quite de-centralized. As indicated above, POMs and Budgets are actually prepared by the services and defense agencies – the Pentagon's "business units" — and submitted for review and approval to OSD – the "corporate headquarters." The services and agencies have their own processes and organizations for performing this function, and coordinate extensively with their own internal commands and, to a much lesser extent, the regional Commanders-in-Chief in drafting their submissions. This approach gives them considerable bureaucratic leverage as they not only have the power of the first draft, but are the recipients of the funds once they are actually appropriated by Congress. Although the program and budget review by OSD lasts as long as six months, and the Congressional appropriations process takes nearly a year, recent experience indicates that over 90% of what the services request survives both processes intact.

It is not the purpose of this report to provide extensive detail of the workings of PPBS. Such information is readily available elsewhere.19 Rather, our purpose is to discuss how the process has evolved, the degree to which it satisfies its purpose, and – ultimately – to suggest ways in which it might be either modified, updated, or replaced by a more contemporary strategic planning and resource allocation process. Satisfying these objectives requires an initial assessment of whether PPBS is underperforming. If it has problems, what are they and how would they best be addressed. In other words, how do we "Frame the Problem"?

Does PPBS Have a Problem?

Determining whether PPBS has a problem that can be identified, isolated, and addressed is much more difficult than might first appear. Although there is a widely held view among those who have worked in the Defense Department preparing plans, balancing programs, and formulating budgets, that PPBS is a very inefficient, laborious, wasteful, and outdated process, many from OSD and from outside the Pentagon have a much more favorable view. A senior official at another major executive branch department stated that, "When it comes to planning and long range decision making, the Pentagon really does that well. All we have to deal with [in my department] are people and buildings. The Defense Department deals with a vast array of resources through its PPBS process in a remarkably effective manner."20

Despite this generous assessment, academic writings about PPBS have often been quite critical. Among the more strident in his criticism was Professor Mintzberg, referenced earlier, who stated forcefully that PPBS was one of the, "greatest planing efforts (and failures) of all times....."21 Adding further weight to his argument, Mintzberg cited Aaron Wildavsky, arguably the best known academic expert of budgeting processes, who stated that PPBS and the program-budget concept it represents have "failed everywhere and at all times."22

Mintzberg considers PPBS to be an effort to apply a "capital-budgeting" concept in the public sector.23 This perception is interesting because, as we shall see, many who have criticized PPBS suggest that a capital-budgeting approach would be an improved management concept for the Department of Defense. If Mintzberg's alternative to PPBS is unclear, his dislike of the process is unambiguous. In his summarizing comment he declares: "Stating an intention to plan strategically and to couple this with programming and budgeting did not achieve anything; indeed because it was such an ambitious effort applied so massively, PPBS simply fell all that much harder."24

Nonetheless, Mintzberg's discussion preceding his condemnation is unsatisfying. Like many, he confuses PPBS with systems analysis, the Vietnam War, and the legacy of Robert McNamara. Contrary to the widely held view, systems analysis – looking at the costs, benefits, and related expenses of particular systems or programs — is merely a tool for the implementation of PBBS rather than the actual process itself. During the 1960s, many organizations within DoD became quite unhappy with the PPBS process when they were required to provide significant amounts of information explaining and justifying programs they were unaccustomed to defending in great detail. The military departments and services, in particular, were resentful of such requests which they considered to be unnecessarily intrusive. Since many of the requests initiated with the Office of Systems Analysis, established by Secretary McNamara to both implement PPBS and establish a framework for key decisions, "systems analysis" – both the office and the technique — became a pejorative phrase within the Pentagon.25

Mintzberg falls into the trap of confusing McNamara's PPBS efforts with his management of the Vietnam War. As Mintzberg declares, "In other words, planning [meaning PPBS] proved to be an impediment to effective strategic thinking and action, whether one favored hawkish military strategies or dovish political ones."26 There is little dispute that McNamara is the most controversial Secretary of Defense to occupy the post since its creation in 1947. At the Ford Motor Company, where he was known as a hard-nosed executive comfortable with gathering and processing vast quantities of detail, and not the least shy about expressing his positions or making decisions, McNamara developed a distinctive managerial style and philosophy. Regrettably, his managerial wisdom was not reflected in his strategic and political intuition. The tragedy of Vietnam has numerous explanations, but PPBS cannot credibly be identified as one of them. As one respected authority has cleverly observed, McNamara proved to be a superior Secretary of Defense, but a poor Secretary of War.27

The opinion of PPBS on Capitol Hill, today and in the past, is more mixed. In general, Congressional staffers offer the opinion that the PPBS process provides them the essential information and supporting data required to carry out their responsibilities. The Congressional view is predominantly focused on the budgeting function of PPBS. The principal interest among Congressional staff is the presentation of a defense budget timely enough to initiate the annual authorization and appropriation process, and detailed enough to allow for often microscopic examination. Although the Pentagon is fully capable of generating enormous detail on its own, the congressional appetite for exact budget data clearly encourages such behavior. Interviews with both Members and staff surfaced no enthusiasm for a more macro-level budget identifying only top-line figures for major categories of spending, such as is the case in the United Kingdom, or even a lowering of thresholds for reprogramming, a move which would lessen the need for a high degree of budget item specificity while expanding program flexibility.

Nonetheless, some Members of Congress interested in defense issues have expressed concern that the budgets they receive neither clearly relate to strategic demands nor fully reflect integrated, rational decision-making. In a 1997 article, Senator Charles S. Robb (D-Va.) observed that the more the Pentagon fails to establish a "framework linking objectives to programs," the more it invites congressional interference with its program and budget process in an attempt to understand its logic and make such linkages.28 In the 1998 Defense Authorization Bill, expressing its concern over the costs of certain procurement programs and overall investment levels, Congress directed the Pentagon to review the, "Adequacy of the Program, Plans, and Budgeting System in fulfilling current and future acquisition needs of the Department."29 The Pentagon Comptroller conducted the review the following year and concluded that PPBS was essentially doing well in shaping and balancing the procurement program. Subsequent actions by the House of Representatives in drafting the following year's appropriations bill, where funding for the F-22 fighter, the Air Force's top procurement program, was eliminated and divided among several other programs, suggested otherwise.30 As one former senior defense official observed, "If PPBS was working as it should, it should not have fallen to the House of Representatives to ask this question or raise this issue about tactical aviation modernization. It is an obvious question, an obvious issue, and OSD should have foreseen it even if the Air Force, for equally obvious reasons, did not."31

Given such a wide dispersion of opinion, spanning the spectrum from admiration to condemnation – passing through a large way station of indifference, does PPBS have a problem in the current context? If so, what is it? What might be done to address it? What contemporary corporate practices in strategic planning might offer a degree of assistance in dealing with a world characterized by swift and substantial change?

Framing the Problem

Perhaps the best approach for "framing the problem" regarding PPBS is to compare the current process with the original intention of those who developed it. Alain Enthoven and K. Wayne Smith specified that that the original concept of PPBS was built around six "basic ideas":

- Decision-making based upon explicit criteria of national interest.
- The simultaneous consideration of military costs and needs.
- The identification and consideration of viable alternatives to current programs.
- The creation of an analytical staff directly supporting the Defense Secretary.
- The projection of foreseeable forces and costs into the future.
- Decision-making founded upon open analysis and debate.32

Taken together these basic ideas were intended to create a structure for defense decision-making, "based on explicit criteria related to the national interests in defense programs as opposed to decision making by compromise among various institutional and parochial interests." 33 How has the current PPBS succeeded in satisfying these initial "basic ideas"?

Decision-making Based Upon Explicit Criteria of National Interest

Are decisions made "based upon explicit criteria of national interest?" Satisfying this objective requires the creation and articulation of "explicit criteria." Although Secretary McNamara felt that he and his staff provided clear guidance to the services,34 over time specific guidance regarding specific actions, outcome expectations, and priorities has greatly diminished. The planning process produces few such explicit criteria, and when it does – as in the case of the two war basic strategy, or the \$60 billion procurement objective, they are rarely met.

For example, before leaving the Pentagon in late 1993 Defense Secretary Les Aspin, having declared "readiness" to be his top priority, asked the Defense Science Board to conduct a study on whether U.S. forces were "ready." The report, directed by General Edward C. "Shy" Meyer, a retired Army Chief of Staff, jolted its sponsors less for what it said about readiness than for what it said about defense policy guidance. Meyer stated that it was difficult to evaluate readiness in the absence of policy guidance on what the force was supposed "to be ready to do." In the words of the report, "A major challenge has been to answer the question — 'Ready to do what?' This is due to the absence of a current National Security Strategy and its followon the National Military Strategy."35

Although the Administration released its National Security Strategy almost immediately afterwards, and the Joint Staff began working in earnest on the National Military Strategy, two significant issues involving the PPBS process had been implicitly raised. First, the planning process intended to guide and shape the overall defense program and budget had become badly frayed. Second, there were no explicit criteria for measuring readiness and no uniform definition across the services of what it was. The Army's definition of deployed forces was inconsistent with the Navy's. What the Army considered to be a demanding mission that would adversely impact on "readiness," the Navy considered to be largely routine with different implications.

In the absence of "explicit" criteria on what readiness was, how it was measured, and what parts of it were uniformly important across the services, there was little possibility that resources could be systematically allocated to either enhance or repair it. There was disagreement on what money was required, in what accounts, and in what quantities? Did improving readiness require more funds for training, more funds for maintenance, more funds for ammunition, more funds for newer equipment, more funds for larger forces, or simply a different allocation of funds currently available?

This is but one example. In general, planning guidance derived from the National Security Strategy, the National Military Strategy, the Defense Planning Guidance, and other planning documents produced as part of the Joint Strategic Planning System (JSPS) has become less useful in providing guidance and priorities to the services for preparing programs and budgets.

The Simultaneous Consideration of Military Costs and Needs

Is there a "simultaneous consideration of military costs and needs?" Clearly this happens, but in the absence of clear guidance on either strategy or priorities, it is difficult to make meaningful decisions. In addition, what costs are the most significant and useful for decision-making: near-term procurement costs or longer-term life-cycle costs?

An example would be the discussion that has lingered for some time on the balance of long-range vs. shorter ranged aircraft. As recently demonstrated in the conflict in Kosovo, long ranged bomber aircraft provide enormous firepower while flying relatively few sorties. In the Kosovo air campaign twenty-one bombers, about 2% of the total fixed wing force and 4% of the strike force, flying 2% of the strikes sorties, dropped half the bombs.36 The six B-2 bombers used in the campaign and flying a mere 49 of the 12,000 attack sorties, all from the United States, dropped 11% of all precision munitions and were the only aircraft capable of attacking through all weather conditions.

Despite this seeming economy of scale and firepower, bombers have increasingly lost ground in the Air Force. During the coming decade, fighters will account for 95% of Air Force aircraft procurement dollars while the ratio of fighters to bombers grows to 14:1 – up from 6:1 in the 1980s, and 4:1 in the 1950s.37 While the strategic and military needs seem to favor bombers, the Air Force continues to favor fighters arguing that bombers are too expensive. Despite its well known unit costs of \$2 billion per aircraft, the B-2's life cycle costs are a third that of fighter aircraft. Nonetheless, the Pentagon was reluctant to fund the aircraft because of its focus on near-term rather than life-cycle costs.38

The Air Force is not alone in this regard. The Army's tenacious retention of a force built around heavy divisions, when its lighter forces are under heavier operation demand in the current environment, and the Navy's continued focus on combat formations built around the large-deck carrier rather than less-labor intensive platforms such as submarines or the futuristic

arsenal ship, raises similar issues. This seeming disconnect between current strategy and operational demands with the current force structure has increasingly left many in the Congress uneasy. It suggests that military needs and costs are not as carefully and fully factored into defense program decisions as the PPBS process would suggest.

The Identification and Consideration of Viable Alternatives to Current Programs

Is there the "identification and consideration of viable alternatives to current programs?" There is extensive identification by a richly endowed staff of alternatives to numerous, discrete programs; but there is little alternative development to the major program areas identified in the Future Years Defense Program (FYDP) such as force structure and infrastructure.

Henry Kissinger once commented about governmental planning efforts that, "What passes for planning is frequently the projection of the familiar into the future." 39 A common challenge for all strategic planning efforts is the limited ability of those involved to step beyond existing organizational structures, and explore options residing beyond their current confines. Despite frequent calls by senior managers for their planning staffs to "think out of the box" in addressing major challenges, few are seemingly willing or capable of doing so. Many feel that radical solutions are rarely received with warmth, despite management's contention that it is seeking new initiatives.

Mintzberg argued that to be useful, "The scope of planning must be expanded to encompass that formulation of alternative policies and the examination, analysis and explicit stipulation of the underlying values and norms." 40 Nonetheless, a study by James Brian Quinn noted that annual planning processes were rarely, "the source of new key issues or radical departures into entirely different product/market realms. These almost always come from precipitating events, special studies, or conceptions implanted." 41 For instance, despite extensive experimentation and evaluation during the inter-war period, the United States Navy never firmly decided between the battleship and the aircraft carrier as it primary offensive platform until the "precipitating event" of Pearl Harbor decided it for them. A clear objective of PPBS was to identify alternatives and set the stage for change before the occurrence of such a "precipitating event." 42

A clear intention of the FYDP structure was to use it as a mechanism for shaping alternatives to the service programs and integrating them by making trade-offs intended to better rationalize the overall product. By creating a decision structure intended to focus, as Schlesinger noted, on defense outputs rather than service inputs, the expectation had been that the Secretary's staff would formulate major program alternatives to service programs. The OSD staff, having full visibility across services and little career loyalty to them, would identify major trade-offs between them thereby rationalizing and integrating their efforts. Early in McNamara's tenure, the OSD staff did precisely this in shaping and integrating the strategic forces program, an effort facilitated by the development of detailed program objectives and performance measures for strategic weapons systems to achieve.

Recent experience, however, has shown that the PPBS process is far from immune to the planning limitations identified by Mintzberg and Quinn. With a relative paucity of detailed objectives established in the planning phase of PPBS, there is little with which to measure the output of the services programs, and therefore scant basis for the development of alternatives. Indeed, the "MFP" structure of the FYDP now appears less output oriented in the post cold war environment, than when it was developed. Accordingly, service programs as submitted to OSD following the programming phase of PPBS are little changed during the OSD review. In an attempt to stimulate more alternatives, in the Goldwater-Nichols legislation Congress gave authority to the Chairman of the Joint Chiefs for developing, "alternative program recommendations and budget proposals within projected resource levels and guidance."43 Nonetheless, the results of these "Chairman's Program Assessments" have been similarly disappointing.

The Creation of an Analytical Staff Directly Supporting the Defense Secretary

Was there the "creation of an analytical staff directly supporting the Defense Secretary?" There was. In fact there were several of them. The staffs directly supporting the Secretary have grown both numerous and large, as have those of the services that respond and interact with them. This has served to restrict the development of options and impede decision-making.

Robert McNamara clearly perceived the need to have staff expertise that offered perspectives unrelated to the preferences of the military services and directly responsive to him. Therefore, the Office of Systems Analysis was established, a small organization of twenty or so analysts providing McNamara the original, independent analysis he desired.44

Over time, however, the size of the OSD planning and analytical staff has grown significantly. As mentioned, with the Goldwater-Nichols legislation the functions of the Joint Staff have also expanded from planning and operational to programmatic and budgetary. The true size of the current DoD planning and analysis apparatus emerges when one includes all of the additional DoD staffs separate from OSD but now involved in PPBS. Consider, for example, the following statement contained in a recent OSD press release on analyses conducted regarding the Theater Ballistic Missile Defense Program:

On 26 October, the Joint Requirements Oversight Council (JROC) reviewed ongoing Office of the Secretary of Defense (OSD), Joint Theater Air and Missile Defense Organization (JTAMDO), and Ballistic Missile Defense Organization (BMDO) alternative analysis efforts to the BMDO Program Objective Memorandum (POM). OSD-Program Analysis and Evaluation (PA&E) presented an information briefing on the ongoing Theater Ballistic Missile Defense (TBMD) Family of Systems analysis in support of the Program Review Group (PRG) process. OSD, JTAMDO, and BMDO are examining the acquisition, architecture, and procurement issues of the BMDO POM. The emerging results are being briefed to the Services during the weekly PRG issue team meetings.

As important, complex, and controversial as ballistic missile defense is, this statement certainly suggests the possibility of too many players, with too many perspectives, and too many differing assumptions. If the intent of such efforts is to develop alternatives for the Secretary of Defense, such an effort is more likely to confuse than clarify his understanding of the real issues involved and options available, if any are actually ever developed for him. As one senior service official noted, "We seem to have developed a bureaucratic process designed to not let anything bad happen too quickly. Of course, it doesn't allow anything good to happen too quickly either."45

The Projection of Foreseeable Forces and Costs into the Future

Was there a projection of "foreseeable forces and costs into the future?" The FYDP process provides for this. Its usefulness, however, has been mitigated by an inability of senior leaders to control projected costs beyond the FYDP period where a large "bow wave" continues to exist. This situation is, in part, the rationale for the recent Congressional assault on the tactical air program.

Projections of costs have always been, and will likely remain, a difficult undertaking. With the adoption of "fiscal guidance," a projection of future defense expenditures developed by the Office of Management and Budget and passed to OSD, the defense and individual service programs had a fiscal constraint extended into the future. This forced service secretaries and service chiefs to make decisions on which programs to fit under their top line, and which to identify to OSD as high priority "unfunded requirements" – commonly referred to as "UFRs." Although this inevitably leaves a large bulge in the defense program projection prominently visible after the last FYDP year, it has served to force decisions on near term programs.

Although PPBS has provided a mechanism for forcing decisions in the near-term and identifying mid-term implications, in many instances senior leaders have elected to underfund programs seeking additional frugality and efficiency from program managers, or additional funding from Congressional patrons during the Hill's own budget process. Both are common managerial, bureaucratic, and political practices that occur regardless of the directions suggested by PPBS. The same can be said about the "bow wave" beyond the FYDP. The PPBS can identify the dimensions of near and mid-term funding problems, but decisions are made by leaders not procedures. The result of the systematic failure to project programs and budgets at their "most likely costs, rather than under "best case" assumptions, is believed to equate to a shortfall of \$20-30 billion per year, and to foster constant churning of program plans when reality strikes.

Decision-making Founded Upon Open Analysis and Debate

Has there been "decision-making founded upon open analysis and debate?" In general there has. There are, nonetheless, disturbing trends in the direction of more analysis, less debate, and fewer decisions.

Although DoD has undertaken numerous analyses, many have produced ambiguous results as the services and Joint Staff debate the assumptions, scenarios, models, and interpretation of results. The *Deep Attack Weapons Mix Studies* (DAWMS) prior to the 1997 Quadrennial Defense Review (QDR) was one prominent example. After twenty months of study and \$12 million in analytical costs, the Pentagon was unable to develop recommendations significantly realigning its plans to spend \$10 billion over the next decade on long-range attack systems. When computer modeling results favored Army systems, the Air Force and Navy challenged the outcome declaring that the results needed to be tempered by "strong military judgement."46

Senior officials informed the Army that even if the results indicated it should have more munitions, it would have to resource them from within its own budget allocation instead of receiving funds shifted from other services as their corresponding systems were reduced or eliminated.47 This statement reflects a philosophy totally at odds with the conception behind PPBS of reallocating funds across services to integrate forces by making decisions based on demonstrated cost efficiencies.

PPBS and State of the Art Strategic Planning

What lessons should DoD draw from this comparison of the basic ideas of PPBS and its current reality? Despite assertions that PPBS has been modified and adjusted in ways that have made it more effective in allocating resources, the evidence suggests that the process has become disturbingly asynchronous and arthritic. Although significant evidence exists to support

this conclusion, one example is enormously compelling in suggesting that many of the major management deficiencies PPBS was intended to correct have returned, if they ever fully departed.

Recall General Maxwell Taylor's complaint previously referenced, "the rigid percentage distribution by service of the budgets since 1953 is clear proof of the absence of flexibility in our military preparations." Since the end of the Cold War and the subsequent collapse of the Soviet Union in 1991, the world has changed substantially. An enormously threatening menace has disappeared, and American military forces have been reduced in size by nearly 40%. The armed forces have shifted from a posture of deployed in forward bases to one of power projection from the United States.

When Secretary Les Aspin published his *Bottom-Up Review* in October 1993, it stated on the first page that, "We cannot, as we did for the past several decades, premise this year's forces, programs, and budgets on incremental shifts from last year's efforts."48 This encouraging comment was consistent with both the concept of PPBS and the announced intent of the BUR to restructure the defense program and the armed forces from the "bottom up." At the end of the exercise, however, the percentages of the defense program allocated to each service were essentially unchanged. By nearly any measure, including budget share, force structure, or end strength, the BUR reductions were uniform and proportional.

There are differing perspectives as to whether this suggests a problem or strength in defense management and the practice of PPBS. Some argue that the stability of the fund allocations among the services reflects their success in articulating, explaining, and defending their various programs. Despite the stability of the funds allocated to the services, there have been significant changes in the distribution of funds between the MFPs that comprise the FYDP with the more significant changes occurring in the programs most closely associated with the Pentagon's warfighting components. Furthermore, major consolidations in several of the support functions, such as the logistics and medical programs, have resulted in an increase in the funding for the Defense Agencies at the expense of the services.

Nonetheless, there remains the concern that the continuing consistency of the services' resource percentages allocated to the services, the Pentagon "business units" that actually produce programs and budgets, suggests a chronic inability of the current PPBS process to significantly reshape the defense program across the well-defined service "stovepipes." If true, this suggests that the management of PPBS has provided less strategic direction than expected. Instead of charting a path to the future it produces results similar to those of the past even during a period of significant strategic and technological change. Regardless, it is a matter of perspective as to whether the service allocation indicates competitive excellence or bureaucratic resistance.

The post-Cold War period has been one of enormous change in the business community as well. Business executives have faced challenges similar to those confronting the military leadership in dealing with expanded global markets, rapidly changing business technology, radically new marketing mechanisms, and heightened competition. They have been forced to make major changes in the ways they organize and manage their basic enterprises because of intense competitive pressures uncommon in the public sector.

As part of the BENS evaluation of PPBS, numerous interviews were conducted with individuals in both public and private organizations, and with senior management personnel in both. Many of the individuals interviewed had extensive experience in both the public and private sectors, and intimate familiarity with the PPBS process. From these interviews, three common trends have been identified in designing and managing strategic planning processes that offer a strong contrast with the current practice of PPBS:

- An increasing reliance on small planning staffs
- Irregular but detailed planning guidance
- A focus on major issues

Strategic Planning Staffs Are Small

One of the basic ideas of PPBS is that a planning and analytical staff reporting directly to the Secretary of Defense was required. When James Forrestal became the first Secretary of Defense in 1947, he was given a very small staff with which to accomplish an enormous managerial task. Being so restricted, Forrestal was forced to become merely a coordinator of the activities of the military departments and services rather than a unified manager of the overall defense program. As one observer of his dilemma reported, "As early as February 1948, Forrestal expressed serious reservations about the National Security Act. In a report to Truman, he indicated a need for a deputy and emphasized the debilitating effects of interservice rivalry."49

In an effort to ensure the development of a balanced military program, Forrestal had little choice but to evenly divide the defense budget among the three services. He had no independent mechanism or staff to develop outside options, or to raise issues that could be used to further integrate the programs of the military services. Air Force Chief of Staff Carl Spaatz saw this as a dangerous situation in arguing:

The safeguards placed by law to protect an individual service are an anachronism that dates from the days of the sailing vessels. Any attempt to temporize with this situation by further adherence to outworn and overworked traditions will not only pyramid the costs of our national defense establishment but will be disastrous in the event of war.50

In the 1949 revisions to the National Security Act that established the Defense Department two years earlier, changes were made that strengthened the authority of the Secretary, increased the size of his staff, and appointed a permanent Chairman of the Joint Chiefs of Staff to provide him with a full time military advisor independent of the military services. These actions did not fully solve the problems of the Secretary, but they were a step in the right direction. Additional changes were enacted in 1958 in an attempt to further restrict the independence of the military services, but these changes were somewhat less substantive. Given his professional background, President Eisenhower to no small degree served as his own Secretary of Defense and was fully capable of making informed decisions regarding the needs of the services and the balance of forces he felt appropriate to execute his national security strategy.51

Robert McNamara desired an expert staff independent of the services and directly responsive to him. In McNamara's view, he wanted the ability to design a military force reflecting capabilities "without uniforms."52 From the perspective of Enthoven and Smith, the Secretary needed the capability to obtain, "information and advice from civilians who have given serious study to the matter of military requirements and whose careers and points of view are independent of the military establishment."53 Therefore, the Office of Systems Analysis was established, a small organization of twenty or so analysts providing McNamara the original, independent analysis he desired.54

The Office of Systems Analysis now resides in the OSD as the Directorate of Program Analysis and Evaluation (PA&E). Following the ageless rules of bureaucratic behavior, it has slowly expanded (and occasionally contracted) through the years but now numbers about 150 individuals. The PA&E is part of the Office of the Undersecretary of Defense for Comptrollership and Financial Management which also includes the OSD Budget Office. The PA&E and Budget offices combined amount to over 350 employees, about 10% of OSD headquarters strength. The military department and service staffs that perform comparable functions total considerably more than this.

Such rich staffing is not seen in major private organizations nor in corresponding public sector organizations with strategic planning responsibilities. One major private sector corporation, having a strategic planning process that many in the business community consider to be very effective, reported that its staff devoted to planning and budgeting numbered about twenty including administrative support. Another major corporation with diverse, international holdings and activities also had a rather small staff that worked on both planning and budgeting. A representative of this second company stated that many budgeting functions had been abolished by the new CEO who felt that too much time was spent "filling out forms" and too little time spent thinking about the major issues of where the company was going in the next five to ten years. A spokesman for the first company indicated that most contemporary CEOs take pride in "having eliminated more processes than they have initiated."55

Major public sector planning staffs are also relatively small. The Strategic Planning Staff devoted to resource allocation at the Department of State numbers less than twenty. In the Department of Budget and Management for the State of Maryland, which conducts statewide strategic planning and budget formulation for the governor, although full departmental strength is nearly 350 only 16 are focused on planning and budget formulation. Much of their effort is dedicated to the oversight of Maryland's "Managing for Results" initiative, an effort to identify measurable goals and objectives tied to budget allocations. In Virginia, widely regarding as one of the best managed states in the country, the Department of Planning and Budget (DPB) has a staff of 66 to provide, "advice and analytical services in planning, budgeting, policy development and evaluation for the Governor and Governor's Secretaries."56

Admittedly, all of these organizations, both public and private, are small in comparison to the Department of Defense, which is among the world's largest centrally managed and controlled entities. Smaller planning staffs might, therefore, be expected. Nonetheless, the comparisons are valuable. While most private and public strategic planning staffs are small, and the recent trend has been towards making them smaller, in OSD, as the previous national missile defense illustration demonstrates, the trend is the reverse.

Smaller staffs are more capable of identifying major objectives and opportunities, and developing more concise alternatives for achieving them. In his widely read 1988 book *Talking Straight*, former Chrysler Chairman Lee Iacocca observed that, "I

have a ridiculously small staff. My line guys are so aggressive that they make multi-million dollar mistakes before I've had one alternative to look at." Despite this concern, Iacocca's concluded that, "if I'm going to err, I'd always err on the side of leanness, because the decision making is faster," while adding the caution that, "if you get too lean, you'll wind up making momentous decisions with no more information than what the weather is like outside."57

Former Defense Secretary James Schlesinger seemed to agree with the need for a small staff noting that, "Only within relatively small groups is there much opportunity for real flexibility. Small groups can change plans, can avoid commitment, can *easily* maintain options until decisions point are reached." He added, "Use of small working groups is, of course, no guarantee of productive work. Yet for the set of production groups, the yield of substantive new work will decline as the group grows significantly beyond some critical mass." In Schlesinger's view: "Massive organizations with extensive communications at high, medium, and low levels will run up costs staggeringly."58 Schlesinger also voiced similar concerns to Iacocca's about having a staff that was too small observing that, "there is the ever present danger that the views of one group will prevail without adequate checks and balances. It should go without saying that even in force-structure choices, heroic judgments are required."59

The message from these two distinguished authorities is that greater innovation and agility is likely when staffs are kept as small and lean as possible, but sufficiently large to identify differing perspectives. As Iacocca concluded in an earlier work, "The biggest problem facing American business today is that managers have too much information. It dazzles them, and they don't know what to do with it all."60 The Defense Reform Initiative of late 1997 made detailed suggestions regarding the organization and size of OSD.61 Some changes have been made, but further work needs to be devoted to size the department's (and the military services) strategic planning staffs, and their division of labor, to ensure they are complementary rather than redundant, and serve to clarify rather than obfuscate issues needing senior leadership decision. Perhaps the Pentagon should consider the advice given by Jack Welch, the legendary CEO of General Electric, to a Chinese business forum, "We all have to go faster and faster. Hate bureaucracy with a passion. Hate it, beat it, don't let it be there!"62

Strategic Planning is Irregular but Detailed

The strategic planning organizations whose processes were examined all indicated that they spend a great deal of their time conducting detailed planning and developing measures of effectiveness. The primary purpose of the planning function of "strategic planning" is to consider the mission of the organization, enunciate the goals related to the mission, establish objectives for achieving the goals, and develop measures to determine the degree of success in achieving the objectives. The planning phase of PPBS should accomplish these tasks, and it attempts to do so — every year.

In the public sector, planning tends to be done at specific times generally related to the calendars of elected legislative bodies. There are, however, some notable exceptions. The Director of Management, Budget and Planning for the Montgomery County, Maryland Public School System (MCPS), among the ten largest systems in the United States, reported that the organizational staff spent three years developing "Success for Every Student: The Strategic Plan for Montgomery County Public Schools." For this school system, budgeting is an annual process driven by the directions of the elected School Board and the County Council. Planning, by contrast, conducted by a separate staffs created using a matrix approach, is as needed. It could be conducted annually, but tended to be done over more lengthy periods to capture new directions necessitated by either internal or external demands and directions.63

Much the same can be seen in the private sector where planning was conducted when it was deemed necessary by corporate leaders. None of the companies examined as part of the PPBS study conducted planning on an annual basis. Instead, major planning efforts and reviews of the company's direction and focus happened at irregular intervals usually over three to five years. As one corporate representative stated, "There is little use in revisiting and redoing your plan inside your cycle time. If planning must be redone every year, then you probably have poor or incomplete planning."64

Annual planning in the absence of a compelling necessity produces new verbiage describing old conditions and intentions, but reduces the time planning staffs could more profitably spend on developing and refining specific objectives and measures of performance.

There is a saying favored by financial mangers that, "You can't manage what you can't measure." Accordingly, a substantial effort by strategic planning staffs in both the public and private sector is dedicated to identifying objectives related to the plans and strategies being pursued, and to developing specific measures (commonly known as "metrics") that indicate the degree to which the objectives are being achieved. It is this indispensable step that gives a strategic plan an operational and managerial dimension. In the federal government such an effort is required by the Government Performance and Results Act of 1993.

During its three year effort working with the school board, the county council, and numerous other interested groups including front line managers, the staff for the Montgomery County Public Schools developed an elaborate strategic plan. The plan contained four hierarchical goals with the first being "Ensure Success for Every Student." To support the four major goals, eight "Core Strategies" were developed containing seventy-seven "Component Strategies." This is the goals, objectives, measures structure common to effective strategic planning.65 In addition, senior managers within the school system were evaluated on their success in meeting established goals and objectives, and efforts were being developed to link the objectives to budgetary requests.

At the State of Maryland, the "Managing for Results" initiative of the Governor has resulted in an extremely detailed articulation of goals, objectives, and performance measures for all agencies of government, including the Governor's Office. For example, the State Police Field Operations Bureau, responsible for the majority of state police operations, has four goals, seven objectives, and nineteen performance measures including, "Percent increase in numbers of unsafe drivers removed from the highways."66

The planning phase of PPBS is quite dissimilar. First, it is unwaveringly annual in its regularity. Although there is little obvious change from year to year, the Under Secretary of Defense (Policy) annually produces a new Defense Planning Guidance intended (conceptually) to provide guidance and priorities to the services and Defense Agencies in developing their six year programs and one-year budgets. Since the DPG routinely is provided very late in the program process, much of the detailed work done by the services has already been completed prior to its issuance. Nonetheless, the services devote considerable effort to influence the content of the DPG seeking to ensure that the final document gives them the direction they desire and the leeway they feel required.

Second, unlike the specific guidance of MCPS, the State of Maryland, and the State of Virginia, the Pentagon's DPG is very vague and general. It does provide some top level guidance on such items as force structure limits, but little substantive guidance elsewhere. It has little to offer in way of priorities for funding, and is almost completely silent on establishing uniform performance measures. Unlike the MCPS that establishes goals and measures that it holds schools accountable for meeting, the DPG offers very little that a service secretary or chief need address. The Commission on Roles and Missions accurately described the DPG as lacking specificity in addition to being untimely.67 Recently, the Senate Governmental Affairs Committee, after declaring DoD "plagued by mismanagement," strongly suggested that it needed to do a more credible job, "to establish specific and measurable goals in your annual GPRA performance plans."68 This does not mean that performance measures are completely absent, and progress has been made in this area, but much remains to be done in establishing uniform metrics across the services.

Strategic Planning Staffs Focus on Strategic Issues

The last area in which current practice of PPBS differs from that seen in other large organizations is in the focus on relatively minor managerial issues rather than the major strategic choices. If, as one might logically ask, the Pentagon has a large planning and resource staff; and if they are not heavily engaged in developing goals, objectives, and measures; what are they doing? The answer is they devote enormous quantities of time and energy analyzing and evaluating the microscopic detail of the service and agency programs and budgets submitted to them. This means that instead of searching for major strategic issues germane to future force structure and systems, and evaluating the necessity of certain redundancies or the implications of operational voids, the staff tends to focus on small program and budget items specific to the individual services. As Lee Iacocca observed, "if you have enough counselors advising you, you'll spend all your time missing what the real priorities are in life." 69

Mintzberg identified something of a paradox in strategic planning noting that, "Planning is characterized by the decompositional nature of analysis – reducing states and processes to their component parts. Thus the process is formally reductionist in nature. This may seem curious, given that the intention of planning is to *integrate* decisions."70 As discussed above, efforts to dissect the missions, functions, goals and objectives of an organization involve a degree of decomposition. The purpose of the procedure, however, is to provide common direction to all the components and to make decisions on resource allocation when it seems that certain activities are inconsistent with expected directions or outcomes. At the corporate level, the intent should not be to determine whether a minor sub-unit is meeting its objectives. The intent is to address the major issues involving the focus, performance, and coordination of the major sub-units in meeting corporate expectations. This is the integration of effort and purpose that Mintzberg highlights.

The heart and soul of PPBS has become its budget function. As previously discussed, considerably less time and effort is devoted to planning as most organizations currently practice it. Considerably more effort is invested in programming, the phase of PPBS where FYDP is constructed, and more still in the budget phase where the first two years of the FYDP are reviewed and packaged into the budget submitted to Congress. The Pentagon has clearly fallen prey to a strategic planning problem both private and public sector organizations consciously seek to avoid: becoming captive of a budget. As one corporate planner observed, "excessive budgeting detail will drive out the need for planning detail every time."71

Whereas the general trend in large private and public organizations has been towards a small staff focused on identifying large issues for the consideration of the senior leadership, in DoD a large staff identifies relatively small issues. Unlike the initial efforts of Enthoven, Smith, and colleagues seeking to establish objectives and performance criteria regarding the size and shape of the nuclear retaliatory force, clearly a major issue in the Cold War, today's OSD staff bores into small issues regarding weapons inventories or stockpiles and conducts numerous analyses that are frequently inconclusive and contradictory. Too many of these analyses often involve issues that in isolation are too insignificant for senior leadership interest or action, and do not lend themselves to meaningful aggregation. And it is my no means clear that the senior leaders of the department in recent years have encouraged the development and serious consideration of potentially troublesome major issues.

For example, following the 1997 Quadrennial Defense Review (QDR), the changes directed by the OSD and Joint Staffs to the service programs and budgets amounted to about .5% of the total dollar value of the program being reviewed. This suggests that the services and agencies had submitted programs and budgets that were over 99% correct before OSD ever saw them. Seemingly, a lengthy review process by a large staff would have resulted in more substantial changes to service submissions. This suggests the absence of major issues being identified for senior management decision.

For instance, during this period there was a lingering major issue that went unaddressed and unresolved. Nearly two years earlier, OSD and the Joint Staff had determined that the procurement accounts of the Defense Department were insufficiently funded to recapitalize an aging capital stock. With procurement funding at slightly over \$40 billion per year, a higher level of \$60 billion annually was established as a necessary objective. The Joint Staff suggested that this increase be achieved within two years. Clearly, increasing procurement by 50%, and effecting an 8% reshuffling within the \$260 billion defense budget presented a major challenge.

It was believed that the intent of the QDR was to address this issue. When the process was completed, however, and a modified FY99 budget presented to Capitol Hill, overall procurement spending across the program period of FY99-03 actually declined by some \$16 billion while operations and maintenance increased by nearly \$25 billion. The exact opposite of original expectations. The \$60 billion annual objective was not achieved and slipped further into the future. Indeed, in constant dollars, it is unclear the department will ever achieve the \$60 billion level, which many believe to be insufficient anyway.72

This outcome suggests one of two circumstances. Either the metric established, the \$60 billion procurement objective, was invalid or unimportant, or the PPBS decision-making process was insufficiently agile and adaptive to develop the major alternatives needed to make it a reality. Given that the metric itself, whose major merit was in establishing an objective where one had not existed, was quite modest, and that it required an 8% program adjustment, the .5% response of the staff and leadership strongly indicates a flawed process. A set of major options was required; minor ones were provided.

As a major federal institution with claim on nearly half of the federal government's discretionary funds, there will always be pressures for senior Defense officials to be involved in relatively minor issues. Inevitably, when a decision is made that unfunds a program important to a major Congressional member, the resulting political trauma will focus on the senior leadership and generate questions on the planning basis behind the decision. In some ways, such political reaction is the surrogate feedback mechanism for the market signals that are very prominent in the private sector but much less prominent in the public sector. Within the public sector, such a feedback mechanism is even less visible in defense. Nonetheless, efforts should be made to manage the Defense Department as an integrated program rather than a large collection smaller ones.

Summary of the Problem

The interviews conducted indicate that in the three areas listed DoD's current practice of PPBS is at odds with common business practice. Rather than having a small planning staff, the Pentagon's is quite large and cumbersome. Rather than conducted detailed planning when needed, DoD's planning tends to be rather vague but rigidly regular. Rather than focusing on major issues, the DoD staff tends to tackle a wide array of issues that are minor and could be left with little impact to business area managers, in this case the individual services. The OSD staff spends considerably more time delving into the operations of the services, than in coordinating and reconciling their activities.

Next Steps

Having framed the problem with PPBS, and compared it to current trends in strategic planning evident in other public and private organizations, the next phase of the study will be to identify changes that need to be made to the PPBS process itself, and to the environment in which it operates. As one current OSD official has accurately commented, to a great extent PPBS is an, "over-constrained problem."73 In other words, although many of the problems and shortcomings are widely known, there are significant constraints that combine to discourage significant changes.

Although this assessment indicates that efforts designed to improve PPBS are likely to be frustrating, its increasing inability to provide the positive results promised long ago demands a conscientious effort. The United States pays more for national security than any other country in the world. Those who make such a significant investment should expect to get a significant return.

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- 2 Mintzberg, p. 12.
- 3 Andrew Campbell, "Tailored, Not Benchmarked: A Fresh Look at Corporate Planning," *Harvard Business Review*, March-April 1999, p. 42.
- 4 See James R. Schlesinger, "Organizational Structures and Planning," in *Selected Papers on National Security*, 1964-1968, Santa Monica: The Rand Press, 1974, p. 59. Hereafter cited as Schlesinger.
- 5 See the Constitution of the United States, Article I, Section 8, and Article II, Section 2.
- 6 See Dwight D. Eisenhower, "The Chance for Peace," address delivered to the American Society of Newspaper Editors, April 16, 1953, contained in *Public Papers of the President*.
- 7 Maxwell D. Taylor, The Uncertain Trumpet (New York: Harper and Brothers, 1959), p. 129.
- 8 Robert C. Higgins, Analysis for Financial Management, 5th Ed. (Boston: Irwin McGraw-Hill, 1998)., p. 37.
- 9 As quoted in Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough: Shaping the Defense Program*, 1961-1969 (New York: Harper & Row Publishers, 1971), p. 33. Hereafter cited as "Enthoven and Smith".
- 10 Interview with the Honorable Robert S. McNamara, Washington, DC, 18 September 1998.
- 11 Mintzberg, p. 117.
- 12 Enthoven and Smith, p. 13.
- 13 Ibid.
- 14 Jack W. Carlson, "The Status and Next Steps for Planning, Programming, and Budgeting," in *The Analysis and Evaluation of Public Expenditures: The PPB System*, the Joint Economic Committee, Congress of the United States (Washington: U.S. Government Printing Office, 1969), p. 613.
- 15 Schlesinger, p. 57.
- 16 Ibid., p. 73.
- 17 Ibid., p. 56.
- 18 Department of Defense Directive 7045.14, dated May 22, 1984, Subject: The Planning, Programming, and Budgeting System (PPBS), p. 1.
- 19 See for instance, Paul K. Davis, editor, *New Challenges for Defense Planning: Rethinking How Much Is Enough* (Santa Monica: The Rand Corporation, 1994); and M. Thomas Davis, *Managing Defense After the Cold War* (Washington: Center for Strategic and Budgetary Assessments, 1997).
- 20 BENS Interview 020299. All study interviews were conducted on a non-attribution basis. The project director has maintained a complete set of interview notes. Those desiring to explore comments in detail may see the notes, and have access to the source of the comments if the source agrees to provide identity and the desired access.
- 21 Mintzberg, p. 19.
- 22 Ibid., p. 117.
- 23 Ibid., p. 35.
- 24 Mintzberg, p. 121.
- 25 Interview 081299.

- 26 Mintzberg, p. 120.
- 27 See James R. Schlesinger, "The Office of the Secretary of Defense," in Peter L. Hayes, Brenda J. Vallance, and Alan R. Van Tassel, eds., *American Defense Policy: Seventh Edition* (Baltimore: The Johns Hopkins University Press, 1997), p. 104. Hereafter cited as "OSD."
- 28 See Charles S. Robb, "Rebuilding a Consensus on Defense," Parameters, Vol XXVI, No. 4, Winter 1996-97, p. 8.
- 29 See National Defense Authorization Act for Fiscal Year 1998, Section. 912. "DEFENSE ACQUISITION WORKFORCE," subsection (d)(11).
- 30 See Eric Pianin and Bradley Graham, "Panel's Vote On Funds Imperils New Jet Fighter," *Washington Post*, 13 July, 1999, p. 4. Also, Pat Towell, "Air War With the Pentagon: Jerry Lewis and the F-22," *Congressional Quarterly Weekly Review*, August 14, 1999, pp. 1992-1996; and Bradley Graham and Juliet Eilperin, "Air Force Tries to Save F-22 Jet, *Washington Post*, 22 July 1999, p. A3.
- 31 BENS interview 081299.
- 32 Enthoven and Smith, pp. 33-47.
- 33 Ibid., p. 47.
- 34 Interview with the Honorable Robert S. McNamara, 12 June 1997.
- 35 See Edward C. Meyer, *Defense Science Board Task Force on Readiness, Final Report*, U.S. Department of Defense, 21 June 1994, p. 3.
- 36 See David Atkinson, "B-2s Demonstrated Combat Efficiency Over Kosovo," Defense Daily, 1 July 1999, p. 1.
- 37 See the comments of former National Security Advisor Brent Scowcroft in Bill Sweetman, "Can the Classic Bomber Survive," *International Defense Review*, 1 June 1999.
- 38 See "DAWMS Phase II Expected to Nix Future B-2 Buy Because of Near-Term Cost," Inside the Air Force, 2 May 1997, p. 1.
- 39 As quoted in Mintzberg, p. 179.
- 40 Ibid., p. 133.
- 41 Ibid., p. 108.
- 42 See Jan M. Van Tol, "Military Innovation and Carrier Aviation: An Analysis," *Joint Forces Quarterly*, Autumn/Winter 1997-98, pp. 97-109. Van Tol notes that, "the evidence of carrier superiority was not clear enough for navies to gamble on not buying battleships and other forces. So America and Japan invested in both carriers and battleships."
- 43 Title 10, U.S. Code, Committee on Armed Services of the House of representatives, U.S. Government printing Office: Washington, D.C, April 1993, Section 153, p. 52.
- 44 Although the initial size of the Office of Systems Analysis is not precisely known, interviews with senior officials of the period agree that it began with a small staffing of about twenty. BENS interviews 083099 and 092199.
- 45 BENS interview 051699.
- 46 See Jason Sherman, "Bombed: A 20-Month, \$12 Million Pentagon Deep Attack Study Yields No Explosive Recommendations on Munitions," *Armed Forces Journal International*, June 1997, pp. 12-14.
- 47 *Ibid.*, p. 14. For further discussion of the Air Force perception of DAWMS, see Rebecca Grant, *Origins of the Deep Attack Weapons Mix Study*, IRIS Independent Research, 1997.
- 48 Les Aspin, Report of the Bottom-Up Review, U.S. Department of Defense, Washington, D.C., October 1993, p. 1.
- 49 See Herman S. Wolk, "The Quiet Coup of 1949," Air Force Magazine, July 1999, p. 79.
- 50 Ibid.
- 51 See James R. Schlesinger, "The Office of the Secretary of Defense," in Peter L. Hayes, Brenda J. Vallance, and Alan R. Van Tassel, eds., *American Defense Policy: Seventh Edition* (Baltimore: The Johns Hopkins University Press, 1997), p. 104. Hereafter cited as "OSD."

- 52 Interview with the Honorable Robert S. McNamara, 18 September 1998.
- 53 Enthoven and Smith, p. 3.
- 54 Although the initial size of the Office of Systems Analysis is not precisely known, interviews with senior officials of the period agree that it began with a small staffing of about twenty. BENS interviews 083099 and 092199.
- 55 BENS interviews 051499 and 050799.
- 56 BENS interviews 020299, 051999, and 070699. Virginia was cited by "The Government Performance Project," conducted by Governing Magazine, as one of the nation's best managed states. A detailed report is available at: www.governing.com.
- 57 Lee Iacocca and Sony Kleinfeld, Talking Straight (New York: Bantam Books, 1988), p. 75. Hereafter cited as "Talking Straight."
- 58 See Schlesinger, p. 60.
- 59 Schlesinger, p. 140. Taken from the essay titled, "Defense Planning and Budgeting: The Issue of Centralized Control," May 1968.
- 60 Lee Iacocca and William York, Iacocca: An Autobiography (New York: Bantam Books, 1984) p. 59.
- 61 The Defense Reform Initiative (DRI) was an effort initiated by Defense Secretary William Cohen to incorporate successful business practices into the Pentagon, "igniting a revolution in business affairs within DoD that will bring to the Department management techniques and business practices that have restored American corporations to leadership in the marketplace." Although an objective was to reduce the size of the OSD staff by 33% from 1996 levels within 18 months, it is unclear that such reductions have been achieved particularly in the Comptroller and Strategic Planning functions.
- 62 See "Forum: China's Prospects," Asia Week, 15 October 1999.
- 63 BENS interview 042899.
- 64 BENS interview 051499.
- 65 See Montgomery County Public Schools, Success for Every Student: The Strategic Plan for MCPS (A Companion Reference), April 1999, pp. 10-15.
- 66 See Maryland Department of Budget and Management, Maryland Managing for Results: FY2000 Budget, p. 720.
- 67 CORM, p. 4-6.
- 68 See "Thompson Takes Aim at DoD's FY00 Performance and results Act Plan," *Inside the Pentagon*, 19 August 1999, p. 1. See the 17 August 1999 letter from Senator Fred Thompson to Secretary of Defense Cohen, and GAO Report B282836, 20 July 1999, Subject: Observations on the Department of defense's Fiscal Year 2000 Performance Plan.
- 69 Talking Straight, p. 118.
- 70 Mintzberg, p. 13.
- 71 BENS interview 051499.
- 72 See Gordon R. Sullivan, Torchbearer Message 4, Association of the United States Army, August 1999.
- 73 BENS interview 09-14-99.