Private Business to Public Service: Robert McNamara’s Management Techniques and Their Limits in Peace and War

by

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ABSTRACT

This dissertation evaluates Robert S. McNamara’s management practices during his tenure as Secretary of Defense, concluding that over-centralized decision-making proved to be the central feature of his management style with one significant exception. When it came to war, notably the Vietnam War, he undermanaged important aspects of that conflict. To better understand McNamara’s management decisions, this dissertation sets them in the context of his brilliance as a student in college and later in graduate school where he absorbed the technocratic management techniques then developing at the Harvard Business School. He applied his education successfully in the Army Air Force during World War II and later at the Ford Motor Company.

As Secretary of Defense he initiated a rigorous analytic approach to the defense budget and weapons acquisition through the Planning-Programming-Budgeting System (PPBS) he installed and the associated discipline of systems analysis that he brought to the department. Yet those innovations had the perverse effect of encouraging his proclivity to concentrate on managing data rather than managing people. Through costly errors such as the TFX plane controversy, McNamara discovered the limits
of technocratic business procedures in a public service environment which required a politically sensitive and socially adept approach.

McNamara disregarded many contemporary managerial techniques and models which emphasized delegation, flexibility, and informal communication. His reluctance to delegate left many subordinates and colleagues without significant institutional roles in decision-making and thus without personal investment in the success of directives emanating from the office of the Secretary. More importantly, the plethora of low-level procedural decisions he funneled through his office took his time and attention away from more important high-level policy issues like the war. When viewed in the full context of his responsibilities, his overconcentration on budgets, logistics, and procedural details contributed to his relatively passive acceptance of the military’s battle strategies in Vietnam, which deserved closer examination.

Bridging the histories of politics, war and public administration, this dissertation interrogates the context and consequences of McNamara’s application of current business management practice to public institutions.

Adviser: Louis Galambos
Readers: Ronald G. Walters, Angus Bergin, Steven M. Teles, Adam D. Sheingate
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INTRODUCTION

“Not everything that matters can be measured, and not everything that can be measured matters.” ~ Albert Einstein

“If you can’t measure it, you can’t manage it.” ~ Various

It was a clear, cool winter day in February, 1967 when Robert S. McNamara rose to speak before a Millsaps College Convocation in Jackson, Mississippi. On the podium with him were the customary college officials and Senator John Stennis, the senior senator from Mississippi and chairman of the Senate Armed Services Committee, who had invited him to speak.

It had been a difficult year for McNamara. The war in Vietnam was deteriorating and was increasingly unpopular. A group of senators, including Stennis, were urging him to lift restraints on bombing while another group led by Senators Fulbright and Mansfield were urging a bombing pause. Only a few months before on a visit to Harvard, protesting students had surrounded McNamara’s car, forcing him to flee on foot through the streets of Cambridge. The day had long passed since McNamara had enjoyed the general approbation of Congress and the media. The president who had recruited him was dead. The military that had chafed under his leadership was growing increasingly vocal. His face and physical appearance clearly showed stress; known for his neat tailored look, his shirt collar now hung loose around his neck. Indeed, only a few months later a future secretary of
defense, Melvin E. Laird, would ask him in a public hearing, “Have you stayed too long?”

In the midst of the chaos of war, McNamara had chosen to speak out on a subject that had consumed his energies for most of his adult life — management. He began conventionally enough by pointing out the growing gap between the developed and underdeveloped world, characterizing the gulf as a “seismic fissure” that could produce an earthquake of violence if the threat were not contained. Then came a discussion of the “so-called brain drain” that was developing as scientists and technicians from more developed countries, especially European, sought opportunities in the United States. McNamara attributed this diaspora not to higher salaries or more advanced technology, but to “more modern and effective management” in the United States. “Management,” he argued, “is the most creative of all the arts … management is the gate through which social, political, economic, technical change — indeed change in every direction — is rationally and effectively spread through society … [T]o undermanage reality is not to keep it free. It is simply to let some force other than reason shape reality.”

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He went on to discuss the means by which he believed reason could be imposed on reality, championing hierarchical decision-making, quantitative analysis, and business education. First, “vital decision making, especially in policy matters must remain at the top.” Second, he admitted that “not every conceivable human situation can be reduced to lines on a graph” but “not to quantify what can be quantified is only to be content with something less than the full range of reason.” Finally, he argued that the best way to stop the brain drain was for Europe to improve its education system, for “Europe is weak educationally…particularly weak in its managerial education.”

The speech reflected a topic that McNamara was increasingly promoting — the potentiality of management. Nine months previously, in a speech at the preparatory school from which his younger daughter was graduating, Chatham Hall, he had tentatively suggested that the fear that “organization in modern society is growing too big and too complex — and that we are establishing management controls that are too massive…a depersonalized bureaucracy,” did not state the problem in a wholly realistic way. “It is possible,” he went on to argue, “that some of our gravest

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problems in society arise not out of over-management, but precisely out of under-management.”

We have no record of how the Millsaps speech was received. Some in the audience must have thought, “How can he be extolling so extravagantly the benefits of management, when it seems to be failing so miserably in Vietnam?” For McNamara, however, management was always the solution, not the problem. He was articulating a credo that he never renounced. It had carried him to great success in business, and had earned him respect and praise in high government service. He would continue to promote its value when he became head of the World Bank in 1968. McNamara was very much reflecting the accepted wisdom of the time, and in proposing that professional business management techniques could solve the challenges of an increasingly complex and labyrinthine government, he was in line with a decade-long shift in the attitudes of a growing number of the American business elite.

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Historical Context: World War & Economic Crisis Pull Private Managers In And Out Of Government

Whereas the prevailing view of most businessmen toward government from the late nineteenth century through the 1930s had been either dismissive or downright negative, a number of businessmen nonetheless came to see positive aspects of selected governmental initiatives and accepted a responsibility to participate in their development and implementation. These men represented what the New York Times would call “a growing group of businessmen-statesmen, standing above politics, who are not only eminently successful in business but who can also see beyond business to the wider implications of statesmanship and the political and human problems it must deal with.”\(^4\) In part, this attitude reflected an acknowledgement that business must accommodate itself to the new power of the federal government. As Marion Folsom, a Kodak official, put it in 1937, “as our civilization becomes more complex, it is only natural the government will have a little more to do with it than it had in the past … we must adjust ourselves to changed conditions.”\(^5\) It also manifested

\(^4\) New York Times (hereinafter “NYT”) editorial on the appointment of Paul Hoffman as Economic Cooperation Administrator April 7, 1948 p. 24.

recognition that the legitimate scope of government had expanded and that, as self-proclaimed elite members of society, businessmen had a responsibility in helping government meet its new responsibilities. At the turn of the twentieth century, however, this remained a minority view among U.S. business magnates.

Actually, the absence of businessmen in the federal government during the late nineteenth century is hardly surprising. One would not have expected the great entrepreneurs of the nineteenth century to join the government. One can scarcely imagine a McCormick, Armour, Rockefeller, or Carnegie presiding over a nascent bureaucracy. By the beginning of the twentieth century, however, a new sort of industrial leader was emerging to take charge of many of the largest industrial firms. They were “bureaucrats” in the words of William Miller, men “who often must have been as occupied with getting and staying ahead in their companies as with keeping their companies ahead of the field.”  

These new business leaders were skilled in management but that was not yet a skill needed in the federal government. By and large the main function of the federal government remained the “gathering of income and

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appropriating funds.”

There were a number of dynamic federal initiatives in the areas of conservation, railroad regulation, anti-trust, health and safety regulation and tariff reform, but the need in these areas was for expert knowledge rather than administrative competence. The era of big government was not far away but it had not yet arrived, and the businessman was not yet in demand.

What created that demand was war, for modern global conflict demanded management and management was what the businessman could contribute. Driven by the imperatives of technology and the need to produce and deliver the sophisticated weaponry of modern warfare on a mass scale to the battlefield, the federal government needed organizational planning on a large scale during World War I. The government was compelled to turn to business for help, as Robert Cuff writes:

\[\text{Big business outdistanced all others in organizational achievement, and provided the major model for bureaucratic developments among most other economic, political and social groups, including the state itself. \ldots A federal government which numbered only 256,000 civil servants by the turn of the century could hardly compete with the bureaucratic power in private hands.}\]

\[\text{\textsuperscript{8}}\]


Even this figure is somewhat misleading. In practical terms the government was far smaller. Of the 256,000 employees Cuff cites, 211,000 lived outside Washington. There were 136,000 postal workers and about 45,000 in the armed services serving throughout the country and abroad. In the greater Washington area, there were only 28,000 federal workers in 1901 -- the year Cuff uses. By contrast, it is estimated that U.S. Steel had 168,000 employees at the same time. A single private firm was managing a workforce six times the size of the federal government’s Washington cadre; organizational and managerial expertise necessarily advanced further in the private sector than in the public.

Not only did business have the managerial know-how, but businessmen were essential to the entire mobilization effort that carried the U.S. into the First World War because President Wilson would not consider reordering the existing fundamental relationships between industry and the government. The President eschewed any model similar to the British system which involved a central bureaucracy, independent state power and

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9 John N. Ingham, *Making Iron and Steel* (Columbus, OH: Ohio Univ. Press, 1991) p. 152. It would be interesting to compare the work force of other companies with that of the federal government, but such data are very difficult to uncover — a condition confirmed by the staff at the Hagley Research Library.
public planning.\textsuperscript{10} As Cuff points out, Wilson’s own public philosophy “subsumed both the idea of friendly cooperation between business and government and an ambiguity toward the role of the state.” It amounted to a cooperative “middle-way between rigid federal control on the one hand and free-wheeling laissez faire on the other.” It produced a unique American system of “public institutional recognition of private individuals and private interest groups [so that] the state remained particularly dependent upon outside talent and administrative mechanisms to fulfill the demands of modern warfare.” Although many business leaders championed a more centralized and directed government organization, the business volunteers who administered the programs fully accepted the ambiguity of the existing system. Their “central ideological aim throughout the war was to prove what private corporate leadership could achieve with a friendly business-dominated state agency.”\textsuperscript{11}

\textsuperscript{10} As Jim Tomlinson writes, “The war brought an unparalleled level of state intervention into British industry … control of prices and profits and the government’s role in the labour-market impinged on almost every enterprise…. The intervention had an important long-lasting political consequence for it led to “the widespread belief on the Left that the war had demonstrated the efficacy of state intervention in the economy.” Tomlinson, \textit{Government and the enterprise since 1900: the changing problem of efficiency} (Oxford: Clarenden Press, 1994) pp. 74-5, 81; see also H.S. Furniss, \textit{The State and Industry during the War} (London: Co-operative Printing Society, 1918).

\textsuperscript{11} Cuff, op. cit., pp. 4, 5, 41, 111.
The result of these compromises was a surge of public agencies staffed in large measure by business executives, and thousands of businessmen were eventually involved in the war effort. After the Armistice, most of them returned to their former positions, but many of them had caught what is now referred to as “Potomac fever.” Alongside influential individuals’ continuing public service — Herbert Hoover, for example, was among the most prominent of the WWI-era businessmen who never returned to private industry — the most lasting legacy of the war was a growing realization that business needed to establish a new relationship with the federal government. Alan Brinkley writes that “… according to subsequent mythology, the wartime experiment had been a brief and glorious moment of economic harmony, in which business, government, and labor cooperated effectively on behalf of the larger economic good.” The wartime experiment was scarcely a “glorious moment of economic harmony” as Brinkley goes on to point out, but it did push a number of

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12 The Food, Fuel, and Railroad Administrations, The Shipping Board and the War Trade Board were established by legislation. The War Industries Board (WIB), on the other hand, never had legislative authority. It grew out of the Munitions Standards Board, an advisory body to the Council for National Defense; the WIB eventually obtained independent status by presidential directive under the authority given him by the Overman Act to reorganize the federal executive at his discretion. Since it had no legislative mandate, technically speaking, all the WIB’s powers derived from the President under his war powers authority. The extent of that power was never tested judicially.

businessmen, academics and government officials to argue for a more cooperative and planned economic system and greater interaction between business and government.

This temporary upturn in public-private cooperation was quickly scuttled by the following decade of economic disaster. The 1930s were not a good time for businessmen to enter the higher reaches of government service. The Depression had destroyed much of the credibility of business. “Business had insisted on all the credit for prosperity,” Arthur Schlesinger Jr. writes, “now it could hardly escape blame for adversity,” or as William Leuchtenburg observed, “[b]y the winter of 1932, the businessman had lost his magic and was as discredited as the Hopi rainmaker in a prolonged drought.”14 There were businessmen like Gerard Swope of GE who offered constructive suggestions to mitigate the devastating effects of the Depression, but by and large the business community was as perplexed as the rest of the nation and either kept silent or sought scapegoats, as did John Edgerton of the National Association of Manufacturers (NAM) when he argued that “… the real responsibility for their poverty… lay with the

jobless themselves.”¹⁵ Nor would matters improve during the 1936 campaign when FDR, virtually ignoring his opponent, campaigned against the so-called “economic royalists” and the forces of “organized money.” The relationship between business and the federal government had reached a low ebb.

Matters would change quickly, however, as the international situation became ominous and “Dr. New Deal became Dr. Win the War.” Businessmen started to stream back to Washington to assist in a mobilization effort that dwarfed anything hitherto experienced by the nation. There was a growing realization that government needed, in particular, the management skills of business. The United States was embarking on the largest military build-ups in its history, would soon undertake the greatest post-conflict reconstruction effort in history, and was in the process of developing a new welfare system, all of which required the collection, analysis, and coordination of unprecedented amounts of data, money, materiel and personnel. The general success of these enormous projects engendered a new excitement about the level of mastery Americans had achieved in the organizational sciences. Peter Drucker, the most prominent historian and promoter of “managerialism” has written, “For twenty-five years, from the

¹⁵ Leuchtenburg, op. cit., p.21; see also Schlesinger op. cit., pp.177-183.
end of World War II to the end of the 1960s, a management boom swept over the entire world.”

Drucker attributed this fascination to the stunningly successful performance of United States manufacturing during WWII and the central role management played in the implementation of the Marshall Plan. “The success of the Marshall Plan made management a best seller,” he wrote, “[s]uddenly everybody talked management, everybody studied management.” Management as an operating methodology was very much associated with the United States. It was promoted by Britain’s Sir Stafford Cripps, the socialist Chancellor of the Exchequer, who sent “productivity teams” to the United States to study its practices. Even the usually skeptical French joined in. The intellectual Jean-Jacques Servan-Schreiber predicted American domination of European markets because of superior management techniques in his best-selling *Le Défi Americain*. Both national and international pundits viewed professional management as very much an American discovery and an American obsession.

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16 Peter F. Drucker, *Management : Tasks, Responsibilities, Practices* (NY: Harper & Row, 1973), p. 11. “Managerialism” is the practice of management which in turn consists of those tasks which must be accomplished for an institution to attain the objectives it has set for itself. It involves administration but is a more encompassing set of activities.
17 Ibid., p. 13.
The 1950s saw a vibrant self-confidence among business leaders specializing in managerialism; after the crisis of capitalist confidence in the 1930s, events appeared to have proven that ingenuity and rational organizational techniques could conquer any problem. American technology appeared without peer, and many were confident that American business methods would also soon prevail. In many respects the attitude of these men was not far from Henry R. Luce’s vision of an “American Century”:

America as the dynamic center of ever-widening spheres of enterprise, America as the training center of the skillful servants of mankind, America as the Good Samaritan, really believing again that it is more blessed to give than receive, and America as the powerhouse of the ideals of Freedom and Justice — out of these elements surely can be fashioned a vision of the 20th Century to which we can and will devote ourselves in joy and gladness and vigor and enthusiasm.¹⁸

One byproduct of Luce’s vision was an increased attention to creating a more efficient government. After all, if America was to be the “center of ever-widening spheres of enterprise”, its federal government should be organized to reflect the best in management thought. It was a goal embraced by both Presidents Truman and Eisenhower each of whom appointed a commission on government organization chaired by former-President Herbert Hoover. The commissions made hundreds of recommendations, but

the overriding message was, “Oh, if government would only act more like business, many of our problems would be solved.”

Yet, that golden age of serene self-confidence did not last. By the late 1960s, American management superiority had come under scrutiny. As a bundle of techniques — whether based on economics, statistics, or behavioral science — American-style management seemed to have serious limitations. As Drucker wrote more prophetically than he realized in 1973, “General Motors in the post-World War II period has been an outstanding success… [but it] may well be the best illustration of the inadequacy of the technocrat concept of management.”

Throughout the first half of the century consuming global wars, alongside severe economic collapses and recoveries, created peaks and valleys of managerial confidence and governed the ebb and flow of private managers into public service. Robert McNamara’s education and career experiences were shaped by these global events and emerging attitudes. He absorbed the management techniques then current at the Harvard Business

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19 The thought continues to resonate. When Senator McCain was asked what changes he would make in the Defense Department if he became president. He is reported as replying, that “he would seek to attract corporate leaders to improve the management of the Pentagon citing individuals like Frederick W. Smith, chief executive of FedEx Corporation and John T. Chambers, the chief executive of Cisco Systems.” (NYT, April 7, 2007, p.1).
20 Drucker, op. cit., p. 18.
School (HBS) when the faculty was just beginning to rely heavily on quantitative analysis and control. At the time the school exemplified the technocratic concept of management. He used those techniques successfully in the Army Air Force during WWII and later at the Ford Motor Company. They were instrumental in his success as secretary of defense in establishing civilian control over the military and developing new budgetary techniques that reinforced that control. By eliminating duplication and overlapping programs, aligning budgets with missions, he made the national defense considerably more cost-effective. At the same time, the Vietnam War revealed the inadequacies of the new “science” of quantitative management. McNamara was not willing in the Millsaps speech, or even more than twenty years later, to admit that the discipline he practiced had proven inadequate.

*Historiographical Review*

There have been thousands of pages written about McNamara during his service as secretary of defense but surprisingly few that focus on his management practices. Most of what has been written concentrates on the Vietnam War and falls into one of two categories. First, for those interested in political and diplomatic history, the dominant issues are McNamara’s role in the decisions that Presidents Kennedy and Johnson made regarding the
conflict, and the extent to which he bears responsibility for misleading the public as to the nature of the war. Alternatively, for those interested in military history, the principal issue is the extent to which McNamara micromanaged the war. Although those issues form part of the backdrop for the discussion of McNamara’s managerial practices in this work, they are not its focus.

There is also specialized literature on particular programs that McNamara initiated and their actual or potential influence on public administration. For example, discussions of the planning, programming, and budget system, and the use of statistical analysis appear from time to time, especially in journals devoted to public administration.

With the exception of the four works mentioned below, there are no works of which this author is aware that treat McNamara’s managerial practices as a major subject of inquiry.

There is an excellent biography of McNamara by Deborah Shapley. *(Promise and Power: The Life and Times of Robert McNamara)* published two years before McNamara’s own controversial wartime memoir.21

Shapley, a writer for Science magazine with a background in defense policy,

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had the advantage of more than 20 interviews with him. Regrettably, as she notes, “he [McNamara] did not agree to speak on the record about his role in the Vietnam War.” Nevertheless, it is an important source for anyone interested in McNamara. Shapley lays great stress on McNamara’s drive for “control,” a theme that also recurs in this work. Where the two works differ is in the greater detail in this dissertation as to how control manifested itself in McNamara’s managerial practices, especially as seen by his colleagues in the department.

I have only found three articles that specifically address McNamara’s managerialism. In 1995, Louis Galambos and David Milobsky wrote an extensive article for The Business History Review, “Organizing and Reorganizing the World Bank, 1946-1977: A Comparative Perspective.” Their study emphasizes the structural changes he brought to the Bank rather than how he managed the institution. To the extent the authors describe his managerial practices; they suggest that he had not altered them significantly from those he employed when he was at the Department of Defense (DoD).

Ten years later, Abraham Zaleznick, a clinical psychologist and professor at the Harvard Business School, wrote an article entitled, “The

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22 Ibid., p. 616.
Zaleznick argued that McNamara was “…unprepared intellectually and perhaps more seriously emotionally for the Office of Secretary of Defense… [and he] was ill-equipped for the learning the new job required.” Zaleznick suggested that McNamara’s failure to understand the Vietnam War was a result of his education — most particularly the case method used by the Harvard Business School. He argues that the case method system produces a self-referential sense of authority in the student unrelated to any theoretical framework. Consequently, when a particular course of action fails to produce a desired outcome, a manager schooled in the case method has nothing to fall back on. Regrettably, the article does not relate the argument either to McNamara’s management practices or to specific actions he took during the war.

More recently, in 2010, an article appeared in the Harvard Business Review emphasizing two points about McNamara’s managerial practices. First, his business decisions were not exclusively based on financial considerations but included a sense of social responsibility, for example, promoting safety in automobiles. Second, he was willing to question his own

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25 Ibid., p. 47.
actions and learn from experience. Rosenzweig concludes by suggesting that his willingness to look back and profit from mistakes “…may be Robert McNamara’s greatest legacy as a manager.”

That may have been the case when McNamara was in retirement, but those who worked with him at Ford and DoD would be surprised by Rosenzweig’s assessment since he seldom looked back to consider his own decisions when he was actually engaged in management. Indeed, decades after the failure of the TFX project, he was unwilling to admit that he had made any fundamental mistakes in managing that effort.

Methodology: McNamara As A Case Study

This dissertation seeks to assess Robert McNamara’s strengths and weaknesses as a manager of the Department of Defense. It places his performance as Secretary in the context of his previous managerial training through his educational, wartime, and business experiences. As good

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27 According to his colleague William Kaufmann, “He [McNamara] was very open-minded until he had mastered a subject, and then it was difficult to influence him,” William Kaufmann interview with Dr. Lawrence Kaplan and . Maurice Matloff, July 14, 1986, (Washington, DC: Historical Office of the Secretary of Defense), p. 18. During the 1980s and 1990s historians from the Historical Office of the Secretary of Defense conducted a series of interviews with McNamara and many of his colleagues. They are archived in the Historical Office under the interviewee’s name and are referred to hereafter by the interviewee’s name, OSD Interview, the date of the interview and the page number.
management depends upon matching the skills of the individual with the needs of his or her organization, the dissertation also devotes attention to considering the work environment of DoD as compared to the automotive business management structures within which McNamara worked and studied. As one might expect, there were problems, as DoD’s political and military milieus presented special challenges, and certain managerial skills — particularly communication skills — that could not transfer easily from Ford’s contentious hierarchy to a government department that needed to rely on informal cooperation.

McNamara is the fitting subject for an in-depth case study, since among the new generation of professionally trained managers who entered public service after World War II, he was indisputably one of the most influential, most widely-known and most controversial. He was the first business school graduate to ascend to the cabinet level in the U.S. government, and through him we can interrogate the utility and adaptability of the precepts he learned at Harvard to the field of civil service. Furthermore, he had an unusually long tenure of office, serving for more than seven years and acting as both a peacetime and wartime Secretary. He was the first Defense Secretary to be in the direct chain of command from the president to the area commander and his experiences — so often
analyzed only as regards the particular conflict of Vietnam — raise more
general concerns about the ill-defined dual role which any Defense Secretary
might be called upon to perform in the event of war.

McNamara’s very prominence and longevity in office mean that he
cannot be regarded as representative of any wider business class, and the
dissertation does not seek to draw broad conclusions about the impact of
businessmen on government generally. Rather, it seeks to present a fair
assessment of McNamara as a manager and to provide a template for the
assessment of other prominent businessmen who served as McNamara’s
contemporaries. Biographical and political studies of McNamara, the
Kennedy and Johnson administrations, and the Vietnam War already
proliferate, but few focus substantially and deeply on the management angle
of McNamara’s secretaryship, beyond the universal observation that he was
over fond of quantification and micromanagement. Most monographs and
many articles about the man concentrate on nailing down the extent to which
he was responsible for high-level mistakes, particularly regarding the war.

The role of the historian cannot exclude the need to judge
performance and responsibility, but concentrating solely on the blame game
is intellectually unproductive. McNamara has been pilloried by many critics,
and alternatively his own Oscar-winning apologia has suggested to a new
generation that coherent “lessons” can be drawn from the tragedy of Vietnam. Rather than seeking to condemn or excuse, it is more productive to attempt to understand how McNamara approached the decision-making process by clarifying his intellectual training, personal predispositions, and institutional environments. As previously stated, assessing his performance as a manager means assessing the extent to which his skills addressed the needs of the Defense Department, and that involves evaluating the organization as well as the man. In scrutinizing his decision-making, we seek answers which eluded McNamara himself, who could find no reasons why he did not ask key questions about Vietnam policy and failed to recognize over-centralization as a problem in his own management. He did not see that his key strengths and successes as a manager themselves contributed to his under-management of the war — he over-managed areas of policy and procedure with which he was most facile and most comfortable, and thereby allowed them to crowd out higher-level problems he felt less prepared to face.

Regarding sources, this dissertation has mined the interviews of McNamara’s colleagues and subordinates which are collected in the Office of the Secretary of Defense Historical Office, some of which — the letters in response to Tom Morris — are particularly addressed to questions of
management. The author has also benefitted directly from the insights of several of McNamara’s colleagues and biographers, with special appreciation for the insights of Deborah Shapley, Paul Ignatius, Charles Rossotti, Norman Augustine and the late Terry Williams, among others.

Chapter Overview

The chapter arrangement of this study focuses first on the formative factors in McNamara’s personality and training, and then hones in on three comparative examples of his DoD management which provide a spectrum of success and failure, policy and procedure, overmanagement and undermanagement.

For purposes of this study we will focus on three challenges: a new budget process, building a new bi-service aircraft that neither of the services wanted, and the Vietnam War. The recasting of the defense budget required establishing a new paradigm and then a rigorous analysis of how programs desired by the services fit within it. It played to McNamara’s strengths, analytical brilliance in the context of quantitative analysis. It was also something he could control to a large degree.

The other two matters present entirely different management issues. In the case of the TFX it was how to persuade the Air Force and the Navy to
cooperate in the building of a new aircraft neither of them wanted. It was not something a Secretary of Defense had ever tried before and it required management techniques that were un congenial to McNamara. As Alain Enthoven has pointed out, the powers of the Secretary of Defense are largely negative. “…he can stop the Services from doing things he does not want done…but it is very difficult—often impossible—for him to get the Services to do something they really don’t want to do.” Finally, any description of McNamara’s managerial abilities would be incomplete without some consideration of how he handled the one issue that is most associated with his name — the Vietnam War.

Chapter One lays out McNamara’s pre-DoD formation, exploring key personality traits — competitiveness, facility with calculations, the tendency to see conversations as debates to be ruthlessly won — and illustrating how these personal proclivities were developed through the particular educational model of the Harvard Business School. It goes on to trace McNamara’s wartime experience as a statistical analyst and the particular logistical challenges he successfully faced with his academic quantitative tools. The chapter continues to cover his tenure at Ford, recapturing the key elements

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of its transformation from a disorderly, dying company to a restructured, rivalry-ridden but successful new entity under Henry Ford, II and his “whiz kid” managers. The chapter concludes by providing an analysis of the central elements of McNamara’s personal managerial style which had already developed and which would profoundly influence his future decisions.

Chapter Two follows McNamara’s appointment as defense secretary to the Kennedy administration — a more haphazard process than one might expect — and then focuses on the first of the dissertation’s three highlighted projects: the Planning, Programming and Budgeting System (PPBS). This was one of McNamara’s greatest and most lasting achievements; by introducing systems analysis into the budgeting process, McNamara was able to eliminate redundant and contradictory programs that the military service branches had developed in their rivalry. The system refocused budget priorities, first determining a broad overall objective (for example, nuclear deterrence), then breaking down alternative means to achieve that objective (submarines, siloes, bombers), and finally allocating funds to the most cost-effective alternatives. The chapter explores the institutional resistance to procedural change which PPBS inspired and evaluates McNamara’s ability to win over his critics (it was poor). The chapter also
argues that, despite being ultimately successful, the PPBS system was overly centralized and must be viewed as an aspect of overmanagement which — when viewed in the full context of McNamara’s duties — misdirected time and attention to minutiae, thus leaving other high-level policy concerns at risk of neglect.

Chapter Three analyzes the experiences of McNamara’s colleagues and subordinates, who reported that working with him could be rewarding for his loyal group of top aides, but was largely unsatisfying for lower-level civil servants and actively antagonistic for many military personnel. McNamara had little ability to prioritize or delegate, which left many subordinates without significant institutional roles in decision-making and thus without particular investment or stakehods in DoD directives. McNamara also had little respect for military traditions or for advice borne of experience rather than analytical expertise. As a result, he offended many potential allies, and in general ran his department with a formality in communication that stifled the free exchange of ideas. The chapter concludes that his brisk and territorial decision-making style was ill-suited to the needs of the Department, which required a more politically sensitive, socially adept approach.
Chapter Four examines the TFX plane debacle, wherein McNamara attempted to illustrate the principles of “commonality” (maximizing interchangeable parts when constructing planes in order to save money) and “program definition” (deciding on objectives and designs on paper before awarding a contract) by forcing the Army and Navy to design one plane to fulfill their contradictory mission requirements. The Army and Navy, of course, would each have preferred to design and construct their own model of plane, but McNamara eventually succeeded in getting them to accept a combo-design and left them the choice of contractor. He then over-ruled the contractor they unanimously chose. As a result, they were wholly alienated from the overall project and failed to efficiently carry it forward; additionally, the plane that had been approved on paper proved to have major design flaws when actually built. The end result was that no combo-plane for the Army and Navy was successfully produced, though the production process (and Congressional investigations of the same) lingered on for years. The episode highlights McNamara’s tone-deaf approach to the softer side of management — “people-skills” — and illustrates the point that policies can be wrecked once important constituencies grow intransigent about carrying out new procedures.
Chapter Five re-evaluates the common narrative of McNamara and the Vietnam War, arguing that rather than overmanaging the conflict, as he is usually accused of doing, he actually undermanaged it. The chapter explores McNamara’s appearance of activity, focusing especially on his numerous “fact-finding” missions, but points out that keeping busy is not synonymous with genuine leadership. The chapter argues that McNamara departed from his normal mode of management when it came to Vietnam policy; he was tentative regarding his own competence to set wartime, life and death, on-the-ground strategy, and as a result avoided taking control of policy decisions. He also never assigned the Systems Analysis Office to perform any serious investigation of policy alternatives. He confined himself to logistics (which he managed quite successfully) and procedural decisions (famously including the selection of bombing targets and the quantification of Vietnamese bodies as yardsticks of success).

Of course, each of these logistical and procedural decisions had implications for policy. The chapter concludes that McNamara’s management of the war was atypically unassertive, and points out that his overmanagement of other policy and procedural defense projects constituted a mismanagement of his time and energy. It suggests that the contradictory requirements of peacetime and wartime must be more fully appreciated.
when evaluating the management expectations placed upon the Secretary of Defense.

Overall, the dissertation suggests that McNamara’s managerial weaknesses become more comprehensible once it becomes clear how closely they were linked to his managerial strengths. Facility with analytical tools designed to help gather massive amounts of data can easily tempt those gifted in rational analysis to over-centralize authority and overcommit to mastering rather than delegating procedural matters. Further, McNamara’s competitive, assertive demeanor and his weak “people skills” were far better suited to the internecine managerial conflicts at Ford than to the far more politicized environments of government departments and military service branches. The common measurement of success in business — profit — had no clear equivalent in public life, and most public projects could not be gradually tested or easily retracted as was the common practice when exploring new possibilities in automobile manufacture. McNamara’s management of people and of time were deeply flawed and a clearer understanding of the comparative demands of the private institutions in which he trained and the public institutions he eventually managed help to explain the trajectory of his choices and mistakes.
CHAPTER 1
THE MAKING OF A BUSINESS MANAGER

Most executives, many scientists, and almost all business school graduates believe that if you analyze data, this will give you new ideas. Unfortunately, this belief is totally wrong. The mind can only see what it is prepared to see. ~ Edward de Bono

An education isn't how much you have committed to memory, or even how much you know. It's being able to differentiate between what you know and what you don't. ~ Anatole France

Throughout his life, McNamara attempted to rebut the generally-held belief that he found truth almost exclusively in numbers, but the case was and still is hard to make.29 Perhaps the most characteristic account of how McNamara’s mind worked occurred when he was general manager of the Ford Division. He came to work one morning and gave one of his top managers, Donald Frey, a church pamphlet on which he had been writing down his thoughts on a new car during service the day before. What the pamphlet contained was a series of numbers representing weight, dimensions, and cost.

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29 Evan Thomas, the co-author, inter alia, of The Wise Men (NY: Simon and Schuster, 1986) tells the anecdote that when he was interviewing McNamara about the possibility of writing his authorized biography, McNamara protested that he was falsely accused of being type cast as only being interested in numbers. He then proceeded to tell Thomas that he was the individual most responsible for promoting seat belts in cars and cited the number of persons whose lives had been saved. He went on to describe his stint at the World Bank, and the number of persons he had helped in that position. Thomas noted that McNamara would inevitably turn to numbers. Conversation with Evan Thomas, Chevy Chase, MD, May 14, 2010.
‘Bob’, Frey finally said, ‘You’ve got everything
down except what kind of car you want.’
‘What do you mean?’ McNamara asked.
‘Well, do you want a soft car, a hot sexy car, a
comfortable car…Whose car is it, what does it feel like?’
‘That’s very interesting’, McNamara said, ‘Write down what you
think is right’.

It is perfectly understandable why McNamara was so insistent on
numbers. They played to his strengths. He was very good at analyzing
figures. Byrne reports that “one wag joked that Bob’s brain cells had to be
lined up in his head like the buttons on a calculator because he was so quick
to access information from memory.” It was not only the ability to access,
but the ability to analyze and manipulate those numbers that made him such
a powerful interlocutor, for this was the period before hand calculators or
computers were available, tools which have enabled individuals with lesser
computation skills to hold their own in such discussions.

Norman Augustine, who worked in the Secretary of Defense’s office
during the McNamara years and would later become the Deputy Secretary of
the Army, also noted another less favorable characteristic. Augustine, an
ingineer by training, liked to use graphs to illustrate points; McNamara did

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not; he insisted that figures be presented in tables. The danger, Augustine noted, “is that it’s like looking at the world through a straw.”\textsuperscript{32} McNamara’s education, personality, and business experiences taught him how to see — and how to overlook — different aspects of managerial problems. Evaluating the strengths and limits of his perception provides the foundation necessary to understand his later career.

\textit{McNamara’s Early Years}

McNamara was born on June 19, 1916 in San Francisco to Robert James McNamara and Claranell Strange. His father was an executive in a wholesale shoe company where he remained his entire working life, rising to the position of regional sales manager. McNamara’s leading biographer leaves the distinct impression that he was never close to his father. Such was not the case with his mother, who subjected McNamara and his sister, Peg, to “intensive training” in their pre-school years. She impressed upon them the importance of rising “higher on the social and economic ladder” than their parents.\textsuperscript{33}

\textsuperscript{32} Interview, Norman Augustine, Lanham, MD, August 27, 2010.
\textsuperscript{33} Deborah Shapley, op. cit., p. 9.
McNamara was a good, if not spectacular, student through his high school years. Right from the beginning of his schooling, however, one trait stood out—he was exceptionally competitive. In his memoir, he writes that, in the first grade, the teacher would give a test each month and reseat the class on the basis of the test results with pride of place to the first seat on the left-hand row. McNamara was determined to be in that seat and was there more often than not. McNamara achieved honors in high school and had the choice of Stanford or the University of California at Berkeley, opting for the latter because it was substantially less expensive. It was at Berkeley that McNamara’s superior intellectual abilities became manifest. First, he discovered his ability to analyze quantitatively at a very fast pace. Throughout his business and public careers, he would amaze colleagues with the rapidity with which he could detect an arithmetic mistake or a faulty mathematical conclusion. It was during college, he told his biographer, Shapley, that he began “to talk and think in numbers;” it was, she wrote, “a consciously adopted style.” It was also in college that he became fascinated with certain branches of philosophy — especially logic. Given

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35 Shapley, op. cit., p.13; see also Robert S. McNamara, op. cit., p.6 “And my mathematics professors taught me to see math as a process of thought — a language in which to express much, but certainly not all, of human activity.”
McNamara’s life-long interest in quantitative techniques, one can easily imagine the thrill he felt when confronted by the intriguing questions that set theory and other mathematically-related inquiries raised. His interest in quantifying human behavior convinced McNamara to major in economics, and he blossomed academically.

Extra-curricular activities also left their mark. He was elected to a number of university leadership positions, including the most prestigious secret society, the Order of the Golden Bear. He was also one of the three University nominees for a Rhodes scholarship. He failed to win the competition, but never lost his enthusiasm for that symbol of academic excellence. According to his biographer, McNamara’s “missing the Rhodes was obviously a deep blow — all his professional life he would pride himself on hiring Rhodes scholars, and he would mention that friends or protégés had been Rhodes scholars….”

But, as is so often the case, what seemed at the moment as a setback turned out to be a career defining event. Given his academic interests and the circumstances of the period, it is difficult to imagine a professional trajectory that could have led him to high public office if he had won a Rhodes. Instead of traveling to Oxford, England in the fall of 1937, he

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36 Shapley, op. cit., pp. 17, 196.
crossed the country to Cambridge, Massachusetts, to enter the Harvard Business School. It was there that he found his intellectual calling and his true métier. Each of McNamara’s subsequent career moves can be traced directly from his years at the “B-school”.

Business School

When McNamara began business school, Harvard had become the most prestigious graduate business school in the country under the leadership of its long-term dean, Wallace Donham. Its defining methodology was the “case method,” an approach to problem solving that was highly compatible with McNamara’s strengths. The method put a premium on the ability to analyze an issue with speed and clarity, and rewarded a competitive spirit. Unlike most other graduate schools, the B-school graded class participation heavily. Those who were able to advance the discussion — as opposed to making merely an observation (what became known in a metaphor borrowed from golf as a “chip shot”) — were not only noticed by the faculty but rewarded with high grades. McNamara was noticed, and at the end of his first year was among the top students in the class.
In addition to classroom performance, the course of study included cooperative exercises in which a small group of students would analyze a business problem. McNamara excelled so conspicuously at these sessions that his Berkeley friend and Harvard classmate, Walter Haas (a future president of Levi Strauss), recalled that “it was terribly tempting to the rest of us to let Bob do all the work.”37 It was from these sessions that McNamara developed his skill at “summing up” — the ability to recapitulate the arguments on either side of an issue, prioritize them and suggest a consensus that initially appeared nonexistent or elusive. In recent years, Henry Kissinger reputedly has been the most skillful practitioner of the art in the halls of government, but McNamara would have been a fearsome competitor had the two been in the same administration. 38

At Harvard, McNamara came into contact with two men who were to have an important influence on his life. The first was Ross G. Walker, a tall, impeccably-dressed pedagogue of athletic-bearing who was professor of accounting. His scholarly output was modest and his principal outside activity, aside from the occasional consulting engagement, was addressing

38 In a telephone interview with Tom Morris, Tex Thornton credited McNamara with “…a great capacity for organizing the thoughts of others.” Papers of Robert S. McNamara, Library of Congress, Part II, Book 78, Thomas Morris Folder, Interview June 6, 1978, p.1
professional societies about arcana such as “flexible budgets” and inventory
costing. He was a popular professor, despite the dryness of the subject,
because of his friendly manner, gentle humor, and obvious concern that his
students not only understand the technical aspects of his subject but how it
could help them in their future careers.

Walker’s classes on accounting went well beyond a focus on financial
reporting. His signature course “Aspects of Budgetary Control” mixed
accounting issues with business statistics. The Introduction to the course
stated: “Business statistics consist essentially of the application of various
technical methods to certain types of data with the object of disclosing
truths.” As they discussed budgetary issues, students were exposed to
statistical techniques like frequency distribution, index numbers, correlation
and time series. The course emphasized how to use data, especially financial
data, to direct management policy. As Walker put it, “Accounting is looking
through the rearview mirror; budgeting is looking through the windshield.”

McNamara took Walker’s course, and it made a memorable
impression. Walker would subsequently tell the *Boston Globe*, when asked
to comment on McNamara’s appointment as secretary of defense, “I’ve
never seen anything like his [McNamara’s] phenomenal coordination

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between ideas and the rate of flow as he expresses them. He is a master at handling complicated subjects under pressure . . . .

McNamara would also keep up with his old teacher. When he was about to leave the Air Force in 1946 to join Ford, he wrote Walker and asked him for copies of some of the cases they had studied; later at Ford, he asked him to send qualified graduates who were interested in financial management.

It was in Walker’s class that McNamara was introduced to General Motors’ (GM) system of financial management. In his seminal book, Concept of the Corporation, Peter Drucker defined “the central questions of corporate organization” as “the distribution of power and responsibility, the formulation of general and objective criteria of policy and action, [and] the selection and training of leaders . . . .” GM approached these issues by means of a system of financially-controlled decentralization that “attempted to combine the greatest corporate unity with the greatest divisional autonomy and responsibility.”

The lynchpin of the system was a financial accounting regime that GM’s president and later chairman, Alfred P. Sloan, and his chief financial officer, F. Donaldson Brown, had worked on for

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40 Boston Globe, December 14, 1960, p. 16.
41 E.g. a letter from McNamara to Walker, April 4, 1946, Harvard Business School, Ross G. Walker papers, Box 3, folder, McNamara correspondence.
43 Ibid., p. 50.
years. The goal of the system was to allow top management to set overall corporate strategy and assign responsibility to the managers of subordinate divisions for implementation. Division managers were responsible for and had the authority to control day-to-day operations while top corporate staff could focus on long-range corporate goals, coordination between divisions and overall efficiency.

Consider some of the issues germane to managing a business with hundreds of products, tens of thousands of employees, and revenue in the hundreds of millions. How was one to determine whether a division was contributing its appropriate share to the corporation’s overall performance? How could one assure that one division’s success was not at the expense of another division? How did one judge whether a division’s performance was the result of operating efficiency or extraneous and fortuitous economic circumstances? For GM, at least, the answer was in an elaborate financial reporting system that attempted, and in large measure succeeded, in providing objective and uniform performance yardsticks. Since all divisions were operating on the same basis, top managers and division leaders could determine and compare how each part of the organization was performing.

GM measured each division’s return on investment by calculating two basic ratios: sales divided by investment (sales turnover ratio) and net
earnings divided by sales (operating ratio). These yardsticks were supplemented by an annual “Price Study” that enabled GM’s top management to coordinate each division’s operating plan and a so-called “flexible budget” that compared actual operating results to the approved budget so that adjustments could be made to the operating plan.\footnote{See generally H. Thomas Johnson and Robert S. Kaplan, \textit{Relevance Lost: The Rise and Fall of Management Accounting} (Boston: Harvard Business School Press, 1987), esp. pp. 84-118.}

As a young business graduate student, McNamara could hardly imagine that he would become a leader in the automotive industry and become intimately familiar with the multi-divisional system that he would help install at Ford. What he could appreciate at this stage of his career was the potential quantitative analysis held to influence business behavior and how congenial the modes of statistical analysis discussed in Walker’s class were to his own analytical predispositions.

The other, and even greater, influence on McNamara was Edmund Learned. In contrast to the gentler Walker, Learned was direct, decisive and forceful. Widely respected within the business school, he was the “go to guy” on the faculty. Initially hired as an instructor in marketing, his interests gradually turned to business administration and management. In the period 1939-1942, he was charged by the Dean to recast the course in business...
statistics “into a course in the use of figures for management control.”\textsuperscript{45} The course would first be offered in 1946 under the simple but revealing title “Control.” Significantly, the emphasis had changed from the revelation of “truth” to “the wise use of figures and accounts towards some governing purpose.”

Learned had followed McNamara’s career at the B-school closely and saw him as a potential colleague. He was one of the three faculty examiners on McNamara’s orals committee and, in light of McNamara’s superior academic record, thought he would graduate “with high distinction.” This would have given him a strong boost towards the goal that Learned had in mind. But for a second time, McNamara was to be frustrated. His father’s death in the fall of 1938 and his trip to California to console his mother evidently disrupted his hitherto laser-like concentration. He graduated with a “high pass” rather than “high distinction.”

No faculty appointment was forthcoming so he returned to San Francisco to begin work with the accounting firm Price Waterhouse. Predictably, he hated the work and was looking for another position when

Dean Donham called to offer him a position as a junior instructor of accounting.

In the meantime, McNamara had resumed his acquaintance with Margy Craig, a former girlfriend of his long-time friend, Vernon Goodin. The relationship matured and, just as he accepted the job, he asked her to marry him. Margy McNamara was a tiny, ebullient, outgoing woman who had graduated from Berkeley and taken a job as a physical education instructor. Teaching would be a passion throughout her life. Shortly after her arrival in Washington, it would lead her to found Reading is Fundamental which has become one of the nation’s largest literacy educational organizations. Margy would provide McNamara with the firm emotional foundation he would need throughout his life. He did not have easy relations with his three children and although he had friends, he was such a private man that it was difficult for them to give him the emotional support he needed — especially during the turbulent Vietnam period. But Margy was a constant source of strength and her empathy must have been considerable for it was she, not he, who developed an ulcer in July, 1967 as the Vietnam policy unraveled.\(^46\)

\(^{46}\) Shapley, op. cit., p. 426.
Army Air Force

McNamara did well as a junior instructor, but it was a short career since the United States entered WWII just over one year after he started. He would be swept up in the war as were so many of his generation, but unlike most, for whom the war bore little relationship to their future careers, McNamara’s military experience would directly advance his career and would reinforce his commitment to quantitative analysis as an essential management tool.

Since 1924, officers from the U.S. Army and the Navy regularly enrolled at the Harvard Business School. As it became increasingly evident that the country would become involved in the war, the Army began to reinforce its ties with faculty members. The Quartermaster General of the Army, who, like McNamara studied under Learned, invited his former teacher to attend the first civilian orientation course at the Command and General Staff School at Ft. Leavenworth.47

47 “Graduation” day for the course was on December, 6, 1941 and the speaker was General H. (Hap) Arnold, on his way to San Francisco to supervise the flight of 13 B-17s to the Philippines, via Hawaii, a flight which caused much confusion on Pearl Harbor Day.
At the outset of the war, the Air Corps\textsuperscript{48} faced a daunting organizational agenda. One issue was the tremendous growth of aircraft and personnel. In November, 1941 just before Pearl Harbor, the Air Corps had only 1100 planes in the United States “fit for war service” and of these, only 159 were four-engine aircraft. That force grew to 72,000 combat aircraft by the end of the war, and Air Force personnel grew from 292,000 officers and enlisted men to about 2.3 million during the same period.\textsuperscript{49} Another major issue was the complexity of its equipment. Aircraft were far more complex machines than the armaments traditionally used by the Army. The B-25 bomber, for example, contained 165,000 separate parts.\textsuperscript{50} Administering the Air Corps required far more sophisticated management techniques than had hitherto been used by the United States military.

The first task was to establish an accurate, uniform data collection system. At the beginning of the war the Army had only an elementary system in place. For example, personnel were accounted for by a daily morning report that had been in use for generations. It listed total troop strength on hand exclusively by rank. In an infantry company this may have been sufficient (although barely), but hardly for an air force squadron,

\textsuperscript{48} Renamed Army Air Forces in 1942.
especially a bomber squadron where commanders needed personnel data broken down by military occupational specialty, viz. the number of pilots, navigators, bombardiers, armorers, and mechanics. Similarly, to operate even at minimum efficiency, a commander needed to know the number of aircraft in ready combat status, the number grounded, the reasons they were out of service, and when they might be expected to return. At higher levels of command, leaders needed to know the status of aircraft in production and anticipated delivery times and — just as significant — the status of personnel in training.

Yet, as late as the middle of 1942, the Air Corps chief, H. H. (“Hap”) Arnold, did not even know the number of aircraft he had in his inventory. Air Corps production was the responsibility of Air Material Command. To make sure that it fulfilled its monthly quotas, it would report to the Air Staff the number of aircraft it had “accepted” (i.e., paid for) even if the planes were still in production and not yet delivered. It took a meeting at the highest level to force Material Command to report only aircraft actually delivered before they could be brought into inventory.\(^51\)

\(^{51}\) Although the Air Staff lacked accurate information, it was not for lack of reports. Air Corps headquarters received an estimated 2500 reports from field organizations on a recurring basis. Frances Acomb, *Statistical Control in the Army Air Forces* (Historical Studies No. 57, USAF Historical Division, Air University, 1952), p. 8.
What was needed at the outset was a set of uniform reporting standards that would be observed throughout the Air Corps. To accomplish that task, Robert Lovett, Assistant Secretary of War for the Air Corps and a former investment banker at Brown Brothers Harriman, encouraged the establishment of a Directorate of Statistical Control under the leadership of C.B. (“Tex”) Thornton, as part of the Air Staff. Lovett and Thornton were to become two of the most important influences on McNamara’s career.

Thornton was one of those remarkable individuals who pop up in chaotic times. A college drop-out, he had moved from Texas to Washington, D. C. in the early thirties and found a job as Under Clerk (CAF-1) in the Agricultural Adjustment Administration. After a series of moves within New Deal agencies he was promoted to Assistant Statistician at the U. S. Housing Authority. On the strength of a report on low-cost housing that had come to the attention of Lovett, Thornton was hired as civilian head of a “small group of statisticians” that provided support for the Air Staff.

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52 This is a somewhat foreshortened and simplified description. Actually, there were two statistical units in Air Corps headquarters in 1941 when Thornton arrived. One, headed by Col Burwell, was assigned to the office of the Chief of the Air Corps; the other headed by Thornton was assigned to the Air Staff of the General Staff. After various reorganizations the two were combined in March, 1942 to be called initially, Directorate of Statistical Control and later Statistical Control Division. Ibid, p. 8.

53 It is notable that someone at Thornton’s level in government and in an unrelated field would have come to the attention of such a highly placed individual as Lovett. It probably did not hurt that Thornton’s boss was Henry Ickes, the cousin of Secretary of Interior, (Continued…)}
One of Thornton’s early priorities was to establish a school that would develop a cadre of statistical control officers who would provide the data higher commands needed. Thornton turned to the Harvard Business School, and specifically Learned, to establish the curriculum for a five- (subsequently eight) week course. Learned chose twelve members of the faculty, including McNamara, to assist. They had only three weeks to prepare the curriculum and assemble the necessary material. McNamara was responsible for engineering, supply, and operations. Like the rest of the faculty, he also contributed to the development of standardized reports that would be used throughout the war and was part of the group that prepared “the directive for the famous 110 report on aircraft status,” one of the key reports used by commanders to determine combat strength.

Harold Ickes. Thornton began his War Department service in March, 1941 as a civilian; was commissioned shortly after the war began as a 2nd Lt. and rose within a year to the rank of Colonel at the age of 28. For Thornton’s career, including his military service, see Beirne Lay Jr., Someone Has To Make It Happen: The Man Who Built Litton Industries (Englewood, NJ: Prentice Hall, 1968), p. xl.

The training and indoctrination of statistical control officers was especially important because the assignment of statistical control units (“SCUs”) was at the discretion of the theater commander. In the Zone of Interior (essentially the continental United States) statistical control units were “voluntary” until 1944 when “newly activated commands” were required to include a statistical control officer in headquarters. Overseas, theater commanders were not required to have statistical control units; nor were they required to submit standardized reports as was the case in the Zone of the Interior. Overseas commands were required to submit certain information, but had considerable leeway in how they chose to report. Thus, the availability of a cadre of uniformly-trained statistical control officers helped maintain consistency in an essentially voluntary reporting system. Acomb, op. cit., pp. 12, 44.
Statistical Control School for the balance of 1942, but the work became routine, and he realized that he was in jeopardy of being drafted.

He faced three choices: wait to be drafted as an enlisted man; apply for Officers Candidate School or seek assignment in an overseas theater where he could receive a direct commission not available in the Zone of the Interior. He chose the last of these three options and along with fellow faculty member, Miles Mace, was assigned to the 8th Air Force in the United Kingdom, initially as a civilian and later as a captain. He would subsequently serve in Salina, Kansas — headquarters of the B-29 superfortress program — as well as XX Bomber Command in Kharagpur, India, XXI Bomber Command in Guam, and lastly the Pentagon and Wright Field.

Data collection and presentation were the first priorities of statistical officers like McNamara, but data analysis and operational suggestions were also a high priority. Some of the best known studies of the Statistical Control Division included a comparison of the effectiveness of the B-24 bomber as against the B-17, and the advisability of deploying B-17s in the Pacific
Theater after Germany surrendered.\textsuperscript{55} Statistical Control also weighed in on one of President Franklin Delano Roosevelt’s constant complaints against the Air Force — not enough planes were reaching the front. The temptation in such circumstances would be to accede to the commander-in-chief’s wishes and send more planes. The Air Force resisted, however, and Statistical Control was able to demonstrate to the satisfaction of the president that if the allocation of aircraft to the 8\textsuperscript{th} Air Force in the UK did not match personnel availability, it would end up with one thousand bombers but only 500 crews to fly them.

The studies directly attributable to McNamara were for the 20\textsuperscript{th} Air Force under General Lauris Norstad. They dealt with issues like bombing accuracy, mechanical malfunctions, and the number of sorties B-29 crews should be required to fly. He reported, for example, that accuracy could be substantially improved if bombing altitude were reduced by 5,000 feet to 25,000 feet, a suggestion that Curtis LeMay (eventual Air Force Chief of Staff) apparently accepted.\textsuperscript{56} Another report wrestled with the constant problem of putting more B-29s over Japan. One of the major criticisms of

\textsuperscript{55} Air Staff concluded that using the B-29 instead of the B-17 would result in a “70% saving in lives, planes, fuel and ground personnel for an equivalent tonnage in bombs.” Lay, op. cit., p.70.

the performance of XXI Bomber Command in the Pacific was that too few aircraft were reaching their targets, usually because of mechanical problems. One potential remedy was to increase the number of sorties that a crew was required to fly. McNamara pointed out, however, that under existing casualty and replacement rates, increasing the per crew sortie rate to six per month would result in significant crew deficiencies in four months. Under such a scenario, a Bomber Command would not be able to operate at “planned levels” unless there was a significant increase in the number of replacement crews.  

It was in the CBI (China, Burma, India) Theater that McNamara made his greatest contribution to the war effort. Allied air strategy in the Pacific was to create two commands to bomb industrial targets in Japan, one located in Chentgu, China (XX Bomber Command), the other in the Mariana Islands (XXI Bomber Command). The difficulty was how to establish a credible base of operations in Chentgu. It was a logistical nightmare as there was no surface supply route. Everything had to be flown in “over the Hump,” an air route of approximately 700 miles from Assam Province in India to Chentgu that was generally considered one of the most dangerous in the world. As

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57 James G. Blight and Janet M. Lang, *The Fog of War* (Lanham, MD: Rowan & Littlefield, 2005), p. 120.
one combat pilot described the operation, “Flying a P-47 in combat was not as dangerous as flying a C-47 across the Hump.” Most of the aircraft used to fly supplies had not been designed to operate at altitudes and under the conditions the route demanded. The workhorse was the C-47, and it could not operate at the extreme altitudes required to clear the Himalayas. Accordingly, it had to fly in the saddles between the highest of the mountains. Even at these altitudes carburetors would ice, controls could become sluggish, and air currents could tear a plane apart. “Scores [of aircraft] simply vanished as if swallowed by the mountains.” Furthermore, navigational equipment on many of the planes was primitive. When Commanding General Arnold visited the CBI in February 1943 and took the flight over the Hump to inspect the air facilities at Kunming, China, his plane became lost, and he was lucky to land at an airfield virtually out of gas, 100 miles from his intended destination.

As statistical officer of the XX Bomber Command, McNamara focused on increasing supplies delivered to Chengtu — his most impressive accomplishment during the war. The obstacles were formidable because of

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58 Perret, op. cit., p 401.
the variety of aircraft used and the “cost” of delivery.\textsuperscript{60} For example, it took 6,000 gallons of fuel for one tactical B-29 to deliver 2,000 gallons of fuel to Chengtu, and that same plane had to make seven round trips in order to deliver enough fuel for a single B-29 to fly one bombing mission over Japan.\textsuperscript{61} To compound the supply difficulties there was constant friction between XX Bomber Command and Chennault’s 14\textsuperscript{th} Air Force (the successor to the “Flying Tigers”) over fuel allocation. The net result was that when XX Bomber Command was ordered to conduct its first raid over Japan on June 15, 1944, it could put only 50 B-29s over the target.\textsuperscript{62}

Beginning in July, 1944, however, the supply situation began to improve. According to the Command’s history:

\begin{quote}
...Without any great increase in the number of planes under its jurisdiction over what it had in June, the three months following saw increases of two and three times what had been carried in June—despite a gradual stepping up of the tempo of operations…
\end{quote}

The history attributes the improvement to McNamara and his successor because of their ability to increase the efficiency of the transport

\textsuperscript{60} There were several aircraft used to ferry supplies: the C-87, C-47, C-46, B-29 tactical, and B-29 tanker—a stripped down B-29 divested of most of its armament and radar.


\textsuperscript{62} Ibid., p. 38.
operation. The improvement did not come without resistance, however, as demonstrated by the reaction of a forward area commander to an McNamara directive about stockpiling. “Who the hell,” the colonel wanted to know, “was running his command, he or the Statistical Section?” Chengtu gave McNamara his first practical experience in the potential power of statistical analysis and of the problems in implementing the new techniques.63

McNamara’s work in the CBI earned him a Legion of Merit, a promotion to lieutenant colonel after only six months as a major and, above all, the recognition of his superiors both in the Statistical Division and Air Forces Headquarters. Learned, characterized his work in the CBI as “the best logistical data of the war for the Air Service Command ….”64

It was all in vain, however. McNamara’s brilliance, and the new energy brought to the Command by Curtis LeMay could do little to improve the performance of XX Bomber Command. LeMay recommended that no more bombers be sent after November, 1944 and the Command ended its missions over Japan in January, 1945. It had flown only 49 missions of which just 15 were “against Japanese industries in the home islands….”65

63 Ibid., p. 28.
64 Learned, “Notes on the Army Air Forces Statistical School”, Edmund Learned Papers Box 5, Folder 7, p. 98.
The logistical problems were just too great. McNamara along with LeMay was reassigned to XXI Bomber Command in the Marianas. He would complete his military service at the Pentagon and at Wright Field where he assisted in the phasedown of aircraft production.

What had McNamara gained from his wartime experiences? It was not the sort of question McNamara liked to answer, and he declined to respond when his biographer, Shapley, posed it during one of their interviews. Apparently, its generality made him uncomfortable. Nevertheless, we can draw some conclusions. First, he had learned how to prosper in a large organization. Time and again he would return to the theme that there was no reason to fear large organizations; with appropriate management and leadership, individuals could reach their personal potential within large institutions. Second, as seen from the remarks of the anonymous colonel, he had learned that statistical data, appropriately analyzed and persuasively presented, could be a source of authority. He also came to appreciate that the lessons that Walker and Learned had taught at the Harvard Business School could have life and death consequences for individuals and institutions. Finally, McNamara had begun to build a reputation beyond the confines of the B-school. Men such as Lovett and

66 Shapley, op. cit., p. xiv.
Thornton had recognized his ability. He had demonstrated the capacity to perform at the highest level and had developed confidence that he could hold his own even in the most competitive circumstances.

_Ford Motor Company_

At the end of the war, McNamara intended to return to the HBS as an academic, but illness intervened. When he was at Wright Air Force Base he developed a mild case of polio from which he quickly recovered. Margy was not so fortunate. She contracted a severe case that paralyzed her lower body and most of her right side. McNamara recognized that whatever the prognosis, Margy’s recovery would involve thousands of dollars annually and that an academic salary, even at Harvard, would scarcely be sufficient.67

As McNamara was coping with what to do after his discharge, Thornton and three of his fellow statistical control officers (Francis C. Reith, George Moore, and Ben D. Mills), considered assembling the best statistical control officers and offering them as a team to a business that needed “advanced management techniques.” Thornton and his original collaborators

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67 Ibid, p. 37; Shapley goes on to make an interesting observation. Although she always walked with a slight limp, through vigorous therapy and tremendous will power, Margy made a full recovery and was able to join McNamara in virtually all of his strenuous recreational activities. Her experience, Shapley suggests, “deepened their optimism, their shared faith that applied human effort could achieve almost anything.” Ibid., p. 42.
reasoned that an individual, no matter how brilliant, could be swallowed up by the bureaucracy of any large organization, but “a group working as a team … [could] control the destiny of a great institution.”\textsuperscript{68} The group made up a list of the best 25 officers with Air Force Statistical Control Division experience and then winnowed the group down to ten.\textsuperscript{69}

Thornton received a positive response to his idea from Robert R. Young of the Alleghany Corporation. In the meantime, Moore had learned from his father, an insurance broker in Detroit who counted Ford as a major client, that Henry Ford II, who had taken over the company, might be receptive to the idea.\textsuperscript{70} Accordingly, Thornton wired Ford directly asking for a personal meeting to “discuss a matter of management importance.” Presumptuous as this might have been, young Ford (he was only 28) was taken by the idea. After one meeting, he checked the group out with Robert

\textsuperscript{69} Not all who were asked accepted. Miles Mace, for example, returned to HBS; John F. Symms returned to Albuquerque to practice law and eventually became governor of the state. Ibid, p. 78.
\textsuperscript{70} Ibid, pp. 68, 78-81. There is an alternative narrative for how the group came to approach Ford. As Arjay Miller, one of the group of ten and a future president of Ford, remembers it, he had read a sympathetic article about young Henry Ford in the October 5, 1945 edition of Life magazine written by Gilbert Burck. Miller called Thornton’s attention to the article, and Thornton then sent his telegram to Ford. Booton Herndon, \textit{Ford: An Unconventional Biography of the Men and Their Times} (NY: Weybright and Talley, 1969) p. 214.
Lovett, who gave them high marks, and hired the group to begin work February 1, 1946.\textsuperscript{71}

The Ford Motor Company was one of America’s major industrial institutions. It had accounted for almost two-thirds of the automobile market in 1923-24 and over one-third in 1929.\textsuperscript{72} It was “managed,” to use the term loosely, by its founder Henry Ford, whose views on subjects ranging from vegetarianism to pacifism to Judaism were widely known. It was also widely recognized that the company had fallen on hard times due largely to the senior Ford’s intransigence. He did not believe in budgets or financial reports, and eschewed any form of organizational chart.\textsuperscript{73} The company’s financial position reflected this chaotic personalized management style. Ford was consistently losing market share not only to GM which, in 1936, outsold it almost 2:1, but to Chrysler which replaced it as the number two automobile producer that same year. In 1936, GM earned a profit in the


\textsuperscript{73} For example, Laurence Sheldrick, the de facto head of engineering (Ford did not believe in job titles either), was once attempting to explain to a subordinate his reporting responsibilities. Surrupitiously, he pulled from his desk a chart he had constructed himself. “Don’t let anybody see this,” Sheldrick warned, “because we’re not allowed to have an organizational chart.” Allan Nevins and Frank Ernest Hill, \textit{Ford: Decline and Rebirth, 1932-1962} (NY: Charles Scribner’s Sons, 1963), pp. 57-58.
quarter ending June 30 of more than $88 million while Ford earned less than $18 million for the entire year. For the previous decade, historian Allan Nevins has estimated that the company had lost “approximately $26 million.”\textsuperscript{74}

World War II and cost-plus contracts had saved the company financially, but it was in precarious shape when Henry Ford II assumed the presidency late in September 1945. Young Ford needed three things above all — new executive talent to straighten out the company, a car that could tap the huge potential market that existed after a four-year drought in automobile sales and a new style of management.\textsuperscript{75}

In the beginning, McNamara was not particularly excited by the prospect of working for an automobile company. Because of Margy’s illness, he recognized the financial imperative of working in industry but was distinctly lukewarm about Ford. After his visit to Dearborn, however, “for once, even Bob McNamara seemed excited … by the prospect of working for Henry Ford,” according to his friend Charles Bosworth.\textsuperscript{76} It is difficult to imagine that McNamara had not been impressed by the Ford

\textsuperscript{74} Ibid., p. 55.
\textsuperscript{75} “Even at full capacity [automotive] operations for three years would not have erased the [post-war] backlog…As late as April 1, 1948, Ford claimed that it had a backlog of 1,575,000 orders.” Lawrence J. White, \textit{The Automotive Industry Since 1945} (Cambridge: Harvard Univ. Press, 1971), pp.10-11.
\textsuperscript{76} Byrne, op. cit., p. 21.
Rouge River plant. Located on more than 1000 acres and employing at its peak more than 100,000 workers, it was the largest integrated production facility in the world and could produce all the basic components of an automobile. There were docks where the huge Ford 600-foot Great Lakes bulk carriers brought iron ore from Northern Minnesota, and coal from Pennsylvania. There were steel furnaces, coke ovens, rolling mills, glass furnaces, and plate glass rollers, a tire manufacturing plant, stamping and engine casting plants, and an electric power plant to service the huge facility. It was a wonder of the industrial age that even today, after it has shrunk considerably, evokes awe.
In addition, McNamara and his fellow whiz kids were joining what was perceived as one of the most glamorous post-World War II industries. “Detroit rivaled Hollywood as the capital of pop culture, with the car as celebrated as any movie star or film of the time.”

Although McNamara was never a true “car man” — viewing the automobile as a means of transportation rather than a symbol of social standing or prestige — he recognized that he was joining an industry international in scope, whose prospects were auspicious and whose prominence offered him the prospect of a national reputation.

Ford was also a company that needed the skills Thornton and his group could provide. If the Rouge complex was an industrial marvel, Ford’s management was rudimentary — especially as related to financial reporting. Henry Ford Sr. distrusted banks and bankers and relied on a financial control system that did not differ much from the one advocated by Luca Pacioli, the Renaissance mathematician, who is considered by many to be the father of accounting. The stories of Ford’s system are legion. One has it that Ford figured that it would take too many clerks to log in each invoice the company received. Accordingly, the accounting department piled up the bills, measured them and then applied a formula to determine accounts

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77 Bryne, op. cit., p. 112.
payable. Just as revealing, is a story told by a future Ford president, Arjay Miller, who was given an assignment shortly after he joined the company to produce some kind of monthly profit figure. He approached one of the controllers and asked,

    What do you think the profit will be this month?
    What do you want it to be? was the reply.
    Well, what do you mean? Arjay asked…
    I can make profit anything you want it to be.

The man went on to explain how he would shift funds around to get whatever results were needed at the time.

The chaos endemic in the financial departments was duplicated in many of the assembly areas as well. In production, for example, there were no property records or uniform system for labeling parts or an accurate count of parts on hand. Parts were merely stored in boxes beside the assembly line and retrieved on an “as needed” basis. In the Rouge complex the Whiz Kids found thousands of mislabeled parts on stopped overhead conveyor belts and no production schedule.

The main problem, however, was the hemorrhaging of cash. Because of lucrative defense contracts, Ford finished the war with a substantial cash

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78 Douglas Brinkley, op. cit., p. 524. Actually, for invoices under a certain amount, say $10, it is not as ludicrous a practice as it first appears.
79 Byrne, op. cit., p. 105. The incident is repeated in virtually every description of how Ford operated in 1946. While the quotations may not be verbatim, there is little doubt about the substance of the colloquy.
cushion (estimated at $685 million). But by the beginning of 1946, it was losing an estimated $10 million a month (perhaps more).\textsuperscript{80}

The situation at Ford was in many respects similar to the one McNamara had faced when he had become a statistical control officer and had begun installing some order in the Air Force’s material inventory. After a three-month period during which they investigated virtually every part of the organization, (and acquired the group nickname, “Whiz Kids” — a derivative of “Quiz Kids”), the Thornton Group went to work as a group to develop an organizational plan for the company and to set up a proper financial system.\textsuperscript{81}

The Group could do much to help straighten out the company’s organizational and financial chaos, but it could not accomplish what the company needed most — that is, to produce new, competitive automobiles. Henry Ford II knew that the revival of the company depended on the development of an automobile that could compete with GM’s Chevrolet. No matter how brilliant, Thornton and his group had never produced an automobile — indeed, never had produced anything but reports. The

\textsuperscript{80} Nevins, op. cit., p. 295, 327; Trewitt, op. cit., pp. 42-43.
\textsuperscript{81} Parts of the new plan were announced publicly with considerable fanfare and reported in the \textit{New York Times}. “New Ford System Ends One-man Rule,” Nov. 25, 1947, p. 41.
company needed experienced automobile men, preferably from its principal competitor, GM.\(^\text{82}\)

The younger Ford’s first success was to persuade Ernest Breech, a 21-year employee of GM, who at the time was serving as president of Bendix Aviation Corporation, to join Ford. Short and muscular with a pencil mustache, Breech was a self-made man who had been befriended by John Hertz, a Chicago entrepreneur who was diversifying his taxi business into car rental. General Motors acquired his company and with it Breech. Breech was known for his skill as a turn-around specialist who had helped straighten out North American Aviation and Frigidaire as well as Bendix. His strength was figures, especially cost analysis.\(^\text{83}\) Breech, in turn, was able to convince his colleague, Lewis Crusoe, who, after a twenty-year career at GM culminating as controller of the Fisher Body Division, came out of retirement to join him at Ford. Crusoe, a former VP of the National Association of Cost Accountants, was “precision personified… [He] had

\(^{82}\) Alfred P. Sloan of GM was surprisingly tolerant of employees who left his company to join Ford. The general supposition is that he recognized a strong competitor would help keep the Justice Department’s Anti-Trust Division at bay.

\(^{83}\) Breech joined Ford on July 1, 1946. See Lacey, op. cit., p. 425; Byrne, op. cit., p. 123; Nevins, op. cit., p. 313.
gained immense knowledge of labor, overhead, cost accounting, tooling, sales and management…” during his time at GM.84

The team that Ford had assembled had two marked characteristics. The top level executives were all familiar with the GM structure and its operating procedures and were well versed in management through financial control. McNamara, Miller, and Lundy were up-to-date with the current theories of financial control and Breech and Crusoe had decades of practical experience.

Crusoe was put in charge of the Thornton group, which had divided itself into a number of subgroups: planning, classification of automotive and business terms (viz. a new vocabulary), financial reporting, and planning. McNamara, along with Miller and Lundy, worked directly with Crusoe on financial reporting. The product of these labors was a series of reports to the Policy Committee (the highest decision-making body of the company at that time) presented in August and September of 1946. Unsurprisingly, the

84 Nevins, op. cit., pp. 317-318, 338, 351. Other members of the “Breech team” were: Harold T. Youngren, former chief engineer at Borg-Warner; Delman S. Harder, production supervisor at GM; Albert T. Browning, former director of the War Department’s purchasing activities and previously a Montgomery Ward executive. John Dykstra, another GM executive and future Ford president would join the group in 1947. One by-product of hiring Breech was the departure in 1948 of Tex Thornton who resented both Breech and Crusoe. In addition to these senior executives, Ford hired over 150 executives off the “bonus list” from GM.” Peter Collier & David Horowitz, The Fords: An American Epic (NY: Summit Books, 1987), p. 222.
organizational plan looked very much like a GM model. Initially, there were to be five divisions: Light Car (soon abandoned), Ford, Lincoln-Mercury, Rouge, and Export. Each division was, in theory, to be managed independently as a profit center, subject to appropriate financial reporting and budgeting. As one would expect, the financial controls were initially modeled on Donaldson Brown’s GM system. Additionally, in a pale imitation of the GM system, Ford initiated regular “management meetings” that brought together company officials to hear top management discuss current policy issues, answer questions, and receive feedback.

The new system may have looked like GM on paper but there were major differences in practice. Ford’s divisional structure was lopsided. GM had as many as thirty divisions, and while some were very small, others, like Chevrolet and Fisher Body, were very large. All were managed to contribute individually to the company’s overall financial strength. The Ford division, on the other hand, overshadowed all others, selling more than three times the number of cars as Lincoln and Mercury combined; in reality many of the other divisions existed only to service Ford. When J.R. Davis, the head of sales and advertising for the entire company, learned that the Ford division

\[^{85}\text{Later expanded by three: General Products, Parts and Equipment and Ford Assembly. See Nevins, op. cit., p. 332.}\]
was to have its own sales manager, he asked plaintively, “What are you going to leave me?”

Alfred P. Sloan of GM emphasized that the primary responsibility for the operation of each business belonged to the operating divisions and their staffs and that central management would act only as advisors or coordinators. In reality, as Arthur Kuhn has persuasively argued, GM was far more centralized than Sloan would admit, and as the years passed more and more decisions, like product styling, were taken from the divisions and made the responsibility of central management. Nevertheless, Sloan had raised the concept of decentralization to the level of ideology.

While there was real doubt whether Ford was truly diversified, there was no doubt about the Ford division’s autonomy as long as Crusoe and McNamara were in charge. Lewis Crusoe, its first head, told his bosses Ford and Breech that “he would welcome advice … but intended to ‘guard [the] independent thinking of the division as though it was an entirely independent

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86 Ibid., p. 330.
McNamara was no less forceful in maintaining the independence of the division when he became its head. When Ford attempted to increase its share of the mid-priced market by redesigning its Mercury models and introducing the ill-fated Edsel, he resisted any attempts at “putting a lid” on specifications for Ford models that might be viewed as, and indeed were, competitive with the company’s mid-priced range.91

It is difficult to imagine such issues arising at GM because of its committee system. GM had evolved an elaborate committee system so that the divisions and central management could present ideas, discuss mutual problems, and smooth over potential conflicts. The avoidance of destructive conflict was a central tenant of Sloan’s management style for, as Peter Drucker writes, he “…was a master at working with and managing people, [and] was personally exceedingly ‘people focused’….”

This did not mean that Sloan did not appreciate the value of vigorous debate. He believed that the best decisions were the result of proposals brought to one of GM’s committees “…that can be defended against well-informed and sympathetic criticism….The group will not always make a better decision,” he would write, “there is even the possibility of some

90 Collier & Horowitz, op. cit., p. 240.
91 Nevins, op. cit., p.380; Collier & Horowitz, op. cit., p 272. The result was the Ford Fairlane that was fully competitive with the Edsel and the antithesis of what McNamara believed the public should drive. See Lacey, op. cit., p. 492.
averaging down. But in General Motors I think the record shows we have averaged up.”

One such example occurred when the head of GM’s Public Relations staff proposed a major PR campaign. The proposal was so well prepared and presented that it provoked immediate and unanimous approval. The committee was prepared to move on to the next item on the agenda when Sloan intervened. “I take it you gentlemen are in favor?” he asked. ‘Yes, Mr. Sloan’ the chorus came back. ‘Then I move we defer action on this to give ourselves a chance to think,’” he replied, and a month later the proposal was either scuttled or drastically revised.”

The same could not be said of the younger Ford. He appeared to manage by pitting persons against each other. According to many observers

92 Drucker, Concept of the Corporation, (New York: John Day Company, Inc., 1975), p. 249, 287; Alfred P. Sloan, My Years with General Motors (Garden City: Doubleday Company, Inc., 1963), pp. 433, 435. According to Drucker, Sloan practiced the Douglas McGregor style of management long before The Human Side of Enterprise became popular. There is a revealing colloquy in Drucker’s Adventures of a Bystander. Drucker was struck by the amount of time spent on discussing the work assignment of a master mechanic at a small accessory division. He asked Sloan,” Mr. Sloan, how can you afford to spend four hours on a minor job like this?” Sloan replied, “This corporation pays me a pretty good salary…for making important decisions, and for making them right….Some of us up here at the fourteenth floor may be very bright; but if that master mechanic in Dayton is the wrong man, our decisions might as well be written on water. He converts them into performance…. If we didn’t spend four hours on placing a man and placing him right, we’d spend four hundred hours cleaning up after our mistake” Peter F. Drucker, Adventures of a Bystander (New York: Harper & Row, 1978), pp. 280-281. Drucker’s extremely sympathetic description of Sloan should be contrasted with that of David Farber, Sloan Rules: Alfred P. Sloan and the Triumph of General Motors (Chicago: Univ. of Chicago Press, 2002).
Ford who was “anxious to maintain his own primacy in the corporation, unconsciously encouraged the situation which blurred the lines of authority and set his executives in conflict.”\(^93\) Whatever the motivation, one is struck in reading the histories of Ford at the executives’ competitiveness and the meetings contentiousness. McNamara admitted to his biographer that his tenure at Ford was “stressful.”\(^94\) There were serious personal rivalries at the top levels, initially between Breech and Thornton and subsequently between Breech and Crusoe after the latter became head of the Ford division. At least one author has suggested that Breech “adopted” McNamara to restrain Crusoe who was gaining more and more power as head of the Ford division. That was unlikely, but there is no doubt that McNamara’s career developed within a highly politicized atmosphere.

Finally, the relationship between the financial staff and other parts of the company, especially production, was also markedly different from GM. David Halberstam described in detail the deep split between finance and production. “Anytime [McNamara] and his disciples wanted to, they could make a product man feel inadequate, make him feel he had failed.” This was

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\(^93\) Collier & Horowitz, op. cit., p. 238. In this regard the younger Ford’s style was not that far removed from his grandfather’s. As Douglas Brinkley has written, “A certain degree of unrest had always circled through management ranks of the Ford Motor Company. Insecurity fostered achievement in Henry Ford’s view.” Brinkley, op. cit., p. 290.
\(^94\) McNamara required “extensive dental work to relieve [his] head pain from bruxism.” Shapley, op. cit., p. 59.
an attitude widely held by the finance staff. Donald Frey, a Ford engineer who later became chief executive of Bell & Howell, recalled that “with few exceptions, operational types — the people in sales, manufacturing and engineering — were considered dummies, inarticulate and not very bright.”

The Thornton group disbanded shortly after the arrival of Breech and Crusoe; it had never made sense to establish a small cadre, especially one so talented, within a larger executive group. McNamara then began his individual career on the finance staff: first, as senior financial analyst, then Assistant Director of the Planning Office, and ultimately as Director of Financial Analysis from 1946 until 1949. During these three years McNamara, along with Miller and Lundy, worked under the direction of Crusoe to develop a financial reporting system that could answer three basic questions: how much did a Ford car cost? How did these costs compare with Ford’s competitors, especially Chevrolet? And how could production costs be reduced?

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95 David Halberstam, op. cit., p. 213; most of his evidence is anecdotal, but consistent with what we know about McNamara; see also, Byrne, op. cit., p. 367.
96 The policy committee of the company decided to disband the Thornton group in June, 1946 but delayed implementation until the reorganization plan was complete in the fall of that year.
Amazingly, these were new questions for the company. At the “old” Ford, costs were not considered since Henry senior took total responsibility for the financial aspects of any decision. Early in his tenure, Crusoe received a proposal from an executive and asked “How much is that going to cost?” “Mr. Crusoe,” replied the official, “we don’t talk about costs around here.” “I have news for you,” replied Crusoe, “From now on you’ll begin talking about them.” With his knowledge of cost control Crusoe was a first-class mentor for the three whiz kids. He was a bear on costs well known for his description of the automobile business as a “nickel and dime business…a dime on a million units is a $100,000,” he would say. “We’ll practically cut your throat around here for a quarter.” One of Crusoe’s major accomplishments was to introduce the concept of “project control” that required an extended financial analysis of the cost of any initiative that extended beyond a year. McNamara, Miller, and especially Lundy — who remained in Finance during his more than 30 years with the company — continued working on the financial reporting and control system that dealt with issues far more complicated than the basic cost questions they initially

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97 Nevins, op. cit., p. 328.
faced. By 1960, Miller could boast that Ford’s system was better than GM’s.99

When Crusoe moved to head of the Ford Division in 1949, McNamara became the Controller of the company. The position of controller in American industry had gradually changed in the 1930s and 40s acquiring considerable authority. Before World War II, controllers were principally charged with ensuring that the company’s financial records were complete

99 Interview Allan Nevins and Frank Ernest Hill with Arjay Miller, January 11, 1960, Ford Archives Acc 975, Box 1, p. 5.
and accurate for the annual audit. In addition, the controller might help with the preparation of the company’s budget. After the war, however, the financial departments of large corporations were increasingly populated by graduates of business schools who had been exposed to advanced accounting techniques and the value of statistical collection and analysis — as McNamara himself had been by Ross Walker at Harvard. Furthermore, the war itself had demonstrated, not only to professional soldiers but to businessmen, the value of statistical control. Brehan B. Somervell, head of the Army Service Forces, for example, was using statistical control techniques to “manage the enormously complex problem of supplying an army spread around the world.”\textsuperscript{100} As Thornton Bradshaw would write, “Controllership represents one of the most important organizational developments in American business during the past half-century.”\textsuperscript{101}

The importance of the controller was reflected in a noticeable trend beginning in the 1960s to promote individuals from the financial side of companies to the position of chief executive officer. This was especially true in the automobile industry e.g., Ford: McNamara (1960); Arjay Miller


(1963-69); GM: James Roche (1967-71); Richard Gerstenberg (1972-74); Thomas Murphy (1974-80); Roger B. Smith (1981-90); Chrysler: Lynn Townsend (1962-70); John Ricardo (1970-79). Coincidentally, the ascendancy of financial executives as heads of the country’s major automobile companies, coincided with the overall decline of the American automobile industry.

McNamara recognized the potential power of his new position and used the authority he had to its full extent. He locked horns with his old boss, Crusoe, over several issues. For example, the Finance department under McNamara had determined that “for reasons of economy” the company should scrap its long-established V-8 engine and offer only V-6s like GM’s Chevrolet. It would allegedly save an estimated $16 per engine. Crusoe objected strongly, polled many of the Ford dealers, who had not been included in the finance division’s calculations, and found out that if the V-8 cost them no more than an additional $100, it was an important sales tool. McNamara’s recommendation did not pass.\(^\text{102}\)

Crusoe’s struggle with McNamara to modernize more of the company’s plants was of even greater significance. Although the ’49 Ford had sold well and was instrumental in the revitalization of the company, it

\(^{102}\) Collier & Horowitz, op. cit., p. 243.
had significant quality problems. Ernest Breech, whose project it was, had been told by one of his close friends that the car was a “piece of junk.” Allegedly it had close to 8000 defects, the most serious of which was the poor fit of the body shell onto the chassis. This permitted dirt and moisture to enter the passenger compartment.\textsuperscript{103} Crusoe knew that the only way to improve quality was to modernize the plants, but McNamara and his staff kept delaying. Finally, after a three-year struggle, the issue came up for a final decision; Crusoe recommended modernization and McNamara recommended further study. The younger Ford finally decided in favor of modernization. According to Halberstam’s account, Ford stated, “Bob, the problem with you is you always want to study things. You never want to do anything.”\textsuperscript{104} This ploy was clearly tactical, however, because throughout McNamara’s career, first at Ford and then later in government, he was a decisive executive.

Although McNamara became known as “Mr. No” when he was controller, he was not exclusively a negative voice. He developed the

\textsuperscript{103} Nevins, op. cit., pp. 343, 351; According to Lacey, “Ford cars were notorious rust traps and rattlers in the 1950s, and this was reflected in their secondhand value. New Fords might sell around the same price as a new Chevrolet, but on the used-car lot they commanded prices $200 or more below that of their equivalent competitor,” Lacey, op. cit., p. 511.

\textsuperscript{104} Halberstam, op. cit., p. 238. Unfortunately, Halberstam gives no citation for the quote. He did not interview McNamara, Breech, or Crusoe but did interview Ford. The quote has an air of authenticity, however. See also Collier & Horowitz, op. cit., p. 244.
concept of “revenue control.” The financial controls that Donaldson Brown had installed at GM concentrated on the earnings efficiency of fixed and working capital. McNamara’s analytical mind probed the components of working capital more deeply to identify the items that made the greatest contribution to gross profit. What he discovered was that some of the highest grossing items were accessories like heaters and radios (now standard in all vehicles) that were becoming increasingly popular. The goal became how to increase the sales of those items, essentially a promotional issue, while integrating their manufacture and installation in the most efficient manner, essentially a systems analysis issue.

In 1953, McNamara left his staff position and assumed line responsibility as Assistant General Manager of the Ford division under his old boss, Lewis Crusoe. It was a major move and clearly indicated he was a contender for top leadership. When Crusoe was promoted in 1955 to Group Vice-president of the Car and Truck Group, McNamara took his old job as head of the Ford Division, and when Crusoe suffered a serious heart attack in 1956 (aggravated if not caused by the combination of the Edsel debacle and the disappointing performance of the Mercury division), McNamara became Group Vice-president. Thus, McNamara had had both staff and line responsibility when he was named president of the company on
November 9, 1960. However, at heart, he remained a “financial man,” for even as he rose higher in the hierarchy at Ford and his responsibilities increased in scope, he maintained his analytical, numbers-driven approach to problem solving.

As head of the Ford Division and Group Vice-president, McNamara’s most important contribution was finding distinct niches of purchasers within the automobile market. ¹⁰⁵ GM had built its line of automobiles by segmenting the car market on the basis of “price and product.” ¹⁰⁶ Basically, it presupposed that as customers ascended the financial ladder, there would be a GM vehicle appropriate for their new financial status. In other words, “start with a Chevy, end with a Caddy.” Ford could not offer the same range of vehicles, but McNamara reasoned that within the financial boundaries of the Ford division’s models, there were subgroups that valued different qualities in an automobile. If such groups could be identified and were of a sufficient size, it made sense to design a specific model for the group. The younger Ford gave credit to McNamara for Ford’s progress in this area; “the whole growth of the automobile industry over the last [twenty] years is due

¹⁰⁵ Segmentation is the ultimate stage in the three phase model of marketing proposed in Richard S. Tedlow, New and Improved: The Story of Mass Marketing in America (NY: Basic Books, 1990); see also Richard S. Tedlow and Geoffrey Jones eds., The Rise and Fall of Mass Marketing (London: Routledge, 1993), Ch. 2.
to some thinking of McNamara’s with respect to the proliferation of car lines … [that] have given a broader choice in the market place.”

The most conspicuous example of segmentation during McNamara’s time at Ford was the development of the Falcon. Stimulated in large measure by the success of the Volkswagen “Beetle,” McNamara was convinced that there was a market for an inexpensive, reliable, sturdy, economical, no frills automobile that provided basic transportation. After all, he reasoned, market research showed that many Beetle purchasers were lawyers, doctors, and other relatively affluent customers who could afford more expensive cars, but rejected the big, powerful tail-finned gas guzzlers of the 1950s. Such an automobile may have reflected his conviction that cars were primarily methods of transportation, but it also distilled the results of thousands of product research interviews with foreign car owners, dealers, and prospective customers.\footnote{Henry Ford II interview with David Lewis, April 18, 1980, p. 57, as quoted in Brinkley, op. cit., p.602. As Lawrence White noted, “Ford was never a style leader but it was a leader in “seeking out product niches.” White, op. cit., p. 207. McNamara spelled out the consequences of market segmentation in his farewell presentation to Ford’s top managers at the Greenbrier on November 21, 1960. He outlined how the company’s two car divisions would “compete with each other in one or more of the same segments of the market.” Ironically, market segmentation was a natural outgrowth of “brand management” a concept made famous by one of McNamara’s predecessors as Secretary of Defense, Neil McElroy when he worked at Proctor and Gamble. See Thomas K. McCraw, American Business, 1920-2000: How It Worked (Wheeling, IL: Harlan Davidson, 2000), pp. 48-49.}

\footnote{Bryne, op. cit., p. 343.}
After a three-year struggle, McNamara was given the green light. As it turned out, the Falcon was light as a result of its unitized body, economical to operate, and had simple lines along with an absence of chrome or expensive options. It sold for less than $2,000. Although the automobile critic, Charles Barnard, derided McNamara and the car (“he wore granny glasses and he put out a granny car”), it sold well from its introduction with total sales just under 1.5 million before it was retired.\textsuperscript{109} The car had found a niche as McNamara intended.\textsuperscript{110}

What was the core of McNamara’s management style?\textsuperscript{111} Essentially, it was based on a highly disciplined, hyper-rational approach to the manufacture and sale of automobiles — an approach that relied heavily on

\textsuperscript{109}White, op. cit., pp. 296-306; Brinkley, op. cit., p. 595; Byrne, op. cit., p. 343.

\textsuperscript{110}McNamara would undoubtedly have been chagrined at how far segmentation developed after he left the automobile industry. Based on “psychographics” or lifestyle images, designers and marketers no longer confined themselves to categories like age, income and education in defining the market, but on an individual’s psychological characteristics-interests, attitudes and values. The result was the high-performance ‘muscle’ and ‘pony’ cars of the 1960s and 1970s that were purchased by consumers who were making a statement about themselves and their vision of the personalities they wished to project. See McCraw, op. cit., p. 269.

\textsuperscript{111}It is difficult to trace the development of McNamara’s management practices because the company’s archives that were once hailed as “an event in business history [because they]...made available to those engaged in research [the company’s] full records dating from its foundation” are no longer available to outside researchers, see Nevins and Hill op. cit., p. 372. This may not be such a loss, however, for such writings by McNamara as have been made available are the apotheosis of formality. McNamara practiced economy in automobile production and economy in written communication. Nor does one find much help in his one memoir or his reflections in the film \textit{Fog of War}. Virtually all the secondary sources about McNamara at Ford rely on personal interviews to limn his portrait as an automobile executive.
quantitative analysis to achieve efficiency and made full use of intellectual
intimidation to gain acceptance for his positions. John Byrne recalled:

He demanded numbers for everything from the capacity
of Ford’s network of dealers to the effectiveness of advertising.
‘I know what the capacity of the assembly system is, but I don’t
know what our dealer capacity is’, Bob complained.
‘The dealer body doesn’t have a capacity’ one of his executives
told him. ‘Oh, yes it does’ Bob would insist.112

McNamara reinforced the advantages of his superior analytical mind
and retentive memory by an intimidating personal style. The “treatment”
would begin at the first interview. According to Fred Secrest, who worked in
finance under McNamara, he would give potential recruits “exactly two and
a half minutes for a job interview. If the candidate talked too long, failed to
come straight to the point, or tried to chat, McNamara refused to see him
again, even if he was hired by someone else in the company.”113

This was not only an interviewing technique, for McNamara was
aloof from his professional colleagues throughout his career. At Ford he
seldom socialized with other executives apart from occasional gatherings
with his fellow Whiz Kids. This sense of distance from his colleagues was
accentuated by his decision to live in Ann Arbor, about 35 miles from his
office at Dearborn, rather than in the automobile communities of Bloomfield

112 Byrne, op. cit., p. 255.
113 Shapley, op. cit., p. 52.
Hills and Grosse Point. He maintained the same pattern when he was Secretary of Defense. With few exceptions, he interacted with other department of defense colleagues, all of whom he had personally chosen, only during working hours. And he made no effort to encourage office events that might create a collegial spirit that is so common in industry and government.\footnote{114 Interview, Norm Augustine Lanham, MD, October 27, 2009.}

McNamara exhibited a social awkwardness on ceremonial occasions as he climbed the leadership ladder. He was noticeably uncomfortable with Ford dealers when they gathered with the top executives either at Dearborn or other locations to learn about new developments in the company. Similarly, as Secretary of Defense he was called upon to make ceremonial appearances before a variety of groups. As one of his colleagues described such a visit, “he would enter the room, scout where the exits were located and then make sure there was always a clear line between himself and the exit.”\footnote{115 Interview, Paul Ignatius, Washington, D. C., December 22, 2009.}

It was not as if he were unaware of this trait. He once had an uncharacteristic exchange with his assistant, Gerry Lynch, during which he asked Lynch’s opinion about his future at Ford. Lynch told him he could go
to the top except for two qualities, “First, you don’t have sensitivity to people as people. Second, you’re never wrong.” McNamara responded, “With respect to people I agree that I don’t have the rapport that some of the backslappers do. I can’t help it. With respect to never being wrong, I just analyze every situation with all the tools at my command. When the decision is made that’s it.”

Yet, McNamara was not entirely anti-social or withdrawn. He and Margy had a strong circle of friends in Ann Arbor, mostly academic and professional, that they saw regularly. During his tenure as Secretary, he was one of the two cabinet officers who were part of the Kennedy entourage that regularly attended events like Robert Kennedy’s group discussions at Hickory Hill. After he left the Pentagon, he widened his circle of friends to include journalists, former government officials, and some who had served with him at Defense. With no work-created barriers, he was able to accept them as companions and lower his guard.

It is difficult to know what drove this quite conscious behavior. It may have been a corollary of the principle that he espoused in his Millsap speech

116 Collier & Horowitz, op. cit., p. 248.
that “vital decision making must remain at the top” and that anything that
breaks down the barrier between the decision maker and those who must
carry out his decisions can compromise his authority.\textsuperscript{118} It may be, as a
number of observers have suggested, that his behavior was a further attempt
at “control” that personal interaction with subordinates might weaken.

McNamara was probably most intimidating at meetings. In the first
place he was superbly prepared. “He prepared for [Executive Committee]
meetings,” Collier and Horowitz have written, “as if cramming for PhD
orals, pouring over minutes of previous meetings to see who had said what
and arming himself with arguments for the forthcoming debates.”\textsuperscript{119} In
addition, McNamara had a marvelously organized mind that broke down
issues systematically and permitted him to argue, even off-the-cuff, as if he
were following an outline. At the end, the conclusion seemed ineluctable.
This intellectual discipline was reflected in his personal habits. He started
the business day promptly at 7:30 after his 35-mile drive from Ann Arbor
and worked steadily until he left the office at 6:30 pm. He would seldom

\textsuperscript{118} cf. Alfred P. Sloan. Sloan once told Drucker, “Some people like to be alone...I don’t.
I have always liked good company. But I have a duty not to have friends at the work
place. I have to be impartial and must not give the impression of having favorites. How
people perform, that is my job; whether I approve of them and the way they get their
achievement done is not.” Peter Drucker, \textit{Adventures of a Bystander}, (NY: Harper &
Row1979), p. 284. Unlike McNamara, however, Sloan was not awkward with dealers or
employees at GM for whom he had no direct responsibility

\textsuperscript{119} Collier & Horowitz, op. cit., p. 248.
visit the executive dining room in headquarters, the so-called “Glass House.” McNamara was also a bear for punctuality. One time before a meeting, his staff advanced the hands on a wall clock by ten minutes and then gently suggested that he might be late. McNamara did not bite. Without looking up from his papers, he simply said, “It’s wrong.”

At work, McNamara had little use for the give-and-take of brainstorming sessions or similar problem solving techniques. Meetings were called to receive recommendations on how to solve problems and to receive instructions. Any proposal was to be reduced to writing, and he insisted on at least two alternative suggestions for any but the most routine recommendations.¹²⁰

He was no less disciplined about recreation. If he were preparing for a camping trip, Shapley has recorded, he would compute “how many ounces and which kinds of food and drink the vacationing group would need and the weight and volume of each item. From these figures, he derived charts of the goods each man, woman, and child should carry in their backpack … [recomputing] the numbers several ways to get the optimal mix.” He would

¹²⁰ “[McNamara] taught me never to make a major decision without having a choice of at least vanilla or chocolate. And if more than a hundred million dollars were at stake, it was a good idea to have strawberry too,” in Lee Iacocca, Iacocca (NY: Bantam Books, 1984), p. 46.
Then go out to the supermarket to try to match his figures to what was available. There was very little impromptu in McNamara’s life.

It was evident that McNamara had a superior will to prevail in any debate he chose to conduct. If he decided that the issue was important to him, he would, in his own words, bring “all the tools at his command” to win the argument. They were formidable tools, and he usually prevailed. He was careful to choose his issues, however, because he was highly deferential to superiors — not only in manner but in the issues he chose to pursue. If Ford and, at least in the beginning, Breech had a firm opinion there is no record of McNamara challenging their positions. The most prominent example of this deference was his reaction to the decision to build the Edsel. McNamara was against the program from the beginning, but rather than argue against it, he absented himself from Edsel meetings and sent a subordinate with instructions to vote “present” on any issue that came to a vote. Today, one can experience that same deference by listening to his recorded conversations with President Johnson.

How should one evaluate McNamara as a manager during his 14 years at Ford? For some, the answer is easy. Charles E. Beck, former director of business planning at the company, believes “he…was one of the poorest

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121 Shapley, op. cit., p. 138.
managers of people I ever knew in my life. Bob never reached out to people. He felt that once he analyzed a problem and reached a logical conclusion, that was it. He forgot that it takes people to make a solution work."\textsuperscript{122}

A more nuanced analysis suggests a more balanced verdict. A manager’s effectiveness must be judged by whether his skills matched the needs of the organization he was managing. When McNamara joined Ford, it was, in the words of J.R. Davis, long-term chief of sales, “already dead, and \textit{rigor mortis} was setting in.”\textsuperscript{123} It became profitable in 1947 and remained so during McNamara’s entire tenure.

No one would suggest that McNamara was chiefly responsible for this record. The main credit should go to Ford himself, who, in McNamara’s words, “gave people the opportunity to excel,” as well as Ernest Breech and Lewis Crusoe. McNamara, however, along with his fellow Whiz Kids and other executives whom Ford and Breech had recruited, were important members of the supporting cast. McNamara played an essential role in developing the Ford financial control system. He had introduced revenue control and refined the concept of “market segmentation” that contributed significantly to the company’s success. He had recognized the threat of

\textsuperscript{122} Byrne, op. cit., p. 248.
\textsuperscript{123} Nevins, op. cit., p. 294.
foreign competition and introduced the Falcon as a counter strategy. He had not accomplished these initiatives by himself, but he had taken the lead in establishing them as company policy.

McNamara was also highly conscious of the responsibility of large institutions to society-at-large. In what turned out to be his farewell address to Ford executives, he emphasized that it was Ford’s responsibility to engage in a “customer-satisfying process rather than a goods producing process.”

Segmentation was one aspect of that process, but so were other socially desirable goals like safety. McNamara was an early leader in encouraging greater safety in automobiles. He commissioned the Cornell Aeronautical Laboratory to do research on crashes that eventually demonstrated the effectiveness of seat belts, padded dashboards, and safety glass. He made safety one of the main themes in advertisements promoting the ’56 Ford.

McNamara was also unhappy about the emphasis on speed promoted by the industry through its racing programs. He approached Ed Cole, then head of GM’s Chevrolet Division, to try to convince him to join Ford and abandon competitive racing. GM refused.

The picture is not uniformly positive, however. There is little evidence that he appreciated the value of quality in automobiles and substantial

evidence that he undervalued it. He seemed to consider quality a secondary consideration.\footnote{One oft-repeated incident involves the slowness of the paint drying ovens. Crusoe thought the answer was new larger ovens. McNamara countered with the suggestion that cars be cut in half and then welded together betraying a complete lack of appreciation for the stresses on an automobile body. It is surprising that McNamara did not appreciate the consequences of Ford’s lack of quality, for although new Ford cars were competitively priced with comparable GM models, they brought far less in the used-car market.}  He did little to counter the prevailing market strategy of “replacement demand [where] there is always great incentives to try to speed up the replacement cycle.”\footnote{White, op. cit., p. 189.}

Issues like speed, safety, or even customer satisfaction were large, abstract concepts that McNamara could embrace without emotional involvement. It is in the more elusive areas of “leadership” that McNamara could be found wanting. He did virtually nothing to build a sense of shared purpose and team spirit with those under his supervision. This was in marked contrast to Lewis Crusoe who took great pride in his “team” and arranged all manner of social and other bonding occasions to develop a congenial and cooperative spirit. McNamara would have none of it. We have already noted his disregard, bordering on disdain, for the production side of the company. His attitude was exemplified by an incident described by Charles E. Beck. Beck was charged with eliminating a critical bottleneck in a number of stamping plants that could not deliver enough deck lids and
fenders for the newly-designed Falcon. With the help of production managers who worked sometimes 18 hours a day, Beck and his colleagues were able to straighten things out in ten days. He reported back to McNamara and asked him “to telephone the divisional manager to thank him and his people.” McNamara refused. “No, Charlie … you really have done the job. Do you know how many millions it will save the company. You did it.” Beck remonstrated and insisted that his contribution had less to do with the resolution of the problem than the work of the production crews. But McNamara would not budge.  

Even when he was in charge of the financial staff, there was an absence of camaraderie or shared purpose. When they would meet later as Ford alumni, having moved on to other companies, they would profess a bond that shared adversity inevitably encourages (‘McNamara’s boot camp,” as one expressed it). Shepard Pollack, a Phillip Morris Vice President-Finance, reflected on the 70-80 hour weeks that they experienced at Ford, “of the 80 hours, one third were productive. The rest were spent protecting your job and politicking.”

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127 Byrne, op. cit., p. 249.
As he assumed the presidency of Ford, McNamara faced a number of significant challenges. Some were industry-wide like the generally poor quality of American automobiles and the effects of foreign competition.

Some were company-specific, like the younger Ford’s drinking problem and deteriorating marriage. One must also wonder how he would have gotten along with his protégé, Lee Iacocca, who was promoted to president of the Ford division when McNamara became company president. In the event, these would soon become the responsibility of someone else.

129 McNamara was very proud of being in his words “…the first president of the Company in the history of the Company that had ever been president other than a member of the Ford family…” Errol Morris, dir., The Fog of War: Eleven Lessons from the Life of Robert S. McNamara (Culver City, CA, TriStar Home Entertainment, 2004) Lesson #6 “Get the Data”. In fact, McNamara was not the first. That honor belongs to John S. Gray, a Detroit banker, who was the Company’s first president 1903-1906; see Allan Nevins and Frank Ernest Hill, Ford: the times, the man, the company (NY: Charles Scribner’s Sons, 1954) pp. 236, 331.
CHAPTER 2
THE NEW SECRETARY

*I consider the budget nothing more and nothing less than the quantitative expression of a plan or a policy. So in developing the budget I propose to start with the plan or the policy and translate it into quantitative terms, terms of benefit and cost." ~ Robert S. McNamara\textsuperscript{130}

Taking Charge

Only thirty days after being named president of the Ford Motor Company, McNamara received a call from Robert Kennedy asking him to see his brother-in-law, Sargent Shriver who was in charge of the President-elect’s personnel recruitment team. Shriver showed up that afternoon in Detroit and, according to McNamara, began by offering him Secretary of Treasury and when he refused, because he was “unqualified,” offered him Secretary of Defense instead. He also declined that post. Shriver then asked

him to at least have the courtesy of meeting the President-elect, a request McNamara could hardly have declined.\textsuperscript{131}

\textsuperscript{131} The manner in which McNamara was offered a cabinet post by Shriver tells us much about the haphazard way the newly-elected administration approached certain matters. Kennedy had decided early in the transition that he wanted Robert Lovett, a former Defense Secretary and Under Secretary of State, to be his Defense Secretary, Kennedy dispatched Clark Clifford, who was working both as his liaison to the Eisenhower Administration and as his adviser on personnel matters, to try and persuade Lovett to join his administration. Clifford knew Lovett was in poor health because of bleeding ulcers and told the President-elect who in turn told him to offer Lovett Treasury if he would not accept Defense since the latter position would not be as strenuous. After consulting with his doctors, Lovett declined either post but agreed to come to Washington and discuss the positions of State, Defense and Treasury with Kennedy. The meeting took place on December 1, 1960. During that meeting Lovett strongly recommended McNamara for Defense based on his experiences with him during World War II when Lovett was Assistant Secretary of War for Air. He also suggested to Kennedy that for Treasury he should appoint someone of “national reputation” and mentioned Henry Alexander of Morgan Guaranty, John J. McCloy, the head of Chase and Eugene Black of the World Bank. A few days later Lovett received a visit from Shriver at his home in Locust Valley, New York to go over the names for State and Defense. He recalled that, “On the list for Defense were three of the names that I had mentioned to the President, including McNamara…I thought McNamara was outstanding among the group and said so…."

Aside from Lovett’s strong recommendation we know that Kennedy had asked Richard Neustadt of Columbia, to prepare a memorandum on the qualities necessary for his cabinet from an historical perspective. Neustadt’s memorandum dated November 3, 1960 entitled “Cabinet Departments: Some Things To Keep In Mind” was discussed by Kennedy at Hyannisport on November 10; it had little to say about Defense and State except that Kennedy should pick someone with whom he could work easily. As for Treasury, Neustadt was more emphatic. He pointed out that the Secretary inevitably became the spokesman for “banks, investors, their colleagues overseas and their friends on the Hill.” Accordingly he argued that the President should select someone who could be “an effective spokesman to them. You can gain advantage from that.” (emphasis in original) He went on to write:

“But you can scarcely stand to gain unless the man is widely known and much respected in those circles. Truman got no mileage out of Snyder’s reputation, such as it was….Your chance for net advantage seems to lie in a man who both fits the description and transcends it: a Lovett, a McCloy, a Dillon; a “Wall Street internationalist,” sophisticated in foreign affairs and prepared for “positive government.” Since Treasury is actually a major foreign policy post, you would be advantaged further if your man had a previous experience in State.”

(Continued…)
McNamara had two meetings with Kennedy in early December; Robert Kennedy joined the second one. Both Kennedys were clearly impressed with McNamara although he had the audacity to proffer the President-elect a draft agreement, complete with signature line, which gave him authority to pick all of the civilian appointees in the department. It was, even without a prenuptial agreement, understood by all parties that McNamara would have complete authority over the civilian staffing of the

(…Continued)

One should also bear in mind that one of the key issues facing the new administration was the balance of payments problem and the serious outflow of gold from the United States. Kennedy knew that his appointment to Treasury should be someone who had the confidence of foreign bankers and government officials. To appoint a totally unknown young inexperienced auto executive with no international experience would have been a grave mistake. Apparently, the offer of either of two cabinet positions came from Shriver. According to Shriver’s biographer, “Shriver knew that getting McNamara to express serious interest was a long shot…[so] why not expand McNamara’s options—and flatter his ego—by offering him the choice of two positions, both defense and treasury?” Shriver allegedly ran the idea by the president-elect from a pay phone in the Detroit airport. Kennedy approved it, potentially jeopardizing the careful work that had gone into the vetting of two of the cabinets most important positions.(Scott Stossel, Sarge: The Life and Times of Sargent Shriver (Washington, DC: Smithsonian Books, 2004) pp183-184). Robert Dallek argues that it did not make much difference to Kennedy which position McNamara accepted since he “…would be of small consequence.” The president-elect was much more concerned with finding a nominal Republican who would convey the signal that the new administration would not be “radical” in its policies. Robert Dallek, Camelot’s Court: Inside the Kennedy White House, (NY: HarperCollins, 2013), pp.85, 88. The other sources for this footnote are: Clark Clifford, Counsel to the President (NY: Random House, 1991), pp. 327-339; Interviews with Robert A. Lovett on July 20 and August 17, 1964; Oral History Project, John, F. Kennedy Presidential Library, JFK Library records, pp. 6-9, 14-16, 23-25; Richard E. Neustadt: Memorandum on “Cabinet Departments: Some Things to Keep in Mind,” November 3,1960, John F. Kennedy Pre-Presidential Papers, John K. Kennedy Presidential Library, Transition Files, Box 1072.
department. At the conclusion of the second meeting McNamara agreed to become Secretary of Defense and was immediately introduced to the press corps that was waiting outside Kennedy’s Georgetown home. Editorial comment was favorable, if tentative, as the press knew little about him or his approach to defense matters.

There were many reasons to be tentative. He was the least known of all Kennedy’s cabinet picks. Compared to previous secretaries he was very young, only 44. He came from an industry that had sent two executives to Washington and their experiences in high government positions had been problematic. He had not served the apprenticeship in the department that all but two of his predecessors had, and his communication and political skills were untested. In addition, there was little evidence of his thinking beyond issues relating to the automobile industry. He may have read

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132 McNamara would use this authority to reject two names suggested by the White House: Franklin D. Roosevelt as Secretary of the Navy and Joseph Keenan, an AFL-CIO Vice-President as Assistant Secretary for Manpower. The first rejection the President-elect accepted philosophically, (“I guess I’ll have to take care of him some other way”) McNamara, *In Retrospect* p.19. The second caused Kennedy more problems and required the intervention of the new Secretary of Labor, Arthur Goldberg, to placate the angry AFL-CIO President, George Meany.

133 Kennedy was the first President-elect personally to introduce his cabinet nominees although without the elaborate staging that is the current custom. Previously, nominees had been announced by press release. See Arthur Krock, “The Grand Inquisitor had a Song for It” NY T Dec. 27, 1960 p. 28.


135 viz. William Knudsen and Charles E. Wilson, both from GM.
Kierkegaard, but there was no indication of how he felt about the position of the U.S. in the world, the military-industrial complex and similar issues relevant to his new position; nor were these issues explored in his confirmation hearing. He appeared to be a businessman selected to bring greater efficiency and “a businesslike approach” to the federal government’s largest department. Would his admitted analytical abilities and brilliance be up to the task?

McNamara began to prepare for his new post immediately. There was no leave-taking from his former associates at Ford. As he expressed it, “I never went back to Ann Arbor, except to get a shirt.”

McNamara had only 37 days before assuming office, and if one makes allowance for the family winter skiing trip to Colorado, what he accomplished in that short time was remarkable and set the tone for his entire tenure as Secretary. He had to assemble a staff, familiarize himself with the department and prepare for his own confirmation without the aid of an office, secretary, staff, or transition funds.

He moved into the Ford Motor Company suite at the Shoreham and began calling on his contacts, members of the defense establishment, to provide names of potential senior staff. He also relied heavily on the services

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136 Shapley, op. cit., p. 87.
of a group of talent scouts whom Shriver had assembled. According to Harris Wofford, Shriver’s deputy, the group offered its services to each of the incoming cabinet appointees. Most attended one session and took down a few names. Not so in the case of McNamara. He badgered the group relentlessly, asking for more and more names, more and more and information. Finally, to allow them to focus on their other responsibilities, they assigned Adam Yarmolinsky to help McNamara. By the date of the Inauguration McNamara had chosen virtually all his senior staff, and even more remarkable by contemporary standards, most had been confirmed. It was certainly the most talented group hitherto assembled at DoD and arguably at any other federal department. As the authors of the Department’s official history note, “It turned out to be a group remarkable both for its compatibility with the secretary’s leadership style and for the quality of its individual administrative talents. They were a mixture of experienced officials [Nitze and Gilpatric] and pragmatic intellectuals [Hitch and Brown]...”\textsuperscript{137}

Equally impressive was the speed with which McNamara grasped the principal national security issues facing the new Administration. He clearly was reading and absorbing everything that he could get his hands on about defense policy and the problems facing the department. His deputy Roz Gilpatric told interviewers that toward the end of December McNamara had suggested that they independently draw up a list of major issues facing the department and then exchange them. Gilpatric, who had served on Senator Stuart Symington’s Committee on the Defense Establishment, and as assistant secretary and then undersecretary of the Air Force in the Truman Administration, as well as on the 1958 committee assembled by The Rockefeller Brothers to report on the shortcomings of U.S. defenses, “felt confident that [he] could bring to McNamara’s attention matters that he would not have known about during his years at Ford.” Gilpatric handed McNamara a list of about forty items, but McNamara handed him a list that contained most of Gilpatric’s “and many more.”

Eugene Zuckert, the Secretary of the Air Force designate, reported that at McNamara’s first staff conference on January 18, 1961, two days

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138 Letter Roswell I. Gilpatric to Thomas Morris dated January 16, 1978. Thomas Morris, a former Assistant Secretary of Defense for Installations and Logistics solicited the views of 36 individuals who had worked with McNamara about his management style for a paper he was to deliver at the Academy of Management. Their responses are in the OSD Historical Office and will henceforth be referred as “Morris Project” see p. 119, footnote 190.
before he was to assume office, he “had achieved such a grasp of the job at hand and had organized his conclusions so thoroughly that at a meeting with most of his incoming team, he was able to delineate many of the initiatives which would command major attention during the coming months.” Two of those initiatives were “his desire to integrate the Service Secretaries into the Defense operation as an arm of the Secretary of Defense rather than having the Service Secretaries function only as advocates of their own Military Departments” and the need for “systematic [budget] programming activity within OSD.”

The effort paid off. Twelve days later in his State of the Union, President Kennedy instructed McNamara:

[to reappraise our entire defense strategy—our ability to fulfill our commitments—the effectiveness, vulnerability and dispersal of our strategic bases, forces and warning systems—the efficiency and economy of our operation and organization—the elimination of obsolete bases and installations—and the adequacy, modernization and mobility of our present conventional and nuclear forces and weapon systems in the light of present and future dangers.]

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In other words, Kennedy wanted a complete review of the nation’s defense posture and he wanted preliminary answers by the end of the next month. McNamara was ready. He had established four task forces to examine major problems of the department with very short deadlines and had issued any number of specific questions directed at specific officials (the so-called “96 trombones”) also with specific deadlines. These were military-economic or cost-effectiveness studies comparing ways of achieving a wide range of national security objectives, involving costs as well as objectives and anticipating the kind of analysis called for by the future PPBS. 141 When asked by the Chairman of the House Armed Services Committee, whether he would be able to meet the President’s deadline, Carl Vinson on February 23 offered a crisp “Yes Sir” which evoked both awe and disbelief. 142

From the outset, McNamara made it clear by his actions that he had decided, possibly even before he assumed office, that DoD was too decentralized and that he needed to establish centralized control and authority over the Department in the Office of the Secretary. Even though

141 The task forces were: (1) requirements for strategic forces and continental defense; (2) the conduct of limited war; (3) a review of the entire field of research and development; and (4) the effectiveness and usefulness of foreign and domestic bases and installations. The time tables for the studies were February 13 for the first two and February 20 for the other two. Kaplan, op. cit., p. 14, 79.
he had spent his entire business career implementing the M-form business model developed by General Motors, right from the beginning he rejected the practice of his predecessor, Charles E. Wilson, who had “looked at the service secretaries as the head of operating divisions, just like the Chevrolet Division of G.M. with OSD staff being the corporate headquarters, like the General Motors corporate staff.” McNamara never spelled out what business model he considered appropriate for the Department. This was probably wise since it would have given critics a target to shoot at. Instead we must look at how he actually managed the Department. As we shall see, that meant his personal involvement in a huge number of decisions which he usually made on his own.

This new centralized decision-making style occasioned a good deal of grumbling from the military services, but McNamara was able to deflect it, at least in the beginning, by his many requests for information coupled with short deadlines. They had the effect of throwing potential adversaries off balance. It made it much more difficult for coalitions to form in opposition. The Joint Chiefs (hereafter JCS or Chiefs) got the message quickly. The Chief

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143 Two of McNamara’s predecessors, Charles E. Wilson and Neil H. McElroy, who had served as heads of GM and Proctor and Gamble respectively, were familiar, as was McNamara, with Sloan’s M-form of business structure. To a certain extent, each of them had managed DoD with this model in mind; McNamara followed a distinctly different model.
of Naval Operations, Arleigh Burke, was particularly impressed. He was, however, set to retire in August, 1961 and viewed the new Secretary with more equanimity than its Chairman, General Lyman Lemnitzer, who resented the extent to which McNamara and his civilian aides “with no military experience at all” became involved in what had hitherto been strictly military judgments.\(^{144}\)

In addition to centralizing authority, McNamara made it clear that unlike his predecessors he intended to become personally involved in developing a common defense strategy. This was not an opportunity available to his immediate predecessors who served under a president whose military experience was unrivaled in American history; no previous Commander-in-Chief could match the breadth and depth of Eisenhower’s military experience. It included staff service in Washington, field command of multi-national forces during WWII and later NATO. “His Army career had afforded him extraordinary insight into the problems of military planning at the highest level and of the relationship between military and other elements in the formulation of national policy.”\(^{145}\) He needed no advice on strategy from his secretary of defense.

\(^{144}\) Kaplan, op. cit., p 11.
\(^{145}\) Ibid., p. 6.
Kennedy’s experience, on the other hand, was only as a junior naval officer. He assumed office during a period when there was a general bipartisan dissatisfaction with the current strategy of “massive retaliation” which was the Eisenhower administration’s stated policy and was generally accepted by the military. Accordingly, Kennedy expected his secretary of defense to provide advice on military strategy as well as to manage the Pentagon.

McNamara benefited from this opportunity. But, even had his predecessors had this opportunity, it is unlikely that they would have seized it as McNamara did. McNamara became much more involved in the deliberations of the JCS. Wilson and McElroy met informally with the Chiefs as a body. McNamara’s immediate predecessor, Gates, began the practice of meeting regularly with the Chiefs but “did not involve himself in details.”\(^{146}\) Involving himself in the details was precisely what McNamara routinely did in virtually anything he undertook.

McNamara immediately tried to capture some kind of control over a department that he referred to as a “jungle.”\(^{147}\) Wisely, he chose not to attack the problem by making fundamental structural changes. During the

\(^{146}\) Ibid., p.11.

presidential campaign Kennedy had drawn together a blue ribbon panel headed by Senator W. Stuart Symington to study the management of DoD and offer recommendations.\textsuperscript{148} The committee’s report would have constituted a fundamental change in the entire defense establishment.\textsuperscript{149} Recognizing that such dramatic change would involve an extended struggle with Congress, McNamara did not pursue the issue. Instead, he publicly stated that the Defense Reorganization Act of 1958 gave him sufficient authority to manage the Department.\textsuperscript{150} He was able to accomplish much of what the Symington Report recommended through the adoption of the Planning, Programming and Budget System he installed — an innovation we will consider below.\textsuperscript{151}

\textsuperscript{148} NYT, September 15, 1960, p.25. The panel included Symington, a former Secretary of the Air Force, and establishment figures like Clark M. Clifford, Thomas K. Finletter, Marx Leva, Fowler Hamilton and Roswell L. Gilpatric. All of them, except Hamilton, had extensive experience in defense matters.

\textsuperscript{149} To name just two: they recommended that all appropriations be made to the Secretary of Defense rather than the services and that the Joint Chiefs of Staff be abolished and replaced by a chairman of a new military council composed of “senior military officers permanently separated from their services.” See Kaplan, op. cit., p.18.

\textsuperscript{150} The Act was an initiative of President Dwight Eisenhower who felt strongly that the Secretary of Defense needed increased authority and that the authority of the service secretaries with their parochial interests should be curtailed. The president viewed the Act as a major legislative achievement of his second term, see Robert J. Watson, \textit{Into the Missile Age}, Vol. IV, History of the Office of the Secretary of Defense, (Washington DC, Historical Office, Office of the Secretary of Defense, 1997), Chapter IX.

\textsuperscript{151} “…once he had the Planning, Programming, and Budgeting machinery in place…he moved control of the service programs into his [McNamara’s] office without having to merge the services into OSD, as recommended by the Symington Committee.” Glass OSD Interview, Oct. 28, 1987, p. 52.
McNamara moved quickly to consolidate some operations that could be organized to serve all services. He consolidated the department’s intelligence activities into a new office called the Defense Intelligence Agency which reported directly to him. Several months later he established the Defense Supply Agency, which also reported directly to him, to “take over wholesale management of common supplies.” Although this initiative had some support in the Senate, especially from Senator Paul Douglas of Illinois, it provoked considerable congressional opposition, especially in the House. Critics charged that McNamara was initiating a master plan to unite all defense activities in the office of the Secretary. In the end, he prevailed and the Agency became a reality in 1962.

McNamara’s influence would eventually be felt in virtually every defense-related issue that arose during the Kennedy-Johnson administrations. There were many of them: recasting of the nation’s nuclear policy — so-called “massive retaliation” - development of an enhanced capacity to wage non-nuclear war at graduated levels of intensity (“flexible response”), development of policies and techniques to give the Secretary greater control over the department’s activities, including military operations (e.g., the Single Integrated Operating Plan (SIOP); consolidation of

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152 Morris OSD Interview, p. 6.
responsibilities for department-wide activities like intelligence and supply, reshaping the budget process, initiating a cost reduction program, and of course, dealing with international crises that arose during his tenure — Laos, Bay of Pigs, Berlin, Cuban Missile Crisis, and Vietnam.

We begin with his first major venture — a new budget process.

*The Budget and the Planning-Programming-Budgeting System (PPBS)*

Consistent with his prior experience McNamara knew that the most effective way to assert control over a large, diversified organization was through the budgetary system.\(^\text{153}\) The sprawling defense establishment at the time comprised 3.7 million military and civilian personnel and consumed almost 50% of the federal budget. His first order of business was to determine what changes to make to the Eisenhower Fiscal Year 62 budget that was before Congress. The Bureau of the Budget had given him a very short timeline as all changes had to be submitted by February 20 only a month after he had taken over. Based in large measure on the

\(^{153}\) Although the most significant consequence of PPBS was the control it gave the secretary over the services and their force structures, the system helped mitigate another problem. As Harold Brown, the Director of Defense Research and Engineering under McNamara and a future secretary of defense told OSD historians, “It was already foreseeable in Gates’s day that if you projected the costs of all the programs that had been started, there wasn’t going to be enough money to do them.” Brown OSD Interview, April 4, 1990, p. 3.
recommendations of the four task forces he had established, the new administration would eventually increase the Eisenhower budget by $5.6 billion, a 12% increase. Although the greater part of the increase was prompted by the Berlin crisis, the new administration signaled its differences from its predecessor by speeding up construction of Polaris submarines, increasing funds for conventional non-nuclear forces, including increased airlift capacity, and coming down squarely in favor of missiles as the nation’s primary offensive weapon instead of manned bombers. These initial steps were not, however, part of any systematic review of the budget. It was a “quick and dirty look” without the benefit of systems analysis or program budgeting.

When McNamara assumed his position there was already considerable dissatisfaction with the defense budgeting process. Congressman George H. Mahon, Chairman of the House Subcommittee on Defense Appropriation, had been complaining for years and had urged then Secretary McElroy to look at the defense budget in terms of military missions. The former Army Chief of Staff, Maxwell D. Taylor, echoed that suggestion. Because each service prepared its budget in isolation, with no side-by-side comparison, the budget did not keep “fiscal emphasis in phase with military priorities…[so that] It is not an exaggeration to say that nobody knows what we are actually
buying with any specific budget.” As McNamara would subsequently write:

…the three military departments had been establishing their requirements independently of each other. The results can fairly be described as chaotic: Army planning, for example, was based primarily on a long war of attrition; Air Force planning was based, largely on a short war of nuclear bombardment. Consequently, the Army was stating a requirement for stocking months of fighting supplies…while the Air Force stock requirements for such a war had to be measured in days, and not very many days at that.

How had the situation come about? It was the product of two basic policy decisions of the previous administration. Eisenhower believed that the strongest weapon the U.S. had in its defense arsenal was a strong economy. “We must achieve both security and solvency. In fact, the foundation of military strength is economic strength. A bankrupt America is more the Soviet goal than an America conquered on the battlefield.” Alarmed by rapidly escalating defense costs, Eisenhower, like Truman, placed an absolute ceiling on defense expenditures — in his case 10% of GDP. Merely imposing a ceiling did not reduce costs, however. How could expenditures be reduced? That led the Administration to develop what it

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157 In Truman’s case the ceiling was one-third of the federal budget.
termed “The New Look,” a strategy that relied on the use of nuclear weapons in a wide range of circumstances, decreasing the need for manpower. The budget ceiling and the New Look had the perverse effect of encouraging each of the armed services to emphasize their strategic missions, whether it be retaliation or defense against a Soviet attack. The Air Force and Army were in competition for the air defense missions and the procurement and deployment of the air defense system. The Air Force and Navy were in competition for the retaliatory missions. Each of the services was promoting programs that were duplicatory of or even inconsistent with those of the other services.

This rivalry was exacerbated by the way the services prepared their budgets. Each service prepared its budget using a so-called “requirements approach.” The essence of such an approach is “…that there are certain absolute needs, stated in terms of military hardware and manpower, which must be met regardless of cost, if the security of the United States is to be guaranteed in some absolute sense.”

It would be a bold Secretary who

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would flatly contradict a military service if the “requirements approach” were the frame of reference. Indeed, at one point when testifying before the Senate Appropriations Committee, Secretary McElroy virtually invited Congress to decide the competition between the Bomarc (Air Force) and Nike-Hercules (Army) missile systems. From a political standpoint it was much easier to allocate a given dollar amount to each of the services and permit the service to decide how to spend the money. This is what the Eisenhower administration did.

Kennedy had made it clear that he wanted to scrap the arbitrary limits placed on the military budget by his two predecessors. He instructed McNamara to develop whatever force structure was required to meet U.S. military requirements but at the lowest possible cost. It was an open-ended charge that required a highly-disciplined programming and budgetary approach to successfully counter the “requirements approach” favored by the services. Fortunately, McNamara had hired an individual who had been thinking for years about the problem and thought he had the answer.

159 The following colloquy took place: “Senator Stennis: “... I am beginning to think that the Department of Defense would welcome a congressional decision on this matter and then you could move on into a more positive program.” Secretary McElroy: “You have certainly touched us in a place that I would call vulnerable.” Senator Stennis: “I do not want to embarrass you.” Secretary McElroy: “You are not embarrassing us...I think it is time.” Senate Committee on Appropriations, Department of Defense Appropriations for 1960: Hearings 86th Cong., 1st Sess., 1959, pp. 30-33.
Charles J. Hitch, the DoD Comptroller, was a 51-year old former Rhodes scholar who had been the first American Rhodes to be asked to join the Oxford faculty. During the war he had done “operations research” on the effects of British bombing raids over Germany in an Anglo-American section of the OSS called Research and Experiments Department No. 8. Invited to a conference in 1947 by the recently-established RAND Corporation, he was recruited and persuaded to head its new economics section. There he pioneered a systematic interdisciplinary approach to help understand the implications for a national defense policy of new, rapidly changing, and very expensive technologies. Hitch was an example of a new breed of defense intellectuals who possessed impeccable academic credentials and were employed by defense-funded nonprofit organizations to analyze military issues. RAND was the best known of such institutions but there were many others such as The Center for Naval Analysis or The Institute for Defense Analysis.  

160 Clark Kerr, former President of the California university system told the following story. When Hitch entered the room prepared to answer questions for his doctorate examination, the examiners in a show of respect merely tipped their academic caps and awarded him the degree without examination. Alain Enthoven, *Tribute to Charles J. Hitch* at [www.orms-today.org/orms-12-95/hitch-tribute.html](http://www.orms-today.org/orms-12-95/hitch-tribute.html).  

161 For a list of DoD supported Research and Development Centers see [www.fas.org/ota/reports/9501.pdf](http://www.fas.org/ota/reports/9501.pdf); see also Fred Kaplan, *The Wizards of Armageddon* (NY: Simon and Schuster, 1983). The emergence of these institutions is an example of the increasing professionalization of virtually all aspects of American society, see Louis (Continued…)
Hitch had co-authored a book in which he argued that the new defense technologies had become so expensive that it was necessary to adopt an entirely new approach to defense planning that involved a far greater emphasis on the efficient allocation of the nation’s resources. The first step in such a system was to develop a budget “in terms of programs that perform tasks and yield end products… rather than actions that yield objects or intermediate products. In other words, rather than argue about funding for a B-70 bomber or an Atlas missile (“intermediate products”) on the basis of the properties each possesses — as was the current practice — DoD should focus on the task each was designed to accomplish, i.e., deter a Soviet nuclear strike. In light of that mission, the second step was to compare “all the relevant alternatives from the point of view of the objectives each can accomplish and the cost which it involves.” ¹⁶² In the words of Lawrence Kaplan, “it represented not only a different way at looking at budgets but a different way of thinking about the functioning of the military establishment”; from the standpoint of the military services it was what

Andy Grove of Intel would call a Strategic Inflection Point, “…a major change takes place in the competitive environment.” For an executive such as McNamara who had spent his professional life weighing such issues as the trade-off between weight and fuel efficiency, the argument had immediate appeal.

McNamara told Hitch to prepare a new budgeting program that would redress the problems of the existing system and Hitch did so in the spring of 1961. Since the new system would require a substantial revision of existing procedures, Hitch confined his presentation to only one program for the FY63 budget — strategic forces — on the assumption that it could be gradually phased in for the entire DoD budget over an eighteen-month period. “At the end of the presentation McNamara, who had remained unusually quiet, banged his fist down on the table and announced, ‘That’s exactly what I want,’ [but] one change ‘do it for the entire defense program. And in less than a year.’”

Analytical Framework

Conceptually, the new system, PPBS, was not difficult to understand. The first step was to break down the nation’s defense activities into mission areas and support systems called “program packages.” “A “program package” was an interrelated group of “program elements” that must be considered together because they support each other or are close substitutes for each other. The unifying element was a common mission or set of purposes.”165 There were initially ten such programs (subsequently reduced to eight): e.g., Strategic Retaliatory Forces, Continental Defense Forces, General Purpose Forces, Airlift, and Sealift and so forth.

These program packages were, in turn, broken down into “program elements” which were the basic building blocks of each package. They were either commonly recognized military units (e.g., Army battalions or Air Force wings) or their modern missile equivalents. For example, the program elements for the Strategic Retaliatory Force, whose mission was to deter a Soviet attack against the U.S. and retaliate in the event of one, had the following program elements: Aircraft (B-52, B-58, B-47 and RB-47, KC-135, RC-135, KC-97, B-70), Land-based ballistic missiles (Atlas, Titan,

Minuteman H&D, Minuteman mobile, Thor, Jupiter) sea-launched ballistic missiles (Polaris, Poseidon, Trident). The program package also included command, control, and communication and headquarters and command support elements. There were at least 1000 program elements in the U.S. defense system.

Comparing the cost effectiveness of each of the program elements in the defense system required a tremendous amount of information, including: a description of each element’s mission, equipment command and control system, manning requirements, force structure, delivery schedule for major equipment, activity rates (e.g., flying hours), communication requirements, training, basing and alert “concepts,” and service-wide support. Since the purpose of the exercise was not just to produce a one-year budget but to generate a five-year defense plan (FYDP), the information needed to cover this time period needed to be included.\textsuperscript{166} It was not readily available as the services had not kept cost figures by program elements and this required estimations in many cases.\textsuperscript{167} The attempt to provide data and studies in a timely and accurate manner to satisfy the insatiable demands of the Office of

\textsuperscript{166} See memoranda from Charles Hitch, dated May 13, 19, and June 6, 1961 Historical Office, OSD.

the Secretary of Defense virtually overwhelmed the services and was
certainly one of the reasons that McNamara turned to personnel in his own
office for appropriate studies.

Determining “effectiveness” was even trickier than determining cost.
There was, of course, a large element of judgment in determining
effectiveness in any system, but it was especially difficult in military
matters. As Hitch himself pointed out, “reliable quantitative data are often
not available, and even where such data are available there is usually no
common standard for measuring military worth.”¹⁶⁸ What was required was
a new analytical technique, and that was supplied by systems analysis.

There is a wide perception that McNamara brought quantitative
analysis into the Pentagon and military planning. Actually, the military
services had been using some quantitative techniques since WWII in the
form of “operations research.” Operations research, in general, “accepted
specified objectives and given assumptions about the circumstances and
attempted to compute an optimum solution, for example the optimum level
of spare parts for a weapon system or the optimum number of ships in a
convoy and optimum spacing.” It emphasized applied mathematics such as

¹⁶⁸ Shrader, op. cit., p.; on McNamara’s dissatisfaction with the information and briefings
supplied by the services see Clark A. Murdock, op. cit., pp.77-84.
linear programming, queuing theory, search theory, and inventory theory — a collection of mathematical techniques that maximized or minimized something subject to constraints.\textsuperscript{169}

Systems analysis was different; it asked different questions and used different quantitative techniques familiar to economists like marginal product and marginal cost. Systems analysis analyzed alternative objectives and explored their implications. It was concerned with giving the decision-maker a menu of choices representing different mixes of effectiveness and cost so that he could make his choice. Systems analysis questioned objectives:

The operations-research analyst is usually trying to use mathematics, or logical analysis, to help a client improve his efficiency in a situation in which everyone has a fairly good idea of what “more efficient” means. The systems analyst, on the other hand, is likely to be forced to deal with problems in which the difficulty lies in deciding what ought to be done, not simply in how to do it.\textsuperscript{170}

Lt. General Dwight E. Beach expressed the thought more colloquially:

Operations Research seeks to find better ways of using existing mouse traps, while systems analysis is concerned with whether to build mouse traps or to use some other method of mouse destruction and how many mouse traps or other mouse destruction devices of what type should be acquired.\textsuperscript{171}

\textsuperscript{169} Tucker, op. cit., p. 179; Schrader, op. cit., p. 55.
\textsuperscript{170} Shrader, op. cit., p. 55.
\textsuperscript{171} Ibid., p. 56.
In theory, systems analysis provided the secretary of defense with the information he needed to compare the cost and effectiveness of one program element (e.g., a B-52 wing) with another program element (e.g., Titan missiles) designed to perform the same or similar missions. On an even higher scale, the system would permit a comparison of the cost and effectiveness of an entire program package (e.g., strategic offensive forces) with another major mission (e.g., strategic defensive forces), although comparisons on such a scale presented a formidable array of intangibles and uncertainties.\(^{172}\)

No previous secretary of defense had demanded information in such detail on a department-wide basis. The military chiefs must have known that what had previously been a rivalry between services would become in part a rivalry between program elements and that the Secretary would have information about costs and effectiveness for each program element far exceeding the information any other Secretary ever had and in some cases more than the services had themselves. An energetic Secretary — and the entire defense establishment knew that McNamara was energy personified — had the tools to make decisions about weapon systems and force

\(^{172}\) Hitch made such an attempt in his book, see Hitch, op. cit., Chapter 8.
structures at a micro level. For a turf-conscious organization like DoD, and for its services, it must have been unnerving.

In a certain sense, systems analysis was not only a new analytical technique but a new language.

When “the standard economic model of efficient allocation” employed in cost effectiveness studies was defined as “the maximization of a quasi-concave ordinal function of variables constrained to lie within a convex region,” a communications gap opened between the systems analysts and those combat veteran officers unfamiliar with the language.  

Until the services were able to catch up, as they eventually did, the Office of the Secretary had a virtual monopoly on personnel who understood the system. Hitch had hired as his deputy to run the Office of Systems Analysis, Alain C. Enthoven, another Rhodes Scholar, who was recognized for his brilliance as well as his abrasiveness. Enthoven filled his office with personalities similar to himself — many of them young, inexperienced, intellectually arrogant young men who were dismissive of military experience and protocol. It was natural that the military came to resent these young “Whiz Kids.”

The office grew quickly. Originally, it had six analysts, and they were not part of the decision-making process but engaged in a few broad theoretical studies. Because of McNamara’s dissatisfaction with the studies and briefings he received from the military services, he turned increasingly to Enthoven’s office, which grew to some 50 analysts by 1964 and over 200 by 1968. Even more significant, it became a central player in the determination of force structures and weapons systems in the department. Even more significant, it became a central player in the determination of force structures and weapons systems in the department.\footnote{Murdock, op. cit., pp. 76-86.}

In many respects the relationship between the system analysts in the Secretary’s office and the military came to resemble the tension that existed between the financial and production departments when McNamara was at Ford.\footnote{See Supra Ch. 1, p. 62, f/n 93.}

Procedure

PPBS encompassed not only a new analytical technique but new procedures, and as Hitch once remarked, in a bureaucracy “…it is much easier to change policy than to change procedures.”\footnote{Charles J. Hitch, \textit{Decision Making for Defense, Gaither Lecture}, (Berkley, CA, Univ. of California Press, 1965), p. 70.} As we have seen, during the Eisenhower administration each service would prepare its own budget based on the amount it was allocated by the Secretary. Those
budgets, in theory, should have been based on two documents: the Basic National Security Plan (BNSP) prepared by the National Security Council) which “defined the basic objectives of U.S. policy and indicated the military, diplomatic, political and economic courses of action needed to advance those objectives.” The second document was a Joint Strategic Objective Plan (JSOP) prepared by the Chiefs that established the strategic and logistic plans to implement the BNSP. In practice it did not work effectively because the BNSP was written so broadly that it did not resolve the most important contested strategic issues.\(^{177}\) The services could, and did, interpret the BNSP to enhance their own positions, and the result was not a coherent plan but “three separate plans added together and called a joint plan [so that] there was in effect no definitive guidance on how to structure the armed forces.”\(^{178}\)

When Hitch began to implement PPBS he believed that general policy guidance would still be provided by a revised BNSP that was in preparation.\(^{179}\) That was not to be. The Kennedy administration decided to

\(^{177}\) Watson, op. cit., pp. 36-37.


scrap the BNSP, and diminish the role of the National Security Council as well as other aspects of Eisenhower’s institutional approach to defense policy formation. Neither the President, McNamara, nor the Chiefs wanted to be tied down to predetermined policies when dealing with the many potential military contingencies they hypothesized.

This created a void that McNamara quickly filled by becoming, apart from the president, the major voice of the administration on matters of foreign policy relating to military issues. The vehicle was an annual “posture statement” he prepared along with Henry Glass that he sent to Congress each year with the department’s budget requests. It was McNamara’s sweeping view of the international scene and its military implications. What had previously been the product of the deliberations of the president and the heads of the relevant major departments and agencies was now the product of the Secretary of Defense and his staff. McNamara ran his statements by Rusk for comment, but there is little indication that the State Department made a serious effort to shape the document.

For budgetary purposes, the posture statements took concrete shape in a foundational document called the Five Year Defense Plan (FYDP). It contained the programs approved by the Office of the Secretary with estimated costs projected over a five-year period. In theory, the FYDP was a
document that could be revised at any time. PPBS contemplated an iterative process in which the services could suggest changes to any program at any time and, if approved, the FYDP would be modified accordingly. In practice, however, these changes occurred overwhelmingly during the annual budgetary process.

That process began almost two years before the budget was to be submitted to Congress with the JCS and the Secretary’s office independently preparing their submissions. In May, the Chiefs would begin preparation of a JSOP based on their own assessment of the military threats facing the country and the force levels required to meet them. It would appear ten months later, but McNamara paid little attention to it because he did not share the Chiefs’ pessimistic assessments of the threats to the country.

While the Chiefs were preparing their document, McNamara’s own office was preparing its Major Program Memorandum (MPM) for each mission area, or program package.\(^\text{180}\) Although the MPM was theoretically a planning document, it actually became the programming document setting forth the Secretary’s position on major force levels, the rationale for choices among alternatives and recommended force levels and budgets. Not

unexpectedly, the Planning and Programming phases of the PPBS had been conjoined because it was difficult to separate programming from planning since the two were so interdependent.\textsuperscript{181}

Around February, McNamara would review the JSOP and MPMs and provide guidance to the services for preparing Program Change Requests (PCR) to the FYDP. The services usually submitted about 300 Change Requests virtually all of which were turned down by the Office of Systems Analysis.

In the meantime, the Chiefs were reviewing the MPM; their comments were sent to McNamara in July and resulted in a series of meetings between them and McNamara to discuss their objections. But, as Korb suggests, “McNamara was not interested in the JSC opinions…he used these meetings to attempt to persuade the Chiefs to accept his position or divide the JSC.”\textsuperscript{182} McNamara was not interested in Sloan’s “averaging up;” he wanted to win. It was a technique he had used successfully at Ford and would continue at DoD.

This process, which had now lasted approximately 16 months, was only preliminary to the actual preparation of the budget. The formal budget

\textsuperscript{182} Korb, op. cit., p. 337.
process began in September when the services were asked to prepare their budgets in traditional categories (i.e., military personnel, operations, and maintenance, and so on, and not by program packages). In his budget directives McNamara would emphasize that the services were not bound by any arbitrary ceilings; the nation could afford whatever was necessary for its defense. The services obliged. Presumably, in order not to “lose face,” each service submitted budget proposals far in excess of what was called for by the MPMs; on average Korb estimated that the services submitted budgets that exceeded by 30% what was eventually approved. During October and November, the Comptroller’s office would review these budgets and issue some 600 suggestions of possible savings which McNamara would review along with the budgets. The process ended in December, when the Secretary and the Chiefs met with the President, and the Chiefs had a final opportunity to persuade the President to overrule McNamara’s decision. They seldom succeeded.

PPBS never worked precisely as designed. Under the time pressure of the budgetary process slippages occurred in the planning and programming phases and in Program Change Decisions. Decisions which should have been made before the budgets were prepared were frequently made only after. Such a procedure naturally gave rise to the suspicion that McNamara’s
budgets only reflected preconceived notions rather than products of a new and rational process. ¹⁸³ All in all, however, the new system had a major impact not only on how the budget was prepared but on the entire management of the department.

Consequences

What were the consequences of PPBS?

First, the system went a long way towards solving the long-standing problem of aligning strategy, plans and programs with the annual budget so that the costs of each mission could be determined and funds could be allocated in accordance with military priorities. General Maxwell Taylor had complained that under the old system, “we didn’t know what we were paying for.” Under PPBS the administration knew what it was paying for. Many in the military services disagreed with the priorities, and how they had been determined, but they were out in the open.

Second, the new system gave an additional impetus to service unification. Since the Department of Defense had been established in 1947, the Secretary had struggled to resist the centrifugal forces that drove each service to pursue its own priorities. The Defense Reorganization Act of

¹⁸³ Shrader, op. cit., p. 65.
1958, enacted during the second Eisenhower administration, provided the institutional structure to bring the services into a more cooperative relationship. PPBS provided the mortar to hold that structure together. As McNamara would write:

…the new planning system allowed us the achieve a true unification of effort within the Department without having to undergo a drastic upheaval of the entire organizational structure.\textsuperscript{184}

Third, the new system provided the Secretary and his immediate staff with a formidable amount of information that gave them unprecedented knowledge of the department’s workings. McNamara unquestionably knew more about how DoD functioned than any of his predecessors. Initially, his deep knowledge made a favorable impression on Congress, the media, and other members of the executive branch. Carl Vinson, chair of the House Armed Services Committee, was lavish in his praise.\textsuperscript{185}

But superior knowledge, and the attitude that frequently accompanies it, can be a double-edged sword, especially when dealing with Congress.

The author had a personal experience with that phenomenon when he was a young attorney in Washington. His assignment was to brief McGeorge

\textsuperscript{184} McNamara, The Essence of Security, op. cit., p. 95.

\textsuperscript{185} Although he disagreed with him on a number of issues, Carl Vinson the Chairman of the Senate Armed Forces Committee would say on his retirement, “Robert S. McNamara is not just a good Secretary of Defense, he’s the best we’ve had”” Washington Post, Jan 1, 1965 p. A4.
Bundy, then the head of the Ford Foundation, on what had previously occurred in hearings Wright Patman (D-TX) was conducting on possible changes to the Internal Revenue Code relating to private foundations, like the Ford Foundation. The Foundation had made some questionable grants, and the feeling in Congress was that there should be some restrictions on the hitherto virtually unfettered discretion of such organizations to support grantees. Bundy, whose mind and demeanor were not unlike McNamara’s, was ready. He had answers to every question even before the interrogator had finished. He created the impression that the issues raised were not worthy of congressional attention and that the issue did not respect the proper role of tax-exempt institutions like the Ford Foundation in a democratic society. As a spectator, the author could sense the atmosphere in the hearing room change from respect, to skepticism, and finally to alarm. The witness was just too quick, too sure of himself.¹⁸⁶

Superior knowledge also makes it difficult for officials to equivocate. “I don’t know” or “I’ll have to look into that” are useful phrases in Washington. That was, of course, not the style of the Kennedy administration. When McNamara did equivocate, even if it was in the

¹⁸⁶ Congress did impose some restrictions on private foundations in the Tax Reform Act of 1969, but they were far less severe than originally proposed.
national interest for security purposes, many in the media thought he was lying. This destroyed trust.

Fourth, PPBS gave McNamara and the Office of the Secretary of Defense unprecedented control over the composition and missions of the armed services. McNamara’s office could make decisions at as low a level as a battalion, although there is no evidence that it ever did.\textsuperscript{187} The new system shifted authority from the services and the JSC to McNamara and his office. Many decisions that had been formerly made on the basis of military experience and judgment were under McNamara now subject to a new standard of cost-effectiveness and were made by civilians using analytical techniques which the military had not yet mastered. Understandably, this caused considerable resentment. It was also not good management. As Secretary Melvin R. Laird would write in his 1971 Military Posture Statement:

> Over centralization of decision making in so large an organization … leads to a kind of paralysis. Many decisions are not made at all, or, if they are made, lack full coordination and commitment by those who must implement the decisions.\textsuperscript{188}

\textsuperscript{187} A battalion is composed of 500-1200 military personnel usually commanded by a Lt. Col.

Probably the most important criticism of McNamara’s centralized system was “lack of coordination and commitment.” Initially, the military resisted systems analysis because it was new and denigrated their experience. To a large extent, this can be explained by the rapidity with which McNamara required its implementation. Eventually, as the services added their own systems analysis sections and the Secretary’s office had a chance to work more closely with their military counterparts, what was initially rejected became accepted with varying degrees of enthusiasm. Although particular aspects of PPBS were challenged, the military came to accept the principles of quantitative analysis and applied the technique not only to weapons procurement but even to tactics.\textsuperscript{189}

One consequence of PPBS that has not received much comment, is how much of McNamara’s time it took. McNamara was an extremely hard worker leaving the house at 6:45 each morning and frequently not returning till eight in the evening, often with work to do at home. He was also able to process figures and arguments very quickly. Nevertheless, as he participated in the PPBS process, he found himself increasingly involved in minutia. He was actively involved in the MPM process, Program Change Decisions, and

\textsuperscript{189} Shrader, op. cit., p.56. For example, the Navy established an OP 96 office under Admiral Elmo Zumwalt to conduct systems analysis studies for the service. For the easing of tensions, see Richard Fryklund, “‘Whiz Kids’ are Mellowing,” \textit{Washington Star}, October 19, 1962, p. 7F.
Budget Savings suggestions of the Comptroller’s office. Korb estimated that McNamara made “about 700 budgetary decisions annually.” Was this a good use of his time? In his memoir, *In Retrospect*, McNamara would write:

> One reason the Kennedy and Johnson administrations failed to take an orderly, rational approach to the basic questions underlying Vietnam was the staggering variety and complexity of other issues we faced. Simply put, we faced a blizzard of problems, there were only twenty-four hours in a day, and we often did not have time to think straight.\(^\text{190}\) (emphasis supplied)

We shall turn to the Vietnam War in the final chapter. It is unlikely that if McNamara had spent less time on the budget it would have materially altered the course of that conflict because, as we shall see, he had no firm grasp of the situation in that distant country and never developed a strategy that had any chance of success. But at the very least we might have expected the author of the annual “posture statement” reflecting basic U.S. foreign/military policy to have devoted substantial time to reflecting on the role of the U.S. in Southeast Asia and on the implications of the new doctrine of “flexible response”. That he did not do so was at least in part due to his decision to become so deeply involved in the budgetary process.

What happened to PPBS? Initially, it became a rage in the Johnson administration. At a news conference on August 25, 1965 the President

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announced “a very new, very revolutionary system of planning and programming and budgeting throughout the vast federal government.”

Shortly thereafter, the Budget Director, Charles Schultze, issued instructions directing all major departments and agencies to establish a “Central Staff for Programming and Policy Planning accountable directly… [to the department/agency head].” The new system never took hold, however, for reasons Hitch himself identified: lack of trained personnel, the difficulty of defining objectives, the problem of interdependencies, and, finally, political considerations.191

Matters have been different at DoD. Fifty years later, PPBS still remains the framework for developing the budget and for the acquisition of weapon systems. It has been modified, of course. For example, the Nixon administration gave the Chiefs the responsibility to design force levels and limited the Office of Systems Analysis to evaluation and review of those plans. No longer could they initiate their own.192 The system has also


become much more decentralized. The Secretary can still intervene when appropriate, but does not generally do so in the ordinary budget process. In part, this is because many of the more successful Secretaries have recruited experienced managers as their deputies to manage the department, like David Packard (HP), Donald Atwood (GM), and Charles Duncan (Coke), so that he can focus more directly on policy. All in all, however, PPBS has proved to be one of McNamara’s lasting achievements.
CHAPTER 3
WORKING FOR MCNAMARA

I figured that I worked a year and
a half for a year’s pay. ~ Henry Glass, Special Assistant
to the Secretary of Defense (1965-1969)

In his Millsaps speech near the end of his tenure as Defense Secretary, Robert McNamara reflected on the fruits of “successful management.” He concluded that it was “a mechanism whereby free men can most efficiently exercise their reason, initiative, creativity, and personal responsibility.” That is a large claim and one wishes that at one time he might have articulated in some comprehensive fashion the factors he considered essential to managerial success. He did not do so, but on various occasions he suggested three elements he considered important.

First, there is activism. Soon after he became Secretary, and frequently thereafter, he was fond of espousing his activist impulses. He would tell interviewers:

The role of public manager is very similar to the role of a private manager; in each case he has the option of following one of two major alternative courses of action. He can either act as a judge or a leader . . . I have always believed in and endeavored to follow the active leadership role as opposed to the passive judicial role.193

193 McNamara, op. cit., p. 23.
Second, good managers develop a skill that can be applied to any organization. Management requires no special sensitivities, or experience presumably because it deals with general principles that are valid across the board and are not dependent on time or place. In an interview with Arthur Schlesinger Jr. in April, 1964 he told the historian:

> Whether one is administering a large religious body such as the Catholic Church, or a large industrial organization such as Ford Motor Company, or a large educational institution such as Harvard, or a governmental department such as the Defense Department, the administrative problems are very much the same. They are simply the problem of organizing a group of people to move toward a common objective, and to continue to move toward it and not away from it.  

This lumping together of the Catholic church, Ford, Harvard and The Defense Department is quite remarkable. It demonstrated an insensitivity to history, organizational culture and psychology and is the apotheosis of managerialism.

Finally good management is hierarchical, very much top down. As he expressed it in his Millsaps speech, “[v]ital. decision making must remain at the top”  

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McNamara’s managerial philosophy did not take into account the need in all large institutions not only for “vital” decisions at the top but mid and low-level decisions as well. In McNamara’s Pentagon a huge number of decisions had to be funneled through the Secretary’s office for approval, and as a result the majority of Defense Department personnel were not given personal responsibility for substantive decision making. Even McNamara’s top aides worked within a formalized communications system which stifled creativity and offered few opportunities for seizing initiative. McNamara’s centralization of authority may have been an appropriate response to the Defense Department he inherited, an organization debilitated by the uncoordinated, redundant and competitive programs adopted by the three services. On the other hand, his inability to delegate, or even respect those who did, made it impossible for him to institutionalize the very principles he held up as a managerial ideal.

In addition, his insistence that managerial competence does not require an appreciation of the particular values, traditions and training of others who are part of the institution created a difficult working environment for many of his subordinates and nurtured continuing hostility between military and civilian personnel of the Department.
This chapter explores McNamara’s management primarily through the eyes of his subordinates and colleagues, many of whom recorded their impressions in retrospective interviews collected by the historians from the Office of the Secretary of Defense Historical Office. Thomas Morris, a former Assistant Secretary of Defense for Installations and Logistics, collected further recollections for a paper he delivered on McNamara at an annual meeting of the Academy of Management. In preparing his paper, Morris wrote to 36 of McNamara’s colleagues, soliciting their views on his managerial style; most responded. Many of the individual respondents were laudatory in their accounts of McNamara’s leadership, which is unsurprising given that they were civilians whom McNamara had selected for their positions; they owed their careers to him in some respects. Morris as a result wrote a glowing assessment of McNamara’s managerial skill, which we will examine more closely at the close of this dissertation. Yet, relying on the same sources — while also leavening them with more critical testimony — this chapter considers McNamara’s stated managerial goals

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196 Thomas Morris’s paper entitled “Robert S. McNamara, A Giant in Management” is referred to hereafter as “Morris Presentation.” The letters he received that supported his presentation are identified as “Morris Project”. Both sources are in Box 27, Biographical Files, Historical Office of the Secretary of Defense (OSD Historical Office), Washington, DC.
and models and contrasts them with his actual practices in organizing the Department’s work and communication routines.

*Centralization*

In considering McNamara’s tenure as the chief civilian officer of the Defense Department, it is important to recall that his predecessors in the secretaryship had not done much to develop the power, authority or influence of the position. The Defense Department itself was quite young as an organization in January 1961, having been established only 14 years before. It had existed under two presidential administrations and been led by seven secretaries, five of whom had served less than two years, and another for only a few months longer. Only Charles E. Wilson had served a more substantial period of 4½ years. None of the secretaries, with the exception of Marshall (who served only one year), had national prominence. The Joint Chiefs, on the other hand, included many men with national or even international reputations: men like Eisenhower, Bradley, Collins and Ridgeway (Army), Nimitz and Burke (Navy), Spatz, Vandenberg and LeMay (Air Force). They had earned their reputations during World War II

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197 The department had been headed by three investment bankers: Forrestal, Lovett and Gates, two businessmen: Wilson and McElroy, one lawyer, Johnson and one soldier, Marshall. As to Wilson’s management, see Watson. op. cit., p. 7.
and constituted a formidable force. The balance of power in setting policy and running the Defense Department’s budget lay with the Joint Chiefs.\footnote{198 Of course, when Dwight Eisenhower was elected president an entirely new dynamic developed. For an overview of strategic planning during the Eisenhower administration, see: Raymond Millen, “Cultivating Strategic Thinking: The Eisenhower Model” 42 Parameters Journal, No. 2 (Summer 2012) pp. 56-70.}

The military service branches retained very distinct identities and priorities, and for most of this period their senior representatives governed the Defense Department as, at best, a loosely-coordinated conglomerate, and at worst a chaotic assortment of rivals. The services operated more or less independently with the Secretary of Defense as a mediator or referee when disputes arose. Previous secretaries achieved only indifferent success in their attempts at refereeing conflicts.

Superficially, the department appeared to be operating along the lines of a modern M-form business corporation, based on the GM model we have described in Chapter 1. It decentralized certain elements of management while retaining top-down coordination. In substance, the Department lacked almost all the model’s key characteristics. The overall goal of the M-form system was to free top personnel from lower-level management responsibilities in order to allow them to focus on long-range corporate goals, coordination between divisions and overall efficiency. This involved delegation to division managers who became responsible for implementation.
of general corporate strategy and managed day-to-day operations. It had become, by 1950, the standard form of corporate governance for twentieth century U.S. industrial enterprises.\(^{199}\) The M-form had replaced an older U-form in which tasks like sales, procurement, personnel, and production were managed in a central office operating on a corporate-wide basis.

Some in the Department, like Henry Glass, thought that previous Secretaries had tried to manage the Department on the M-form model with the service secretaries acting like division heads.\(^{200}\) In practice, however, the service secretaries and chiefs of the armed forces were not actually comparable to division heads or corporate staff. Instead, these military leaders maintained divergent strategic and procedural priorities, and delegating management responsibilities to them did not result in coordination or in common standards of accountability or measures of progress. In addition, each of the services had a formidable support group in Congress and among the general public, making them a powerful political force.


\(^{200}\) See footnote 140, p. 88, supra .
In fact, the M-form would not have been a good fit for the Defense Department’s managerial needs. That system worked at GM and other profit-oriented businesses because each segment of the organization was focused on and judged by how it contributed to the same goal—overall profitability. At Defense the success of each component was not judged by an overall single standard, but rather by how successful each service was in acquiring funds. More money meant more personnel, newer and more sophisticated equipment, and higher status in the Defense establishment. Such a reward system encouraged rivalry between the services and frequently unnecessary duplication as, for example, in the pursuit by each service of its own missile program independent of the other services.

Neither did the pre-1961 Defense Department match the older U-form model which avoided redundancies and reduced conflicts by handing over control to a small, relatively coherent decision-making hierarchy. Because of objections from the services, the Defense Department had been unable to consolidate activities that in a profit-oriented enterprise would have been the responsibility of a corporate headquarters. For example, the Defense Department had four intelligence agencies, one for each branch of the armed services, and each had its own estimates of the force levels and intentions of
the Soviet Union as well as other potential enemies.\textsuperscript{201} The services campaigned for funding based on the divergent predictions of their intelligence systems, which made it very difficult to allocate resources amongst them rationally.

The Defense Department which McNamara inherited, then, was inefficiently decentralized and its policy and procedural decision-making powers lay chiefly in the hands of military personnel who were managing them poorly; the situation would have encouraged any trained and experienced business manager to attempt centralization, and McNamara needed little encouragement. It was clear from the outset of his secretaryship that “…he ran the business himself. He was the spark plug and lynch pin of the whole operation.”\textsuperscript{202}

He demonstrated his determination to take the lead in project management even before he took office. In early January 1961 he and the more experienced Henry Glass were considering what amendments to the Eisenhower defense budget the Department should recommend to Congress. McNamara decided that he would appoint three task forces (subsequently expanded to four) with short deadlines to examine major issues like strategic

\textsuperscript{201} Kaplan, op. cit., pp. 298-302.
\textsuperscript{202} Glass OSD Interview, Oct. 28, 1987, p. 16.
forces, limited war forces, and research and development which we have mentioned in the previous chapter. These task forces would make recommendations to him within the parameters laid out by their guiding work statements. Glass volunteered to go back to his office and prepare a statement of work for each of the task forces, as would have been the customary way to proceed in the DoD at the time. “Let’s do it now,” McNamara said. Glass “was stunned for [he] could not think that fast,” as he later told interviewers. McNamara called in a secretary and, with department deputy Gilpatric and Glass present, dictated drafts of the statements of work. The three then polished the drafts and the directives were issued the next day. The incident, trivial in itself, revealed a new management style had arrived at the Pentagon characterized by McNamara’s speed, decisiveness and willingness—or even impatience—to master the details personally and to ensure that his office would immediately take primary responsibility for dictating directives.\(^{203}\)

That new style of fast, inquisitive, hyper-detailed management was even more forcibly apparent in the flurry of specific questions that McNamara sent to individual officials about defense policy — the so-called 96 trombones. These queries served notice to the defense bureaucracy that

there was a new management team in place, that it was conducting a fundamental review of national defense policy and that the central figure in that review would be the secretary himself. For example, he asked the Chairman of the Joint Chiefs, Lyman Lemnitzer, to provide by May 15 “a statement of the quantitative requirements for strategic nuclear weapon delivery vehicles based on target analysis and survivability factors.” Dubbed the “76 trombones” after a popular song in the musical “Music Man”, McNamara’s list would eventually exceed 100 inquiries. The derisive nickname did not mean that Department personnel didn’t take the list seriously. CNO Arleigh Burke understood its implications. He told his staff that McNamara “is going to be very decisive and he is going to be very quick. He catches on very fast…He is going to get impatient.”

It was quickly clear that McNamara would have no hesitation about reordering the Department of Defense to better meet his ideals of efficient management, but it was less clear what elements of his business education and previous work experience would guide the Department’s new form: would McNamara try to centralize according to older U-form business

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205 Ibid., p. 11.
models, or attempt the coordinated delegation of M-model management, or combine elements of both systems into some hybrid organizational approach? We have seen that neither the U- or M-forms seemed likely to transfer smoothly onto the unique landscape of the Defense Department. Nonetheless, McNamara himself gave the impression that the M-form had won his allegiance and liked to portray his Defense Department as either based upon or progressing toward that model.

There may have been a political element to this characterization, with McNamara deliberately downplaying the real levels of centralization he sought and seeking to convince hostile subordinates, particularly alienated military officers, that they had a continuing role in M-form management that would not be so different from their services’ traditional management. Paul Ignatius, then Assistant Secretary of the Army for Installations and Logistics, tells of the time that McNamara was trying to persuade the army to abandon its traditional structure of technical services (Ordnance, Signal, Engineers, etc.) in favor of a unified Army Material Command. The move was controversial within the Army and strongly opposed by the powerful Ordnance Corps. Unexpectedly, McNamara showed up one day at a conference of the top military and civilian leadership that was considering the issue. As Ignatius tells it:
The officers were surprised, if not astonished, by his unexpected presence because he was a remote figure who typically stayed behind closed doors in his office. He quickly disarmed the officers by telling them that his organization at Ford, and at GM and other large corporations, was based on the line and staff concept pioneered by the Army. The rigid backs began to relax and McNamara said the new command was needed and that he hoped the Army would support it. 206

In the above example, McNamara’s equation of the military services’ line and staff system with the delegated responsibilities of automotive company divisions may be viewed as a ploy, but politics alone does not explain McNamara’s invocation of the Ford and GM model as his ideal. Long after his tenure as secretary was over, he continued to claim that the M-form had influenced his DoD management. He told OSD historians that he had studied that system when he was at the Harvard Business School and “...had applied portions of it in the U.S. Army Air Force...[and] after the war, I went to Ford...[where] I applied the general concepts of planning as a major tool of management. I then came down to the Defense Department to do the same thing.” 207

However, despite his admiration for the M-form and his seeming ideological or at least rhetorical commitment to it, McNamara in fact

206 Paul R. Ignatius, The Other McNamara, (unpublished ms), courtesy of the author.
adopted a highly-centralized management system which was the antithesis of the M-form model. Whereas the M-form decentralized decision making to the lowest practical operating level, the entire thrust of McNamara’s management was to centralize decision making in the office of the secretary. This was reflected, for example, in the consolidation of intelligence activities in the Defense Intelligence Agency and a similar consolidation of common purchasing activities in the Defense Supply Agency, both of which reported to the secretary.

Indeed, McNamara’s Defense Department operated more like a U-form corporation than a newer M-form, with, however, a significant innovation: as we have seen, PPBS tremendously expanded the Secretary’s ability to make budget decisions even down to the battalion level, and the establishment of the Systems Analysis office expanded his ability to make operational decisions at a volume that would have been inconceivable either to his predecessors at DoD or to the corporate headquarters of traditional U-form businesses. McNamara could use the new methods of information gathering and systems analysis developed for M-form corporations and taught at Harvard Business School, not to create efficiently coordinated delegation as they were intended to do, but rather to centralize decision-making at the top of the Department to an unprecedented degree. He himself
could and did control decision-making at both the macro- and the micro-
levels, using the tools of his business education.

Several of his peers noted the gap between the way McNamara said he
wanted to run the Department and the way he actually did, although
McNamara denied that he was departing from the modern organizational
tenets which he had previously studied. William Proxmire, a senator from
Wisconsin, met McNamara one evening at a White House dinner; they had
been together at the Harvard Business School, and they reminisced about
what a marvelous educational experience it had been. Proxmire then asked
him, “how he [McNamara] was able to master such an infinite variety of
complicated details” in his new job. According to Proxmire, “His answer
was very simply, ‘I do my own work.’ He explained that because he put
together the budget literally dollar by dollar, he understood it, he understood
the justification for it and was prepared to defend the budget in detail.”
Later, in thinking about McNamara’s answer, Proxmire wondered why
“…he didn’t put into effect one fundamental principal (sic) that was stressed
way back in our mutual experience at Harvard Business School, to wit, the
vital importance of executive delegation of authority.” 208 Similarly,
McNamara told Congressman Porter Hardy in 1963 that he didn’t enjoy

working 14 hours a day six days a week and was trying to decentralize
decision making in the department but that he had “…to take charge during
this transition period.” The congressman was dubious, and decentralization
had not been implemented by the time McNamara had left in 1968.²⁰⁹

In summary, when he took over the Defense Department, McNamara
developed a management organization and style which combined U-form
breadth with M-form depth in decision-making, enabling him to centralize
power and responsibility at the top of the DoD and to transfer the
preponderance of power back from military to civilian hands. In doing so,
McNamara corrected some of the earlier inefficiencies and imbalances he
had inherited with the Department, but created a new set of problems of his
own. The following sections will use the testimony of DoD employees and
other of McNamara’s professional colleagues to explore what McNamara’s
broad and deep centralization of authority looked like in practice and
evaluate the strengths and weaknesses of his managerial approach, analyzing
the extent to which it fit the needs and culture of the DoD.

Isolation at the Top: McNamara and His Chief Aides

²⁰⁹ Shapley, op. cit., p 235.
McNamara and his small cadre of top aides became isolated at the top of their Department long before the Vietnam War would bring McNamara’s secretaryship to crisis. Though his relentless work ethic kept the overly-centralized system running, McNamara’s leadership was breaking down even without the war, largely due to his problematic management of both time and talent. In examining the details of McNamara’s “all or nothing” approach to delegation, it becomes clear why his Department was a personally fulfilling place to work for a handful of young, well-educated, ambitious civilian and military officers, and a demotivating and alienating environment for the majority who remained outside his delegation circle.

The breadth of McNamara’s involvement was such that he directed most of the Department’s activities himself. He devoted a great deal of time to the areas one would expect a civilian head of the Defense Department to oversee, such as the budget, cost containment, procurement issues, base closings, reserve and national guard issues. By nature of his office one would also have expected him to be involved in the major military confrontations during his tenure, including those in Cuba, Berlin and Southeast Asia. More than any of his predecessors, however, he immersed himself in the most intractable issues facing the department, including the intricacies of the nation’s strategic defense policies, especially its nuclear
policy: finite deliverance, flexible response, graduated response, controlled response, counterforce, counter-cities, no cities, full first strike, first strike, second strike, negotiating pause, assured destruction and damage limiting.

The debates surrounding these issues produced an immense volume of paper and, of course, consumed a great deal of time. In addition, he was deeply involved in the Limited Test Ban Treaty, NATO relations, the Multilateral Force, weapon acquisitions, the Military Assistance Program, and civil defense - not to mention the totally unrelated issues the President would call upon him to help resolve from time to time like the development of the SST or steel and aluminum price increases.

McNamara maintained these wide-ranging responsibilities while simultaneously delving into their details with unprecedented depth. He was determined not simply to sign off on the large volume of decisions funneled through his office, but to evaluate all of them to his own satisfaction by learning intricacies which his predecessors had left to qualified staff. It was by personally delving into the details that McNamara came to understand an issue. For example, William Bundy, then Deputy Assistant Secretary of Defense for International Security Affairs, was assigned to help McNamara

\[^{210} \text{McNamara’s predecessors, Wilson and McElroy, viewed their function as administrators and “…left to others the formation of strategy.” Watson, op. cit., p. 130.}\]
prepare for his first appearance before the authorizing committees for the military assistance programs. The outgoing administration had requested $2.8 billion; the program was popular, and no one anticipated any problems. Previous secretaries had given pro forma statements and if any questions were asked that required more than a superficial knowledge, would refer the question to an accompanying military aide. According to Bundy, “McNamara would have none of that. ‘I am going to understand this program’,” he declared. By the end of the exercise he did, having gone over each line item bit by bit. As for Bundy, “I had not worked as hard as that since some cases in my lawyer’s experience,” he said.  

McNamara’s involvement with the budget was even more probing. We have already seen that he made in the neighborhood of 700 decisions a year regarding the budget. Yet he sought ever increasing control. For example, he assumed responsibility for all reprogramming reports to Congress. Such reports were required when the DoD wanted to move authorized funds from one program to another. In some cases prior authorization was required; in others after-the-fact reporting was sufficient, and in still others, sums could be lumped together. It was a complicated task

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211 William Bundy OSD Interview, Nov. 9, 1989, p.10.
that had been smoothly handled by the comptroller’s office for many years, but McNamara took it over and personally signed each request.

More significant was his directive that any change in a major program over $25 million or in a minor program over $2 million required his approval. Bear in mind that he was dealing with a total budget exceeding $49 billion. Henry Glass once asked him,

> If the Air Force was to take $5 million from the B-52 program where they have surplus funds and apply it to a fighter program where they are short, do you want them to come back for your specific approval in writing; i.e., a program change action? [He replied.] That’s precisely what I mean.\(^\text{212}\)

McNamara was just as concerned when the DoD underspent a budget estimate. For example, according to Glass, in FY 1965 the department underspent the budget estimate by some $2 billion. Glass thought that McNamara would be delighted, but on the contrary he wanted to know what had happened.

Something didn’t go according to plan, and he wanted to know what, in detail. He told Joe Hoover, the chief budget officer, to give him a complete analysis of the discrepancy. Joe was fit to be tied because he thought McNamara should be happy we were under budget. But McNamara wanted to know whether it was planning…or was it saving.\(^\text{213}\)

\(^{212}\) Glass OSD Interview, Oct. 28, 1987, p. 43.
\(^{213}\) Ibid., p. 47.
Some colleagues questioned whether McNamara was properly prioritizing his responsibilities. McNamara’s deep intrusion into the budgetary process and the responsibilities of the Comptroller and the services led Glass to conclude that he “…was an accountant, not an economist.”

The comment intimates that, given McNamara’s self-appointed micro- and macro-level responsibilities, it was micro- rather than macro-level issues which were commandeering overlarge shares of his attention and time, perhaps because he had a personal affinity for the mastery of detail. To Glass, thinking like an accountant (for example, toting up itemized expenses) excluded thinking like an economist (for example, broadly analyzing best investments and balancing budgetary priorities); for McNamara, however, the roles were not mutually exclusive — he committed to wearing both hats. In illustrating the combined breadth and depth of McNamara’s managerial interventions, the above examples hint at some of the strengths and weaknesses of his overall approach.

McNamara’s incredible work ethic could be a strength, enabling him to make vast numbers of decisions and winning the loyalty of some of his closest aides, but it could also generate resentment amongst subordinates and

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214 Ibid., p. 45; cf Augustine’s comment that “it’s like looking at the world through a straw.” p. 51, supra.
colleagues, some of whom felt overwhelmed with unreasonable demands and others of whom felt excluded from meaningful participation and power.

McNamara held himself to a rigorous schedule - 12-14 hours a day on weekdays and 8-9 hours on Saturday - but many on his staff were forced to work even longer hours and over the weekend. His military aide, Bob Pursley, described a not-infrequent occurrence:

He’d [McNamara] come out of his office at 3:00 or 4:00 on a Saturday afternoon, after a pretty full day of work… and say, “A couple of things here I would like to have Monday morning, but I don’t want you spending the weekend on this.” Between now and Monday morning there is one day. It was a nice expression of consideration, but you damned well better have it there on Monday morning.  

Pursley apparently had no difficulty coping with the pressure, but others did. Eugene Zuckert, the Secretary of the Air Force, had difficulty standing up to the demands from McNamara’s office.

“We…were just peppered with directives…It was very hard to try and get things done in the Air Force when you were spending most of your time fighting with the third floor.”

Zuckert left no doubt that he found it difficult working with McNamara, although the two had been colleagues at the Harvard Business School. When asked point blank, “Did you enjoy working with him?” his

215 Pursely OSD Interview, Sept. 6, 1995, p. 32.
response was a succinct, “No.” Zuckert, who was fond of sports metaphors, said he felt “…like a goalie on a bad hockey team that always had two men in the penalty box---you were getting things shot at you from all sides.”

Switching sports, he told interviewers “putting the burden of proof on you, he [McNamara] always kicked the ball deep in your territory” or, switching yet again, “every pitcher should have a change of pace, and McNamara just had that high hard one.” Frank Sander, a veteran of the House Committee on Appropriations and subsequent Undersecretary of the Navy, sympathized with Zuckert. “It was the Secretary of Defense and his assistants…who poured out minutiae in directives …hundreds of directives…from the hallowed halls of OSD, frequently from the hands of the entrenched bureaucrat to the military and inexperienced system analyst…”

McNamara was well aware of how demanding a boss he was and that the speed of information-gathering he mandated was not fully achievable. Phil Goulding, his Public Affairs officer, once asked him why he made ridiculous demands that could not be met. “I know I have asked for the impossible,” he replied, “But I am going to get much more by asking for more than possible in that time period than I would if I had asked for half as

The pace, however, could exact its toll. Paul Nitze, who had moved from Assistant Secretary ISA to the Secretary of the Navy, was forced to check himself into the Naval hospital in Bethesda with a perforated ulcer. A long-term friend, Charles Burton Marshall, visited and asked “how on earth one perforates an ulcer.” “I’ve never said this before and I’ll never say it again” replied Nitze, “But the answer is ‘McNamara.’”

Yet despite the punishing pace, most of McNamara’s top staff, including Nitze, remained with him during his tenure; they were a remarkably cohesive group. Excluding the service secretaries, only 17 different men occupied the top nine civilian positions in the department during McNamara’s seven-plus years on the job. They were extremely loyal, accepting McNamara’s leadership without question and avoiding turf battles and other disruptive actions that are common in large bureaucracies. He was able to inspire them with a sense of mission that made the sacrifices worthwhile. Indeed, many of McNamara’s colleagues seemed to take pride in the long hours and demands that McNamara put upon them. Ignatius, for example, confessed to a “sense of fulfillment.” In a You Tube video he relates that even though McNamara seldom praised work well done, “…if

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you turned in a piece of work and he got his old left hand (sic) and pen and initialed it “RSM”, that was reward enough….\textsuperscript{221}

Many of his colleagues stressed the high value McNamara placed on loyalty. He was loyal to his subordinates and expected them to be loyal to him. A frequently cited example of his loyalty to his staff involved a confrontation with the Senate over the extent to which the Defense Department reviewed the public remarks of senior military officials. In order to make sure that the speeches of such officials reflected administration policy, the department established a “review” system to vet them prior to delivery. Chief of Naval Operations Arleigh Burke was the first victim of the new system when one of his speeches was “mutilated” by reviewers, infuriating him. As the program expanded, Congress became increasingly concerned that McNamara was “muzzling” the military and scheduled hearings on the issue. The Congressional panel went so far as to demand copies of more than 1500 speeches given by military men that had been reviewed. The department complied, but the committee went further and attempted to link specific speeches with individual reviewers. McNamara refused to allow such an inquiry, invoking executive privilege and claiming

\textsuperscript{221} http://www.youtube.com/watch?v=ghHMWdAqHly; regrettably the web address produces the message: “This video is unavailable”. One can view the video by Googling “LMI, Ignatius”.

that “the responsibility was his and no one else’s.” McNamara’s actions sent a signal throughout the department that he would protect those working for him.\textsuperscript{222}

Many of his subordinates, especially younger ones, remained loyal not because McNamara shielded their anonymity, but quite the opposite; he offered some of his subordinates extraordinary opportunities for autonomy after he had green-lighted a policy and entrusted them with its execution. For example, in 1966 Morton Halperin sent him a memo arguing that the United States should begin the process of returning Okinawa to Japan. He asked for a meeting to discuss how the process should begin. McNamara read the memo and “Scrawled on the margin of the first page were the words ‘No need for meeting. Give it back. R McNamara.’” As his biographer, Shapley, notes:

From then on, Halperin knew he was free to call meetings with State and CIA and other agencies, and to make up agendas, hand out papers. He could sit in a room and negotiate Defense’s positions freely, and McNamara would always back him up, even after the fact...Halperin and his colleagues had real power, deriving from McNamara.\textsuperscript{223}

What Shapley did not note is that Halperin was 28 years old at the time. It is little wonder that this method of decision-making and the authority

\textsuperscript{222} Trewhitt, op. cit., pp. 91-93.
\textsuperscript{223} Shapley, op. cit., p. 128.
given very junior civilian employees rankled senior military officials. At the same time it could not help but increase the self-esteem of youthful, inexperienced but highly-intelligent young men who were aware that their status in the defense hierarchy depended on their relationship to McNamara.

McNamara’s circumscribed circle of opportunity at the top of the Department, much of it directed at those educated in systems analysis, helps explain how McNamara and his senior staff were able to attract a talented group. The Secretary was fond of bragging about the members of his staff that went on to cabinet positions like Vance, Califano, and Brown, but junior members of his staff, especially in Enthoven’s Systems Analysis office, had similarly distinguished careers. For example, Stansfield Turner and Charles Di Bona, junior naval officers, became part of the Enthoven group. Turner would go on to head the CIA and Di Bona the American Petroleum Institute, one of the most powerful trade associations in Washington. On the civilian side, there was Les Aspin, a future Defense Secretary and a group consisting of Ivan Selin, Charles Rossotti, Pat Gross, Jan Lodel, and Frank Nicolai who, not unlike Tex Thornton and the whiz kids, would leave government service and establish American Management Systems, a highly successful consulting firm that specialized in developing customized software for businesses and governmental agencies. After their business careers, Rossotti
would return to government service as the Commissioner of Internal Revenue and Selin as Chairman of the Nuclear Regulatory Commission. There were other future leaders not associated with Enthoven, like Norman Augustine, who joined Harold Brown’s Office of Defense Research and Engineering when he was 30. He would eventually become Chairman of the Board of Lockheed Martin and renew his government service as Under Secretary of the Army and serve on numerous governmental commissions.

Yet, just like the department as a whole, each of McNamara’s aides was subject to central direction from McNamara. For example, McNamara told OSD historians how he handled his relationship with his Deputy Secretaries: “I would discuss the matter; I would come to a conclusion, and I would expect them to follow it, whether they recommended it or not. It worked very well; it was superb.” This was how he managed virtually all his subordinates — one-on-one discussions, followed by a decision, sometimes with specific directions as to how to implement it. As Peter Drucker explained, each member of the Department’s civilian leadership was “truly distinguished” and “outstanding”, but McNamara “…had not the

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224 McNamara OSD Interview, Apr. 3, 1986, p. 17.
faintest idea how to make use of his team, or even how to make a team out of them.”

This problem was far more pronounced outside of McNamara’s top circle; the larger civilian DoD staff were alienated by the lack of institutionalized opportunities to make any significant decisions for themselves, either in setting their own objectives or even in determining the best procedures by which to achieve objectives handed down to them. The military was particularly resentful that McNamara respected neither their substantive decisions nor the traditions and experience which guided them. McNamara jettisoned established procedures, devalued wisdom born of experience, installed new systems and even a new language. Indeed, for Air Force General Curtis Lemay the Department had been turned on its head because of McNamara’s inability to respect any style of working that did not reflect his own. “[I]t was Bob’s view that higher echelons should be capable of doing original work themselves and should not have to rely on completed staff work.” Not only did McNamara create a micro- and macro-level double burden of responsibilities for himself, but he pressured his senior

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225 Letter Peter Drucker, February 6, 1978, Morris Project, p. 2; contrast Drucker’s opinion with Robert Pursley’s statement about Secretary of Defense Laird, “I don’t know of another secretary where the group of people who truly worked directly with him, let’s say the top 40, felt more like a real team.” Pursley OSD Interview, Aug. 15, 1997, p. 27.
colleagues to do the same, to take responsibility away from their staff and to work without relying on their continuing participation. This lack of collegiality had a demoralizing effect, especially on the military personnel in the department as they appeared to be mere executors of one person’s decisions — the Secretary’s.

For many senior officers, whether civilian or military, the McNamara years were frustrating, but for a small group of young talents the McNamara administration offered an unparalleled opportunity. Here was a management team that put a premium on brains—analytical ability, articulateness and energy—as opposed to time in grade. True, the hours could be brutal, but the excitement of applying new analytical tools, of influencing major decisions involving the security of the free world, of being at the edge of history more than compensated. In the service branches as well, McNamara and the President promoted a number of younger general officers — Westmoreland, Johnson and Abrams in the Army, and Zumwalt in the Navy — to choice billets. The majority of civil and military officers, however, were less engaged; some resigned, others merely served out their time.

Terry Williams, a former McKinsey & Company officer who had consulted with DoD during the McNamara era, developed a terminology of “system specifications” versus “specified systems” to capture McNamara’s
managerial flaws in more analytical terms. Williams told the author that “a specified system is one that explicitly says what you do, how you do it, when you do it, and there are no options…. [Alternatively,] an approach that uses a systems specifications would say: here are specifications that we have for whatever system you choose to use and, as long as your system design does and achieves what we want in terms of specifications, then you can do anything you want…. Those are very different points of view and, with the first one, that’s micromanaging, and invading other people’s space, and the second approach is leaving much more solutions space and degrees of freedom to the individual.”

Peter Drucker agreed, reflecting that “McNamara's greatest strength as a manager was his realization of the need for objectives and his willingness to think through objectives and altogether to think through strategy.” However, McNamara could not leave it at that and failed to see the importance in giving his subordinates their own stake holds by leaving them institutionalized areas of responsibility for guiding projects to their conclusion. “His greatest weakness was that he always lost the objective over procedures…. McNamara lost one objective after the other… by dictating

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227 Interview: author with Terry H. Williams, July 8, 2011, p 2.
how something should be done instead of saying “This is what we are going to do, you work out how to get there.”

The Challenge of Cooperative Communication

We have seen that existing corporate business models would not have been easy to map onto the Defense Department’s needs, and that McNamara’s hybrid U- and M- style had particular pitfalls; the unique challenge of coordinating the diverse cultures and priorities of the armed service branches required a style of management that placed a premium on building voluntary teamwork and informal cooperation. Such a style was certainly not unprecedented in the business sector and guidelines for developing cooperative systems were available in the management literature of the 1960s.

Although McNamara extolled management as “the most creative of all the arts,” there is little evidence that he read many books about business or organizational theory. One book he could have read with profit, although appalled by its obscurantist style, was Chester Barnard’s The Functions of

\[\text{Letter Peter Drucker, op. cit., p. 3.}\]

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the Executive. Barnard, the president of New Jersey Bell Telephone Company, was a student of organizations and spent decades developing a theory of how successful ones operated and were managed. He began with the premise that organizations exist because two or more individuals recognize that if they cooperate they can accomplish substantially more than a single individual can by himself. The key concept is cooperation, and the function of the manager is to foster cooperation among those individuals for whom he is responsible.

Barnard goes on to argue that the survival of any organization depends on two principle attributes. The first is what he calls “effectiveness”, or in more colloquial terms, the accomplishment of whatever the institution was created to do. The second attribute is “efficiency”. The term is not used in its commonly-accepted meaning, but rather as an expression of the “non-economic inducements” that encourage individuals within an organization to cooperate.”229 Cooperation depends, in turn on establishing a system of communication, and it is “…the first

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executive function…to develop and maintain a system of communication” both formal and informal.²³⁰

The function of such a system of communication is to encourage the members of any organization to cooperate by accepting the authority of the person who directs it. That authority does not depend on the position of the person giving the order, Barnard maintains, but on the willingness of the person receiving the order to accept it as authoritative. As Barnard writes in one of his most innovative observations:

…the decision as to whether an order has authority or not lies with the persons to whom it is addressed, and does not reside in “persons of authority” or those who issue these orders.²³¹

Barnard uses the term “authority” in a broader sense than mere obedience to an order. It means, of course, that the individual must understand and be able to comply with the directive, but it also means that at the time of decision that directive must be compatible with the individual’s personal interest and consistent with the purposes of the organization. The function of the networks of communication is to maintain this authority and they do so by employing both formal and informal systems. Formal systems involve formal communications—orders from the top-- and although

²³⁰ Ibid., p. 224-226.
²³¹ Ibid., p. 163.
important, are not as important in Barnard’s eyes as informal systems.
Informal systems, according to Barnard, permit an “expansion of the means of communication with reduction in the necessity for formal decisions, the minimizing of undesirable influences, and the promotion of desirable influences concordant with the scheme of formal responsibilities.”\textsuperscript{232} The executive needs to develop what might more colloquially be called a sense of teamwork where those reporting to him understand the mission and operate with a minimum amount of formal direction but cooperate with each other through an informal system of communication.

The absence of an informal system of communication in McNamara’s Pentagon was especially noticeable. It did not make much difference in his relationship with the top civilian staff, who remained devoted. However, McNamara’s relationship with the military, especially the Joint Chiefs, was another matter. In general, these men were older, relied on procedures that had existed for years based on thorough planning and judgments born of experience.\textsuperscript{233} McNamara’s management practices disrupted their customary procedures and created serious resentment. An informal system of communication would have helped to increase “efficiency” in the

\textsuperscript{232} Ibid., p. 227.
\textsuperscript{233} When McNamara arrived at the Pentagon the ages of the Joint Chiefs of Staff ranged from 55 to 61. Only two of McNamara’s principal aides were in their 50s (Gilpatric and Nitze); most were in their early to mid-40s and some in their 30s (Enthoven, Brown).
department, but McNamara did little to cultivate such a system. He eschewed many of the practices which could have supported it.

He gave no heed to the rich traditions of the services. A small but telling example was the issue of the Marine belt. In order to demonstrate the advantages of standardization, one day he held a fashion show for his civilian and military deputies. He hung from a peg board the various aprons, jackets, boots and belts worn by the different services. He would display each item and then “decide on the spot which of the versions would henceforth be used by all the services.” McNamara gave the assembled group a little lecture on the importance of making decisions quickly. “What mattered was that he had decided the question and moved on, and not wasted any more precious time on the subject.” When it came to belts the Army and Navy accepted the black metal buckle McNamara had chosen, but not the Marines. They had their own distinctive buckle which had deep significance to the Corps which believed, however erroneously, that its uniform, including the belt buckle, was directly linked to its heritage and combat legacy. The Marines put up a fuss and eventually McNamara

acceded “reluctantly”. How much time he saved is questionable; that the decision caused resentment is unquestionable.235

More significant was McNamara’s failure to observe some of the elementary practices any leader, especially a military leader, was expected to follow. He did not address the future young officers at the military academies; he did not visit troops in the field except occasionally in Vietnam in the later stages of his tenure. His military assistant, George Brown, who would eventually rise to become Chairman of the Joint Chiefs, urged him “…to get out of the Pentagon more frequently, visit military units in the field and see for himself how they handled their equipment.” McNamara appeared to treat Brown’s suggestion as an opportunity to evaluate ordnance rather than to demonstrate leadership to the troops and told him “…others could do that who would better understand what they saw and could better judge the professionalism of the performance of the troops whereas he could better serve the common interest by staying at his desk and doing those chores which he could best do …”236

McNamara was frequently advised to arrange informal meetings with members of the Joint Chiefs, but he demurred. His three predecessors had

235 McNamara once told Henry Glass, “…to be a good executive you have to be willing to make decisions and be right more than 50 percent of the time.” Glass OSD Interview, Oct. 28, 1987, p. 47.
participated in a “Secretary’s Conference,” initiated by Secretary Wilson, to which the top 100 civilian and military administrators were invited annually to “foster a spirit of cooperation” between the military and their civilian leaders. The conference was a combination of briefings and recreational activities, and followed a pattern long practiced in private industry; it was a popular event. McNamara did not continue the practice.\textsuperscript{237}

One reason McNamara probably did not make a greater effort at developing informal relations with the military side of the department was that he wasn’t naturally good at it and did not want to make the effort to become so. When he first assumed his duties he was persuaded by Arleigh Burke, the Chief of Naval Operations and a World War II hero, to join a stag party of senior military and civilian officials so that they could get to know each other better. According to Henry Trewitt, a reporter for the Baltimore Sun and Newsweek:

\begin{quote}
It was a minor disaster. McNamara obviously made a genuine effort, as participants recalled later, but he was incapable of instant camaraderie… He had one drink and stood around uncomfortably for an hour or so in the Officers’ Club at Fort Meyer…and everyone else carefully remained sober. Burke left the Department convinced that McNamara lacked
\end{quote}

the human qualities necessary for outstanding leadership.\textsuperscript{238}

Yet McNamara was not anti-social nor did he lack charm. The Kennedys, especially Bobby and Ethel, were fond of him and invited him often to their home at Hickory Hill. He was a prominent participant in the “seminars” they held there featuring luminaries like the economist Barbara Ward and the historian Arthur Schlesinger, Jr. as well as some of their less intellectual activities. We have seen his reluctance to fraternize with his professional colleagues when he was at Ford. It probably had something to do with his strong feelings of hierarchy, his distaste for unstructured conversation and finally, the pride he expressed in not being a “socializing” Secretary.\textsuperscript{239}

McNamara also made little effort with Congress. John Blandford, Chief Counsel to the House Armed Services Committee (1963-1972), described the Defense Secretary’s relations with that important committee:

> His congressional relations, at least with our committee, particularly after Vinson left as chairman, deteriorated rapidly. I remember that many of the members felt that he had a very low regard for Congress, and one even remarked that


\textsuperscript{239} Robert McNamara OSD Interview, Apr. 3, 1986, p. 4.
McNamara thought that Congress was an unnecessary evil.\textsuperscript{240} McNamara did not like big meetings, and privileged the exchange of information (preferably in writing) over discussion and the informal exchange of ideas. He told his colleague Eugene Zuckert, “If it takes a lot of people, it probably can’t be done.”\textsuperscript{241} He would hold weekly staff meetings for top civilian and military personnel on Monday mornings, but these were designed to deliver department-wide information, plug an initiative like his “cost reduction” program or hear a presentation that might be of general interest. They were not a medium for the exchange of ideas. His style contrasted markedly from that of his successor, Clark Clifford. Clifford would assemble a group of five individuals with whom he would consult frequently, sometimes on a daily basis, called the “8:30 group” because that was when it met.\textsuperscript{242} Clifford would raise an issue that concerned him, giving the pros and cons and then, without disclosing his tentative decision, ask each of the members of the group for his opinion. That was the antithesis of a McNamara meeting.

\textsuperscript{241} Zuckert OSD Interview, Sept. 26, 1984, p. 30.
\textsuperscript{242} The members were, Deputy Secretary of Defense, Nitze, Assistant Secretaries, Warnke (ISA) and Goulding (Public Affairs), Special Assistant, George Elsey, and top military aide, Robert Pursley. See Pursley OSD Interview, Sept. 6, 1995, p. 37 and May 7, 1996, pp. 1-2.
McNamara’s preferred method of communication was weekly personal meetings with his top aides. Virtually everyone on McNamara’s staff who was subsequently interviewed about their experience has pointed to these weekly meetings as one of the most effective ways in which McNamara imposed his personality on the management of the department. Why did they have such an impact? First, they were regularly scheduled on the same day at the same time and McNamara almost never postponed or cancelled them. Second, they were strictly limited in time. Anyone who has argued before a court or any other body with enforced time limitations knows how a strict time limit forces one to focus on essentials. Third, the sessions were strictly one-on-one. Except in rare instances, the briefer was not permitted to bring assistants. Accordingly, he had to master the details of every item on the agenda because, as Ignatius put it, “He always wanted an informed and reasoned defense of what was being proposed, not simply a loose judgment based on personal experience. With McNamara there was no such thing as an opinion that was not cross-examined.”

This communications approach limited discussion to what was of immediate concern and within the briefer’s direct area of responsibility. It discouraged, virtually prohibited, tentative thoughts, spontaneity, or

\[243\] Ignatius, op. cit., p. 117.
speculation. Such an intense interrogation required preparation and according to Ignatius he would prepare “a tightly written eight-to-ten-page agenda” to guide the discussion. McNamara would read and quickly digest each item, commenting on the details and frequently placing the item in a larger context. He was also quick to make decisions. Indeed, the word circulating around the Pentagon was, “Be careful about asking for a decision, cause you’ll get one.” After the meeting was over Ignatius would return to his office, dictate a memorandum of what had transpired, meet with his staff to bring them up to date and by the beginning of the next week start thinking about next Friday’s meeting. As Alfred Fitt, who served in a number of high positions in the DoD between 1961 and 1969, characterized it, “We did our business with him and no more than that; his manner and style precluded our offering advice or expressing doubts about matters beyond our charter.”

His close associate, Alain Enthoven wistfully echoed the sentiment, “Sometimes you felt that you would like just to sit down and kick something around and think it out together, but I learned that that just wasn’t his style. …once when I was trying to feel him out as to where his thinking was going

244 Ignatius to author, 7 May 2013.
in a particular area, he said to me something like, ‘I hired you to figure that out. You figure it out and tell me, and then I’ll decide whether or not I agree with you.’”

Although the weekly meetings were important, the principal way McNamara liked to communicate was in writing. “He would wade quite happily through a 50 to 100-page cover memo” in his office, scribbling his responses in the margins. As he told William Kaufmann just prior to being briefed on counter-force doctrine in his first month in office, “Give me something in writing; I hate to be briefed.” To a certain extent this was understandable, as a conventional military briefing consisted of three parts: this is what I am going to tell you; now I’m telling it to you; this is what I have told you. Repetition is not a bad technique when instructing troops, whose minds can wander easily, but it was an anathema to McNamara. In addition, military briefers not infrequently would begin at the most elementary level. McNamara’s usual reaction to this kind of presentation was to interrupt and go directly to the issue that interested him or to

248 William Kaufmann, OSD Interview, July 14, 1986, p. 16.
249 Apparently, the problem still exits over forty years later. Secretary Robert Gates did not like The Pentagon’s style of briefing either and tried to change it but to no avail, “…[it] was a singular failure on my part,” he would write. “I was not just defeated — I was routed.” Gates, op. cit., p. 86.
terminate the briefing. Subjecting a junior officer or official to such behavior was one thing, but McNamara would treat senior officials the same way.

Paul Nitze, an experienced senior government official who had briefed presidents and prime ministers, recounted to his biographer being subjected to such treatment. It obviously still rankled.

Nitze claimed that McNamara’s problem was his relentless need to prove his brilliance and decisiveness. He would demand papers for early the next morning, expect you to stay up all night preparing them, and then cut you off halfway through your presentation. He would proclaim that you had now told him all he needed to know—maybe because you had, and maybe because he was so caught up in the image of mountain-climbing, decision making, problem-solving.250

On the other hand, McNamara’s communications with, and on behalf of, his superior, the President, carried informal cooperation so far that the act of communication itself was complicated and politicized. McNamara was willing to obfuscate his own ideas in order to fully support and carry out the decisions of his commander, again reflecting his firm ideas about a system of delegation which accepted directives from above as sacrosanct. When McNamara would make recommendations to either of the two presidents he served, he labeled each document a “Draft Presidential Memorandum.” He denominated them as “drafts so that I could submit my recommendations

250 Nicholas Thompson, op. cit., p. 199.
and if they didn’t choose to follow it, I could withdraw it, and there would be no way that the press or anybody else could drive a wedge between the President and me.”

Mirroring his all or nothing approach to delegation in general, McNamara found it difficult to strike a balance of clear communication and cooperative respect; extremes of respect (minimal for the military, maximal for the President) could equally interfere with the effective exchange of ideas. We have already seen McNamara’s strong hierarchical bent in his Millsaps speech. That trait had been evident as he worked up the ladder at Ford. There is no record of him disagreeing, for example, with Henry Ford, even when he felt strongly about an issue as he did in the case of the Edsel. He carried that attitude with him into his government service and was proud of it. As he would write in *In Retrospect*: “…it was the same with Kennedy and Johnson as it had been with Henry Ford II….they knew that my loyalty was unwavering, and that my goals were consistent with theirs.”

McNamara claimed that he told President Johnson, “…what I believed rather than what I thought he wanted to hear, but also once he, as the president,
made a decision, I would do all in my power to carry it out.” However, his associate Gene Zuckert noted that McNamara’s determination to fully cooperate with Presidential authority led to what he called “overcompensation” in burying any difference of opinion. “[W]e always used to say in the building that he was never more vigorous in defending a position than the one his boss had told him to take which he really didn’t believe in, and he always overcompensated to make sure that his boss’s position was the one that prevailed.”

That attitude is exemplified by an incident reported by President Kennedy’s assistant, Theodore Sorenson. In July, 1961, the Soviets were threatening to sign a separate peace treaty with East Germany that would have altered the status of Berlin. It was a very serious challenge to the new administration, second only to the Cuban missile crisis that would develop the next year. Kennedy and his advisers were considering what steps to take to convince the Soviets of the determination of the United States to retain their hold in Berlin, including the possibility of armed conflict. One important issue on which there was “sharp disagreement within the administration” was whether the president should declare a national

\[253\] Ibid.
\[254\] Zuckert OSD Interview, Oct. 10, 1984, p. 36.
emergency. According to Sorenson, when called upon by Kennedy for his views McNamara:

...extemporaneously presented a brilliant, logical, clear-cut argument in favor of an emergency declaration, speaking in well-structured paragraphs supported by facts. After the President decided against the declaration, we all filed into the Cabinet Room for the formal meeting of the NSC, and the President called on the Secretary of Defense to open the discussion. McNamara then proceeded to deliver, again without notes, a brilliant, logical, clear-cut argument against the issuance of an emergency order."  

In many ways McNamara had formidable communication skills — he was eloquent, organized, and overbearingly persuasive — yet managing cooperative communication effectively with both subordinates and superiors, shirking neither the cooperation nor the communication, was a key necessity for Defense Department management and a weak link in McNamara’s training, experience and personal temperament.

Conclusion

McNamara’s managerial method was to centralize DoD decision-making and to assume personal responsibility both for setting macro-level objectives and for specifying micro-level procedures to implement them, a

strategy which had certain strengths but more significant weaknesses. His micro-macro double load was a burden he created for himself that generated negative consequences as time went on, but it did not always prove unmanageable in practice. As noted in the previous chapter, his PPBS success showed his ability to reorganize department budgeting rationally so as to coordinate the strategies and capabilities of the service branches — he institutionalized a new and effective methodology for setting budgetary investment goals, and he carried those goals into practice through exhaustive procedural micro-management. As Charles Rosotti observed: “For the first 3 or so years of his term, his system was so new and there was so much ‘low hanging fruit’ that he was able to make it work pretty well….in the sense that he produced a lot more capability [in the services] for not a lot more money.”\textsuperscript{256} He generated resentment along the way, which was not an insignificant cost, but he did make better investments with DoD money, both setting initial budgetary goals and implementing them effectively. The DoD as he inherited it was badly in need of institutional reform, and any incoming manager might have felt an understandable temptation to centralize; the existing system was counterproductively decentralized, lacking in cooperation and coordination between the services, and decision-making

\textsuperscript{256} Charles Rosotti to author, June 14, 2010.
was weighted towards senior military officials rather than the Department’s
civilian secretaries. McNamara corrected many of those pre-existing
problems.

However, the micro-macro double burden which his over-centralized
approach created was ultimately unsustainable for him and unhealthy for the
DoD as a whole. One colleague observed that even his PPBS success
contained the seeds of failure, because what McNamara created failed to
institutionalize decision-making itself anywhere but at the isolated top of the
Department:

The inherent weakness was that this process depended on one
individual, McNamara, making a huge number of decisions and making
them all stick, with no real commitment from almost anyone else throughout
the organization to these decisions. Eventually, that broke down. If
McNamara had paid some attention to institutionalizing and organizing the
decision process, it would have been more stable.

McNamara too often engaged in the wrong kind of
institutionalization, demanding military and departmental changes in
procedure without soliciting military or departmental involvement in
substantive decision-making. Furthermore, his all or nothing style of
delegation, while earning him the loyalty of his small cadre of top aides, left
him exposed to opposite types of mismanagement at a wider level. He institutionalized his own responsibility for macro and micro decisions, but when he mishandled procedural, micro-level decisions through unproductive over-management, he sabotaged his prospects for building cooperation among alienated subordinates and colleagues. Without broad investment and support it was difficult to achieve the DoD’s main objectives, as this chapter and the following chapter on the TFX project will argue. Alternatively, when he faltered at the macro level none of his subordinates had any institutional mandate to fill that gap and the result was under-management, which proved particularly detrimental to the DoD’s policies regarding Vietnam. Thus the flaws in McNamara’s general management style, which this chapter has explored, will help to explain how the different types of specific mismanagement highlighted in the case studies of the following chapters occurred. Additionally, setting McNamara’s management style in comparison with the M- and U- models of his previous business schooling and work experience challenges us to consider what elements of business management can be mapped onto the needs of the Department of Defense and gives us further insight into the unique level of centralization which contributed to McNamara’s greatest failures as secretary.
CHAPTER 4
A PLANE GONE AWRY

“If you build it; [they] will come,” ~ Kevin Costner, Field of Dreams

On Saturday November 24, 1962 McNamara announced his decision in the hotly-contested, year-long competition to produce a new multipurpose fighter-bomber. A team of General Dynamics and Grumman Aircraft would build the new plane named the TFX that had been designed to meet the requirements of both the Air Force and the Navy. The contract was estimated to be worth around $7 billion and was the largest single aircraft order since World War II. It represented well over 12% of the entire military budget for FY63, and over 7% of the entire federal budget for that same fiscal year.\(^{257}\)

It was a very large contract but more was at stake than a large weapons procurement contract. The TFX project gave McNamara the opportunity to demonstrate the cost effectiveness of two initiatives that he considered important for holding down defense expenditures — “commonality” and “program definition.”\(^{258}\)

\(^{257}\) Of course the costs would be spread over 5-7 years so that the impact in any single year would not be nearly as great.

\(^{258}\) McNamara’s third initiative to reduce procurement costs was in the area of contracting. He took steps to: increase the number of competitive bids in lieu of sole (Continued…)
For anyone who had spent time in the automobile industry, commonality was a familiar concept. Automobile manufacturers used it all the time. For example, an Oldsmobile and Buick, both General Motors vehicles, might appear quite distinct when one stepped into the car but, in all likelihood, they shared a number of common components, including chassis and motor. The principle was widely accepted in the industry, but not in the defense establishment. For example, when McNamara became Secretary in 1961, each service continued to order separately items that were common to each. McNamara was convinced that by centralizing the procurement of common items the Department would realize substantial savings. Accordingly, he established early in his administration the Defense Supply Agency “to take over wholesale management of common [defense] supplies within the continental United States.” Centralized purchasing was only an initial step and fairly simple conceptually, but it stirred up considerable resistance in both the military and Congress. It should have served as a warning about similar efforts.²⁵⁹

Designing a weapon system to meet the requirements of both the Air Force and Navy, especially one as complex as a supersonic fighter-bomber,

²⁵⁹Kaplan, op. cit., pp. 24 ff; Quote at p. 25.
was a considerably more formidable task than centralized purchasing. It entailed significant risks because both services would resist the effort, and, to be successful, the final product would require a number of performance trade-offs by each service. Yet, McNamara judged the risk acceptable because, as he stated in his affidavit to the Senate Committee investigating the award in the case of the TFX “…we would save at least a billion dollars in development production, maintenance and operating costs.”

The other McNamara innovation was program definition. It was intended as “an attempt to protect the government from committing large amounts of money to a project before it was fully defined.” As the costs of weapon systems had escalated, it became impractical for bidders to produce actual prototypes of the weapon to compete against each other.

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260 TFX Contract Investigation, Senate Hearings, Committee on Government Operation, Permanent Subcommittee on Investigations, First Series, Part 2: p. 377, 88th Congress (hereafter “TFX Hearings”). How McNamara came up with the figure of one billion is unknown. Robert Coulam claims it was the product of a “secret study,” which has not yet surfaced. Robert F. Coulam, *Illusions of Choice: The F-111 and the Problem of Weapons Acquisition Reform* (Princeton: Princeton Univ. Press, 1977), p. 59; Deborah Shapley attributes the figure to a “back of the envelope” calculation by Albert W. Blackburn, a former Marine test pilot…based on past fighter procurement programs…” Shapley, op. cit., p. 106 (see testimony of Albert W. Backburn, TFX Hearings, First Series, Part 5: p. 1192 “a rough ballpark figure”). Lawrence Kaplan has uncovered a memorandum dated March 7, 1968 from Blackburn justifying the one billion dollar figure but the memorandum was dated three and one-half months after the award. See Kaplan, op. cit., p. 470. On the other hand, McNamara might have just chosen the number which could neither be proved nor disproved as some thought he frequently did. David O. Cook OSD Interview, Oct. 23, 1989, p. 8.

Under the new system, the procurement of any weapon system costing more than $25 million would be divided into two phases. Phase I was the program definition phase during which bidders would submit preliminary bids “…not on the basis of detailed designs, but…their ability to prove their competence to undertake and manage the contemplated program.”262 At least two bidders would then be selected to participate in Phase II of the process during which the Department would assign technical experts and military-service personnel to work with the remaining bidders as if they were a prime contractor to compete “on paper” for the project by describing in detail how they proposed to build the aircraft to design specifications. The TFX was one of the first projects to which this new technique was applied. McNamara hoped that it would reduce the costs of preparing bids which, in theory, would reduce the overall cost of the project. Ideally, it would also reduce the chance of “surprises” during the development stages of the project because bidders would address the greatest uncertainties in their proposals. There were, however, two unintended consequences that should have been anticipated: it brought the military services and contractors closer together and narrowed the differences between the two final bids.263

262 Ibid., p. 95.
The TFX project began with two interlocking events — a technological breakthrough and a change in Air Force command. In the late summer of 1959, General F. F. (“Hank”) Everest, a hard charging fighter pilot, became the head of Tactical Air Command. Although his command had just begun receiving the final production model of the F-105D — a nuclear strike fighter-bomber that could also carry a conventional bomb load and would become the workhorse of the Vietnam War — Everest wanted a new aircraft to overcome a major tactical flaw. The F-105 required a long, conventional runway to take off and land. Everest estimated that there were only 44 such runways within the operational radius of the plane and the battlefields in which it would most likely see action. These airfields would be well known to the nation’s most likely enemy, the Soviet Union, and could be easily neutralized in the event of a surprise attack imperiling the mission of TAC. To overcome this problem, Everest wanted a plane that could take off and land on unimproved terrain within 3,000 feet, as opposed to the 10,500 feet runway required by the F-105. The new plane also needed to be capable of travelling extremely long distances without refueling, for example across the Atlantic Ocean (“ferrying capacity”). Of course, the new plane would have to be capable of fulfilling the three principal missions of the Tactical Air Command, including an expanded conception of
“interdiction” to encompass the delivery of a nuclear weapon deep into enemy territory.\textsuperscript{264}

The preferred method for a fighter-bomber to deliver a nuclear strike deep in enemy territory was for the bomber: (1) to descend from cruising altitude before enemy radar could detect it; (2) fly at low subsonic speeds close to the ground (“on the deck”) to avoid radar detection; (3) make a faster but still subsonic dash also on the deck to the target (Everest wanted a so-called “dash range” of 400 miles); (4) drop its load and return at supersonic speeds to a friendly base. The problem was that no one had been able to design such an aircraft.

The central problem was that TAC’s requirements were aerodynamically contradictory. The TAC desire for transoceanic range, as well as its need for short take-off and landing capability from semi-prepared fields, required a relatively long, upswept wing for the proposed aircraft. However, its desire for high speed dictated a relatively short, sharply swept wing.\textsuperscript{265}

Early in 1960, John Stack, a respected NASA aeronautical engineer, told Everest that he believed he had solved the problem by designing a new wing. Previously, designers had assumed that to overcome the aerodynamic problem outlined above, the entire wing had to pivot. Since the wing was

\textsuperscript{264} Those three missions were: (1) acquire air superiority over the battlefield; (2) disrupt enemy forces by interdicting his supply lines; and (3) provide close support for Army ground forces.

\textsuperscript{265} Coulam, op. cit., p. 38.
attached to the plane inside the fuselage, this presented an insuperable problem. Stack’s new wing would be divided into two sections so that the outer section required for subsonic long distance travel would pivot on the wing itself.

The design was promising enough for the Air Force to move ahead with a development program. In approving the program, however, Air Force Headquarters imposed an additional requirement viz., that the plane be capable of flying on the deck at a supersonic speed (mach 1.2) for its dash to the target.266 The Air Forces’ own technical staff predicted that this additional requirement would create size and weight problems because of increased drag and tremendous structural stresses that would result from flying so low at such high speeds. Higher drag would result in greater fuel consumption; greater stress would require more rigid and aerodynamically refined aircraft structure. Both factors would mean greater aircraft weight and performance deterioration. Since the Air Force recognized that the new aircraft might be its last chance for a manned fighter-bomber, it was not deterred and recommended a development program to the outgoing Eisenhower administration, including test aircraft, with a price tag of $2.2 billion.

266 Ibid., pp. 41-40.
At the same time, the Navy was also considering its aircraft requirements for fleet protection. It concluded that it needed a plane that could circle a fleet of ships at high altitude for long periods of time with the ability to destroy any approaching enemy aircraft at a distance of at least 20 miles. The plane required long endurance as well as complex detection and
air-to-air missile systems. The plane also had to be relatively short and light with sufficient lift for carrier operations. The Navy had received tentative permission to proceed with this single mission aircraft which it named “The Missileer.”

The outgoing Eisenhower administration was unwilling to commit the new President to such expensive long-range programs, so McNamara’s predecessor, Thomas Gates, directed the Air Force to cease further TFX development and directed the Navy to delete any funding for the Missileer from the 1962 defense budget. In addition, because Eisenhower and Gates were concerned about the proliferation of weapon systems with similar characteristics, “it instructed the Director of Defense Research and Engineering to begin efforts to coordinate the requirements of the services into a single multi-servicefighter.”

Shortly after McNamara assumed office, both the postponed TFX decision and a report from one of his appointed task forces reached his desk. The report recommended that the Department “undertake the development

267 Ibid., p. 46. Examples of duplication included the Army’s Jupiter and Air Force’s Thor intermediate-range missiles, the Air Force’s Snark and Navy Regulus cruise missiles. As the House Appropriation Committee wrote in 1957, “Each service, it would seem, is striving to acquire an arsenal of weapons complete in itself to carry out any and all possible missions.” House Committee on Appropriations, Report No. 471, 85th Cong., 1st Sess., p. 20.
of a multi-service bomber for use in the limited war environment.” The TFX appeared to fit that bill. The plane’s projected ferrying capacity, ability to operate from unimproved terrain, supersonic speed, and conventional bomb-carrying capacity fit many of the characteristics that the new administration was looking for as it moved the nation’s defense policy away from “massive retaliation” of the Eisenhower administration towards a policy of “flexible response.” The new approach emphasized military response proportional to the military threat facing it. In the immediate context, that meant increasing the nation’s ability to wage conventional war.

As he reviewed the aircraft’s capabilities, McNamara also came to the conclusion that the TFX satisfied many of the characteristics that the Navy had been looking for from the Missileer and, accordingly, directed Herbert York, the holdover Director of the Defense Research and Engineering (DDR&E), to direct the Air Force and Navy “to study the development of a TFX, based on a tactical fighter then under consideration by the Air Force, to meet [the Navy’s] requirements for future fighter bombers [and] develop a coordinated specific operational requirement and technical plan for his [York’s] approval.”

268 Coulam, op. cit., p. 50; Art, op. cit., p. 34.
York, aware of the services’ mutual antipathy towards a joint fighter, decided that the best way to achieve consensus was to convene a committee with an expanded agenda to include not only the TFX but the Navy’s Missileer and the close-support air requirements for the Army and Marines. The Committee on Tactical Air met for four months and produced one recommendation that McNamara accepted — close-support missions required an aircraft other than the TFX; it was unable to resolve the divergent views of the Air Force and Navy on the specifications of the TFX. McNamara then asked the Air Force Secretary, Eugene Zuckert, to convince the Navy to accept the Air Force’s specifications as the basis for a joint aircraft with modifications, of course, to accommodate carrier operations. Zuckert was unsuccessful because in the services’ views. “…the performance requirement of their respective missions were so different that to design one aircraft to perform both missions would compromise each of them.”270

McNamara was not persuaded. “I believe that the development of a single aircraft of genuine tactical utility to both services in the projected time frame is technically feasible,” he wrote. Accordingly, on September 1 he ordered, “A single aircraft for both the Air Force tactical mission and the

Navy fleet air defense mission will be undertaken. The Air Force shall proceed with the development of such an aircraft.” McNamara’s memorandum made a number of concessions to the Navy involving weight, aircraft length, ability to carry air-to-air missiles, but significantly provided, “Changes to the Air Force tactical version of the basic aircraft to achieve the Navy mission shall be held to a minimum.” A request for proposal to industry (RFP) was to be ready on October 1 with a signed contract set for February 1, 1962.271

McNamara’s belief in the feasibility of a single plane may have been strengthened because the Air Force had recently agreed to accept a version of the Navy’s F-4H as its tactical fighter after he had cancelled further production of the F-105. He may have reasoned that, although services were reluctant to accept aircraft designed for another service, they would eventually come around. The situations were not the same, however. The Air Force had the opportunity to test the F-4H rather than merely assess a paper

271 TFX Hearings — First Series, Part 6: pp. 1513-1514. The basic specifications of the aircraft were contained in Specific Operational Requirement Number 183 (SOR-183) and were classified at the time of the first TFX hearings; they were included in the Final Report. The concessions made by McNamara to the Navy in his September 1 memorandum included: the ability to: accommodate a 36 inch radar dish, withstand carrier operations, carry six, 1,000 pound missiles for 3.5 hours at 150 miles from a carrier, and have a take-off gross weight not to exceed 55,000 pounds. See U.S. Senate, Committee on Government Operations, Permanent Subcommittee on Investigations, TFX Contract Investigation Report, 91st Cong., 2nd Sess., (1970) (hereafter “TFX Hearings, Second Series”) p.8. Note these concessions did not replace any of the SOR-183 requirements, see Coulam, op. cit. p. 101-102.
design. Air Force pilots could judge for themselves whether the plane met their requirements. In addition, the F-4H was compatible with the missions that both services envisioned for the aircraft. That was not, or did not appear to be, the case for the TFX. One service wanted deep interdiction, the other fleet protection. These were distinct missions even if the requirements of the aircraft were somewhat similar.\(^ {272} \)

The services met the October deadline in the form of a 250-page Work Statement. The Statement was intended to meet the requirements of project definition but still left many of the tradeoffs unresolved. Available information at the time suggested that no aircraft could meet all of the requirements in the Work Statement.\(^ {273} \) For example, NASA pointed out to the Air Force that its specification for a supersonic dash “on the deck” would greatly increase the size and weight of the plane, an observation confirmed by that service’s own engineers. Such increased weight made the plane’s adaptability to carrier operations unlikely.

Why was such “on the deck speed” necessary, especially in a tactical fighter? Did it improve the chances that the plane would reach its target?

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\(^ {272} \) As Alain Enthoven wrote, “The key factor [in commonality] is the compatibility of the proposed missions of the aircraft.” Alain Enthoven op. cit., p. 263. McNamara was still using the Navy F-4H argument as a justification for his decision as late as 1986. See Robert S. McNamara, OSD Interview, May 22, 1986, p. 17.

\(^ {273} \) For the definition of a Work Statement, see Art, op. cit., p. 24.
Robert Coulam, who has written the most detailed narrative of the TFX project, cogently argues that the increased speed provided at best marginal survivability benefits, and may indeed have decreased them.\textsuperscript{274} An even more fundamental question is why the aircraft needed such a dash capability. It was only useful to deliver tactical nuclear weapons. We know why the Air Force wanted nuclear capability; McNamara had recently taken steps to cancel the F-105, a nuclear capable fighter-bomber, and the TFX was viewed as possibly the last manned bomber that would be built. But was interdiction deep into enemy territory with nuclear weapons an appropriate Tactical Air Command mission? How did deep interdiction fit into the new emphasis on flexible response? Alain Enthoven, who headed Systems Analysis subsequently questioned the value of deep interdiction in either Europe or Asia. But, McNamara did not consult Systems Analysis before he made his decision as Enthoven made clear.\textsuperscript{275}

If the TFX was to prove successful, each of these questions needed clear answers. The principal difficulty in the development of the TFX was weight, and most of the questions centered on this problem.\textsuperscript{276} Systems Analysis was the logical place to seek answers, but McNamara did not bring

\textsuperscript{274} Coulam, op. cit., pp. 42, 94.
\textsuperscript{275} Enthoven, op. cit., pp. 221, 262.
\textsuperscript{276} Coulam, op cit., p. 55, n. 48.
it into the discussion. Various reasons have been advanced for its lack of involvement: the office was not adequately staffed; Enthoven, who was a deputy assistant secretary was not in a position to go head-to-head with his boss, the newly appointed assistant secretary, Harold Brown, who was a firm supporter of a single aircraft. Finally, McNamara may have been unwilling to subject his own proposals to rigorous analysis. We will return to this issue at the end of the chapter.

Nine companies responded to the Work Statement by the December 1 deadline -- three individual companies and three two-company teams.\footnote{Individual submissions: Lockheed, North American Aviation, Boeing; Teams: Republic Aviation & Chance Vought, General Dynamics & Grumman, McDonnell & Douglas. Apparently Boeing rejected partnership feelers put out by Grumman because it thought it had a step up over all the other airframe bidders. See Richard Austin Smith, “The $7-Billion Contract That Changed the Rules,” \textit{Fortune}, Vol. 67 (March, 1963) p. 101.} Initially, the selection process followed established Air Force practice. Standard procedure was for bids to be referred to an Ad Hoc Evaluation Group (in this instance, 250 cost accountants, aeronautical engineers and experienced Air Force officers), to assess the proposals and to grade, or “score,” them in four areas: management, operational, technical, and logistical. These results were sent to an Air Force Source Selection Board composed of senior flag-grade officers and, since this was a bi-service weapons system, a Navy admiral. The Selection Board reviewed the
Evaluation Groups’s conclusions and voted in secret as to which company to recommend as the source. In turn, the Source Selection Board’s recommendation and the comments of the service commands that were directly impacted were sent to the Air Force Council, a group of eleven senior general-grade Air Force and Naval officers, that reviewed the recommendations and voted on a source to develop the weapon system. That decision was passed through the Chief of Staff of the Air Force and the Chief of Naval Operations to the two service secretaries and finally to the Secretary of Defense for a final decision. The important point is that with a major decision such as the TFX, twenty-three senior generals and admirals had reviewed the recommendation before it reached the Secretary and his service secretaries.

The Evaluation Group found all of the proposals unacceptable, but that two of them (Boeing and General Dynamics/Grumman) were superior to the other four. Consistent with the new project definition procedure, the Group recommended that these two be given paid study contracts to correct the deficiencies in their proposals.\textsuperscript{278} This recommendation was passed on to

\textsuperscript{278} The Evaluation Group found that Boeing’s proposal was unacceptable because it had designed its airframe round a new GE engine that was only “on paper;” the risk was too great that the engine could not be developed within the timeframe of the TFX delivery and the potential advantage of the GE engine was not worth the cost of delay in the delivery of the plane. “The problem with the General Dynamics/Grumman proposal was (Continued…)
the Source Selection Board that concurred that all proposals were deficient, but recommended that the study contract be given exclusively to Boeing. The Air Force Council agreed with the Evaluation Group that there should be a runoff between Boeing and General Dynamics/Grumman, and this decision was approved by the service secretaries and McNamara.

This early split between those who favored a single source study contract and a runoff between the two best submissions revealed a basic difference in procurement philosophy between the Air Force and the Navy. The Air Force selected a source early in the procurement process and worked with it to produce an acceptable design. The Air Force considered this procedure more efficient because it lowered the costs of the design phase, reduced the cost and time for evaluation, and produced a quicker result. The Navy, on the other hand, was accustomed to nailing down an acceptable design before deciding on a source. It considered its practice more efficient and less costly because there were fewer surprises during the development phase.

(...Continued)

that the ‘wind-over-the-deck requirement was much too high for carrier operations. Accordingly, Boeing redesigned its plane with a new airframe to accommodate another engine and General Dynamics/Grumman redesigned its airframe to meet the wind-over-the-deck requirement. See Art, op. cit., pp. 64-65.
In the case of the TFX, the Navy believed it was vital to lock in a design because it intended initially to purchase only 250 planes out of a total estimated production run of 1,700. It knew that after it signed off on the design, it had very little leverage because the Air Force had been given overall control of the development of the aircraft, and McNamara had clearly stated that “Changes to the Air Force tactical version of the basic aircraft to achieve the Navy mission shall be held to a minimum.”

The two remaining contestants completed their revisions by the beginning of April 1962. After vetting by the Evaluation Group, the Selection Board evaluated their proposals for a second time and voted 3-1 to award the contract to Boeing. The Navy representative agreed that the Boeing design was superior but considered neither design acceptable. The Air Force Council basically came to the same decision. All 10 officers agreed that Boeing had the superior proposal, but the Navy refused to approve the design. For the Navy, the “wind-over-the-deck,” a Navy requirement for carrier operations, was a problem with both designs. To satisfy the Navy, the weight of the plane had to be reduced, or the area of the wing increased, or a combination of both. The difficulty was that this

279 See p. 172, supra.
280 Art, op. cit., p. 68. Boeing’s second proposal had increased the weight of the plane by 4,000 pounds.
solution degraded the plane’s supersonic dash which was a prime Air Force requirement. The services were at a stalemate.

The service secretaries then recommended to McNamara that the two competitors be given a short period, only three weeks, to try to overcome the Navy’s objections and that “some divergence in the airframe structure be permitted in the two versions.” McNamara agreed to the three-week period and directed, somewhat delphically, that “acceptable Navy and Air Force versions were not to be created by reducing the degree of commonality so far as to lose the savings inherent in a joint program.”

Boeing and General Dynamics/Grumman submitted their bids to the Source Selection Board which found for the third time that Boeing had the better proposal. Boeing had increased the wing area of the plane by 15% reducing the wind-over-the-deck requirement and increasing loiter ability which pleased the Navy. Although the design reduced the supersonic dash capability the Air Force had obtained a longer ferry range and a larger ordinance capability; it considered the tradeoff acceptable. The Air Force Council unanimously supported the Board’s recommendation. There was no disagreement by either the Navy or the Air Force that Boeing be selected as

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281 TFX Hearings — First Series, Part. 2: pp. 379, 513.
282 Art, op. cit., p. 72.
the contractor. The Navy was willing to bend its preferred procurement policy to permit selection of the source before final design definition, but it was unwilling to sign off definitively on the program until the design had been determined. It agreed that only Boeing be selected to continue design studies.

One might have thought that the project was in fairly good shape at this point. Although the signing of a contract was five months behind schedule, the services had unanimously agreed on a source; the Navy had shown some flexibility by agreeing to a source before the design was completely locked in, and the Air Force had agreed to design changes that improved the wind-over-the-deck requirement for the Navy even though the changes degraded its on the deck supersonic capability. The military services were unanimous that Boeing should be selected for a sole source study contract.  

The service secretaries disagreed and recommended that the competition continue between the two companies and that study contracts be given to each, but with two significant changes from the rules that had governed the three earlier competitions.  

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283 Art, op. cit., p. 75.
284 TFX Hearings — First Series, Part. 6, pp. 65-66; Part 6: p. 1400.
Group, Colonel Gayle, was permitted to assist each competitor in correcting the deficiencies that the Group had found. Second, Deputy Secretary Gilpatric wrote the presidents of each company spelling out the three conditions that had to be met before any contract was signed:

1) Satisfaction of both the Navy and Air Force that a significant improvement to their tactical air capabilities is represented by the winning design.

2) Minimum divergence from a common design compatible with the separate missions of the Air Force and Navy to protect the inherent savings of a joint program.

3) Demonstrably credible understanding of costs for both development and procurement of the complete TFX weapon system, which costs must be acceptable in view of the capability added to our military strength by the weapon system.285

The final competition began on July 1 under these new rules. The companies submitted their revised designs on September 1 which were then subjected to the standard review. The Evaluation Group found both designs acceptable. The Source Selection Board, the Air Force Council, and all relevant user commands unanimously recommended Boeing as the source. Those recommendations represented the views of one colonel, four major generals, six lieutenant generals, five generals, five rear admirals and one admiral.

285 TFX Hearings — First Series, Part. 5: p. 1195; see also Art., op. cit., p. 76.
Then the wheels suddenly came off the cart. McNamara and his two service secretaries overruled those recommendations and selected the General Dynamics/Grumman team to build the aircraft. DoD announced its decision on November 24 in a short press release that offered no clue as to how it had reached such a conclusion. In a memorandum for the record prepared three days earlier, but not released until March 3, it spelled out in greater detail how McNamara and the two service secretaries had reached their decision. They rated the two designs virtually the same in technical operational, management, and logistics. The big differences were in commonality and cost realism which had been spelled out in Gilpatric’s letter of July 13, 1962. They determined that The General Dynamics/Grumman design had an 85% on commonality and Boeing only 60% and even this latter figure was optimistic. As for cost realism, the three men also found that “It is hard to understand the optimism of the Boeing estimates for engineering, tooling and manufacturing…they are approaching the development of this aircraft on a very simple basis.” The General Dynamics/Grumman proposal, on the other hand, “could be considered as

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286 DoD Press Release dated March 3, 1963, Research and Development, TFX 1961-71, Box 879 OSD Historical Office; TFX Hearings — First Series, Part 9: p. 2519. The figures used in the press release were not the same as the weighted scores developed by the Source Selection Board in the Fourth Competition, but the conclusion was the same.
being conservative…[and] more likely to meet the development milestones and cost goals than the Boeing proposal.”

This announcement caused, as one might suspect, uproar within Congress and the defense community. It is striking how unprepared McNamara and his colleagues were for the storm that broke. Zuckert must have been aware what was about to happen; he had been visited by no fewer than 12 members of Congress regarding the TFX. His prior service as Assistant Secretary of the Air Force in the Truman administration should have prepared him. Perhaps, it did, but he did not appear to have passed on his experience to his boss or, if he did, McNamara did not listen.

One of the early visitors to McNamara after the award had been announced was Senator Henry M. Jackson who was frequently referred to as the “Senator from Boeing” because the company’s headquarters was located in his state. According to Shapley “the defense secretary was shockingly rude…act[ing] as though congressmen had no business seeking defense contracts for their states and districts; such politicking was not in the national interest.” Whatever occurred, Jackson was angry and persuaded John L. McClellan, a populist senator from Arkansas and chairman of the

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287 Some of the facts and figures used in the November 21 memorandum were challenged in the Senate hearings and appeared to be incorrect. Ibid, Part 1: pp. 230-233, Shapley, op. cit., p. 638 f/n 34.
Senate Permanent Subcommittee on Investigations, to involve himself in the matter. McClellan and his subcommittee had become prominent in the 1950s by investigating labor racketeering. His potential involvement should have suggested caution on the part of McNamara and the department. McClellan’s first act was to write McNamara a letter on December 21 requesting a delay in signing the TFX contract until his committee had looked into the matter. This was hardly a reasonable request but, in what appeared a studied insult, Gilpatric signed the TFX contract the afternoon that McClellan’s letter was received and wrote the chairman five days later, “I consider it to be in the national interest for the program to proceed further without delay.”

Matters were not off to a good start.

Senate hearings on the TFX project began on February 26, 1963. McClellan followed the same tactics that he and his counsel, Kenneth Alderman, had used in investigating labor racketeering — start with bit players who had subordinate roles to build a case against the major targets of the investigation, in this case, McNamara, Gilpatric, Zuckert (Air Force) and Korth (Navy). DoD could probably have avoided much of the negative publicity surrounding the TFX award if McNamara had testified first, a courtesy routinely granted cabinet officers. He could have set forth, in detail,

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why he and his service secretaries had made the award, and seized the high
ground. As it was, the department did not even release a copy of the
Memorandum for the Record until March 3, almost a week after the hearings
began, and that document, dated November 21, contained a number of
errors.290

Instead of taking the initiative, DoD allowed the case against the
General Dynamics/Grumman award to build and was content to denigrate
the hearings, suggesting that the committee was improperly motivated.
DoD’s principal press spokesman, the “waspish” Arthur Sylvester, stated on
the record, “Obviously you will hardly get a judicial rendering from a
committee in which there are various senators with state self-interest in
where the contract goes.” Around the same time, Gilpatric apparently told
certain reporters that he had been “misled” by the chairman into believing
that the hearings would be short and non-confrontational. Even Zuckert
became involved, suggesting that committee staff had treated certain Air
Force officers improperly during their investigation causing one of them to
seek psychiatric help.291

290 See TFX Hearings, First Series, Part 1, testimony of Col Gayle.
McNamara did not present his side of the award until March 13, 1963. It began rather awkwardly with John McNaughton, the department’s General Counsel, reading a long affidavit setting forth McNamara’s side of the story. Since McNaughton had no personal knowledge of most of the facts in the case, he could not be examined on the merits of the decision, and the statement had very little impact. McNamara did not testify until March 23. In what might appear to be a retaliatory gesture, he was kept waiting all morning while the Committee interrogated Gilpatric. When McNamara finally appeared, he was not questioned about the actual award and its merits or demerits, but about conflicts of interest and the politics of the award.

The committee hearings were recessed on November 20 because of the death of President Kennedy, and would not formally resume until March, 1970, finally concluding the following month.\(^{292}\) By that time the investigation had lasted more than seven years, longer than it took to build the TFX — now known as the F-111A for the Air Force version and F-111B for the Navy model - as Harold Brown wryly noted. The 45 days of hearings had not uncovered any impropriety or disclosed any inappropriate political

\(^{292}\) The Committee staff resumed its investigation of how the plane was progressing beginning 1966, but waited until the Project was completed until holding final hearings.
pressure. They had, however, raised suspicions that were widely circulated in the media.

None of the principal actors enhanced their reputations. McClellan, who had acquired stature as a racket buster, was injured because he and his counsel were seen to be conducting a vendetta against the Defense Secretary rather than an objective inquiry into one of the most important military contracts of the decade. McNamara was injured even more seriously. Important questions had been raised about his judgment. For the first two years of his administration, he had been largely immune from serious criticism. He had mastered so many details and he had been so forceful in his presentations that few dared challenge him. On the TFX matter, however, he was frequently on the defensive, not so much about the details of the aircraft (McClellan never questioned him about such matters), but about conflicts of interest and political pressures. These were subjects which could not be put to rest by citing numbers, but which depended on trust, and McNamara had not built up much trust with either the military or Congress.

293 [Senator Ellender], for example, stated in the hearings on the 1965 DoD Appropriations Bill, “It has been my privilege to be in Congress for 27 years, and I do not know of anytime that I have been confronted with a witness who is more informed than you [McNamara]. Hearings on the Department of Defense Appropriations, 1965, before the Subcommittee on the Department of Defense, Committee on Appropriations, U.S. Senate, 88th Cong., 2nd Sess., p. 230.
Both groups recognized his brilliance, analytical ability, facility with figures, and articulateness, but these did not automatically translate into trust.

There are probably many reasons for this impression. Foremost, was the distance McNamara maintained from those he worked with, especially the military. We have seen that during his time at Ford he was never a “car guy”. He was not comfortable with the Ford dealership network and eschewed attendance at many of the new-model rituals which were part of the car culture. By the same token he maintained a formal distance from the military except possibly with Taylor and Wheeler. As Richard Stubbing, a long-time expert on DoD budgets observed, “Often, he [McNamara] appeared to treat the chiefs as members of his staff rather than heads of the Military Services.”

Despite being urged to get up to the Hill more often he also maintained a studied distance from Congress. In addition, McNamara had a way of arguing that provoked resentment. He had not changed much from his Ford days when he brought “all the tools at his command” to win an argument. Zuckert put his finger on it when he observed, “that one of his [McNamara’s] problems was that he recognized the necessity of always being right because, if they once started to pick holes in the structure, the

structure would fall apart. Therefore, he just ran all over you. It was like being always on the defense.”

What McNamara needed after the McClellan hearings was to demonstrate that a bi-service plane could be built that substantially met the requirements of his September 1 memorandum, and was sufficiently cost effective to validate his claims about the savings that could be realized from “commonality.” Regrettably, after having made his decision as to who should build the plane, McNamara simply turned the project over to the Air Force to follow its standard procedures. He received periodic reports but attended no meetings relating to the TFX project, or otherwise attempted to shape the development/production process until the project got into trouble.

The Air Force used a development/production practice called “concurrency.” It was a system that telescoped development and production so that certain parts of the process might be begun before all of the technical issues that had arisen in a previous portion had been resolved. Concurrency had been developed in the 1950s to reduce the lead time between the initiation of a weapon system and its operational readiness. Its principal features were: a comparatively large number of prototypes produced on

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“hard” production tooling (rather than hand-built “soft” tooling), an accelerated testing phase, and the start of production before the testing phase was complete. Implicitly, the system assumed that problems would be few and easily solved and that development plans would be sufficiently detailed to permit “the rapid integration of complex development tasks for early production.” As a consequence, there was less time in the development process to resolve technical issues and a corresponding loss of flexibility because development efforts had to be coordinated with production schedules.

Whatever the merits of concurrency, was it appropriate in fabricating an aircraft that neither service wanted, that involved difficult tradeoffs in operational capabilities, and that had been entrusted to a corporate team that the military services had unanimously rejected? In retrospect the answer was clearly no and should have been reasonably apparent at the time. To require the Air Force to change its standard operating procedures, however, would have entailed civilian officials overruling military judgments for a third time. Only McNamara’s close personal involvement or a specialized institutional arrangement similar to the one used in developing the successful Air Force

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297 Ibid., p. 205.
missile program might have produced results that vindicated McNamara’s initial decisions. As we have seen from his time at Ford, McNamara was not interested in production issues, so the TFX proceeded under standard operating procedures.

It was a tight schedule. To insure that the first flights took place in December 1964, the plane would have to be ready for ground testing in October and major assembly had to begin in July. In turn, that meant first aircraft parts had to be fabricated in December, 1963 and drawings of these parts substantially completed by October, only ten months after the contract award. Yet, none of the officials involved seemed to have any doubts about the plane or the schedule. Harold Brown, Assistant Secretary for Research and Engineering, testified “There is no question that the Air Force version [of the TFX] is going to be extremely successful” and Zuckert, as late as 1966, would write, “The first flight of the TFX … may well prove to have been the most effective documentation of the McNamara technique of ‘project definition.’” McNamara testified before the Defense Subcommittee of the Senate Appropriations Committee on February 26, 1965 that “The flight test program [for the TFX] to date has been very

successful.” Actually, at the time, there had been very few flights and they had revealed substantial problems of which McNamara was probably unaware. At least two senators seemed to know more about the program than he did.299

As is true in the case of virtually every new sophisticated weapons system, problems arose during the development and production phases of the TFX. In 1963, a major issue involving the aircraft’s drag surfaced. This had major implications for the aircraft’s supersonic dash and its ferry capability. The problem was never satisfactorily resolved because the solutions depended on “a new aerodynamic principle” not yet discovered. Accordingly, the supersonic dash was reduced from a contract specification of 210 miles to a scant 30 miles; ferry capacity was similarly reduced from 4,180 to 2,750 miles.300 Another significant problem was weight. At the end of 1966, General Dynamics estimated a weight increase in the Navy version of 8,000 lbs. This was a serious problem and prompted the Navy to suggest a redesign. McNamara rebuffed this effort, sensing that it was an attempt by the Navy to acquire its own plane, and instituted what was called a Super

299 Senator Margaret Chase Smith raised questions on whether the TFX was underpowered and Senator Strom Thurmond raised a question about the lift-to-drag ratio. Both were, in fact, problems indicating that the senators had sources within the military. McNamara gave assurances that there were no problems.
300 Coulam, op. cit., p. 223 fn136; TFX Hearings, Second Series, p. 70.
Weight Improvement Program (SWIP) that was generally ineffective. What he failed to do was slow down a program that was moving inexorably toward producing the first production models after which changes would be difficult and expensive.

A third serious problem was the aircraft’s susceptibility to engine compression stalls. The problem had been discovered while on the ground and during the plane’s first flight in January 1965. It continued throughout the testing period. The engine and the air inlet and ducts of the airframe were incompatible, a problem which was magnified by the fact that the F-111 was using a new after-burning turbofan engine instead of the more traditional turbojet. This was an issue that should have been addressed early in the development process — certainly before the department had committed itself to production.

In spite of these difficulties, DoD signed a letter of agreement for production in April 1965 upon the recommendation of Zuckert and with McNamara’s concurrence. That was before DoD had any flight data of its own or anyone knew about the stall problems. DoD would not seriously focus on the problem until 1966. It would appear as if defense officials

Coulam, op. cit., 69 f/n 72, 217, 226-27; TFX Hearing, Second Series, Exhibit 26 W-51. There were other problems, as well, such as fatigue and stress cracks in the plane’s (Continued…)
were more concerned about meeting a production schedule than producing an aircraft that came as close to design specifications as possible. There is some indication that DoD was willing to authorize production with such a paucity of data because it believed it could force the contractor to remedy any deficiencies pursuant to the “remedies of deficiencies” provisions of a definitive production contract.302 One of McNamara’s early initiatives had been to reduce the number of cost-plus fixed fee contracts in favor of fixed price or price incentive contracts. The new contracts put the government in a far stronger bargaining position when it came to remedying deficiencies in performance. It was not, however, a fail-safe remedy. In the case of the TFX, it was not clear who was responsible for the engine/airframe incompatibility as between the engine manufacturer and the airframe fabricator. It was also not clear to what extent the government’s acceptance of the aircraft as well as its conduct during the development and production phases amounted to a waiver of some or all of the deficiencies.

302 The April 12, 1965 agreement was a letter agreement authorizing production of 407 Air Force and 24 Navy aircraft to be followed by a definitive agreement which was not to be signed until more than two years later on May 10, 1967. The letter agreement spelled out obligations in general terms; the definitive agreement was far more specific and detailed. Even though the letter agreement was “sketchy,” it was a binding legal obligation.
McNamara had received reports but had otherwise not taken much interest in the project until it was clear that there were problems with the aircraft. Beginning in August 1966 he finally recognized that the TFX was in trouble. DoD had identified 16 significant deficiencies in performance in the three existing versions of the plane. The situation was exacerbated by squabbling between the airframe and engine manufacturers each of whom blamed the other for the problems. In addition, McClellan’s staff had revived its investigation. Accordingly, McNamara set up a series of weekend meetings with the Chairmen and Presidents of General Dynamics and Pratt & Whitney and appropriate Defense Department officials to bring the project back on course. Dubbed the “Icarus Project” after the mythological Greek figure, these meetings, initially weekly and then bi-weekly, would last from August 1966 until January 1968. McNamara attended at least 25 of them. Under McNamara’s guidance, they were able to improve cooperation between the airframe and engine manufacturers, but accomplished little else.

As Shapley has described them:

The blueprints for the plane were spread out all over the rug in his office. The men—most of whom were not engineers but businessmen like himself—stood around awkwardly, trying to offer suggestions and feeling inept, when, to their amazement, McNamara

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303 The list of 16 deficiencies can be found at TFX Hearings, Second Series, Part 3: pp. 542-543; see also Coulam, op. cit., p. 226.
got down on his hands and knees in his pressed trousers and began crawling over the plans with a pencil, calling out instructions that he imagined could force this bird to fly.\textsuperscript{304}

All the while, General Dynamics was producing and the Air Force was accepting F-111s.

No bi-service plane was ever produced. The Navy’s version of the TFX project (F-111B) was cancelled in 1968. A total of seven planes were built for the Navy, all for purposes of research and testing.\textsuperscript{305} The Air Force expected to purchase 1,473 aircraft when the project was originally conceived. It actually purchased only 413 planes in the fighter-bomber series, of which only 82 (the F-111F series) substantially met the original specifications. In addition, the Air Force acquired 76 strategic bomber versions designated as FB F-111. The cost of the project was approximately twice its original estimate which was in line with other Air Force aircraft development projects in the 1950s that exceeded target costs from 100 to 200 percent.

McNamara continued to argue that his TFX decision was correct “in principle”. He would point out that the Air Force accepted the Navy’s F-4 aircraft after he had cancelled its own F-110. The commanding general of

\textsuperscript{304} Shapley, op. cit., p. 222.
\textsuperscript{305} Senate TFX Report, p. 75.
the Tactical Air Command “...was absolutely ecstatic about the F-4,” he
would observe.\footnote{McNamara OSD Interview, May 22, 1968, p. 17.} As we have already discussed, the F-4 was a faulty
analogy. The Air Force had a production aircraft it could evaluate. In the
case of the TFX each service had only an aircraft design; each was called
upon to accept on faith the performance characteristics of the final product.
Knowing the problems inherent in producing such a technically-complicated
product, each service was understandably skeptical.

Although McNamara continued to argue for the benefits of
commonality, the TFX project hardly supported his argument. Nor had
“project definition” proved its value.\footnote{Concurrency also fell out of favor as a result of the 1969 report of the Defense Blue
Comptroller General on the acquisition of major weapon systems — \textit{Report to the
Printing Office, 1971); and the testimony of Deputy Defense Secretary, David Packard
before the U.S. House of Representatives, Committee on Government Operations, Policy
Changes in Weapon Systems Procurement. The new policy was known colloquially as
“Fly it before you buy it,” and suggested that future procurement of major weapon
systems would have greater flexibility. Concurrency, however, is a snake that will not die
easily. Walter Pincus reported that the Air Force is currently using concurrency in the
development of the F-35 Lightning II Joint Strike Fighter which has cost the taxpayer an
additional $7.5 billion. The project has been delayed almost three years. See “Slack
Budgeting at Defense Department”, \textit{Washington Post} June 7, 2012, p. A21.} Perhaps the greatest irony is that
none of the versions of the F-111, which was intended to be “the sole tactical
fighter in the Air Force in the 1970s,” had the maneuverability necessary for
a fighter aircraft and, therefore, was not used in that capacity, but only as a ground attack bomber.

Probably the greatest damage from the TFX controversy was to the Secretary. It substantially damaged his credibility. “The press had started to doubt his truthfulness during the TFX hearings and this attitude had carried over to the Vietnam war”, his biographer concluded. From a management perspective the manner in which McNamara made the decision called into question the usefulness of PPBS and the Systems Analysis office. In 1967 testimony before the Senate Committee on Government Operations, Alain Enthoven admitted that his then boss, Charles Hitch was not consulted about the TFX and that his Systems Analysis office was not involved in any way. He attempted to justify that omission on the grounds that PPBS was in its most primitive form. He stated that McNamara made his decision based on “common sense.” Well then, Senator Karl Mundt of South Dakota asked, if McNamara’s decision was based on common sense and the military Evaluation Group’s decision rejecting TFX was also based on common sense (which Enthoven had to admit the military possessed), why didn’t the Secretary bring in Systems Analysis and PPBS “to overrule the common

308 Shapley, op. cit., p. 294.
sense determination of the three unanimous Evaluation Groups…?”

Enthoven, clearly on the defensive sought refuge in the time-honored excuse that he was “…not acquainted in detail with the facts of the case.”

In his testimony, Enthoven kept urging the committee not to judge PPBS by the TFX decision but by the decisions regarding the B-70, Skybolt and Nike-Zeus which had saved billions. Even admitting its values in these instances, one could easily have drawn the conclusion from his testimony, that when McNamara opposed a program, PPBS was useful but that when he supported one, it was superfluous. That, I believe, was the case.

In the final analysis the test of managerial competence is whether the manager accomplished what he set out to do. By that standard McNamara’s management of the TFX project was a failure. His actions also revealed certain deficiencies in his managerial approach: (1) his tendency to think that his work was done once he had made a decision and left the job for others to complete: (2) his cavalier treatment of other stakeholders in the decision like the military and Congress (3) his maladroitness when it came to a public defense of a controversial decision, (4) his disinterest in matters involving

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310 Ibid., pp. 239-40.
311 Ibid., p. 244.
production, and finally, (5) his inability to prioritize. Commonality was, and remains a “big idea” in terms of saving defense dollars. In light of the magnitude of the TFX initiative, one would have expected McNamara to have spent much more time on the issue — consulting Congress, the military, industry, and above all, answering fundamental questions like why did the Air Force need deep interdiction into enemy territory with nuclear weapons.
CHAPTER 5
ROBERT S. MCNAMARA WAR MANAGER

I have been critical of the Secretary of Defense, Mr. McNamara.
I was worried about him from the beginning when they said he makes no small mistakes ~ Eugene McCarthy,
Ft. Wayne, Indiana April 27, 1968

The great captains of history drew their lessons from complex chess, not simple dominoes ~ George W. Ball, New York Times Magazine,
December 21, 1969, p.33

One cannot assess McNamara’s overall performance as a manager without grappling with his involvement in the Vietnam War. It is a paradoxical narrative. In some areas, like logistics, he performed well. The introduction within a three-year period of more than 450,000 military personnel into a small country without a modern infrastructure 9,000 miles

312 McCarthy, a senator from Minnesota, was a Democratic candidate for president in the 1968 primaries. His strong showing in the New Hampshire primary on an anti-war platform persuaded President Johnson not to seek a second term and propelled Sen. Robert Kennedy into the race. McCarthy went on to say: “I think it’s probably a mistake to take presidents of any of the big three automobile companies and make him secretary of defense because on the record they’re not allowed to make any small mistakes. It’s kind of the Edsel complex. The Edsel and the TFX have so much in common. They were designed to meet all the needs of whoever was to use them. I think I should explain what the Edsel was conceived of providing. It wasn’t McNamara’s idea; he just programmed it. It was a car which was supposed to be the car a man would buy if he was on the way up and wasn’t sure if he was going to make it. Also, they said it was for the man who was on the way down and didn’t want anyone to know it; and for the man who was somewhat unsure of which way he was going. The Ford Motor Company figured that everyman in his lifetime would have to have three Edsels.” Eugene McCarthy campaign speech during the Democratic presidential primary, Ft. Wayne, Indiana Coliseum April 27, 1968 Pressed by Wakefield Mfg., Phoenix AZ, and distributed by McCarthy for President Committee, Washington, DC. Copy in author’s possession.
away presented formidable management issues. There were glitches, of course, but overall McNamara, who was characteristically very much involved, managed the operation well.

On the larger issues, however, such as our objectives in Vietnam and the strategy we should pursue to reach those objectives, he failed. His activism and centralized management style made him appear to be managing the war, which I argue he was not, but by his own admission such activism left him with inadequate time to understand the historical factors underlying the conflict. His deference to superiors made him reluctant to give advice that he believed would be rejected. His combative intellectual attitude prevented him from considering alternatives to the positions he was advocating. Finally, his lack of professional collegiality isolated him from a full range of opinions on the conduct of the war.

In sum, many of the traits—analytical brilliance, quantitative facility, persistence, and his determination to win personal encounters—that made him so forceful in managing issues like force structure, weapons acquisition, and even nuclear strategy, failed him when it came to Vietnam. McNamara was an Aristotelian tragic hero—a man who fails because of internal flaws colliding with external forces which he fails to understand.
Although the Vietnam War remains a highly contested period of American history, there has been wide-spread historical agreement about Robert McNamara’s role in it. The general portrait that has come down to us is that it was “his” war. As David Halberstam wrote in his popular, *The Best and the Brightest*, “In Washington the dominant figure on Vietnam was not Dean Rusk, but the Secretary of Defense McNamara; it was he who dominated the action, the play, the terms by which success in Vietnam was determined.”\(^{313}\) The maverick, Wayne Morse, Senator from Oregon, called it “McNamara’s War” and McNamara had accepted the appellation. “I don’t object to its being called McNamara’s War,” he replied to a reporter’s query, “I think it is a very important war and I am pleased to be identified with it and to do whatever I can to win it.”\(^{314}\)

This general impression has, if anything, been amplified over the years since Halberstam wrote his bestseller. Major studies by journalists who were involved in the war portray Robert McNamara as *primus inter pares* among the president’s advisers. A typical example would be the judgment of

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Marvin Kalb and Elie Abel who wrote, “McNamara more than any other high official, set the tone and direction of United States policy in Indochina.” After all, they argue, why else would President Johnson have sent him and General Taylor to check out the new head of state of South Vietnam, General Nguyen Khanh in early 1964 when a more appropriate choice would have been the secretary of state? He was, they write, “Washington’s No. 1 expert on Vietnam.”

High-ranking military personnel who participated in the conflict have reinforced this image. In memoirs that consistently blame civilian micromanagement for the tragic outcome of the conflict McNamara is singled out as a principal offender. Academics are also part of the chorus. As George Herring of the University of Kentucky has written, “McNamara remained the key figure…continuing…to serve as the ‘desk officer’ for Vietnam” and “Johnson and McNamara saw their principal task in war management as maintaining tight operational control over the military…The tendency to

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micromanage must also be understood in the context of the strains in civil-
military relations during the Vietnam era.”

How accurate is this portrait? It is not easy to disentangle the strands that combine to produce a tapestry of McNamara’s management of the war. Part of the difficulty lies in the varied nature of his responsibilities as the Secretary of Defense. On the one hand, he was an adviser, probably the most important one on the conduct of the war, to the president as Commander-in-Chief. In that capacity he participated in virtually all the important strategic decisions the president made with respect to the war. His influence is evident on the major questions that came before the president: troop deployments, bombing pauses, targets and peace negotiations. His influence was increased by the way in which President Johnson liked to receive advice. Adapting a technique he had used as majority leader of the Senate, Johnson would hold regular Tuesday lunches with McNamara, McGeorge (Mac) Bundy and Rusk to discuss the war. In such a setting McNamara, who was always superbly prepared and forceful in presentation, would have a distinct edge - especially as there was no military figure present as was the case until General Wheeler became a regular invitee late in 1967.

What is important to keep in mind is that he was not in a position to “manage” these major issues in any meaningful sense. He was a counselor—not a good one as it turned out - both in terms of his recommendations or the vigor with which he discredited those who disagreed with him - but he was only one of many advisers, perhaps the most important one, but still just one.

McNamara also had responsibility for translating the president’s decision, insofar as they involved the Defense Department, into operational directives. The Vietnam War was the first conflict in which the Secretary of Defense was directly in the chain of command from the president to the theater commander. In World War II, for example, President Roosevelt dealt directly with the Chief of Naval Operations and the Army Chief of Staff who were actually assigned to the Executive Office of the President. The Secretary of War, Henry Stimson played only a minor role. He “…was not invited to all or even most of the key conferences at which alliance strategy was hammered out with the British and was not even on the circulation list for the Joint Chiefs of Staff papers.”

After passage of the National Security Act of 1947, the three services were under a single department but each service retained much of its previous authority, including operational

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318 The Air Force was not yet a separate service but part of the Army.
authority. During the Korean War, for example, directives went from the president to the Joint Chiefs and from there to MacArthur. It was not until passage of the Department of Defense Reorganization Act of 1958 that the service secretaries were removed from the operational chain of command, permitting combatant commands to communicate directly through the Joint Chiefs of Staff with the Secretary and the President. McNamara made full use of the authority given him by that legislation to reorganize the Pentagon, fundamentally changing the means of procuring weapon systems and recasting U.S. nuclear strategy. One major question remained. How would he use this enhanced authority when U.S. forces were in combat? It was an issue no previous secretary had faced.\(^\text{320}\)

\(^{320}\) McNamara’s authority over operations was not accepted by all the services, however. Although the Defense Reorganization Act of 1958 specifically provided that the President, “…through the Secretary of Defense shall establish unified or specified combatant commands [and] … such combatant commands are responsible to the President and Secretary of Defense for such military missions as may be assigned to them by the Secretary of Defense…,” the Navy refused to accept the secretary’s operational authority over naval commands. Admiral Thomas Moorer, the Chief of Naval Operations, testifying on the \textit{Pueblo} incident before the Senate Committee on Armed Services stated, “The Joint Chiefs of Staff, of which the chief of naval operations is the Navy member, exercises command of all operating forces. Thus, in the case of the \textit{Pueblo}, the command chain ran up from CTF 96; to commander-in-chief Pacific Fleet; commander-in-chief, Pacific; to the Joint Chiefs of Staff, who in turn report to the commander-in-chief of the armed forces through the secretary of defense. As James Locher observed, “Moorer had transposed the responsibility of the defense secretary and JCS.” Department of Defense Reorganization Act of 1958 (72 Stat. 514 (Sec 202 (j); James R. Locher, \textit{Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon}, (College Station, TX: Texas A & M Univ. Press, 2002), p. 304; Senate Committee on Armed Services, \textit{Defense Organization: The Need for Change}, Staff (Continued…)}
The image we have of McNamara is also heavily influenced by his personality. As his oft-time opponent, George Ball, the Undersecretary of State, would write, “In any group where McNamara was present, he soon emerged as the dominant voice.” Ball credits him with having extraordinary self-confidence that was based not on bluster but “on a detailed knowledge of objective facts.” The accuracy and dependability of those “objective facts” have been questioned by some. David O. Cooke, Director of Administration and Management, a 45-year veteran of the Department who had served under twelve secretaries, for example, observed that McNamara “…Quite often…would give a finite number and it could not be proved true or untrue”.

George Ball echoed that observation. When asked to predict the chances of success of an operation, he wrote, McNamara:

…would answer with apparent precision: one operation would have a 65 percent chance, another a 30 percent chance. Once I tried to tease him, suggesting that perhaps the chances were 64 percent and 29 percent, but the joke was not well taken.\(^\text{321}\)

\(^\text{321}\) David O. Cooke, OSD Interview, Oct. 23, 1989, pp. 6, 8.
The McNamara Pentagon, Cooke suggests, was frequently gripped by the “fundamental fallacy of concrete numbers.”  

Accordingly, in any discussion of Vietnam strategy, McNamara would be a forceful voice. He did not always prevail but his advice was followed more often than not. In addition, as pointed out above, he was in the direct chain of command from the president to the area and theater commanders. The orders would pass through the Joint Chiefs, but they came from McNamara. No wonder then that he has been singled out as the most important figure, apart from the president, in setting Vietnam policy.

Complicating the picture is the virtually unanimous agreement that he revolutionized the defense department through transformative managerial techniques. “The term ‘revolution’ is often too loosely applied to political or bureaucratic change,” writes Lawrence Kaplan, “but it aptly describes the transformation that McNamara wrought in the Department of Defense… In his first years in office he shook up the Pentagon, bringing to it an energy and intelligence that would make him the most successful manager in the history of the department up to that time as well as its most controversial

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secretary.” Not only did McNamara “revolutionize” the defense department, he made sure that the frame of reference through which he orchestrated this revolution — the PPBS and the closely related analytical discipline of systems analysis — “would permeate every area of Defense responsibilities, from the preparation of the budget to conceptions of strategy, from the composition of military forces to choices of offensive and defensive weapons.” Furthermore, as Edward Drea writes, “What set McNamara apart were not only a far-reaching agenda but the depth and breadth of his involvement in all Defense affairs.” He oversaw every feature of defense management, according to this portrayal, presenting an agenda that was novel and innovative and expanding it to every corner of his jurisdiction. By the relatively early date of,

January 1965 he stood near a peak of success and influence. In taking command of the largest department in the government, he had improved its military capabilities, firmly established civilian control over the military services, swept away many outmoded practices and organizations, and forced the services and bureaucracy to adapt to a new, more analytical approach to defense management.

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323 Kaplan, op. cit., p. iii.
324 Ibid., p. 72.
326 Ibid., p.4.
Numerous voices have expanded this chorus. He brought his managerial expertise to the Department of Defense (DoD) and did not miss a beat. Borrowing methodologies developed by the Rand Corporation (a global policy think tank with close ties to the Air Force), McNamara’s Pentagon sought to subject an old object of study to exciting new techniques. As Arthur Schlesinger has described defense operations under McNamara, “The essence of their effort was the application of systematic quantitative analysis to strategic decisions.”\(^{327}\) He “entered on the scene,” as Halberstam put it, “an imaginative and able cog in an enormously successful machine: business methods applied to war.” And he brought with him a basic understanding of the affairs of men and how he would properly shape them. To him, “the mind was mathematical, analytical, bringing order and reason out of chaos. Always reason. And reason supported by facts, by statistics — he could prove his rationality with facts….\(^{328}\) That so many years later he still resolutely asserted, “things you can count, you ought to count,” has only seemed to confirm the legend — that McNamara subjected everything he possibly could to a relentlessly statistical analysis, delivering by this


\(^{328}\) Halberstam, op. cit., pp. 221, 217.
sophisticated social-scientific method what was otherwise elusive: rational
control in a fundamentally irrational world.\textsuperscript{329}

It was a world that was quite removed from the automobile industry.
There is, of course, an irrational aspect to selling cars, especially as
automobile manufacturers resorted to techniques such as psychographics.
The irrationality of salesmanship, however, could be channeled through test
marketing, focus groups and other techniques to probe market reaction.
None of this is available in war.

The Secretary whose reputation was built on counting, model-
building, and monolithic analysis — confirmed by critics and supporters
alike — made Vietnam the “rational” war, or tried to anyway. The signature
opportunity and challenge of his tenure offered him the greatest opportunity
he had yet received. It afforded a chance to take the most complex, chaotic,
and irrational of human endeavors and bring it under the kind of precise,
empirical control that only PPBS and, even more so, systems analysis could
provide. Thus, working under these assumptions, it comes as no surprise that
Gregory Palmer has suggested as the basis for his study on McNamara and
the management of the Vietnam War that “the Planning Programming
Budgeting System…dominated American defense planning between 1960

\textsuperscript{329} McNamara, op. cit., p. 238.
and 1968 and played a large part in the escalation of the Vietnam War between 1965 and 1968.”

This was the age of the “New Frontier,” after all, a time when vigorous, young public servants would sweep away the outdated, unnecessary practices of stodgy, close-minded generations. It was a time when the novel and the logical would no longer be shackled by the conventional and the customary. The men whom President Kennedy appointed to the executive department were perpetually impatient. Neil Sheehan once wrote after a two-day visit to Saigon by McNamara “…high American officials of McNamara’s generation were always in a hurry, hurry to make decisions so they could hurry on to make more decisions.” It was a new age and they were here to usher in the rational modes of social and bureaucratic control that had been stifled for too long. It was a New Frontier and no individual more neatly fit the description of the “New Frontiersman” than Robert McNamara.

The strength and appeal of this portrait, one which has been reproduced and strengthened with the passage of time, has firmly established

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332 See Kaplan, et al., Chapter 1 for a succinct account of the “New Frontier” and the energy it unleashed.
the terms of debate. It is obvious that McNamara managed the Vietnam War much as he managed everything else, with the same relentless procedures and the same tireless conviction that enabled him and his fellow “whiz kids” to revive the ailing Ford Motor Company and transform the Pentagon. If the American war effort proved a disaster (something that many, both the resolutely analytical and the nakedly political alike, have concluded), then it was certainly not because of under-management. If anything, it was over-management by civilians, especially the Secretary of Defense, who would go as far as selecting bombing targets in managing the war. Halberstam first offered this kind of portrait, one that was not just highly critical of McNamara’s approach but one that, importantly, presumed that his error lay in over-management. To him, McNamara “knew nothing about Asia, about poverty, about people, about American domestic politics, but he knew a great deal about production technology and about exercising bureaucratic power. He was classically a corporate man; had it been a contest between the United States and Hanoi as to which side could produce the most goods for the peasants of South Vietnam, clearly we would have won. If it had just been a matter of getting the right goods to the right villages, we would have won; unfortunately, what we were selling was not what they were buying.” The military would “produce the raw data, and McNamara, who knew data,
would go over it carefully and extricate truth from the morass.” These conclusions would lead him to tell reporters, with great optimism, that all of the “indices were good.” But he “could not have been more wrong; he simply had all the wrong indices, looking for American production indices in an Asian political revolution.” He was unwilling to “adapt his own standards and criteria.” And all of this made him, “there is no kinder or gentler word for it, a fool.”

What Halberstam first wrote has remained popular and, as demonstrated, has continued to shape our understanding of the Secretary and how he handled the Vietnam War. We glimpse a man managing the war to the fullest, managing it on precisely his own terms. He took the data and believed that he had extracted the clear picture that the details had otherwise obscured. The problem lay precisely here, that he allowed quantitative analysis to so fully shape his understanding of the conflict and the Asian society in which it took place, that he failed to understand who the Vietnamese really were or what they wanted. “Taking on a guerilla war was like buying a sick foreign company,” Halberstam mocked, “you brought your systems to it.”

Many have disagreed with Halberstam’s biting

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334 Ibid., p. 214.
conclusions — either suggesting that McNamara’s techniques were more effective than he was willing to concede or that forces beyond the secretary’s control conspired against him — but few, if any, have disagreed with his basic premise: that McNamara managed the war like he managed everything else.

The contention here is that this assumption needs to be rethought.

Introduction to Vietnam and the First Major Decision

Let us start by looking at what McNamara actually did as the U.S. became entangled in the Vietnamese insurrection. Vietnam was not a high priority foreign policy issue in the early days of the Kennedy administration. Berlin, Cuba, relations with the Soviet Union and the Congo received greater attention. Even in Southeast Asia, Laos was the principal focus. When the president-elect and his top cabinet nominees, including McNamara, met with President Eisenhower the day before the Inauguration he told them that Laos was “the key to the whole area” and that if it fell “it would just be a matter of time until South Vietnam, Cambodia, Thailand and Burma would collapse.” Kennedy would remark to W.W. Rostow, of the

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National Security Council (NSC), a week after that meeting “This [Vietnam] is the worst we’ve got, isn’t it? You know Eisenhower never mentioned it. He talked at length about Laos, but never uttered the word Vietnam.”

Vietnam was also a low priority for McNamara for most of 1961. He requested a short 5-10 minute briefing at the end of January from Edward Lansdale, the celebrated Air Force officer and CIA operative, who helped Ramon Magsaysay defeat the communist Hukbalahap in the Philippines. Lansdale, who had spent considerable time in Vietnam in the period 1954-1956 and was one of the few westerners whom South Vietnam President Diem trusted, had just returned from a visit to the country in mid-January. His memorandum on the current situation had reached the president and had created something of a stir. McNamara naturally wanted to be kept abreast, but the meeting did not go well. As Lansdale recounted several years later, when he entered McNamara’s office he dumped on his desk a stack of primitive guerilla weapons still caked with blood and mud. He was trying to impress him with the type of enemy the U.S. was facing and as he put it “the struggle goes far beyond the material things of life.” It was not the kind of briefing that McNamara appreciated. As he once told a White House aide

who was arguing against the war, “Where is your data? Give me something I can put in the computer. Don’t give me your poetry.” 337 Lansdale had a good deal of poetry but little data. “Somehow I found him very hard to talk to,” he would say, “watching his face as I talked, I got the feeling that he didn’t understand me.” 338

McNamara’s other contribution during the first few months was to persuade Kennedy to establish a Vietnam Task Force chaired by his deputy Roswell Gilpatric to review the administration’s policy and offer recommendations. He gave the committee only one week in which to accomplish its task. As we have already seen, short deadlines were typical of McNamara’s management style and frequently served a useful management goal of spurring actions. In the context of examining the highly complex military and political state of affairs in Vietnam, however, a short deadline made it likely that the final product would only be a rehash of prior initiatives and suggestions, especially because no one on the task force, save

338 CRS Interview with Edward G. Lansdale Nov., 19, 1982 as quoted in Gibbons II, p. 13. In that same interview Lansdale recounts another meeting when McNamara called him in and showed him a list of entries like body counts, enemy casualties from which he hoped to determine progress in the war. Lansdale told him, “Your list is incomplete. You’ve left out the most important factor of all…the human factor. You can put it down as an X factor…what the people out on the battlefield really feel; which side they want to win.” Lansdale claimed he figured out how to integrate this X factor into McNamara’s calculations, but by the time he had come up with an answer McNamara had lost interest. Ibid. p. 107.
Lansdale, had any experience in the subject. That is precisely what happened. As Gilpatric later reflected:

We took all of these masses of suggestions that came in from all of these people...who had been out there and we talked them over and threw them around at various sessions we had at State and Defense, and came up with this whole package of different measures. I think we bought that whole line and then put it forward as our own...I think we were kidding ourselves into thinking that we were making well-informed decisions.339

As the year progressed McNamara recognized that Vietnam would become a major area of attention. In August, he proposed to the Joint Chiefs that South Vietnam be “‘a laboratory for the development of organization and procedures for the conduct of sub-limited war’ run by an experimental command directly responsible to the Secretary’s office.”340 This was a perfectly normal corporate response. It is not unusual for a top manager to establish a small group outside the normal chain of command to develop a new product or service. Tom Watson had done the same sort of thing in developing the IBM 360. The military, however, has a different tradition and the Chiefs wanted no part of such a novel arrangement.

McNamara’s sustained engagement with Vietnam began in the late fall of 1961. The Viet Cong had enjoyed increasing success during the

339 Gibbons II, p. 36.
summer, spurring President Diem to request a bilateral defense treaty with the U.S. and ask for the dispatch of combat troops. In response to the growing crisis, Kennedy sent Maxwell Taylor, his special military adviser, and W.W. Rostow of the NSC on a week-long fact finding mission to Saigon. Their report of November 3 drew a grim picture: Viet Cong strength had almost doubled, and “the entire country was suffering from a collapse of national morale….” The report recommended a commitment of 6-8,000 U.S. logistical and combat troops to work side-by-side with the Vietnamese and the encadrement of U.S. civilians into the Vietnamese bureaucracy to “show them how the job might be done.” Taylor characterized the new relationship as a “limited partnership” that required a shift in the military organization that was providing assistance to the Vietnamese military “from an advisory group to something near — but not quite — an operational headquarters in a theater of war.”

Initially, McNamara supported the Taylor-Rostow recommendations; indeed, the memorandum submitted by DoD on November 8, only five days after Taylor’s written report, signed by McNamara, Gilpatric, and the Joint Chiefs, suggested that those recommendations might be too timid to convince the North Vietnamese that the U.S. was fully committed to their

341 Gibbons II, p. 76.
southern neighbor. The dispatch of combat troops, they argued, should be accompanied by a warning “that continued support of the Viet Cong will lead to punitive retaliation against North Vietnam.” As McNamara remembered it in his memoir, he immediately had second thoughts about his advice and three days later sent a revised joint State-DoD memorandum recommending against sending combat troops.

What had prompted this quick change of mind? After all, sending combat troops into a foreign country is a momentous decision. How could McNamara have changed his mind so quickly on so important an issue? Was it self-generated, as he maintained, or had he realized that his initial advice was contrary to the wishes of the president? As we saw when he was working at Ford, McNamara’s bureaucratic antennae were particularly sensitive to the wishes of his superiors. It turns out that President Kennedy did not want any public discussion of the possibility of sending U.S. combat troops to South Vietnam. In an unusual step either he, or someone close to him, had planted a story in the New York Times that Taylor’s proposed trip to Saigon was to consider many options and that the possible dispatch of U.S. combat troops was at “the bottom of the list.” Citing authoritative

sources, the *Times* reported, “Military leaders at the Pentagon, no less than
General Taylor himself, are understood to be reluctant to send organized
U.S. combat units into Southeast Asia.” As the Pentagon Papers
characterized the Times report, “this was simply untrue.”

To keep Taylor’s recommendation of combat troops secret, Kennedy went so far as
to recall copies of the report from all recipients other than his top advisers.

The Taylor-Rostow report was debated extensively over a two-week period. Kennedy decided not to send combat troops, but approved aid to
increase South Vietnam military forces and a substantial increase in the
number of U.S. advisers to the South Vietnam military down to battalion
level as well as in each provincial capital. It was the first significant step
toward the Americanization of the war.

The President’s decision, embodied in National Security Action
Memorandum (NSAM) 111, neglected to state clearly the objective of
America’s involvement in the South Vietnamese struggle. The military, and
McNamara, had requested a clear-cut statement of a commitment to an
objective like “…preventing the fall of south Vietnam to Communism.” That
was not forthcoming. Instead NSAM 111 stated, “The United States

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Reston, a personal friend of the president, NYT, Oct. 20, 1961 p. 32.
345 See: Gibbons, II, 100.
Government would join forces with the South Vietnamese Government in a sharply increased joint effort to avoid a further deterioration in the situation in South Vietnam” followed by a list of 10 initiatives. It was not an objective that the military, or indeed any manager, would feel comfortable with, and it would characterize the entire war effort.

*McNamara’s Travels: The Illusion of Management*

JFK’s decision marked the beginning of McNamara’s “personal responsibility” for the conflict. When President Kennedy asked for a cabinet officer “to be responsible for monitoring progress” in Vietnam, McNamara volunteered. After the issuance of NSAM 111, which spelled out the details of the president’s decision, McNamara took over. He may have been charged with “monitoring progress”, but to the world he seemed to take charge.

He made his first trip to Hawaii to begin the process of establishing procedures to implement the president’s decision in the middle of December. That meeting would be followed in the next nine months by five more trips.

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to Hawaii and one trip to Vietnam. On January 12, 1962, the NYT reported
that McNamara, “who rarely leaves Washington even on business trips…had
committed himself to similar trips every thirty days over the next few
months.”348 From this first trip in December, 1961 until his resignation in
November, 1967, he would make 11 trips to Hawaii for conferences on the
war and nine trips to Vietnam for the same purpose.349 These trips did much
to create the image of a manager in charge, especially because they were so
out of character. As the Times had reported in January, 1961 McNamara
seldom left his Pentagon office. During his tenure as Secretary, McNamara
did not address any of the military academies and almost never visited any
troops outside Vietnam. Thus, his regular trips to Hawaii and Saigon
acquired special significance. They were also an integral part of his
management philosophy — project leadership through activism:

The role of a public manager [he would say] is very
similar to the role of a private manager; in each case
he has the option of following one of two major
alternative courses of action. He can either act as a
judge or leader…I have always believed in and

349 In addition to conferences in Manila (1966) and on Guam (1967), Robert McNamara’s
trips were: 1961: Dec.-Hawaii; 1962: Jan.-Hawaii, Feb.-Hawaii, March-Hawaii, May-
days), Nov.-Hawaii, Dec.- Saigon; 1964: Mar.- Saigon, May- Saigon, June- Hawaii,
Conference with LBJ, Jul.- Saigon.
endeavored to follow the active leadership role as opposed to the passive judicial role.\textsuperscript{350}

But what did all this activity accomplish?

McNamara was clearly sensitive about his trips to Honolulu and Vietnam; he justified the meetings on the ground that it was the best way to obtain accurate information:

…Were our views of the problems we faced realistic? Would our plans to deal with them succeed? How were we to know when we were moving in an alien environment alongside a people whose language and culture we did not understand and whose history, values, and political traditions differed profoundly from our own…

None of us…was ever satisfied with the information we received from Vietnam. Of course, we asked for and got factual reports on military operations. And we avidly read the flood of narrative analyses from our embassy in Saigon. But very early we decided there was a need for regular meetings among the senior U.S. officials in Saigon and Washington dealing with these issues.

His answer was personal briefings:

Critics have subsequently faulted us for holding such meetings…While they were far from perfect, the meetings in Hawaii and Vietnam permitted those of us from Washington to convey the president’s thinking and objectives to our colleagues in Vietnam and gave them the opportunity to offer reports and make recommendations for further action. I believe we would have been far worse off if the meetings had not been held.\textsuperscript{351}

\textsuperscript{350} McNamara, op. cit., p.23.  
\textsuperscript{351} Ibid., pp. 43-44.
No one seriously argues that no meetings should have been held, but there are genuine questions: was a two-day briefing of the Secretary of Defense the best way to determine whether Washington’s view of the problems faced by the U.S. was “realistic”? Would fewer, but longer and more probing discussions, especially with more junior military personnel, have been more productive? Would it have been more revelatory to send junior staff members to explore the issues since they were not subject to the protocols inherent in the visit of a senior administration official like McNamara? What were the negative consequences stemming from how briefings were conducted?352

First, the trips were exhausting. If they were to Hawaii, the aircraft, a converted windowless KC-135 without soundproofing and initially without bunks, would leave on a Sunday afternoon and arrive before midnight in Honolulu. Monday would be filled with all-day briefings with an evening departure for Washington so that McNamara could brief the president on Tuesday morning. A Saigon trip, which took over 20 hours, was even worse. As William Colby, a future Director of the CIA, described it:

352 Zuckert once visited Vietnam shortly after McNamara. Whereas the latter was optimistic, Zuckert came away “very pessimistic.” Part of his pessimism stemmed from the phoniness of the briefings. During his visit Zuckert saw the Air Force bomb a log cabin that was supposed to have been a Communist stronghold. Zuckert complimented The Vietnamese officer in charge of the operation who replied, “We did a lot better for Life photographers last week.” Zuckert, OSD Interview, Oct. 10, 1964, p. 26.
[We] were bundled into the windowless KC-135 jet for the familiar leap from Andrews Air Force base outside Washington to Anchorage, Alaska, to Tan Sun Nhut airport in Saigon. The procedure was always the same: diving upon arrival into a series of briefings in hot, stuffy rooms and a succession of conferences with American and Vietnamese officials (in that order) to try to determine what was happening “on the ground.”

Chester Cooper of the NSC described one of his visits as follows:

His typical trip involved leaving Washington in the evening and, after a twenty-four hour journey and a thirteen hour time change, arriving in Saigon at eight in the morning. The Secretary would emerge from the plane and suggest graciously that his fellow-travelers take a half-hour or so to wash up and then join him at a 9 o’clock briefing at MACV Headquarters. There, for the next three hours, they were expected not only to add up figures but to absorb the rapid-fire series of complicated military briefings liberally seasoned with charts, graphs, maps, and the inevitable sequence of slides.

What were the briefings and conferences like? In Hawaii they were conducted in a large conference room before 50 or 60 persons so that even McNamara had to admit, “the crowded atmosphere and agenda often made it hard to focus on the issues at hand and ensure we were receiving candid reports and thoughtful recommendations.”

Mac Bundy, the National Security Adviser, accompanied McNamara on his November, 1963 trip to

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355 McNamara op. cit., p. 43.
Honolulu and before the trip asked his colleague, Mike Forrestal, what the conferences were like. Forrestal reported:

…that past meetings had consisted of 100 observers in the commander’s conference room watching the military briefers unveil “a dazzling display of maps and charts, punctuated with some impressive intellectual fireworks from Bob McNamara.”

Bundy remarked that “the agenda seemed to be full of briefings and [I] asked Forrestal if something could be done about that or whether they would have to have some dinners on the side to do some real talking.”

Apparently it was difficult to change the format; the large circus-like briefings continued, and there were few occasions for candid talk. Later, when he was looking for a pithy way to summarize this trip for his staff, Bundy concluded that the best way to describe the briefings was “people tried to fool him [McNamara], and he tries to convince them they cannot.”

The inadequacy of quick fact-finding visits was dramatically demonstrated by the oft-repeated description of a weekend trip by two officials to determine whether the U.S. should support a coup against President Diem in the fall of 1963. The administration was divided. The group supporting a coup despaired of ever winning the war unless Diem

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dismissed his brother, Nhu, as an adviser which the South Vietnamese president refused to do. The opposing group admitted that Nhu was a malign influence but argued that Diem was the best available leader for the country, that a coup invited chaos, and that the U.S. should stick with him but continue to bring pressure to remove Nhu. As happens so often when faced with a difficult decision, each side hoped that more “on the ground” information would resolve the problem. Accordingly, Kennedy sent Maj. General Victor Krulak from Defense and Joseph Mendenhall from State on a four-day round-trip to Vietnam to report on the situation. Upon their return, Krulak gave an optimistic view of the military situation. He assured the group that the war was being won and that abandoning Diem would undermine a successful strategy. Mendenhall on the other hand reported that the war was being lost and that Diem had forfeited the trust of the country, especially in Saigon, Danang, and Hue. When they had finished, Kennedy wryly asked, “The two of you did visit the same country, didn’t you?”

One consequence of having a senior official like the Secretary of Defense participate in high-level conferences was that it attracted heightened press attention. Inevitably, both when McNamara departed Vietnam and

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later when he arrived in Washington, he would be asked about the war’s progress. During the first two years the response was that it was going well. McNamara admitted that his optimism may have been a bit overstated but later blamed it on the positive reports that he received from the U.S. military which relied on “very inaccurate information from the South Vietnamese, who tended to report what they believed Americans wanted to hear.” The explanation is too glib. Americans stationed in Vietnam also reported information that they thought higher authority wanted to hear.

Take, for example, the briefing McNamara received on his first trip to Saigon in May, 1962. One question on the top of the agenda was the strength of the Viet Cong. The head of Military Assistance Command Vietnam’s (MACV) intelligence was Col. James Winterbottom an Air Force officer whose specialty had been selecting sites for nuclear targeting. He had previously briefed McNamara in February in Honolulu in what has been described as a “confusing presentation of charts and figures…” Before his visit McNamara had cabled ahead requesting a province-by-province analysis of Viet Cong strength. Winterbottom knew he was on the spot. Initially, his team came up with a total figure of 40,000 Viet Cong which

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358 McNamara, op. cit., p. 47.
was about double that of any previously reported figure. The number was unacceptable, so he tightened the criteria and reduced the figure to 25,000. General Harkins, the MACV commander, would not accept this number either. Accordingly, the colonel relieved the team he had been working with, and assembled a new group of junior officers whom he hoped would be more pliable; they cut back the figure to 17,500. “By the time McNamara got to Saigon, it was the more authoritative-sounding 16,305.”

One can sympathize with the colonel. During virtually the whole war, U.S. intelligence was inaccurate and misleading. A study conducted by the JASON division of the Institute for Defense Analysis in the summer of 1966 concluded:

…with very few exceptions our information on communist logistics and manpower was so inexact that it was difficult to come to any conclusions as to the effectiveness of our military policy. It is not an exaggeration to say that the data is so soft that we cannot state with confidence whether we have been doing better or worse militarily over the past year.

The colonel was undoubtedly aware of the truism: “To adopt a negative attitude was defeatism, and there were no promotions for

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361 Gibbons IV, p. 383.
defeatists…positive reports were rewarded, even if they bore little resemblance to the truth."\(^{362}\)

It is difficult to accept that McNamara had unbounded confidence in the figures that the military were reporting. He acknowledged in his memoir that he received information from other sources like the CIA and the State Department’s Office of Intelligence and Research, and the reports of the much-criticized American journalists were available if he chose to read them. Generally, these sources were less optimistic and more accurate.\(^{363}\)

Yet, there is no evidence that McNamara, the data-driven manager, sought

\(^{362}\) Karnow, op. cit., p. 271. The author can empathize with Winterbottom based on his own experience. During the 1968 Democratic presidential primary he was working for Senator Robert Kennedy as a state coordinator in two Oregon counties — Lane and Douglas. Lane, the home of the University of Oregon, was solidly for Kennedy’s principal opponent, Senator Eugene McCarthy. About 10 days before the election Steve Smith, Senator Kennedy’s brother-in-law, came to the state and began calling the coordinators. “How’s it going in Lane?” he asked. The author gave him accurate figures based on the responses from the telephone banks the campaign had established which showed McCarthy with a substantial lead. “That’s not good Beveridge,” he replied, “Maybe we should put someone else down there in Lane.” The campaign didn’t change coordinators, but the author was careful thereafter before reporting any figures to headquarters to telephone the other coordinators in the surrounding counties, get their tallies and then adjust his figures after taking into account the influence of the University.

In the event, Kennedy lost Lane and the state to McCarthy.

\(^{363}\) David Halberstam in his review of McNamara’s In Retrospect asserts, “McNamara and Taylor (with Harkins their proxy) …pressured the field people to report dishonestly, and made sure there was one source of pessimistic reporting, the American journalists,” The Story we Never Saw in Vietnam, Washington Post May 14, 1995 p. C3. David Kaiser also points out that if McNamara had only paid attention to MACV’s own “Headway Reports” on Viet Cong attacks he would have had a more accurate picture of the situation than he claimed he had. Kaiser, op. cit., p. 293.
intelligence independent of the military until 1967 when he asked the CIA to analyze the effectiveness of air operations over North Vietnam.\textsuperscript{364}

McNamara’s optimistic public reports on the progress of the war were not exclusively the product of faulty intelligence. A number of historians of the war, most notably Stanley Karnow, have charged him with consistently dissembling. More specifically, Karnow charges that McNamara misled the public on at least four separate occasions.\textsuperscript{365} The record largely bears out this assessment. For example, when describing his trip to Saigon in December of 1963, Karnow writes, “But, as usual [McNamara’s] public utterances bore no relation to his real estimate.”\textsuperscript{366} McNamara admitted that when he reported on his December, 1963 trip: “We reviewed the plans of the South Vietnamese and we have every reason to believe they will be successful…[was] an overstatement at best.”\textsuperscript{367} In his defense, however, readers of the \textit{New York Times} were not misled about the then current situation. Max Frankel’s lead story on page one describes McNamara’s

\textsuperscript{364} Enthoven and Smith, op. cit., p. 291.
\textsuperscript{365} December-1963; March-1964; July-1965; October-1966; Karnow was wrong about the July, 1965 trip when he wrote “McNamara came back with a lengthy memorandum, and his confidential comments again bore little resemblance to his public remarks”, Karnow, op. cit., p. 440. His public remarks were also pessimistic. “M’NAMARA FINDS SITUATION WORSE IN VIETNAM WAR: Defense Chief Says Effort of Viet Cong Have Grown Since his 1964 Visit” were the headings on the page 1 of the July 21, 1965 edition of the \textit{New York Times}.
\textsuperscript{366} Karnow, op. cit., p. 341.
\textsuperscript{367} McNamara, op. cit., p. 103.
report to the president as “sober”; he reported that McNamara told “…the president and other high officials about recent successes of the Communist guerillas…the Administration acknowledged with silence that it had abandoned the 1965 deadline for the removal of most United States troops from Vietnam.”

There was little doubt that the situation in Vietnam had seriously deteriorated whatever McNamara might have stated about future plans.

Karnow’s charge has greater merit when it comes to the March, 1964 trip. McNamara’s official report, captured in a March 16, 1964 memorandum for the president is extremely gloomy. “The situation has unquestionably been growing worse…” McNamara wrote. He went on to catalog how the Viet Cong controlled greater portions of the countryside; ARVN desertion rates had been increasing in the last 90 days, and “the weakening of the government’s position has been particularly noticeable.”

Yet the March 15 edition of the New York Times’ lead column read: M’NAMARA TELLS JOHNSON OF GAIN IN VIETNAM WAR. He is not quoted in the article, however, only “authoritative sources.” It may have

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370 NYT, Mar. 25, 1964, p.1, McNamara asserted that during a refueling stop in Hawaii in response to a reporter’s question about the war he answered that, “the situation is serious” (McNamara op. cit., p. 113). This was not the general impression.
been White House spin; to what extent McNamara was compliant we cannot know, but he did not contest the article, or the impression it created.

The most egregious example of McNamara’s “public/private” reports was after his October, 1966 visit to Vietnam. The New York Times reported:

Mr. McNamara made a generally optimistic appraisal of the situation in South Vietnam during a brief news conference before his departure. He said that military operations had “progressed very satisfactorily” in the last year and that “the rate of progress exceeded our expectation.”

In his top secret report to the president on October 14, 1966 he took a distinctly more pessimistic tone. He would write:

In essence, we find ourselves — from the point of view of the important war (for the complicity of the people) — no better, and if anything worse off…But the discouraging truth is that…we have not found the formula, the catalyst for training and inspiring them into effective action.

As for military operations:

I see no reasonable way to bring the war to an end soon. Enemy morale has not broken…He knows that we have not been, and believes we will not probably be, able to translate our military successes into the “end products” — broken enemy morale and political achievements by the Government of Vietnam…

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Were these trips really a way to acquire on-the-spot information? Not if his associate and admirer, Adam Yarmolinsky, is to be believed. In a 1978 interview he offered a different take:

[McNamara] regarded his trips as theater, and, in fact, the report was usually drafted before he left and then revised in the light of what assessments they made of what people told them...I don’t think, and he may contradict me, that he would say that those 24, 48, and 72 hour trips were in any sense fact-finding.  

As the war ground on McNamara appeared increasingly to recognize that his visits were an occasion for theater. Whereas in the early years, he would be closeted with generals, ambassadors, and other high-ranking officials, toward the end of his service he would use his trips to visit troops, watch launches from aircraft carriers and participate in similar ceremonial functions.

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373 Congressional Research Service Interview with Adam Yarmolinsky, Oct. 27, 1978 as quoted in Gibbons III, p.369; it was common for McNamara to order a draft of his report before he left on his trips. For example, before his March, 1964 trip to Saigon he instructed John McNaughton, the Assistant Secretary for International Security Affairs to draft a memorandum to “serve as an overall vehicle for thought…and a framework for his report on his return.” H. R. McMaster, Dereliction of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff and the Lies that Led to Vietnam, (NY: Harper Collins, 1997), p. 71. He did the same thing before his July 14, 1965 trip to Vietnam when Yarmolinsky was the drafting officer. Gibbons, III p. 369. Similarly, Krulak drafted the military portion of the McNamara-Taylor Saigon trip in September, 1963, Kaiser, op. cit., p. 258.
This theater exacted a price, however. Since McNamara’s public reports of his visits frequently contrasted with his private messages to the President, the discrepancy undermined public and congressional trust.\footnote{McNamara statements to the press about the state of the war were at times misleading but were not his most egregious efforts to spin the information. That honor goes to his testimony before the Senate Foreign Relations and Armed Services Committees in favor of the Tonkin Gulf Resolution on August 6, 1964. In that testimony he flatly stated that the Navy had no knowledge of South Vietnamese operations against North Vietnamese coastal installations (so-called 34-Alpha operations): “…our Navy …was not associated with, was not aware of any South Vietnamese actions, if there were any. I want to make that clear.” Three and one-half years later appearing before the Senate Foreign Relations Committee, when the committee had ample evidence that this statement was flatly wrong he persisted arguing that he had testified that the Navy “was not aware of the details [of the operations]” which was not at all what he had said. See: Joseph C. Goulden, \textit{Truth is the First Casualty: The Gulf of Tonkin Affair—Illusion and Reality} (Chicago: Rand McNally & Company, 1969) pp. 59, 218 (emphasis supplied). McNamara finally admitted his initial statement was wrong in his memoir, McNamara, op. cit., p. 137.} Any manager knows that it is important to retain the trust of all stake holders of the organization. This means in the case of a public institution the trust not only of his colleagues in the department but of Congress, which funds the organization, and the general public as well. Actually, McNamara was aware how important public support for the war could be. At the Honolulu conference, June, 1-3, 1964, when the expansion of the war and increased U.S. involvement were the main topics of discussion, he argued that it would take “at least 30 days to prepare the public” for the expanded effort.\footnote{Gibbons II, p. 261.} Neither the administration nor McNamara made such an effort; indeed, they did all that they could to disguise the new policy.
McNamara also recognized the constraints which prevented him from disclosing his true beliefs about the war. “It is a profound, enduring and universal ethical and moral dilemma: how, in times of war and crisis, can senior government officials be completely frank to their own people without giving aid and comfort to the enemy?” he would write. The dilemma is incontestable; McNamara did little to resolve it.

*Logistics*

McNamara may have created the illusion of management with his frequent visits to Hawaii and Vietnam, but such was not the case with his handling of the logistical demands of the war. He was very much involved in managing the logistical aspects of the conflict. There are two basic aspects of logistics during combat operations: distribution and production. McNamara took a direct, sustained personal interest in each of them after the U.S. began combat operations in 1965. His interest is hardly surprising for during his fourteen years at Ford he had devoted substantial time to managing the flow of widely dispersed parts and assemblies that needed to come together to produce an automobile. He was no stranger to logistics.

\[376\] McNamara, op. cit., p. 105.
Distribution

Distribution of logistical support presented a number of daunting obstacles during the Vietnam War. First, there was the length of the supply line — 9,000 to 11,000 miles from the home base to the theater of combat, the longest in U.S. military history up to that time. Second, the country was overwhelmingly agricultural and lacked the infrastructure of a modern industrial state: deep-water ports, terminals, airfields, railroads, paved roads and all of the communication, transportation, maintenance, and storage facilities that are required to establish a logistical base for a highly mechanized modern military machine. Third, the country’s geography and climate presented formidable challenges. In a small area, roughly the size of the state of Missouri, there were jungles, tropical forests, mountains, deltas, and swamps. The weather could be atrocious. It is said there are two weather systems in Vietnam: hot and wet (May-September) and hot and dry (October-March). The wet season makes unpaved roads impassable and severely limits air mobility. The dry season produces a fine corrosive laterite dust that penetrates everything, wearing out engines, clogging fuel, and lubrication lines, and even infiltrating food and open wounds. Finally, as Joseph Heiser notes, “For the first time in modern history the U.S. Army was required to establish a major logistical base in a country where all areas

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were subject to continuous enemy observation and hostile fire with no
terrain under total friendly control.”

These were formidable obstacles but even more significant was the
rapidity of the military buildup and Westmoreland’s decision to accept
combat troops and their supporting units at the same time rather than bring
in the supporting units first to establish a logistical base. The growth of the
U. S.’s military presence was dramatic. At the end of June, 1965, just
before President Johnson made his announcement to grant Westmoreland’s
request for additional troops, there were 27,300 army and 59,900 total U.S.
military personnel in South Vietnam. Eighteen months later there were
239,400 army and 485,300 total military personnel in the country and all
were fulfilling their missions without significant logistical interruptions.

One needs also to bear in mind that the U.S. military did not travel light. The
1st Logistical Command, for example, calculated that on average it took one
ton of supplies to support one soldier in Vietnam for one month which
would mean that at the end of 1966 approximately 485,000 tons of supplies
were being shipped to Vietnam monthly. By contrast, McNamara estimated

Army, 1974), p. 37. Heiser was the commander of 1st Logistical Command in Vietnam.
it took from 1200 to 4200 tons of supply per month to support the combined VC/NVA operations.\footnote{Ordnance was, of course a large part of the total supplies. U.S. figures come from First Logistical Command Fact Book 1968, Center of Military History, p. c-2; McNamara’s estimate from PP, Gravel ed. IV p.625. McNamara’s figures are substantially at odds with the figures he used before the Senate Preparedness Committee in August, 1967. There he testified”…intelligence estimates suggest that the quantity of externally supplied material, other than food, required to support the VC/NVA forces in South Vietnam at about their level of combat activity is 15 tons per day.” This was a ridiculously low figure equivalent to 450 tons per month or from 1.6 to 2.0 ounces per combatant then reported to be in country. Senator Jackson, and the Committee’s Counsel, James Kendall pointed out the improbability of the figures. It was a clear indication that by August, 1967 McNamara was no longer at the top of his game. Hearings before the Preparedness Subcommittee of the Committee on Armed Services, U. S. Senate, 90\textsuperscript{th} Cong., 1\textsuperscript{st} Sess., Part 4, August 25, 1967, pp. 277, 298, 368.}

To supervise the logistical buildup McNamara chose Paul R. Ignatius. Ignatius had entered the Kennedy Administration as Assistant Secretary of the Army for procurement, supply, and base structure in May, 1961. After three and one-half years on the job, he was promoted to Assistant Secretary of Defense for Installations and Logistics just prior to the escalation of the war. A graduate of the Harvard Business School, Ignatius had been an instructor at the school and then left to found a firm which offered executive training programs to business and government organizations. Intellectually comfortable in the fast-paced hierarchy of the Defense Department, he was less wedded to statistical analysis than his boss. He also had a less aggressive personality and relied more on persuasion and teamwork to accomplish his tasks. He supervised a staff of technical experts who
“weren’t flashy or shining intellects like most of Enthoven’s whiz kids…they weren’t kids and you couldn’t find a whiz among them, but they knew how to get things done.”

The initial tasks were to build the infrastructure necessary to receive, store, and distribute the material required to support military operations and begin the logistical buildup. The military construction program was entrusted to four giant private international engineering and construction firms because Johnson would not call up the Reserves and National Guard that contained most of the military construction units. At the peak of the effort in mid-1966, there were 51,044 civilian personnel working on construction projects and only 10% of them were Americans. The results were impressive; the U.S. would eventually build:

- 8 jet fighter bases with 10,000 ft. runways
- 6 new deep-water ports with 28 deep-draft berths
- 26 hospitals with 8,280 beds
- 280,000 KW of electrical power
- 10.4 million sq. ft. of warehousing
- 3.1 million barrels of POL storage
- 4,100 kilometers of highway
- Plus; ammunition storage, communication, and sanitation facilities

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Massive as it was, the construction program did not require high-level intervention except to establish a command structure capable of assigning priorities to specific projects.

Such was not the case when supplies began arriving in large quantities in the fall of 1965. In the absence of a timed-phased buildup of logistical support or any meaningful consumption or other experience data, the military made estimates of needed supplies and “pushed” them into the theater (so-called “Push Packages”) until such time as normal requisitioning procedures could be established (i.e., a “pull” system). The result was dozens, indeed at times over a hundred, ships waiting to be unloaded and tons of supplies piling up in port areas much of it improperly marked and sorted and frequently hundreds of miles from its intended recipient.

The push system created two significant problems. First, the estimates might not take into account the particular requirements for Vietnam. The department needed an advance warning system for items considered essential for the army buildup by field commanders. Essential items could be as commonplace as tropical uniforms and boots, as vital as 40-mm gun ammunition, or as uncommon as collapsible petroleum storage tanks. Such items were listed on so-called Flagpole Reports and would be reviewed by
Ignatius and his staff on a weekly basis and discussed with McNamara in his weekly conferences with Ignatius.

Once potential shortages had been identified, a system needed to be established to make sure the items got to the field quickly, bypassing the normal delivery process. Such a system was especially important in the case of spare parts. The corrosive laterite soil and dust, previously mentioned, wreaked havoc with vehicles and helicopters which were essential components of Westmoreland’s ground strategy. This caused a large number to be “deadlined” (i.e., unavailable for use). The Red Ball Express, named after the famous truck convoy system that operated in France during World War II, was designed to allow Westmoreland to request repair parts especially for deadlined equipment. Red Ball Express requisitions received special attention within the theater, and if they could not be satisfied, they were sent back to the States where they would be filled on a priority basis and then segregated and shipped on dedicated aircraft to Vietnam. The control office in Vietnam had the tail number of the aircraft, which was also marked with a large red ball, along with the cargo manifest so that particular items could be identified. We have become so used to delivery of individually identifiable packages by Federal Express, UPS, and the Post Office that the Red Ball Express seems quite ordinary. At the time it was
highly innovative and Ignatius gives McNamara credit for conceiving it and monitoring the system at their weekly briefings. He credits McNamara’s curiosity and willingness to immerse himself in the details of programs to his desire to “find out how the system was functioning. Then he could hold people’s feet to the fire until the progress he sought was attained.”\footnote{Ignatius, op. cit., p.136.}

McNamara’s military aide, Robert Pursely, gives another example of his preternatural willingness—or rather his compulsion—to immerse himself in details. The problem was ordnance. Pursley reported that it was obvious there was enough ordnance in Vietnam, but “…people just weren’t keeping track of where casings and fuses and other things were.” As a consequence, some units lacked the ordnance they needed; for them there was a shortage. As Pursley described his boss’s actions:

Bob McNamara and I worked together on a large “horse blanket” that had all the kinds of ordnance arrayed in one way, and where they might possibly be laid the other way. It was an array about as big as this table…We worked one whole Friday night and Saturday on that …That was instructive in a lot of ways. One, the dedication in McNamara’s insistence that we get right into the middle of a problem to try to understand it well, and not just wait for the system to percolate back up; two, the endless hours, the ability to work intensely over such a long period of time.\footnote{Pursley, OSD Interview, Sept. 6, 1995, pp. 7-8.}
Flagpole and Red Ball Express were considered extraordinary measures. They did not solve the major problem of tons of supplies piling up at port locations. Something had to be done to clear up this huge backlog and develop a system where items shipped from the States could be identified, stored, and shipped to their intended recipient. Ignatius believed that the best way to approach the problem was to make the army part of the solution. The army should be directed to assemble a team of knowledgeable military and civilian personnel and send them to Vietnam “for as long as it took to identify the supplies and bring them under control.” He would leave the composition and size of the group to the army. McNamara had other ideas. He thought the team should be no larger than fifteen and “if the army can’t do the job, we should send management experts out there.” Ignatius pointed out in his memoir that when McNamara “would bear down too hard on a point that was more complex than he seemed to realize…it was important…not to be overwhelmed by the vigor of his argument. With one so dominant and quick to make decisions, a subordinate should stand his ground if he thinks it will help to keep his boss out of trouble.” Ignatius stood his ground in this case and prevailed. The army seized the opportunity,
containerized supplies with proper manifests, restored more normal requisitioning procedures, and the stockpile shrank to normal.384

\textit{Production}

In many ways the production side of logistics was more difficult to manage than the distribution. Distribution was almost entirely in the hands of the military while production depended almost entirely on outside contractors. Production was also influenced by large exogenous forces like the economy. For example, when President Johnson approved the first large-scale increase in combat forces in July 1965, the economy had enjoyed 56 months of continuous growth and there was pressure on prices as evidenced by the attempt to raise aluminum prices in the late fall of the year. Under the circumstances it would not be easy to fight an economical war, but McNamara was determined to do so. He resolved not to repeat the Korean

\footnote{Ignatius, op. cit., pp. 117, 136-7; Shapley tells a similar tale. McNamara was frustrated by the army’s inability “to give him a complete set of tables showing all the…job specialties needed by each division…[including] the amount and kinds of equipment required by each group.” He wanted to hire additional system analysts to do the job, but the head of the section, William Brehm worried about the effect of a group of civilians telling the army what its requirements were “right down to two-men well-digging detachments.” He was able to persuade more senior officials to persuade McNamara to “let the Army figure its requirements itself and it did the job well.” Shapley, op. cit., p. 237.}
experience when the war was overfunded by at least $30 billion and had “…left a huge residue of excess stockpiles.”

Reports of shortages began to appear as early as July 1965 when the New York Times reported a shortage of jungle uniforms, shoes, tents and refrigerators for food supplies in Vietnam. It was too early to tell, however, whether this was a distribution or production problem. A month later the Times reported that McNamara would be called before a special Senate hearing “to answer a charge that the Army is in danger of serious equipment shortages.” Again, in September the Times reported that there were deficiencies in the supply and maintenance of equipment in Europe most likely because of the funneling of equipment to Vietnam. In a more comprehensive article in October, Hanson Baldwin, the military-affairs editor of the Times and a dogged critic of McNamara who excoriated his “buy only what we need” philosophy, reported that “personnel and equipment problems of increasing severity are facing the armed services as the United States military commitment in Vietnam becomes larger.” Baldwin specifically mentioned trained personnel, ammunition and spare

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385 Drea, op. cit., p. 510.
388 NYT, Sep. 6, 1965, p. 4.
parts as items in actual or potential short supply.\textsuperscript{389} The first clear indication that there would be production problems was reported in December when the Times disclosed the reluctance of clothing manufacturers to bid on contracts for military uniforms because “…the nation’s men’s clothing manufacturers are enjoying good civilian business…” \textsuperscript{390}

The most trenchant criticism of McNamara’s management came on February 21 in another article by Hanson Baldwin that amounted to what Edward Drea calls a “…scathing indictment of the Johnson administration’s mismanagement of the armed services.” Baldwin asserted that “the nation’s armed services have almost exhausted their trained and ready military units with all available forces spread dangerously thin in Vietnam and elsewhere…[and] there are major existing shortages in uniforms and clothing, and actual or potential shortages of various types of ammunition and equipment…” \textsuperscript{391} Reports of shortages would continue through 1966 and even into 1967 and would rouse Congress to look into the situation. McNamara’s most persistent critics were Rep. Gerald Ford, the House minority leader, and Senator John Stennis of the Senate Preparedness

\textsuperscript{390} NYT, Dec. 21, 1965, p.59.
\textsuperscript{391} Drea, op. cit., p. 511; NYT Feb. 21, 1966, p. 1.
Committee. Baldwin was also roaming the corridors of the Pentagon ready to pounce at any time.

How did McNamara handle the criticism? Basically, in two ways by explanation or bluster. By way of explanation, McNamara would tell congressional committees that any shortages were only temporary and that a “hot line” system he had initiated would put things aright in short order. He testified he wanted to avoid the rapid build-up of a production line for an item, a bomb, for example, that would have to be shut down when production surpassed consumption. Such a start-stop system, he argued, was both inefficient and expensive. His solution was to try and smooth out production with a “hot line.” Battlefield commanders would be asked for their estimates for ammunition for a specified period. McNamara’s office would take their figures and compare them with past consumption and make its own estimate of a base line production schedule. If demand was higher, production could be increased within 90 days under the flexible “hot line” system. To cover any deficiency, short falls could be drawn from world-wide stocks.

It was the kind of system one might expect from an automobile executive — keep the production line moving smoothly on a long-term basis, adjusting for periodic increases or decreases. The difficulty was that
the Vietnam War involved constant escalations, both in military personnel and operations. Thus, there was no smoothing out of supply and demand, only constant increases. For example, in April 1966, the production level of 250 lbs. and 500 lbs. bombs had been set at 65,000 tons per month. The figure was revised to 80,000 tons per month in March 1967 and again in May to 92,000 tons based on a projected 800 B-52 and 30,000 tactical sorties per month. The military wanted even more. According to Ignatius, CINCPAC, which was in charge of the air war, wanted to increase the number of B-52 sorties from 800 per month to 1200 and The Joint Chiefs contemplated requesting an amount as high as 2000 sorties per month. Ignatius wryly notes that together with ground munitions, there was a possibility that “we would likely exceed the nation’s entire capacity for making explosives.” Whatever the theoretical merits of McNamara’s “hot line”, it did not work in Vietnam. The Joint Logistics Review Board concluded that production of air munitions, especially the effective 750 lbs. bomb, did not catch up with consumption until 1967, 19 months after initiation of the contract.392

McNamara’s other response to allegations of shortages was bluster. He went ballistic after reading Baldwin’s allegations of actual and potential shortages.392 Ignatius, op. cit., p. 133.
shortages, complaining that “disunity was the ‘biggest danger facing the
country’ ….”

He assembled a press conference during which, according to
the Chicago Tribune, a “bristling indignant”, “desk-thumping” McNamara
“…insisted that the military had not become ‘overextended’ in meeting the
manpower and equipment demands of the war in southeast Asia.” In the
same articles the Tribune facetiously noted that the Chief of Staff of the
Army “came within an adverb of challenging the veracity of the Secretary of
Defense” when he testified before the Senate Armed Services Committee
that “…the Vietnam War had indeed ‘extended’ the army’s capabilities.”

Another example occurred the following month when McNamara
testified before the Senate Foreign Relations Committee. He was asked
about an article that appeared in the Times that day to the effect that the Air
Force had “…drastically reduced the number and intensity of its bombing
raids…because of a shortage of parts for bombs.” McNamara denied the
report, and threw out a raft of statistics about bombing in World War II and
the Korean war. He complained that “…we [presumably the media] try to

393 Drea, op. cit., pp. 511-512.
seek out and exaggerate imaginary weaknesses and that was what the article did.” He characterized the news story as “baloney”.  

Three days later in an editorial the New York Times asked if there were no shortages why was the U.S. repurchasing 750 lbs. bombs it had sold for $1.70 to a German dealer for $21.00 each. It went on to catalog a number of other “undeniable scarcities” and concluded “…Mr. McNamara does himself no credit by trying to deny the obvious.”

In his handling of the alleged logistical shortages, McNamara frequently displayed what Peter Drucker described as his greatest weakness as a leader — he confused leadership with morality. “Anyone who did not agree was an ‘enemy,’ and clearly had to be damaged, destroyed or at least humiliated,” he would write to Tom Morris who was preparing a paper on McNamara’s management.

Although there were shortages, overall they did not seriously impede combat operations. General Westmoreland paid appropriate tribute to the logistical effort telling U.S. News and World Report:

Never before in the history of warfare have men created such a responsive logistical system — one that is capable of supporting a flexible strategy that

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created sudden requirements from widely scattered points. Never has there been such zealous participation by logistical troops who believe in the importance of full and fast support for the combat elements. Not once have the fighting troops been restricted in their operations against the enemy for want of essential supplies. 398


Things have apparently not changed much. Secretary Gates in his recent memoir writes, “The Department of Defense is structured to plan and prepare for war but not to fight one.” He goes on to describe the difficulty of getting “…commanders and troops in the field…what they needed” and concluded that he, like McNamara “…had to be the principal advocate in Defense for the commanders and the troops….” Gates, op. cit., pp. 116-118.
After JFK made his decision on November 15, 1961 to increase aid to South Vietnam there was a burst of enthusiasm and activity. As we have described, McNamara began his almost monthly trips to Hawaii or Saigon and took control of the military aspects of the struggle. In a remarkably short period the U.S. seemed to have turned the situation around. When McNamara visited Saigon in May 1962 only six months after the new policy had been in effect, he told Neil Sheehan, a young UPI reporter, “Every quantitative measurement we have shows we’re winning this war.” Two months later, General Paul Harkins, the head of the Military Assistance Command, Vietnam (MACV), told McNamara at one of the Hawaii conferences on July 23, 1962 that the Viet Cong (VC) would be eliminated as a significant force about a year after the Army of Vietnam (ARVN) became fully operational. Reports from the field were equally encouraging — indeed so encouraging that McNamara ordered planning to begin for a phased withdrawal of U.S. military personnel beginning in 1963, to be completed by the end of 1965.

It was an order that is difficult to understand. Its premise was that the South Vietnamese Army (ARVN) was performing well enough that it would

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399 Sheehan, op. cit., p. 290.
not need U.S. advisory or support personnel after 1965, and indeed could start reducing assistance as early as 1964. It was difficult to believe that an insurrection which had been in progress for more than three years could be turned around in seven months when similar insurrections in Malaya and the Philippines had taken up to a dozen years, and both of them had been conducted under more favorable circumstances. Robert Dallek characterized the decision as one “…based on guesswork resting more on hope than anything concrete — an astounding bit of flimflam from someone who prided himself on statistical analysis.”400 McNamara consistently maintained that his decision was based on the best intelligence available at the time. Although he admitted that the intelligence turned out to have been overly optimistic, he blamed that problem on the South Vietnamese.

There was, however, plenty of intelligence at the time that already indicated the ARVN was not performing well. Brigadier General E.K. Egleston, Acting Chief of the Military Assistance Group, prepared a series of studies based on the performance of ARVN units during the first half of 1962. Of thirteen ARVN operations he studied, two were partially successful and eleven were failures.401 Later, the battle of Ap Bac in January, 1963

400 Dallek, op. cit., p. 281.
demonstrated serious deficiencies in the ARVN, especially its unwillingness to press the attack against the enemy. Although characterized as a “success” by MACV, the operation was recognized by U.S. journalists as a defeat. The battle prompted Arthur Krock, a respected middle-of-the-road columnist of the New York Times, to suggest that there should be a “fundamental review” of the administration’s Vietnam policy. In addition, there were numerous discouraging reports about the Strategic Hamlet program not meeting its goals, and the political unrest in the Buddhist community was also widely reported. Yet the generally upbeat assessments continued through most of 1963. McNamara’s spokesman, Arthur Sylvester, who accompanied him on a ten-day trip to Vietnam in September, 1963, for example, remained relentlessly optimistic just two months before the coup that deposed President Diem. He stated that the “military events in Vietnam were ‘getting better and better rather than worse and worse’...[and] that reports today showed that the Government was ‘rapidly approaching’ militarily the point where the goals set will be reached relatively shortly.”

Public statements made by McNamara and Taylor after the trip reaffirmed the 1965

withdrawal date.\textsuperscript{403} Even the coup that deposed President Diem in November of that year did not alter the reports that were sent to Washington. It is difficult to believe that McNamara’s decision to begin withdrawing troops in 1963 was the result of his assessment of the military situation on the ground in 1962. It seems much more probable that his decision was based on the imperatives of Washington rather than, those of Saigon, and that he was acting under the directions of The White House. As we have seen, Cuba and Berlin were the principal geopolitical hotspots in 1962. President Kennedy had consistently sought to downplay the role of U.S. advisers in Vietnam and the White House uniformly denied the numerous reports in the media that those advisers were more heavily involved in combat than the administration would admit. McNamara came close to admitting in his memoir that his order to begin planning for a phased withdrawal was in response to White House direction. He justified the directive on the ground that the goal of the U.S. was “to train the South Vietnamese to defend themselves.” Accordingly, he reasoned “if the training would prove successful…we would be able to withdraw — or enough time would elapse to indicate it would fail — in which case our withdrawal would

also be justified.” McNamara certainly did not have the authority to order a withdrawal of U.S. troops if the South Vietnamese failed in their effort to defend themselves. Only the president could make such a decision. If McNamara’s reasoning is correct, only the White House could have made such a decision, and it is most likely that it was the source of the directive.  

It is possible that the new policy may have also been designed to convey a message: (1) to Diem that he could not rely indefinitely on U.S. assistance, and that the South Vietnamese had to take steps to put their house in order and (2) to the U.S. military and other supporters of a more robust military effort “…to put the lid on the inevitable bureaucratic and political pressures for increased U.S. inputs into Vietnam.”

Whatever the reasons, the optimistic reports that established the foundation for the phased withdrawal policy would lead directly to the loss of credibility when it became apparent that there was no progress in Vietnam, and that the country could not survive as an independent nation without increased American support. That realization came at the beginning of 1964.

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404 McNamara, op. cit., p. 48.
405 John M. Newman, JFK and Vietnam: Deception, Intrigue, and The Struggle for Power, (NY: Warner Books, 1992), pp. 321-325, Newman goes too far in suggesting that Kennedy and McNamara had as “secret agreement…that they would get out of Vietnam after 1964,” but his argument lends support to the hypothesis that Washington was calling the shots.
of 1964 when the euphoria that had prevailed through 1962 and much of
1963 had dissipated. By the March, 1964 Hawaii Conference it was clear
that the military situation was deteriorating and additional U.S. help would
be required. The president, now Lyndon Johnson, was reluctant to take any
drastic steps to alter existing practices because of the forthcoming election
and the potential danger to his Great Society programs. Much of the year —
especially during the period immediately after the election — was spent
planning the U.S.’s entry into the war as a combatant.\textsuperscript{407}

Those plans came to fruition early in 1965. The Administration
initiated what would turn out to be a three-year sustained aerial
bombardment of North Vietnam, Operation Rolling Thunder, on March 2.
Six days later, two Marine battalions landed at Da Nang. They were under
strict orders “not to engage in day to day operations against the Viet Cong”
but to assume defensive positions and protect the base from attacks.\textsuperscript{408} Less

\footnotesize{\textsuperscript{407} See Kaiser op. cit., Chapter 10, \textit{A Decision for War}, esp. p. 307; regarding planning
after the election see Gibbons II, p. 366 “During the remainder of November [1964]
there occurred one of the most intense and important periods of planning of the entire
Vietnam War. In a very real sense it was the month that the United States Government
made final plans to enter the war. Although the order to begin executing the decisive
second phase of these plans was not issued until February 1965 the agreement was
reached in November 1964 on the course of action that should be taken, and the first
phase of that plan was authorized to begin.”
\textsuperscript{408} PP Gravel ed. III, p. 417.}
than a month later those instructions were secretly superseded when two additional Marine battalions were dispatched to Vietnam. In NSAM 328:

> The president approved a change of mission for all Marine Battalions deployed to Vietnam to permit their more active use under conditions to be established and approved by the Secretary of Defense in consultation with the Secretary of State.\(^{409}\)

As the authors of the Pentagon Papers make clear this was a pivotal document. “It mark[ed] the acceptance of the President of the United States of the concept that U.S. troops would engage in offensive ground operations against Asian insurgents.” The memorandum was still tentative, however, and Ambassador Taylor, who had been in Washington for consultations, cabled on his way back to Saigon, “In Washington discussions…it was my understanding the SecDef would provide text of revised mission.”\(^{410}\) This was the perfect opportunity for McNamara to seize the initiative and set policy for the conduct of the ground war, subject, of course, to approval by the president. He did not.

There were two basic strategies for proceeding with the ground war after the president had authorized combat operations for U.S. military personnel. Ambassador Taylor joined by William Bundy, Assistant

\(^{409}\) Ibid., p. 703.

\(^{410}\) Ibid., p. 448.
Secretary of State for Far Eastern Affairs, favored, at least initially, a so-called enclave strategy that would send troops to secure bases like Ton Son Nhut (near Saigon) and coastal cities like Qui Nhon and Nha Trang. Those troops would secure the base and then engage in a mobile counterinsurgency role in the vicinity for improved protection of the base and, following the acquisition of experience in such missions, would be available as a reserve force in support of ARVN operations within 50 miles of the base. Enclave was a cautious policy. It did not require as many troops as the competing strategy; it allowed U.S. troops to gain experience in counterinsurgency operations; it placed the ARVN in the lead; and it permitted the president to withdraw U.S. forces if the situation so dictated.

For a variety of reasons, the most notable being the difficulty of working out command relationships between U.S. and ARVN commanders in joint operations, the first test of the enclave model did not occur until August 18, 1965 with Operation STARLIGHT. The authors of the Pentagon Papers write,

...[it] was conducted with dramatic success 15 miles south of the Chu Lai enclave. It established the viability of enclave operations limited to the northern coast of South Vietnam, a fact that no one disputed, but such operations were by that time only one facet of a much more ambitious strategy
sanctioned by the president and in the process of being implemented by Westmoreland.\textsuperscript{411}

The competing strategy, strongly urged by Westmoreland and supported by the Joint Chiefs, envisaged a three-stage war plan:

Stage I: Secure base areas with a Tactical Area of Responsibility (TAOR) out to the range of light artillery. [the stage the marines who had already landed were involved in.]

Stage II: Deep patrolling and offensive operations outside the TAOR with ARVN forces.

Stage III: Long-range search and destroy operations.\textsuperscript{412}

Westmoreland’s plan was considerably more ambitious than Taylor’s. It called for a significantly larger commitment of U.S. personnel and, since it would have been difficult to extract U.S. forces, was implicitly a commitment by the United States to see the war through to the finish.

Delay favored Westmoreland. During the summer the Viet Cong had successfully overrun a number of important South Vietnam towns like Song Be, the capital of Phuoc Long province and completely decimated two battalions of ARVN in the battle of Ba Gia. “By mid-June, the Viet Cong offensive was in full swing” the CIA would report at the end of the week of June 14: “the initiative and momentum of military operations continue in favor of the Viet Cong. The impact of Viet Cong operations is being felt not

\textsuperscript{411} PP, Gravel ed. III, p. 461.
\textsuperscript{412} Ibid., pp. 459-60.
only by the Republic of Vietnam Armed Forces (RVNAF) but by the nation’s internal economy, as well. Nothing this week points to the Republic of Vietnam (RVN) wresting the initiative from the Viet Cong (VC).”\(^{413}\)

One week earlier on June 7, Westmoreland had sent an urgent request for additional troops, the so-called “44 battalion” request. He pointed out the seriousness of the situation and asked for an immediate increase of 41,000 troops bringing the total of U. S. personnel to 123,000. He also suggested that in all likelihood he would need an additional 51,000, bringing the total to close to 175,000 troops. After an extended discussion, the president approved Westmoreland’s request.\(^{414}\) Westmoreland had previously received authority on June 26 to commit U.S. forces in offensive combat operations in support of ARVN “in any situation…when, in Commander, U.S. Military Assistance Command, Vietnam’s (COMUSMACV’s) judgment, their use is necessary to strengthen the relative position of GVN forces.” As the Pentagon Papers note, “this was about as close to a free hand in managing the forces as General Westmoreland was likely to get.” He used it the next day to initiate a search and destroy operation in which U.S. and ARVN forces invaded Viet Cong base areas to destroy existing stores of

\(^{413}\) Ibid., p. 440.
\(^{414}\) Gibbons III, p. 380.
supplies and munitions. “The enclave strategy was finished,” although a modified version would reappear."\(^{415}\)

What was McNamara’s position on the two strategies? The Pentagon Papers conclude that “It is difficult to be precise about the position of the Secretary of Defense during the build-up debate because there is so little of him in the files.” The Papers go on to quote a number of excerpts from memoranda McNamara had prepared but they are at best equivocal. In the end, the Papers conclude that “From the records, the Secretary comes out much more clearly for good management than for any particular strategy.”\(^{416}\)

Although McNamara did not disclose his opinions on battlefield strategy there was no doubt about his position on Westmoreland’s request. He supported the troop increase in a memorandum that also argued for an increase in the air war and a naval quarantine. His position was set forth in a June 26 memorandum which has been lost. We know the substance of the memorandum, however, because on June 30, McGeorge Bundy wrote a cogent and prescient comment on McNamara’s draft which defined the issues:

\(^{415}\) PP, Gravel III, pp. 471-2.
\(^{416}\) Ibid., p. 475. Gibbons has an extensive discussion of the six meetings that took place between the president and his advisers about the Westmoreland request, but except for a memorandum from William Bundy, the Assistant Secretary of State for Far Eastern Affairs, they did not involve details as specific as ground operations. Gibbons III, pp. 277-294, 317-350.
The draft proposal to the president seems to me to have grave limitations.

1. It proposes a doubling of our presently planned strength in South Vietnam, a tripling of our air effort in the north and a new and very important program of naval quarantine. It proposes this new land commitment at a time when our troops are entirely untested in the kind of warfare projected. It proposes greatly extended air action when the value of the air action we have taken is sharply disputed. It proposes naval quarantine by mining at a time when nearly everyone agrees the real question in not in Hanoi but in South Vietnam. My first reaction is that this program is rash to the point of folly.

2. I see no reason to suppose that the Viet Cong will accommodate us by fighting the kind of war we desire…I think the odds are that if we put in 40-50 battalions with the missions here proposed, we shall find them only lightly engaged and ineffective in hot pursuit.

3. The paper does not discuss the question of agreements with the Vietnamese Government…The apparent basis for doing this is simply the increasing weakness of the Vietnamese forces. But this is a slippery slope toward total US responsibility and corresponding fecklessness on the Vietnamese side.

4. The paper also omits examination of the upper limit of US liability. If we need 200 thousand men now for these quite limited missions, may we not need 400 thousand later? Is this a rational course of action?

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8. If casualties go up sharply, what further actions do we propose to take, or not to take? More broadly still, what is the real object of the exercise? If it is to get to the conference table, what results do we seek there? Still more brutally, do we want to invest 200 thousand men to cover the eventual retreat? Can we not do that just as well where we are now?
The author has found no single expression of the flaws in the administration’s proposed policy as cogent as Bundy’s memorandum. One would think that it would have given McNamara occasion to pause and attempt to craft some answers, but it did not slow him up for an instant. He submitted a revised memorandum a day later “with only minor changes from his earlier draft [and] …ignored almost all of Bundy’s questions.”

In his memoir McNamara states that “I shared all his [Bundy’s] views and concerns. But the challenge was to lay out the answers—not just the questions.”

McNamara’s reaction to the Bundy critique in his memoir is reminiscent of his attitude towards George Ball’s memoranda critical of the administration’s Vietnam policy. Beginning in October, 1964, Ball would write eighteen memoranda and talking papers against the war. On several occasions he would receive a call from McNamara asking to come and speak to him. Although protocol dictated that Ball should travel to the Pentagon, McNamara insisted that he come to State. There, frequently accompanied by John McNaughton his Assistant for International Security, he would say words to the effect:

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[^418]: McNamara, op. cit., p.194.
‘Gee, George, you’re right, everything you say here [i.e., Ball’s memorandum] is exactly the case. The war is going no place but down a rat hole, we’ve got to find a way to get out.’ And do you know what? The next day, in a meeting with the president at the White House, there’d be not a trace of what had gone on the day before. 419

The reluctance of McNamara to become engaged in the details of military tactics characterized his entire attitude toward the intricacies of military operations. As Robert Komer pointed out in his study for the Defense Advanced Research Projects Agency (DARPA),

The President and the Secretary of Defense made final decisions on overall personnel ceilings and on political constraints within which the military should operate outside Vietnam...[but] they never infringed on the traditional military control over the conduct of the war inside South Vietnam...The author at least cannot recall any major instances in which senior civilian officials...([including] the civilian leadership in DoD) directly intervened in the way the U.S. military ran its in-country war after 1965.... 420

In addition, readers may recall that when McNamara was at Ford he insisted that any major recommendation that came to him have at least two alternatives and if it was a really significant issue three choices. There were alternatives to search and destroy but there is no evidence that McNamara

ever insisted that requests from the military contain alternatives. It wasn’t the way the military did things at the time and he acquiesced.\footnote{See footnote 117, p. 74.} Actually McNamara’s hands-off attitude towards the military aspects of the war had begun well before 1965. It is an elementary principle of management that one of the most important tools in the manager’s kit is the ability to select key personnel. As we have seen, Alfred P. Sloan would subject the appointment of even a subordinate position like master mechanic in one of GM’s subsidiaries to a searching inquiry.\footnote{See, Ch. 1, p. 49, f/n 74).} McNamara had also demonstrated his awareness of the importance of choosing top personnel with whom he could work by the diligence and energy he exhibited in choosing his own key staff. He had even gone so far as to turn down two requests by the president to appoint individuals who had materially helped him win the election. Yet when it came to Vietnam, there is virtually no evidence that either he or the President devoted much time and thought to the selection of the first two military commanders who would lead Americans in Vietnam.

General Harkins and Westmoreland were soldiers from an old mold, and both were protégées of Maxwell Taylor. Harkins had been on General
George Patton’s staff during WWII and embodied the can do spirit of that famous general. Westmoreland, a former Superintendent of the Military Academy, was described as “all spit and polish, two steps up and one back.” He was, however, about to be involved in a counterinsurgency war, and according to one of his former colleagues from West Point “…he would have no idea how to deal with it.”

Harkins, 57 at the time of his appointment, was, according to Ambassador Lodge with whom he was constantly quarrelling, “totally insensitive to all political considerations and simply gave his blind loyalty to whomever was running things in the government of Vietnam.” Mac Bundy reported that he “has been unimpressive in his reporting and analyzing and has shown a lack of understanding of the realities of the situation.” McNamara was most dismissive, “he wasn’t worth a damn so he was removed…you need intelligent people.”

How had an officer so deficient in the performance of his duties been appointed? It appears as if McNamara

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423 Lewis Sorley, *Westmoreland: The General Who Lost Vietnam* (Boston: Houghton Mifflin Harcourt, 2011), p. 67. Sorley’s relentless anti-Westmoreland posture suggests caution in some of his judgments. In this instance, however, the author believes he is correct. Ironically, Westmoreland was part of a youth movement in the army leadership. He was promoted over twelve general officers and at the time of his appointment ranked 33rd on the list of lieutenant generals. Harold K. Johnson who became Army Chief of Staff around the same time was 32nd on the list and Creighton Abrams, who would replace Westmoreland was 34th. Ibid., p.322, f/n3.
merely accepted the recommendation of the Joint Chiefs and did not even bother to interview him. In his December 21, 1961 memorandum to the President, McNamara first recommended that the senior U.S. Commander in Vietnam be a four-star general and then wrote:

I further recommend the assignment of Lt. General Harkins to this position….The Joint Chiefs of Staff consider him an imaginative officer, fully qualified to fill what I consider to be the most difficult job in the U.S. Army.

Six days later Mac Bundy would write the President:

I notice with some alarm that Secretary McNamara does not seem to have a personal judgment of General Harkins…I wonder if it would not be wise for you or Secretary McNamara, or perhaps both to have a careful talk with Harkins, before this appointment is made.\(^{425}\)

Hawkins apparently met Kennedy in Palm Beach early in January, 1962, but it was a ceremonial meeting not a job interview. The decision had been made.\(^ {426}\)

We can be certain that neither McNamara nor the President interviewed Westmoreland before he was sent to Vietnam as Harkins’ deputy. He had been commander of the XVIII Airborne Corps headquartered at Ft. Bragg, NC for only six months when he received a call from General Earle Wheeler, Army Chief of Staff, informing him that he was to be

\(^{425}\) FRUS, 1961-1963, I #336, p. 756; #342, p. 766.
\(^{426}\) Newman, op. cit., p. 184.
Harkins’ deputy. Wheeler made it “quite clear” that he was being sent eventually to take over command. Before he left on his new assignment, Major General William Yarborough, Commanding General of the U.S. Special Warfare Center at Fort Bragg which was conducting “a serious and systematic study of guerilla warfare” had written him a long letter passing along his thoughts on the conflict in Vietnam. “I cannot emphasize too greatly that the entire conflict in Southeast Asia is 80 percent in the realm of ideas and only 20 percent in the field of physical contact,” he wrote, “Under no circumstances that I can foresee should US strategy ever be twisted into a ‘requirement’ for placing US combat divisions into the Vietnamese conflict as long as it retains its present format.”427 Yarborough’s advice was much closer to McNamara’s professed attitude toward the war, but Westmoreland was of the “old school”; he had other ideas.

Westmoreland arrived in Vietnam on January 26, 1964 and would have met McNamara on the latter’s visit two months later, but they did not have a “private talk” until McNamara returned to Vietnam May 12-13 after

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the announcement of his appointment as commander of MACV on April 25, effective June 20.\footnote{\textit{NYT}, April 26, 1964, p. 18; Westmoreland, op. cit., p. 88.}

In the case of the two battle commanders, McNamara would not have known their personal attitudes toward the war, but in the case of Earle Wheeler, with whom he had worked since the latter became Army Chief of Staff on August 9, 1962, he would have had no doubt on where he stood. In a speech at Fordham a few months after becoming Chief of Staff Wheeler would say:

> It is fashionable in some quarters to say that the problems in Southeast Asia are primarily political and economic, rather than military. I do not agree. The essence of the problem in Vietnam is military….The struggle in Southeast Asia, then, is a military struggle in a military context, with political and economic factors significant but not as significant at this moment, I think, as are the military factors.\footnote{\textit{Vital Speeches of the Day}, Dec. 15, 1962, pp. 158-9.}

Wheeler maintained this position throughout his eight years as a member of the Joint Chiefs, including six years as chairman, the longest tenure on record up to the present day. He never appreciated that the country was fighting what McNamara in a memorandum to the President described as two wars — “the ‘regular’ war against the main force Viet Cong/NVA…and the ‘Pacification’ or revolutionary development war to...
neutralize the local Viet Cong and gain the permanent support of the South Vietnamese population.\(^ {430}\)

Thomas Ricks in his study of American military command from WWII to the present has argued that one of the problems with the conduct of the Vietnam War was that:

…the senior military leaders participated too little [in policy formation]. President Johnson, Maxwell Taylor, and McNamara treated the Joint Chiefs of Staff not as military advisers but as a political impediment, a hurdle to be overcome, through deception if necessary. They wanted to keep the Chiefs on board with policy without keeping them involved in making it or even necessarily informed about it.\(^ {431}\)

Certainly part of the reason military leaders were not invited to participate in major policy discussions — remember, Wheeler was not invited to the famous Tuesday luncheon until 1967 — was that their views on the nature of the war were so divergent from most of the top of the civilian leadership. Some of this could be expected as a result of the

\(^ {430}\) PP IV, Gravel ed., p. 368, According to the Joint Chiefs of Staff history of the war: “General Wheeler thought that there was too much concentration by ‘many Washington agencies’ on pacification/RD as the answer to all problems in RVN.” Sorley, op. cit. p. 103. As late as March, 1968 Wheeler was advising the president to reject former ambassador Lodge’s advice “…to direct Westmoreland to drop the aggressive ‘search and destroy’ strategy in Vietnam…”David M. Barrett, *Lyndon Johnson and his Vietnam Advisers* (Lawrence, KS: Univ. Press of Kansas, 1993), p. 136. The description of the “two wars” is taken from McNamara to President Johnson Presidential Draft Memorandum dated Nov. 17, 1965, PP, Gravel ed. IV, p. 368.

military’s training and the nature of their professional experience. But the
gulf was so wide that it does provide a complete explanation. By October 1,
1962, the Administration had appointed three of the five members of the
Joint Chiefs of Staff and by January 31, 1965, as combat operations began,
all of its members. It is difficult to explain why the civilian and military
remained so far apart on how the war should be prosecuted since all the
Chiefs had been chosen by the Kennedy-Johnson administrations. Suspicion
falls on McNamara’s disinterest in military personnel matters and his
reluctance to vet thoroughly the top military leadership to make sure that
there was a common general understanding of the nature of the Vietnam
conflict and how to fight an insurrection. It was, at least in part, a failure of
management.

*Attrition Strategy*

McNamara’s reluctance to interfere with the military operations
extended to policies that he knew were not working. Westmoreland’s
attrition strategy is one example. The policy was based on a simple
proposition. If the allies[^432] could kill more of the enemy than they could

[^432]: Although frequently overlooked, the U.S. received military assistance in the war from Australia, New Zealand, Korea, Thailand and the Philippines.
replace, eventually they would reach a *crossover* point. When that point was reached the enemy should be willing to negotiate some sort of settlement. How long such a process would take and indeed, to what extent North Vietnam was willing under any circumstances to negotiate was left up in the air. To reach the crossover point the allies needed to reduce the number of troops and the supplies entering South Vietnam from the North and increase the number of VC/NVN troops killed in the South.

Reducing infiltration from the North had proved difficult because short of invading Laos, Cambodia and possibly North Vietnam — operations that were clearly off the table — the only method available was bombing — the results of which were disappointing. In 1966 McNamara began pushing Westmoreland to construct an anti-infiltration barrier consisting of an electronic fence supplemented by mines and air and ground surveillance. It was a project Westmoreland stoutly resisted and nothing came of it. Subsequently, the flow of men and material from the North was only modestly reduced.

The other part of the equation was not much more encouraging. To kill more of the enemy Westmoreland ordered a series of search and destroy missions against VC/NVN sanctuaries. One of the larger examples of such

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433 Drea, op. cit., pp. 127-130.
an operation was JUNCTION CITY. Between February 22 and April 15, 1967, 25,000 U.S. and ARVN forces engaged the 9th Viet Cong Division in a major search and destroy operation. During the 72 days they were engaged, allied forces killed 1,776 Viet Cong and destroyed large amounts of ammunition, medical supplies, and the main food staple, rice. The operation was deemed a success, and the after action report claimed that it “confirmed…that such multi-division operations have a place in modern counterinsurgency warfare.” Andrew Krepinevich does not agree. He points out that the enemy division “was not rendered ineffective, and with one exception, the only significant engagements were those initiated by the Viet Cong.” The enemy was able to slip away whenever he wished. Furthermore, the operation required an immense amount of firepower — 3,235 tons of bombs and over 366,000 rounds of artillery. “Thus,” he notes, “several tons of ordinance were required to kill one Viet Cong.”

The collateral damage was also extensive. There are no figures for the number of refugees created by each search and destroy operation but certain cumulative figures are. Krepinevich reports that between 1964 and 1969

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434 Andrew F. Krepinevich, Jr., The Army and Vietnam (Baltimore, Johns Hopkins Univ. Press, 1986), p. 191; MACV did its own study of munitions expenditures and concluded that “in 1966 approximately six tons of munitions were expended for each personnel loss sustained by the enemy” William C. Westmoreland to General Johnson, Chief of Staff, Westmoreland Message file, Oct. 10, 1967. U.S. Army Center of Military History, Washington, DC.
over three million Vietnamese (or 20% of the population) became refugees as a result of the attrition strategy and the policy of population relocation. Those policies resulted in a loss of economic potential, cost the government and the U.S. the loss of goodwill and large sums, encouraged corruption and receptivity toward the VC, and finally resulted in the loss of intelligence in the areas that had been abandoned.\footnote{\textit{Ibid.}, p. 226-7.} Search and destroy ran counter to all of the policies that the Pacification program was attempting to encourage.

Doubts about the strategy first came to McNamara’s attention from Marine Lt. Gen. Victor Krulak in mid-January, 1966. The two men had worked together since 1961 when Krulak was Special Assistant for Counter Insurgency to the Joint Chiefs. He was a participant in the 1963 trip to Vietnam with Joseph Mendenhall at the behest of President Kennedy — a trip that produced diametrically opposing assessments of the situation. Krulak had been disturbed by what he observed during two firefights involving marines late in 1965. It spurred him to write a 17-page memorandum in which he argued “attrition would fail…because attrition was the enemy’s game… [the enemy was] ‘seeking to attrite U.S. forces through the process of violent close-quarters combat which tends to diminish
the effectiveness of our own supporting arms, i.e., artillery and air power.”

Krulak fortified his basic argument with numbers. The Communists had at their disposal a military manpower pool of approximately 2.5 million men. Using the current official kill ratio of 1 American or South Vietnamese soldier killed for 2.6 Viet Cong or North Vietnamese (which was probably optimistic) and the proportional share of dying between Americans and Vietnamese troops (a figure that was likely to change to the disadvantage of the Americans), he calculated that it would take 10,000 Americans and 165,000 South Vietnamese killed “to reduce the enemy [manpower] pool by a modest 20 percent.”  

Krulak presented his memorandum personally to McNamara who saw the figures and was impressed, but there was no follow-up.

A few months later an Army Staff report appeared entitled “A Program for the Pacification and Long-Term Development of South Vietnam” or PROVN for short. The report criticized the lack of “a unified and well-coordinated program for eliminating the insurgency in South Vietnam” and argued that U.S. policy should primarily focus on pacification. A number of critics of U.S. Vietnam policy, notably Lewis Sorley, have

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436 Sheehan, op. cit., p. 630.
characterized the study as “thoroughly repudiating Westmoreland’s concept, strategy, and tactics for conducting the war.” That may be somewhat of an overstatement as a recent article in the Journal of Military History points out, but there is no denying that the report’s emphasis on pacification cast substantial doubt that tactics like search and destroy were productive. McNamara was briefed on the report which he approved for limited distribution in September, 1966, but it did not have any impact as long as Westmoreland remained in command and large search and destroy operations continued.

What did draw McNamara’s attention was a request for more troops. In June, 1966 Westmoreland requested additional personnel for the calendar year 1967 which would bring the total to 542,588. As the request was passed up the line through CINCPAC and the Joint Chiefs, the figures changed somewhat, but Westmoreland’s figure is sufficient for our purposes. McNamara wanted to cap the total at 470,000 and that is the number he

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440 A thorough debate on attrition strategy would have disclosed considerable dissatisfaction with the existing policy within Westmoreland’s command. In a 1974 study based on a sixty-item questionnaire mailed to 173 Army General Officers who held command positions in Vietnam 1965-1972, sixty-two percent of the respondents “show[ed] a noticeable lack of enthusiasm, to put it mildly, by Westmoreland’s generals for his tactics and by implication for his strategy in the war.” Douglas Kinnard, *The War Managers*, (Hanover NH, Univ. Press of New England, 1977), pp. 44-45.
approved on November 11. In a Draft Presidential Memorandum dated November 17, 1966 he wrote an extensive memorandum to President Johnson justifying that figure.

First, he argued:

…the data suggest that we have no prospects of attriting the enemy force at a rate equal to or greater than his capability to infiltrate and recruit, and this will be true at either the 470,000 U.S. personnel level or 570,000.

He went on to explain in greater detail:

…it if were assumed that new forces would produce enemy losses at a rate equal to the average of all forces deployed by the end of October, 1966 each deployment of 100,000 additional friendly troops would produce only 230 more total enemy losses per week compared to the 2915 current enemy input rate. A U.S. force of 470,000 would result in enemy losses of 2450 per week; an extra 100,000 U.S. personnel would increase average weekly enemy losses to about 2680, still less than the 3500 per week that the enemy is supposed to be able to infiltrate/recruit.441

McNamara’s analysis was a simple application of the law of diminishing returns. What is surprising is that he did not press the argument further. His analysis suggested that the U.S. would never be able to reach the crossover point.442 If that were true, did the large search and destroy


442 Alain Enthoven added another argument against the attrition strategy in a memorandum to McNamara’s successor on March 8, 1968, “the enemy can control his casualty rate…by controlling the number, size and intensity of combat engagements…If he wants to suffer fewer casualties per month, he can fall back into the jungle and remote areas. If we go after him, we must accept combat on less favorable terms,” Enthoven & Smith , op. cit., p. 298.
operations that Westmoreland initiated the following year in 1967 make sense? Why didn’t he charge his Assistant Secretary for Systems Analysis to analyze the issue? It remains one of the major conundrums of McNamara’s management of the war.

According to Enthoven and Smith:

The Systems Analysis office did not have a prominent, much less a crucial, role in the Vietnam War. Prior to 1965, it had no role at all, and afterwards it was never closely involved with the strategy or operations. Such matters were largely outside its charter.

They argue that:

… systematic analysis and the application of program-budgeting concepts might have helped forestall the over-Americanization of the war, the pervasive optimism of official statements on the expenditure of billions of dollars on various war programs. Systematic analysis was a major missing element in understanding what the United States was doing in and to Vietnam. In Vietnam, no one insisted on systematic efforts to understand, analyze, or interpret the war. 443

Robert Pursley, who served as the military aide to McNamara and his two immediate successors, agreed. He told OSD historians that the only source “where there could have been an introduction of analytical thought as to what objectives we were really pursuing, what resources we had and how

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443 Ibid., p. 270.
that was going to be put together in some sort of strategic format” was
Enthoven’s Systems Analysis section.⁴⁴⁴

Systems Analysis had a small role in the war beginning in 1965 when
American combat troops were introduced into Vietnam. It was given
responsibility for developing deployment tables for troops requested by
Westmoreland. The following year its role was expanded to include
responsibility for keeping deployment tables up to date ensuring that ceilings
on total deployments were being observed and advising the secretary in
selected cases with an independent analysis of force requirements. These
were useful exercises, especially in holding down costs, but they were
essentially a bookkeeping function. It expanded its role somewhat in 1966
with studies on the effectiveness of mines and fire fights, a review of
CINCPAC’s troop requests and Ambassador Lodge’s piaster budget in
October of that year. The following year it prepared memoranda for
McNamara before the Guam conference and in response to Westmoreland’s

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⁴⁴⁴ Robert E. Pursely, OSD Interview, Sept. 6, 1995, p. 27. There are others who served
in the Secretary’s office who maintain that McNamara tried to use Systems Analysis but
that the office struggled to “quantify the Vietnam War” and indeed, that “McNamara
struggled with that problem all the way through [because] it just didn’t lend itself to that
kind of quantification.” Henry Glass OSD Interview, Nov. 4, 1987, William Kaufmann
believed Systems Analysis was not able to make a greater contribution because its
personnel “very quickly became micro-analysts. That’s where the operations research
people feel most comfortable-footnote 102, cont. --defining problems pretty narrowly and
fixing the constraints so they could make the problem manageable and make their tools
work.” William Kaufmann OSD Interview, July 23. 1986, p. 16.
request for additional troops.\textsuperscript{445} Thus, its role was larger than Enthoven & Smith suggest. Yet they are not wrong when they argue:

> These examples should not be allowed to obscure the basic fact that there was no organized critical analysis of the strategy and operations of the Vietnam War---cost-effectiveness or otherwise. (emphasis in original) \textsuperscript{446}

The mystery is why McNamara, the champion of PPBS and the advocate of systematic quantitative analysis to strategic decisions did not use Systems Analysis, the office he had created, to supply that function.

Apparently, it remained a mystery to McNamara himself as well. When he came to write his memoir around 1994 he described a study he had requested from the Joint Staff asking, “Can we win if we do everything we can?” Not unexpectedly the answer came back Yes, “within the bounds of reasonable assumptions…if such is our will.” But the report contained an important caveat. It cautioned that the assurance a U.S. victory “if we do ‘everything we can’ must remain to a degree tentative for many reasons, including in particular the limited experience in South Vietnam to date with offensive operations approximating the kind envisaged herein.” As McNamara would write, “That was the key unknown.” The Joint Staff assumed the North Vietnamese would adopt large-unit operations which the

\textsuperscript{445} Enthoven and Smith, \emph{op. cit.}, pp. 296-297; Gibbons IV, pp. 345, 626-27.

\textsuperscript{446} Enthoven and Smith, \emph{op. cit.}, p. 306.
U.S. could defeat by conventional military tactics like “search and destroy”.

If they did not, U.S. and Vietnamese forces could wage effective anti-guerilla operations. McNamara goes on to write:

I will never fully understand why I did not do so here. Although I questioned these fundamental assumptions during my meetings with Westy [Westmoreland] and his staff… I clearly erred by not forcing then or later either in Saigon or Washington---a knock-down, drag-out debate over the loose assumptions, unasked questions and thin analysis underlying our military strategy in Vietnam. I had spent twenty years as a manager identifying problems and forcing organizations—often against their will—to think deeply and realistically about alternative courses of action and their consequences. I doubt I will fully understand why I did not do so here.  

Passing the question what mechanism McNamara had for “forcing…a knock-down, drag out debate” over strategy, he could have at the minimum turned the issue over to Systems Analysis to receive a preliminary analysis.

The question remains why did McNamara not make greater use of his Systems Analysis office to analyze not only the question posed above but a number of others involving military tactics and strategy? Why did he move

\[447\] McNamara, op. cit., p. 202-203.

\[448\] Under a different president an exercise like “Project Solarium” that President Eisenhower used in 1953 to define U.S. policy toward the Soviet Union might have worked. It is doubtful that McNamara could have cajoled President Johnson into such a procedure because the manner in which Johnson arrived at major policy decisions was the antithesis of Eisenhower’s. see Evan Thomas, *Ike’s Bluff: President Eisenhower’s Secret Battle to Save the World* (Boston: Little Brown and Company, 2012) pp. 106-109.
“…virtually alone in an area where he was least equipped to deal with the problems, where his training was all wrong, and the quantifier trying to quantify the unquantifiable?”449 He clearly felt uncomfortable dealing with issues of military doctrine. When asked by Henry Brandon, long-term Washington correspondent of the London Sunday Times “…why he did not tell his officers what to do and reminded him that Churchill had not hesitated to do so, he shot back that he was no Churchill and would not dabble in areas where he had no competence.”450 The comparison, of course, was absurd. Churchill was an elected leader with a popular mandate, not an appointed official. He was also known for making military strategic blunders like Gallipoli in World War I. Finally, his Chief of the Imperial General Staff, Field Marshall Alan Brooke, spent considerable time dissuading him from some of his hair-brained schemes.

The episode, however, discloses a larger truth. McNamara was particularly uncomfortable with the irrationality of war. He could not conceive how a great industrial power with its overwhelming superiority in firepower, and mobility could be stalemated by a loosely-coordinated group

449 Halberstam, op. cit., p. 247.
of peasant guerrillas. Try as he might to fit the contingencies of combat into a set of comprehensible parameters, they would not fit.

There were at least three other factors inhibiting McNamara. First, he knew that Enthoven and many of his colleagues in Systems Analysis had created a great deal of resentment within the military as a result of their analysis of weapons procurement issues. He could accept the potential pushback from the Joint Chiefs, Congress and even the White House when the issues were cost and efficiency and he had control of the data as was the case with weapons acquisitions. With issues involving life and death and the contingencies inherent in combat so numerous, imposing a “civilian” solution on a resistant military was far more perilous for his leadership of the department and politically for the President. He could, however, have adopted a technique used by Secretary Laird who would have Systems Analysis prepare a paper but not quote or refer to it but use it for the insights it would give you on an issue but that was not McNamara’s way; it was too subtle.451

Second, overruling the strategy of a battlefield commander required a subtlety that was foreign to McNamara’s management style. If Systems Analysis had produced a study demonstrating the ineffectiveness of

Westmoreland’s attrition policy, he could not have just ordered Westmoreland to adopt a new strategy. He would have had to persuade military leaders like the Chairman of the Joint Chiefs, the Army Chief of Staff and the Marine Commandant that a change was necessary. It would best have been done informally, and it would have taken time. It would not have been a comfortable process for McNamara.

Third, McNamara could not have been sure of the backing of the President. Johnson called Westmoreland home in April, 1967 as part of his “charm offensive” to counter the growing anti-war sentiment in the country. The last thing he would have wanted was a squabble between his secretary of defense and his “whiz-kids” on one side and his military advisers and theater commander on the other. One should bear in mind that the entire Joint Chiefs seriously contemplated resigning en masse after McNamara’s testimony about the ineffectiveness of bombing before the Preparedness Subcommittee of the Senate Armed Services Committee in August, 1967. A secretary of defense more politically astute and connected might have accomplished such a policy reversal, but it is unlikely that McNamara could have succeeded, and he probably knew it.

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452 Especially, because his position in the chain of command was for some in the military ambiguous, see footnote 323, supra.
What did McNamara have to say when he addressed the issue of attrition in his memoir? First, he wrote, “With Washington’s tacit agreement, Westy fought a war of attrition, whose major objective was to locate and eliminate the Vietcong and North Vietnamese regular units.”

The statement is disingenuous. At the Honolulu conference held February 6-9, 1966, Westmoreland received a written note setting forth six goals for the year. Number six stated: “Attrit, by year’s end, VC/PAVN forces at a rate as high as their capability to put men into the field.” The authors of the Papers cannot positively identify the author of the note but state that it was “probably written by McNamara.” In any event, it certainly was not written by Westmoreland, and it certainly reflected the administration’s policy.

McNamara goes on to accept responsibility but in a curious way. He writes:

> But the president, I, and others among his civilian advisers must share the burden of responsibility for consent to fight a guerilla war with conventional military tactics against a foe willing to absorb enormous casualties in a country without the fundamental political stability necessary to conduct

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454 McNamara, op. cit., p. 211.
455 PP, Gravel ed. IV, p. 625.
456 Ibid., p. 605.
effective military and pacification operations (emphasis added).\textsuperscript{457}

First, the President was the commander-in-chief and McNamara his principal deputy; he bore far greater responsibility than any other civilian adviser. And what does he mean by “consenting to fight?” He and the President were giving the orders. Perhaps he is suggesting that when it came to the war he was no longer playing the active leadership role he “always believed in and endeavored to follow” but the “passive judicial role” he disdained and that somehow he was less at fault because he was only “consenting” to what the military wanted to do.

Nor did McNamara follow a managerial maxim he was fond of quoting:

\ldots define a clear objective…develop a plan to achieve that objective, and systematically monitor progress against the plan…if progress [is] deficient…either adjust the plan or introduce corrective action to accelerate progress.\textsuperscript{458}

Time and again in reports to the President he points out that the ground war was not making adequate progress, but there was no corrective action and no new plan.

\textsuperscript{457} McNamara, \textit{op. cit.}, p. 212.

\textsuperscript{458} McNamara, \textit{op. cit.}, p. 24.
Conclusion

One of the enduring questions about the Vietnam War is McNamara’s role in the conflict. It has been the contention of this chapter that contrary to the prevailing view that he was actively managing the war, he was, with the exception of logistics, actually undermanaging it.

It was not for lack of attention. He devoted countless hours to the subject: regular grueling trips to Hawaii and Saigon to debrief generals, ambassadors, and Vietnamese political leaders, vigorous participation in all important policy meetings related to the war; regular attendance at the president’s famous Tuesday luncheons devoted to Vietnam when North Vietnam bombing targets were discussed and selected. He was active but that should not be confused with managing. What he and the president failed to do is what every top manager should do--provide strategic guidance.

Two caveats are in order up front. Firm strategic guidance would not necessarily have resulted in the U.S. reaching its goal of a South Vietnam free from Communism with the ability to defend itself. Good management cannot turn a sow’s ear into a silk purse. It can alter conduct, however, and in war that can mean savings both in terms of lives and money.

Second, as McNamara recognized, one defect in the conduct of the war was the executive branch’s failure “to deal effectively with the
extraordinarily complex range of political-military issues...associated with
the application of military force under substantial constraints over a long
period of time.” He bemoaned the absence of a “full-time team at the highest
level ...focused on Vietnam and nothing else” consisting of the “deputies of
the secretaries of state, defense, the national security adviser, the chairman
of the Joint Chiefs and the CIA director.” A variant of such a structure
might have been possible during the Eisenhower administration with its
highly organized NSC, but the Kennedy administration dismantled that
apparatus when it assumed office and given the close-to-the-vest manner in
which President Johnson made decisions, it is highly unlikely he would ever
have agreed to a system that could have restricted his discretion as such an
administrative arrangement was likely to do.

It was also not the way McNamara liked to operate. There is no little
irony in reading the following in McNamara’s wartime memoir:

One of his [LBJ] closest advisers, in commenting
on an earlier draft of this text [In Retrospect], wrote
that I had failed to emphasize properly the weakness
of LBJ’s decision-making approach. “He did not
like working toward a decision in company—he
wanted to go one-on-one. He never let anyone see
his hole card in any context.”

459 Ibid., pp. 321, 332.
460 Ibid., p. 294.
Although McNamara was not a poker player, his management approach was very similar to his boss’s.

McNamara’s greatest failure as a wartime manager was his unwillingness or inability to provide strategic guidance. There were periods when McNamara could have initiated comprehensive discussion of military strategy. First, when combat troops were initially sent to Vietnam, he was officially charged with determining the circumstances in which they were to engage the enemy. Later, there were several instances when the attrition policy came under criticism, although as an “activist” he should not have needed such stimulus to question Westmoreland’s strategy. He knew the VC/RVN had been able to match American increases in manpower step by step, and there was no reason to believe this would not continue in the future. He also knew that Johnson was not going to activate the reserves and that draft calls could not have been increased indefinitely. Accordingly, the strategy of attrition was unworkable. Yet he did not seize the reins as he did with virtually every other issue that came before him when he was in office.

McNamara advanced a number of reasons why he was not more forceful in establishing military strategy. One was that there was a host of other problems that required his attention and that “our failure was partially the result of having many more commitments than just Vietnam…we were
left harried, overburdened and holding a map with only one road on it. Eager
to get moving, we never stopped to explore fully whether there were other
routes to our destination.”

In the early years of the administration (1961-1963) there were a series of international crises that required top level
civilian attention like Cuba, Berlin and Laos. By the middle of 1964,
however, the world scene was considerably quieter. Yes, there was the
invasion of the Dominican Republic in 1965 and the Six-Day Arab-Israeli
war in 1967, but these were relatively short-lived episodes that should not
have distracted attention from the far more significant commitment of the
United States in Vietnam.

It is true that McNamara was a very busy man, but it was not the
troubled international scene that consumed so much of his time but his over-
centralized management style. He was in the words of Pursley “…so
involved in everything; it was hard to think of a principal issue in which he
wasn’t involved” and as a consequence he was unable, or unwilling to
“systemize” his responsibilities.

He also suggested that it was difficult to establish policy because his
office was dependent on data provided by the military and that such

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461 Ibid., p.108.
intelligence was so unreliable as to preclude credible analysis, a complaint that is echoed by Enthoven.⁴⁶³ There were, however, other sources including the CIA and the State Department’s Bureau of Intelligence and Research (INR), foreign governments and the press. Furthermore, the military’s raw date was not that inaccurate. Thomas Hughes, the head of The State Department’s INR, relates a telling incident in his review of McNamara’s wartime memoir. INR had published a Research Memorandum on October 22, 1963 entitled, “Statistics on the War Effort in South Vietnam Show Unfavorable Trends” (RFE-90). Relying exclusively on the military’s own data, it drew a picture of a deteriorating military situation. Whereas the military had used annual figures of “VC incidents” to demonstrate a stable military situation, INR looked at the trend which showed a marked increase in recent incidents. It provoked a monumental outcry from McNamara who wanted Rusk to reprimand Hughes for “second guessing ‘military analysis’” and not incidentally, McNamara’s own analysis of the military situation in Vietnam contained in his October 2 memorandum to the president. Military intelligence required vetting, but it did not preclude credible analysis.⁴⁶⁴

Enthoven and Smith are much more on the mark when they write:

⁴⁶³ Enthoven and Smith, op. cit., p. 292.
It was generally recognized that an attempt to give the Systems Analysis office a charter to analyze Vietnam operations and strategy, one that really tied the office into decision making, would meet with such strong military resistance as to make it politically impossible.\textsuperscript{465}

Systems analysis was for peacetime but wartime was for the generals. If we are to trust Enthoven, then McNamara undermanaged the war because he was \textit{unable} to manage it in the manner that he wished. But this analysis leaves open another possibility. Perhaps McNamara undermanaged the war because he did \textit{not know how} to apply the analytic techniques of which he was so fond. Henry Glass, who served six different secretaries of Defense, later said that McNamara’s team struggled to “quantify the Vietnam War,” and, indeed, that “McNamara struggled with that problem all the way through” because “it just didn’t lend itself to that kind of quantification.”\textsuperscript{466}

McNamara had been a master at determining means once ends were established. But war was different; it required determining the ends as much as it did calculating the means. While a vigorous peace-time secretary, McNamara was an ambivalent war manager. It was not just that he could not subject the chaos of war to empirical control; it was that he implicitly

\textsuperscript{465} Enthoven and Smith, p. 292.
\textsuperscript{466} Henry Glass OSD Interview, Nov. 4, 1987, p. 13, Glass disagreed with Enthoven that Systems Analysis was precluded from managing the war, but suggested nonetheless that the war was undermanaged, just that Systems Analysis was more a culprit than a victim, see pp. 13-20.
recognized the fact. He was tentative in his approach — in establishing concrete goals, in challenging the military’s assumptions, in demanding that Systems Analysis play a greater role in strategy, in encouraging pacification. But he was tentative because of the uncertainty of wartime analysis. The first step in business analysis was determining which ends were to be maximized. War provided no such luxury; it did not come fashioned with clear ends. Recognition of such facts in part inspired an era of limited warfare in which civilian oversight was expected to take a different form. \(^{467}\) Furthermore, as Lawrence Kaplan observed, McNamara failed to understand a new kind of conflict. \(^{468}\) Military strategy was not his strong suit. Bureaucracy and cost efficiency were. McNamara was the ultimate peacetime Secretary of Defense. His main interest lay in restructuring the Pentagon. His energy and skills served him poorly when it came time to manage a war.

In an interview conducted with Maxwell Taylor, the former high-ranking general asserted that secretaries of Defense wore “two hats,” a fact that was “seldom recognized.” Taylor deemed this a significant problem since it meant that the secretary was both “the head of a great Department” but also that he “has another role, which is rarely mentioned or defined, in

\(^{468}\) Kaplan, *op. cit.*, p. 292.
the chain of military command.” This second hat was altogether different than the first, and lacked the formal definition and clear accompanying expectations of the first. It should come as no surprise that McNamara was uncomfortable wearing it.

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CHAPTER 6  
CONCLUSION

We have followed McNamara through a number of management milestones during his seven-plus years as Secretary of Defense. Some of his initiatives like the PPBS and its complementary system analysis methodology have been generally recognized as major contributions to improving the management of the Defense Department. Other initiatives like the TFX development project have been recognized as failures. Still other managerial tests like the Vietnam War furnish ambivalent or mixed verdicts. Logistically, the war was not handled badly. On the other hand, McNamara’s reluctance to become involved in how the ground war was fought and his inability to provide firm strategic guidance to the military were managerial failures.

The end of this study is an appropriate time to look more broadly at McNamara’s management style and his operational methods. An expedient way to proceed would be to consider Tom Morris’s effort to assess McNamara’s record as a manager in a talk he prepared for presentation to The Academy for Management in August, 1978 (referred to previously in
Chapter 3).

Morris knew McNamara well. He spent all but one year between 1961 and 1968 working for him as Assistant Secretary for Installations and Logistics (I&L) and Assistant Secretary for Manpower. He was clearly an admirer of his management style. As he told Defense Department historians in explaining why he returned to DoD after a one-year absence, “once you have lived under such a dynamic leader, you never forget it, and you miss it quickly.”

Morris divided his analysis into five separate categories: organization, planning, communication, decision-making and implementation. Unsurprisingly, he came to the conclusion that McNamara “…was a managerial giant in the Pentagon… [and a] genius as a practitioner in management.” How did he reach those conclusions?

Organizer

Morris gave McNamara high marks for his organizational ability in consolidating a number of service-wide functions as exemplified by the Defense Supply Agency, which buys, stores and issues common items used by all the services. Under McNamara there were a number of similar

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470 See f/n 190, p. 118, supra.
471 Thomas Morris OSD Interview, undated as first page is missing, p. 25.
consolidations involving joint activities like intelligence, in the form of The Defense Intelligence Agency, transportation, contract administration and contract auditing. All in all, Morris claims that McNamara consolidated some ten support agencies. In addition, he brought a new analytical approach to the entire military procurement effort by supporting the establishment of The Logistics Management Institute, a non-profit research organization that focused its attention on defense procurement issues and developed a number of important studies on the subject. These were laudatory steps in making the Defense Department more cost-conscious, and they required a good deal of McNamara’s personal attention since they were resisted both from within the department and Congress. That praise should be somewhat tempered, however, since the need for consolidation was generally recognized, and a great deal of what was done in the early Kennedy-McNamara period “was already pre-figured in what had been going on before under their predecessors.”

McNamara’s organizational abilities should not be judged, however, solely on the basis of the actions that he took; to get a complete picture one must also consider actions that he did not take. For example, how did he organize the war effort in Vietnam? Did he organize it in the most effective

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472 Morris OSD Interview, (date), p. 20.
way? In his memoir McNamara laments the absence of an interagency subcabinet committee that devoted its attention exclusively to Vietnam to advise the President. He blames its absence for the Administration’s failure to confront the most fundamental issues involved in the conflict in Southeast Asia.\(^{473}\)

In the absence of an interdepartmental group, the question arises why McNamara did not at least establish a group within DoD devoted exclusively to developing on a long-term basis the objectives the United States ought to be pursuing, what resources were available, and how to fashion a set of coherent objectives. Such a group could have included representatives from

\(^{473}\) Actually, from time to time the president would establish informal groups of subcabinet officials to discuss the war. The most notable example was the regular gathering of some ten subcabinet officials who would, beginning early in 1967, meet every Thursday at 5:00 pm in the office of Nicholas Katzenbach, the Under Secretary of State. McNamara would occasionally attend. Known as the “Non-Group,” its atmosphere was according to William Gibbons “…congenial—drinks were served—and informal. Although subjects for discussion were frequently known in advance, there was no formal agenda and no notes were kept.” It was, Gibbon notes, in many respects like the Tuesday luncheon group of Cabinet-level officials that met in the White House to discuss the war. This was hardly the kind of arrangement McNamara had in mind and was certainly not the kind of structure the situation demanded. Admittedly, only the president could instigate such a system, and any independent group with any sort of authority would have been at odds with President Johnson’s decision making process which involved “…tight personal control and loosely structured organization.” On the other hand, McNamara never seems to have raised the issue with the President. Given his high standing with Johnson, and his centrality in discussions about Vietnam he would have been the most appropriate individual to broach this issue. See: Gibbons, IV pp. 479-472; Chester Cooper, op. cit., p. 413; George Herring argues that no such group was established because the administration was following a “limited war theory” which posited that war should be fought under peacetime arrangements and a gradualist approach. Herring, op. cit., p. 22.
Systems Analysis, the Joint Staff, International Security Affairs and appropriate intelligence sources. If properly managed, it might have helped avert the situation which Bruce Palmer and Lewis Sorley have identified as a major deficiency in the prosecution of the war, “…our military leaders failed to get across the message that the U.S. strategy was not working and over time would probably fail to achieve stated U.S. objectives.”

It was not that the absence of such a device went unnoticed. McNamara’s Air Force aide, Robert Pursley, found it was “…odd that the Secretary of Defense did not have an explicit vehicle for attaching himself to the rest of the department to influence the way it worked on Southeast Asian issues.” As Pursley describes the management of the war, McNamara “would give assignments to the chairman [of the JCS], and allow him to do things operationally, give certain assignments to Alain Enthoven; but it was all part of ongoing business. That was mixed in with nuclear management and everything else…in the absence of having a dedicated institutionalized kind of structure it sort of implies that it is business as usual, not a lot

different from any of the other great array of issues that are handled during the course of the day.” 475

When Pursley mentioned the issue to Melvin Laird, who succeeded McNamara, one of his first acts was to set up a Vietnam Task Group that met daily.

One cannot know, of course, how effective such a special purpose group would have been, but it is puzzling that McNamara appears never to have considered such an arrangement since he had proposed that the war be “a laboratory for the development of organization and procedures for the conduct of sub-limited war.” 476 Given McNamara’s analytical bent and insistence that decision-making be based on the best in available intelligence, one might have expected some institutional structure to study the war. Whatever McNamara’s reasoning, the absence of a focused single group devoted to studying the war tempers one’s acceptance of Morris’s judgment that he was an organizer of “rare skill.”

475 Pursley OSD Interview, Sept. 6, 1995, p. 34.
476 See, p. 216, supra.
Morris gave McNamara “highest marks” as a planner based almost exclusively on his introduction of the PPBS. He attributed “McNamara’s success in his first four years…directly from improvements in program planning and budgeting” 477 It is difficult to quarrel with his judgment. PPBS was McNamara’s most important innovation during his tenure as Secretary, with the possible exception of the reorientation in the military use of nuclear weapons that he spearheaded. PPBS gave him and his successors unprecedented control over the department and won the praise and respect of congressional leaders like Carl Vinson, the Chairman of the House Armed Services Committee who commented after one of McNamara’s budget presentations:

I say it from the bottom of my heart. I have been here dealing with these problems since 1919. I want to state that this is the most comprehensive, most factual statement that ever has been my privilege to have an opportunity to receive from any of the departments of Government.

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You dealt with both sides of the problems. When you reach a decision, you set out the reasons why you reached that decision. You point out why—it could have been done the other way, but the other

facts were superior and therefore you followed the method you did. It is a magnificent statement.\textsuperscript{478}

PPBS has also passed the test of time. As Carol DeCandido wrote in 1996:

Since its inception, PPBS has been in a state of constant evolution...However the basic elements of the system—three phases, program and budget guide to the services from the Secretary, OSD review of the service program and budget and proposals, and the use of quantitative analysis to choose among competing programs—have remained.\textsuperscript{479}

The same could be said today. The program is still evolving, but its core principles remain.

PPBS had its limits, however, especially as applied to war. Alain Enthoven told the Senate Subcommittee on National Security and International Operations that it could not answer basic questions like how many divisions the U.S. should deploy in Vietnam and where or whether the South Vietnamese government should negotiate with the NLF. It could be helpful in a number of important issues related to logistics and force

\textsuperscript{478} Hearings on Military Posture and H.R. 9751, before the Committee on Armed Services, House of Representatives, 87\textsuperscript{th} Cong., Second Sess., p. 3306.
structure, but on the broader questions of strategy and even tactics it had a limited role. The limited usefulness of PPBS did not however reduce McNamara’s responsibility with respect to the war.

What strikes one as out of character was the apparent disinterest of the secretary in the conduct of the ground war in the South. To be sure, he was intimately involved in the issues of bombing pauses and target selection. He also advocated the erection of a barrier to impede infiltration from the North to the South. In general, however, he appeared to take little interest in what was happening on the ground with the troops he was sending to Westmoreland. He declined to define the terms of engagement when combat marines were first introduced into the country, although the NSAM directed him to do so; he did not attempt to mediate the dispute between the Marines’s “enclave strategy” and Westmoreland’s “search and destroy” tactics; he showed little interest in the Army’s PROVN report that strongly suggested that there was too much emphasis on military measures and too

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480 See Hearings on Planning, Programming and Budgeting, before the Subcommittee on National Security and International Operations of the Senate Committee Government Operations, 90th Cong, 1st Sess., Part 2, pp. 100-101. Enthoven gave a more upbeat assessment of the potential contributions of system analysis and PPBS when he published his book, *How Much is Enough* four years later (see pp. 291-293) There are those who argue that PPBS was actually used in the conduct of the war. Gregory Palmer asserts that “…American military intervention in 1965 [in Vietnam]… was conducted according to [PPBS] principles.” He grounds this assertion by contending that PPBS and the Vietnam War were both products of “rationalist defense theories.” See Gregory Palmer, op. cit., Ch., 4;“The Influence of PPBS on the Escalation of The Vietnam War.”
little on pacification. The Pentagon Papers were correct when they concluded that McNamara “…was more interested in management than in strategy”. What explains this uncharacteristic attitude on the part of the most activist Secretary of Defense?

Perhaps, as George Herring suggests, McNamara knew that “…he was out of his element when compelled to go beyond the managerial aspects of military policy.” The difficulty with such an explanation is that McNamara was not generally deterred from dealing with issues just because they involved “military policy.” He was not diffident, for example, about debating nuclear military strategy with defense intellectuals at RAND and other think tanks. Perhaps that was because nuclear policy had developed a language and logic of its own, however bizarre that may appear to us now. Once he had mastered the language and logic of a subject he felt comfortable operating within its boundaries.

Vietnam was different. It was part insurrection, part invasion. The goal of the enemy was not to win battles or even to control territory but in the words of Roger Hilsman “to gain administrative control over the sixteen

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481 PP Gravel ed. III, p 475.
482 Herring, op. cit., pp. 38.
 thousand hamlets of South Vietnam." It was an entirely new kind of struggle without precedent, discernible logic, patterns or parameters. No wonder McNamara felt intellectually uncomfortable.

Perhaps the only way he could have become comfortable enough to develop an appropriate managerial role was to enter into extended dialogue with the military, especially, the younger officers developing counterinsurgency doctrine, diplomats, both American and foreign, especially those with knowledge of the history of Southeast Asia, and experts in economic development. Dialogue, however, was not part of the McNamara repertoire, so he never undertook such a process and left the military in virtually exclusive control of the ground war.

Another possible explanation for his passivity was that he was unsure of the backing of the president in the event he attempted to intervene in tactical decisions made by the area commander. Presidential counselor, Clark Clifford describes Lyndon Johnson’s approach to the war at the end of 1967.

...Lyndon Johnson during this period often acted more like a legislative leader, seeking a consensus among people who were often irreconcilably opposed to each other, rather than a decisive

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483 Hilsman, To Move a Nation, p. 430.
Commander in Chief giving his subordinates orders.\footnote{Clifford, \textit{op. cit.}, p. 527.}

We know that one of Johnson’s principal concerns was that the military, especially his area commander, would give public utterance to their disagreement with the way the war was being waged. According to Westmoreland, at the February 1966 conference in Honolulu Johnson pulled him aside and told him, “General I have a lot riding on you” and later, “I hope you don’t pull a MacArthur on me.”\footnote{Westmoreland, \textit{op. cit.}, p. 207; see also, Herring, \textit{op. cit.}, Chapter Two, “No More MacArthur’s.”} McNamara who, as we have seen, was sensitive to the thinking of his superiors may have concluded that delving too deeply into combat operations risked both a presidential rebuke and an additional strain on civilian-military relations.

In summary, McNamara made a formidable contribution to defense policy with the introduction of PPBS into the budgeting process. When it came to actual military operations, however, he could not transfer that skill into coherent strategic and tactical planning. He was, in other words, equipped to be a peacetime secretary but not a successful wartime one.
Communicator

We have already considered McNamara as a communicator in Chapter 3. Communications in the McNamara Pentagon was formal and very much top down. He would use directives, and frequently provide specific instructions on how to implement them. For Morris, this demonstrated that “…McNamara’s communications skills were superb (1) in dealing with the president, (2) in dealing with his internal staff… and (3) in dealing in an intellectual sense with Congress, the public and the press through analytical material skillfully written and clearly presented,”\(^{486}\)

Following the same kind of analysis as Chester Barnard, Peter Drucker has pointed out that effective communication does not depend on the person delivering the communication but on the ability of the recipient to perceive what is being communicated. Unless the recipient can perceive what he is being told, there is no communication only noise. To communicate, the speaker must “…talk to people in terms of their own experience…one can communicate only in the recipient’s language or on his terms.”\(^{487}\) When McNamara attempted to communicate in this way he was frequently successful.

\(^{486}\) Morris Presentation, pp. 21-22. 
\(^{487}\) Drucker, Management, op. cit., p. 483.
For example, early in his tenure he had great success with Congress on budgetary matters because he spoke in terms Congress could understand. It was comfortable with the subject matter and McNamara presented his budget in the format it was used to rather than attempting a presentation more compatible with the PPBS system that he had initiated.\textsuperscript{488}

He was also successful in communicating with the President because he became a master of so-called “Goldilocks Principle.” The Goldilocks Principle, as described by George Ball, is a method whereby “…seasoned bureaucrats deliberately control the outcome of a study assignment by recommending three choices…By including with their favored choice one ‘too soft,’ and one ‘too hard,’ they assure that the powers deciding the issue will almost invariably opt for the one - ‘just right.’”\textsuperscript{489} McNamara used the technique often in his memoranda to the President.

He was also very successful in the councils of government because he was skillful in a much-admired Washington talent — “tactical brilliances formed by strategic conformity — the facility to outmaneuver one’s counterpart in a discussion without questioning the fundamental

\textsuperscript{488} Carl Vinson’s praise is persuasive evidence that he had been successful, see f/n 184, p. 112.
\textsuperscript{489} George Ball, \textit{op. cit.}, p 388.
assumptions.” As we have seen George Ball kept questioning basic assumptions, and no one took him seriously.

He could even be successful with the military when he adapted this approach. Paul Ignatius gave one example when McNamara sought support for his proposal to consolidate the Army’s technical services. He referred to the Army’s “line and staff: concept which had influenced modern corporations like Ford and GM.” The incident apparently helped diminish the opposition to his proposal.

In most cases, however, McNamara made no attempts to communicate in the recipient’s language. His communications with the military were most often distinctly “top down.” Morris did not even include the military in his list of those with whom McNamara communicated effectively — a telling omission. As Drucker described this form of discourse:

> For centuries, we have attempted communication “downward.” This, however, cannot work no matter how hard or how intelligently we try. It cannot work, first, because it focuses on what we want to say. It assumes, in other words, that the utterer communicates. But we know that all he does is utter. Communication is the act of the recipient….All one can communicate downward are commands, that is, prearranged signals. One cannot

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491 See p. 128, supra.
communicate downward anything connected with understanding, let alone with motivation.\textsuperscript{492}

Although he had some successes, McNamara was overwhelmingly a top down communicator. He made little effort to communicate in the recipient’s language or on his terms. The way in which he handled the TFX decision is probably the most prominent example of his communication failure, but there are many others since it was his standard way of operating. It was one of McNamara’s prominent failures as a manager.

\textit{Decision Maker and Implementer}

There is no doubt that each year McNamara made thousands of decisions. As Tom Morris observed, “It was almost as if McNamara’s insistence on planning was so that he could make decisions. Decisions became an index of managerial productivity.”\textsuperscript{493} It is also incontestable that he followed up on his decisions. He frequently accompanied his decisions with instructions as of how to implement them and would scribble at the top of the page “the date and precise time he’d like to have a report.”\textsuperscript{494} The problem was as, Peter Drucker told Morris, that he would get caught up in minor issues. Drucker would write:

“McNamara’s greatest strength as a manager was his realization of the need for objectives…[but] his

\textsuperscript{492} Drucker, \textit{op. cit.}, p. 490.
\textsuperscript{493} Morris Presentation, p. 15.
\textsuperscript{494} Morris Presentation, pp. 21-22.
greatest weakness was he always lost the objective over procedures. He always got caught up with them in minor points and the objective became secondary to the way in which this or that specific ‘urgency’ of the moment was being done.”

McNamara may have considered decisions as the index of management productivity, but in reality, the extreme reliance on him as the decision maker undermined the system he was attempting to establish.

McNamara’s Legacy

From time to time McNamara would discuss with Alain Enthoven his aspirations for permanently reforming the Defense Department’s management system. He would talk “… about [the] achievement of Alfred Sloan in creating the system that became the permanent long-term management system for General Motors. McNamara said his ambition for the Defense Department was to create what would be a permanent reform in the management system of the Department in the hope that future secretaries would build on that, and strengthen and improve it.” It was a goal Enthoven came to share and he blamed Nixon and the “extreme right of the Republican party” for failing to build on McNamara’s “reforms.”

Certainly, politics played a part in dismantling part of McNamara’s system.

495 Enthoven OSD Interview, Feb. 8, 1986, p. 38.
A far more realistic appraisal, however, is that McNamara’s method of operation characterized by highly centralized, hierarchical, personalized decision-making implemented by his immediate staff could not be institutionalized. McNamara’s system, was as Charles Rossotti suggests below, inherently unstable and the very antithesis of the system Sloan and Brown instituted at General Motors.

Rossotti, a former staff member of System Analysis, analyzed the McNamara system cogently:

His method relied on an extreme degree of centralization of decision making of far too many decisions. He set up an elaborate process of requiring detailed memorandums and budget decision documents for every program and even some smaller budget decisions, which all came eventually to him for decisions making.

***********

But the inherent weakness was that this process depended on one individual McNamara, making a huge number of decisions and making them all stick, with no real commitment from almost anyone else throughout the organization to these decisions. Eventually that broke down…If McNamara had paid some attention to institutionalizing and organizing the decision process, it would have been more stable. 496

The day before he left office on February 29, 1968, McNamara was too emotional to say even a few words at the farewell ceremony. There were

496 Communication Charles Rossotti to author June 14, 2010.
tears in his eyes, and he was at the edge of a breakdown. Most attributed his condition to exhaustion and despair over the course of the Vietnam War. Undoubtedly, they were important components of his emotional state.

There were probably several other emotions as well and one of them may well have been that there would be no McNamara system with the staying power of Alfred Sloan’s GM System. Joseph Kraft summed it up in a valedictory column on McNamara’s service:

Nobody should be under illusions as to what his [McNamara’s] departure means. It expresses a failure in the managerial faith, a crisis of the whole post-war generation.497

It is not clear to what “managerial faith” Kraft was referring. If he meant large transformational initiatives, foreign or domestic, like the Marshall Plan, the Vietnam War, the National Highway System, Manned Space Flight, that impulse is still alive. One need only review the rhetoric of the administration justifying the Iraq War to detect its continued vitality.

If he was referring to the more prosaic management of The Pentagon, it did not vanish, but it took different forms. Subsequent Secretaries of Defense with the possible exception of Donald Rumsfeld did not attempt to impose a highly-centralized, top down managerial system in the McNamara mode. A new structure developed which, although differing from

497 As quoted in Shapley, op. cit., p 448.
administration to administration, saw a division of responsibility. In many instances, the Secretary would manage the political and diplomatic aspects of the position including relations with the Joint Chiefs. His deputy, frequently a businessman, would be responsible for managing the operational side of the Department. The Laird/Packard team is generally considered the most successful.498

This dissertation has laid much stress on RSM’s activism. It was a course of conduct that he extolled in word and deed. In various guises it had served him well throughout his career beginning at Berkeley and continuing throughout business school, the Army, Ford and the Defense Department. It was characterized by articulateness, assertiveness, decisiveness, and a willingness to work very hard. All of these traits meant that he was able to impose his personality rapidly on individuals and institutions. Just as he honored management “as the most creative of arts”, so he privileged activism as the only worthy form of management.

Activism certainly helped him establish the primacy of civilian control and the adoption of the PPBS system when he first arrived at DoD. It raised him quickly to become the most influential of the president’s advisers.

and for a time to enjoy virtually unqualified deference from Congress. Yet it
could not help him with the biggest challenge he faced, resolving the
ambiguities of the Vietnam war, or lesser difficulties like the TFX
controversy or even establishing a management system that would outlast
his tenure. What he needed was a more nuanced approach or in the words of
his colleague, Eugene Zuckert, “every pitcher should have a change of pace,
and [he] just had that high hard one.”
## VIETNAM CHRONOLOGY

<table>
<thead>
<tr>
<th>January</th>
<th>January</th>
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<tbody>
<tr>
<td>President Kennedy Inaugurated</td>
<td>U.S. begins operation Ranch Hand which will dump an estimated 19 million gallons of defoliant on 10-20 percent of South Vietnam</td>
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<tr>
<td>Khrushchev pledges support for “wars of liberation”</td>
<td>Marked increase in U.S. personnel. Undersecretary of State George Ball: “The balloon was going up”</td>
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<tr>
<td>Laos No. 1 danger spot in S.E. Asia</td>
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<tr>
<th>April</th>
<th>May</th>
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<tr>
<td>Bay of Pigs Fiasco</td>
<td>McNamara’s first trip to Vietnam: “Every quantitative measurement shows we are winning this war”</td>
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<tr>
<th>June</th>
<th>July</th>
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<tbody>
<tr>
<td>Khrushchev threatens to sign separate peace treaty with East Germany jeopardizing allied access to Berlin</td>
<td>International Conference on Laos concludes with all parties agreeing to a “neutral” Laos.</td>
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<tr>
<th>July</th>
<th>October</th>
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<tbody>
<tr>
<td>President Kennedy calls up Reserves and increases draft calls</td>
<td>Cuban Missile Crisis</td>
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<tr>
<th>December</th>
<th>Year End</th>
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<tbody>
<tr>
<td>President Kennedy sends Gen. Maxwell Taylor and Deputy National Security Council adviser, Walt Rostow to South Vietnam. They recommend sending support and combat troops, more military advisers, and increased aid. President Kennedy follows recommendations except for combat troops</td>
<td>Total U.S. Military Personnel — 11,390</td>
</tr>
<tr>
<td>McNamara makes first trip to Hawaii to plan Vietnam buildup</td>
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### 1961
- **January**
  - President Kennedy Inaugurated
  - Khrushchev pledges support for “wars of liberation”
  - Laos No. 1 danger spot in S.E. Asia

- **April**
  - Bay of Pigs Fiasco

- **May**
  - International Conference on the Settlement of the Laotian Question begins

- **June**
  - Khrushchev threatens to sign separate peace treaty with East Germany jeopardizing allied access to Berlin

- **July**
  - President Kennedy calls up Reserves and increases draft calls

- **December**
  - President Kennedy sends Gen. Maxwell Taylor and Deputy National Security Council adviser, Walt Rostow to South Vietnam. They recommend sending support and combat troops, more military advisers, and increased aid. President Kennedy follows recommendations except for combat troops
  - McNamara makes first trip to Hawaii to plan Vietnam buildup

### 1962
- **January**
  - U.S. begins operation Ranch Hand which will dump an estimated 19 million gallons of defoliant on 10-20 percent of South Vietnam
  - Marked increase in U.S. personnel. Undersecretary of State George Ball: “The balloon was going up”

- **May**
  - McNamara’s first trip to Vietnam: “Every quantitative measurement shows we are winning this war”

- **July**
  - International Conference on Laos concludes with all parties agreeing to a “neutral” Laos.

- **October**
  - Cuban Missile Crisis

### Year End
Total U.S. Military Personnel — 11,390

Total U.S. Military Personnel — 3200
<table>
<thead>
<tr>
<th>1963</th>
<th>1964</th>
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<tbody>
<tr>
<td><strong>January</strong></td>
<td><strong>January</strong></td>
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<tr>
<td>• Battle of Ap Bac demonstrates ineffectiveness of South Vietnamese Army (ARVN)</td>
<td>• Continued ARVN ineffectiveness</td>
</tr>
<tr>
<td><strong>May</strong></td>
<td>• Westmoreland appointed deputy to General Harkins, head of Military Assistance Command Vietnam (MACV)</td>
</tr>
<tr>
<td>• Buddhists in Hue demonstrate against government of President Diem and his brother, Nhu</td>
<td>• McNamara tells House Armed Services Committee “bulk of U.S. armed forces in Vietnam can be expected to leave by 1965”</td>
</tr>
<tr>
<td><strong>June</strong></td>
<td>• General Nguyen Khanh deposes General Minh</td>
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<td>• Self-immolation of Buddhist monk Tich Quang Duc</td>
<td><strong>April</strong></td>
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<tr>
<td><strong>August</strong></td>
<td>• North Vietnam begins sending regular army troops (NVA) into South Vietnam</td>
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<td>• Special forces loyal to Nhu attack Buddhist pagodas</td>
<td><strong>June</strong></td>
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<tr>
<td><strong>September</strong></td>
<td>• Westmoreland appointed head of MACV</td>
</tr>
<tr>
<td>• President Kennedy rebuffs President de Gaulle’s suggestion of neutrality for Vietnam; de Gaulle will continue to urge neutrality for the next six years to no avail</td>
<td>• Honolulu conference of principal Vietnam advisers (Rusk, McNamara, Ambassador Lodge, Westmoreland, McCone (CIA)) discuss possible bombing targets in North Vietnam</td>
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<tr>
<td><strong>November</strong></td>
<td><strong>August</strong></td>
</tr>
<tr>
<td>• Diem deposed in military coup with apparent U.S. acquiescence. He and his brother, Nhu, killed; U.S. recognizes new government under leadership of General Duong Minh</td>
<td>• North Vietnamese torpedo boats attack U.S. destroyer <em>Maddox</em></td>
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<tr>
<td>• President Kennedy assassinated</td>
<td>• Gulf of Tonkin Resolution PL 88-808</td>
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<tr>
<td><strong>December</strong></td>
<td>• Continued protests against government of South Vietnam</td>
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<td>• “Strategic Hamlet” program suspended; increased pessimism over Vietnam in administration</td>
<td><strong>September</strong></td>
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<tr>
<td><strong>Year End</strong></td>
<td>• First large scale demonstration in U.S. against the war in Berkley, CA</td>
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<tr>
<td>Total U.S. Military Personnel — 16,300</td>
<td><strong>October</strong></td>
</tr>
<tr>
<td><strong>Year End</strong></td>
<td>• George Ball drafts 67-page memorandum criticizing U.S. Vietnam policy</td>
</tr>
<tr>
<td>Total U.S. Military Personnel — 23,300</td>
<td>• Khrushchev ousted</td>
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<tr>
<td><strong>November</strong></td>
<td><strong>November</strong></td>
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<tr>
<td>• LBJ elected by landslide</td>
<td>• Intensified preparation for increased operations in Vietnam</td>
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<tr>
<td><strong>Year End</strong></td>
<td><strong>Year End</strong></td>
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<tr>
<td></td>
<td>Total U.S. Military Personnel — 23,300</td>
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<tr>
<td>Month</td>
<td>Events</td>
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</tr>
<tr>
<td><strong>January</strong></td>
<td>- Continuing protests against government of South Vietnam</td>
</tr>
</tbody>
</table>
| **February** | - Viet Cong attack U.S. barracks killing 32 and wounding 98  
- U.S. mounts reprisal campaign and then begins sustained bombing campaign against North Vietnam (“Operation Rolling Thunder”). The bombing campaign will last three years (with pauses) until October, 1968  
- U.S. dependents leave country |
| **March** | - Two combat battalions of Marines arrive in Vietnam; mission: protect U.S. bases and do not engage in offensive operations  
- First “teach-in” against war |
| **April** | - LBJ authorizes offense operations by U.S. troops, but change of mission not disclosed. Decision embodied in National Security Memorandum (NSM) 328 |
| **May** | - Continued buildup of U.S. troops |
| **June** | - Westmoreland requests additional troops (“44-battalion request”) to increase U.S. personnel to more than 120,000 and suggests more troops will probably be required; gives no assurance of success  
- Air Vice-Marshall Ky assumes premiership of Vietnam government |
| **July** | - LBJ grants Westmoreland request for more troops |
| **August** | - Congress passes law making it illegal to burn or mutilate draft cards |
| **November** | - Norman Morrison, a thirty-two year-old Quaker immolates himself before Pentagon  
- Battle of Ira Drang Valley frequently cited in support of “search and destroy” operations  
- Major anti-war demonstration in Washington, DC |
| **December** | - Westmoreland request additional troops stating he needs 443,000 by end of 1967  
- First suspension of bombing campaign |
<p>| <strong>Year End</strong> | - Total U.S. Military Personnel — 184,300 |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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<tbody>
<tr>
<td><strong>January</strong></td>
<td>▪ Operation Rolling Thunder resumes</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td>▪ Honolulu Conference attended by President Johnson, Vietnamese leaders, McNamara and other U.S. top advisers—renewed emphasis on the “other war” i.e., economic and social improvements</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>▪ Continued political unrest including Buddhist demonstrations</td>
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<tr>
<td><strong>June</strong></td>
<td>▪ Westmoreland asks for 542,588 troops by the end of 1967</td>
</tr>
<tr>
<td><strong>July</strong></td>
<td>▪ Majority of Americans still support war</td>
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<tr>
<td><strong>September</strong></td>
<td>▪ South Vietnam conducts elections for constituent assembly</td>
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<tr>
<td><strong>October</strong></td>
<td>▪ Manila Conference - Johnson attends with other political leaders of allied forces</td>
</tr>
<tr>
<td><strong>December</strong></td>
<td>▪ Harrison Salisbury of NY Times publishes a series of articles describing destruction from U.S. air war, especially civilian casualties</td>
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<tr>
<td><strong>Year End</strong></td>
<td>▪ Total U.S. Military Personnel — 385,300</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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<tbody>
<tr>
<td><strong>February</strong></td>
<td>▪ Junction City - largest search and destroy operation of war thus far (25,000 troops)</td>
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<tr>
<td><strong>March</strong></td>
<td>▪ Guam Conference with President Johnson Vietnamese leaders Thieu and Ky and other top U.S. advisers</td>
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<tr>
<td><strong>April</strong></td>
<td>▪ McNamara announces plan to build physical and electronic barrier to curb infiltration from North</td>
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<td>▪ Massive anti-war parades in New York and San Francisco</td>
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<tr>
<td></td>
<td>▪ Westmoreland requests additional troops to bring total to 671,616 by 1968</td>
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<td></td>
<td>▪ Westmoreland returns to U.S. as part of “charm offensive” to counter anti-war sentiment; speaks before joint session of Congress</td>
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<tr>
<td><strong>May</strong></td>
<td>▪ Alan Enthoven, head of Systems Analysis, sends McNamara memorandum arguing “size of force we [U.S.] deploy has little effect on the rate of attrition of enemy forces”</td>
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<tr>
<td></td>
<td>▪ Civilian Operations and Revolutionary Development Support (CORDS) established to manage pacification</td>
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<tr>
<td><strong>August</strong></td>
<td>▪ LBJ announces he will raise U.S. troop levels to 525,000</td>
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<td></td>
<td>▪ McNamara offers pessimistic view of war prospects before Senate Preparedness Subcommittee; Joint Chiefs consider resigning en masse</td>
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<tr>
<td><strong>October</strong></td>
<td>▪ Polls reveal that a majority of Americans oppose war</td>
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<td>▪ 50,000 march on Pentagon against the war</td>
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<tr>
<td><strong>November</strong></td>
<td>▪ Robert McNamara resigns as Secretary of Defense to become President of World Bank; he will leave office February 29, 1968</td>
</tr>
<tr>
<td><strong>Year End</strong></td>
<td>▪ Total U.S. Military Personnel — 485,600</td>
</tr>
<tr>
<td>1973</td>
<td>Summary</td>
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</table>
| **January** | - More than three million Americans served in Vietnam  
- 47,424 Americans killed in action or died as a result of combat  
- 10,785 Americans died of non-battle injuries  
- 1,679 Americans listed as Missing in Action  
- 313,919 Americans wounded of which 153,300 were listed as “serious”  
- 195,000-430,000 South Vietnamese killed during war  
- 440,000-1 million North Vietnamese and Viet Cong killed  
- Eight million tons of bombs were dropped during the war, more than four times as much as was dropped by the U.S. in World War II.* |
| **March** | - Last U.S. troops leave Vietnam |
| **April** | - Communist Troops enter Saigon and President Duong Van Minh surrenders unconditionally |

*All figures are from James H. Willbanks, *Vietnam War Almanac*, (NY: Facts on File, 2009)
GLOSSARY

ARVN  Army of the Republic of Vietnam – the South Vietnam Army
BNSP  Basic National Security Plan
CINCPAC Commander-in-Chief, Pacific Command – the unified Combatant Command responsible for Pacific Ocean area. During Vietnam War it was responsible for the air war.
CNO  Chief of Naval Operations
DARPA Defense Advanced Research Projects Agency – agency of DoD responsible for the development of new technologies for use by the military
DDRE Director of Defense Research and Engineering in the Department of Defense
DoD  Department of Defense
DPM  Draft Presidential Memorandum - used by McNamara to make provisional policy recommendations to the President
FYDP  Five Year Defense Plan
GVN  Government of South Vietnam
HBS  Harvard Business School
INR  Bureau of Intelligence and Research in the Department of State
JCS  Joint Chiefs of Staff
JSOP  Joint Strategic Objective Plan – proposed annually by The Joint Chiefs to translate strategic planning guidance into specific integrated strategic war plans
MAAG  Military Assistance Advisory Group (Vietnam) – the military command directing American military advisers in Vietnam during the initial stages of U.S. involvement
MACV  Military Assistance Command, Vietnam. The military command in Vietnam directing U.S. and allied combat forces; it replaced MAAG
MPM  Major Program Memorandum
NATO  North Atlantic Treaty Organization
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>NVA</td>
<td>North Vietnamese Army</td>
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<tr>
<td>NSAM</td>
<td>National Security Action Memorandum – an executive order issued by the President relating to nation security applicable during the years 1961-1969</td>
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<tr>
<td>NSC</td>
<td>National Security Council – the principal forum used by the President to consider national security and foreign policy issues</td>
</tr>
<tr>
<td>OSD</td>
<td>Office of the Secretary of Defense</td>
</tr>
<tr>
<td>PCR</td>
<td>Program Change Requests</td>
</tr>
<tr>
<td>PPBS</td>
<td>Planning, Programming and Budgeting System - initiated by McNamara</td>
</tr>
<tr>
<td>RVNAF</td>
<td>Republic of Vietnam Armed Forces – entire armed forces of South Vietnam</td>
</tr>
<tr>
<td>SIOP</td>
<td>Single Integrated Operating Plan – the general plan for nuclear war</td>
</tr>
<tr>
<td>VC</td>
<td>Viet Cong – a political and military organization that fought the U.S. and South Vietnamese governments, principally composed of indigenous South Vietnamese</td>
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BIBLIOGRAPHY

Frances Acomb, *Statistical Control in the Army Air Forces*, (Historical Studies No. 57, USAF Historical Division, Air University, 1952)


Thornton Bradshaw and Charles C. Hall, eds., *Controllership in Modern Management*, (Chicago: Richard D. Irwin, 1949)


Clark Clifford, *Counsel to the President*, (NY: Random House, 1991)


Carol L. DeCandido, *An Evolution of Department of Defense Planning Programming and Budget System: From SecDef McNamara to VCJCS Owens*, Strategy Research Project (U.S. Army War College, Carlisle Barracks, PA, 1996)


    Concept of the Corporation, (NY: Mentor Books, 1972)


Hearings, *Planning-Programming-Budgeting, Senate Committee on Government Operations, Subcommittee on National Security and International Operations, 90th Congress, 1st Session*

Hearings, *Preparedness Subcommittee of the Committee on Armed Services, U.S. Senate, 90th Congress, 1st Session*


*LBJ and Vietnam: A Different Kind of War*, (Austin, TX: Univ. of Texas Press, 1994)

James E. Hewes, *Special Studies from Root to McNamara: Organization and Administration*, (Washington, DC: Center of Military History, United States Army, 1975)


Historical Office of the Secretary of Defense, Washington, DC:

Robert J. Watson, *Into the Missile Age* (1997)


John F. Kennedy Presidential Library:
  Interview Robert A. Lovett
  John F. Kennedy Pre-Presidential Papers


- *The Secretary of Defense*, (Lexington, KY: The Univ. of Kentucky Press, 1980)


(Wheeling, WV: Harlan Davidson, 2000)


Newspapers:
Chicago Tribune
Boston Globe
New York Times
Washington Post


Papers of Robert S. McNamara, Library of Congress

Pentagon Papers (3 volumes) Gravel edition, (Boston: Beacon Press, 1971)

Geoffrey Perret, *Days of Sadness, Years of Triumph,* (Madison: Univ. of Wisconsin Press, 1985)


Report # 471 House Committee on Appropriations, 85th Cong., 1st Sess.


*A Thousand Days: John F. Kennedy in the White House*,
(Boston: Houghton Mifflin, 1965)


*The Role of the Committee for Economic Development, 1942-1967*,


Deborah Shapley, *Promise and Power: The Life and Times of Robert McNamara*,
(Boston: Little Brown and Company, 1973)

Journals:
American Political Science
Business History Review
Foreign Affairs
Fortune
Harvard Business Revue
Journal of Accountancy
Journal of Economic History
National Journal
Public Administration Review
Revue française de gestion
Saturday Evening Post
Virginia Quarterly Review


*My Years with General Motors*, (Garden City: Doubleday & Company, Inc., 1964)


TFX Contract Investigation, U.S. Senate Committee on Government Operations, Permanent Subcommittee on Investigations First Series, 88th Congress, 1st Session; Second series, 91st Congress, 2nd Session


*Vital Speeches of the Day*


*XX Bomber Command History, Fourth Phase, The Transport Project*, (Department of Air Force, Air Force Historical Research Agency)


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Albert Beveridge has been an attorney in Washington, DC for more than 50 years. After a series of legal positions, including three years in the Department of Justice, he joined William D. Ruckelshaus, the first Administrator of EPA, in 1974 to establish the law firm presently known as Beveridge & Diamond. It has become a premier environmental law firm in the country with offices in Washington, Baltimore, New England, San Francisco and Austin.

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Throughout his career Mr. Beveridge has served on a number of business, educational cultural and philanthropic boards including: SunTrust Bank, The Johns Hopkins School for Advanced International Study at Bologna, The National Symphony Orchestra, of which he was president, and The District of Columbia Board of Elections and Ethics of which he was Chairman. He has also taught at the law schools of American and Catholic Universities.

He was born January, 1935 and received his undergraduate degree from Princeton, his law degree from Harvard and a Masters from John Hopkins. He also served two years as an officer in the U.S. Army.