

PRESIDENT'S BLUE RIBBON COMMISSION ON DEFENSE MANAGEMENT

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Mr. David Packard

June 30, 1986

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Director

Mr. Rhett B. Dawson

The President
The White House
Washington, D. C. 20500

Dear Mr. President:

On behalf of your Blue Ribbon Commission on Defense Management, I have the honor to present this Final Report, which compiles the detailed findings, conclusions, and recommendations produced by our yearlong study. They address, in addition to the areas on which we have reported previously, several additional aspects of defense management.

The Final Report is intended to assist the Executive and Legislative Branches as well as industry in implementing a broad range of needed improvements, including the many Commission recommendations endorsed by you in April 1986. Its title -- "A Quest for Excellence" -- reflects a basic management philosophy, as well as a standard to which those engaged in the work of our nation's defense must always aspire.

Without exception, the recommendations of our Final Report have the support of all members of the Commission. All members have contributed invaluably to this work, and I am deeply grateful for their unstinting efforts. We are most fortunate to have had the assistance of a talented and dedicated staff.

We have tried to conduct a study of the important dimension you intended. We are gratified by your confidence in us and your support of our recommendations. We hope that, under your leadership, they will help realize a new era in defense management for the benefit of all Americans.

Sincerely

David Packard



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Dear Mr. Secretary:

On behalf of the President's Blue Ribbon Commission on Defense Management, I have the privilege to present a copy of our Final Report, which was submitted to the President today.

We hope this Final Report will assist the Department of Defense to implement a range of management improvements. Among these are the many Commission recommendations which the President designated in April 1986 for quick and decisive implementation. For this purpose, I would be pleased to continue to work with you in any way possible. I look forward to joining you, as the President recently requested, in a progress report in early 1987.

Please accept our sincere thanks for the responsive manner in which your Office, and the Department of Defense generally, assisted in the work of the Commission.

Sincerely

David Packard

The Honorable Caspar Weinberger Secretary of Defense Washington, D. C. 20301

A Quest for Excellence

Final Report to the President

by the President's Blue Ribbon Commission on Defense Management



June 1986

TABLE OF CONTENTS

Foreword by Dav	vid Packard	Page . xi
Summary	•••••••••••••••••••••••••••••••••••••••	. x v
Introduction		. 1
Chapter One:	National Security Planning and Budgeting	7
Chapter Two:	Military Organization and Command	33
Chapter Three:	Acquisition Organization and Procedures	39
Chapter Four:	Government-Industry Accountability	73

LIST OF APPENDED MATERIAL

Appendix*

- A. Detailed Recommendations, President's Blue Ribbon Commission on Defense Management
- B. Executive Order 12526 (July 15, 1985)
- C. National Security Decision Directive 219 (April 1, 1986), White House Summary
- D. President's Special Message to the Congress (April 24, 1986)
- E. Recommended Process for National Security Planning and Defense Budgeting
- F. A Comparison of Cost Growth in Defense and Non-Defense Programs
- G. An Illustrative Organization of the Acquisition Staff of the Secretary of Defense
- H. Wendy T. Kirby, Expanding the Use of Commercial Products and "Commercial-Style" Acquisition Techniques in Defense Procurement: A Proposed Legal Framework (1986)
- I. Logistics Management Institute, The Department of Defense and Rights in Technical Data (1986)
- J. The Navy Demonstration Project: An Alternative Personnel Management System
- K. Survey of Department of Defense Acquisition Workforce (1986)
- L. U.S. National Survey: Public Attitudes on Defense Management (1986)
- M. Defense Industry Initiatives on Business Ethics and Conduct
- N. Ethics Resource Center, Final Report and Recommendations on Voluntary Corporate Policies, Practices, and Procedures Relating to Ethical Business Conduct (1986)
- O. Peat, Marwick, Mitchell & Co., Report on Survey of Defense Contractors' Internal Audit Processes (1986)
- P. Arthur Andersen & Co., Study of Government Audit and Other Oversight Activities Relating to Defense Contractors (1986)

^{*}Appended material is contained in a separate Appendix to Final Report.

FOREWORD

By David Packard, Chairman

Less than one year ago, President Reagan established his Blue Ribbon Commission on Defense Management to "study the issues surrounding defense management and organization, and report its findings and recommendations." In February 1986, the Commission submitted an *Interim Report to the President*. Intended as a blueprint for overall improvement in defense management, the *Interim Report* provided initial recommendations concerning key aspects of national security planning and budgeting, military organization and command, acquisition organization and procedures, and government-industry accountability. This *Final Report* compiles the Commission's full findings and recommendations in each of these areas. I wish to add a final personal word on the "Quest for Excellence"—a standard to which defense management must always aspire.

As the Commission concludes its efforts, the urgent need we have found for reforms in defense management should not obscure accomplishments of recent years. The American people justly continue to have high confidence in the United States military as an institution, and in the ability of our men and women in uniform to defend the nation. The morale and fighting ability of our Armed Forces have achieved a level higher than at any time in my recent memory.

Despite many positive achievements, however, I believe the importance of revitalizing defense management has become ever more apparent. The paramount purpose of the Commission's work has been to identify and develop solutions for those structural problems—and to ease the stifling burdens of regulation, reporting, and oversight—that have long limited the success of the many people in government and industry on whose talents and dedication the nation's defense depends. Innovations in American industrial management, yielding products of ever higher quality and lower cost, have provided a key insight: human effort must be channeled to good purpose through sound centralized policies, but free expression of people's energy, enthusiasm, and creativity must be encouraged in highly differentiated settings.

The Commission's recommendations are intended to help establish strong centralized policies that are both sound in themselves and rigidly adhered to throughout the Department of Defense (DoD). In any large organization, policies must be executed through discrete structures. In the large, complex enterprise of national defense, centers of management excellence dedicated to advancing

DoD's overall goals and objectives. The Commission's recommendations, if fully implemented, will help create an environment in which each DoD component can achieve ever higher standards of performance by summoning forth the enthusiasm and dedication of every man and woman involved in accomplishing its mission. Excellence can flourish, I believe, only where individuals identify with a team, take personal pride in their work, concentrate their unique efforts, develop specialized know-how, and above all constantly explore new and better ways to get their job done. Freedom and incentives of just this sort, President Reagan has observed, "unleash the drive and entrepreneurial genius that are the core of human progress."

This technique—establishment of strong centralized policies implemented through highly decentralized management structures—has its legacies at DoD. On this model, for example, Navy-industry teams working together as one brought the Polaris submarine-launched missile system from initiation to successful operational test in one-third the time it would take now. In today's advance development work, centers of excellence should include select program management and industry teams working more closely together on new prototype weapons. If DoD truly is to fly and know the cost before it buys, the early phase of research and development must be one of surpassing quality, following procedures and meeting timetables distinct from those of approved production programs.

Despite formidable bureaucratic obstacles, I believe that a centers-of-excellence approach can tangibly improve productivity and quality. If widely adopted and steadfastly supported, it could achieve revolutionary progress throughout defense management. The potential applications are almost without number. In 1984, for example, DoD began to apply this concept to managing its installations as potential centers of excellence, by according installation commanders much greater latitude to run things their own way, cut through red tape, and experiment with new ways of accomplishing their missions. As a result, commanders and their personnel have found more effective means to do their jobs, identified wasteful regulations, and reduced costs while improving quality. The program has shown the increased defense capability that comes by freeing talented people from over-regulation and unlocking their native creativity and enthusiasm.

Excellence in defense management will not and can not emerge by legislation or directive. Excellence requires the opposite—responsibility and authority placed firmly in the hands of those at the working level, who have knowledge and enthusiasm for the tasks at hand. To accomplish this, ways must be found to restore a sense of shared purpose and mutual confidence among Congress, DoD, and industry. Each must forsake its current ways of doing business in favor of a renewed quest for excellence.

Congress must resist its inveterate tendency to legislate management practices and organizational details for DoD. Excellence in defense management will not come from legislative efforts to control and arrange the minutest aspects of DoD's operations. Congress can more usefully contribute by concentrating on larger, often neglected issues of overall defense posture and military performance.

DoD must displace systems and structures that measure quality by regulatory compliance and solve problems by executive fiat. Excellence in defense management can not be achieved by the numerous management layers, large staffs, and countless regulations in place today. It depends, as the Commission has observed, on reducing all of these by adhering closely to basic, commonsense principles: giving a few capable people the authority and responsibility to do their job, maintaining short lines of communication, holding people accountable for results.

Defense contractors and DoD must each assume responsibility for improved self-governance to assure the integrity of the contracting process. Excellence in defense management will not be achieved through legions of government auditors, inspectors, and investigators. It depends on the honest partnership of thousands of responsible contractors and DoD, each equally committed to proper control of its own operations.

Summary

Final Report to the President

In July 1985, this Commission was charged by the President to conduct a defense management study of important dimension. Our findings and recommendations,* summarized below, concern major features of national security planning and budgeting, military organization and command, acquisition organization and procedures, and government-industry accountability. This summary represents, with certain important additions, the blueprint for overall improvement in defense management presented as our *Interim Report to the President* on February 28, 1986.

National Security Planning and Budgeting

The Commission finds that there is a great need for improvement in the way we think through and tie together our security objectives, what we spend to achieve them, and what we decide to buy. The entire undertaking for our nation's defense requires more and better long-range planning. This will involve concerted action by our professional military, the civilian leadership of the Department of Defense, the President, and the Congress.

Today, there is no rational system whereby the Executive Branch and the Congress reach coherent and enduring agreement on national military strategy, the forces to carry it out, and the funding that should be provided—in light of the overall economy and competing claims on national resources. The absence of such a system contributes substantially to the instability and uncertainty that plague our defense program. These cause imbalances in our military forces and capabilities, and increase the costs of procuring military equipment.

Better long-range planning must be based on military advice of an order not now always available—fiscally constrained, forward looking, and fully integrated. This advice must incorporate the best possible assessment of our overall military posture vis-a-vis potential opponents, and must candidly evaluate the performance and readiness of the individual Services and the Unified and Specified Commands.

To conduct such planning requires a sharpened focus on major defense missions in the Department's presentation, and Congress' review, of the defense budget. The present method of budget review, involving duplicative

^{*}The Commission's recommendations are set forth in full and detailed form at Appendix A to this *Final Report*. All appended material is collected in a separate *Appendix to Final Report*.

effort by numerous congressional committees and subcommittees, centers on either the minutiae of line items or the gross dollar allocation to defense, and obscures important matters of strategy, operational concepts, and key defense issues. As Senator Goldwater, Chairman of the Senate Armed Services Committee, recently observed, "The budget process distorts the nature of congressional oversight by focusing primarily on the question of how much before we answer the key questions of what for, why, and how well."

Of greater concern, congressional approval of the budget on a year-to-year basis contributes to and reinforces the Department's own historical penchant for defense management by fits and starts. Anticipated defense dollars are always in flux. Individual programs must be hastily and repeatedly accommodated to shifting overall budgets, irrespective of military strategy and planning. The net effect of this living day-to-day is less defense and more cost. Although often hidden, this effect is significant—and it can be avoided.

Biennial budgeting, authorization and appropriation of major programs not annually but only at key milestones, and a focus on strategy and operational concepts instead of line items are among the most important changes that could be made to improve defense planning. They would enhance the congressional role in framing good national security policy.

Budgeting based on strategy and operational concepts also would provide a far greater improvement in the performance of the Office of the Secretary of Defense than would any legislated reorganization of that Office. In general, we believe, Congress should permit the Secretary to organize his Office as he chooses to accomplish centralized policy formulation and decentralized implementation within the Department.

The Commission concludes that new procedures are required to help the Administration and the Congress do the necessary long-range planning and meaningfully assess what military forces are needed to meet our national security objectives. Public and official debate must be brought to bear on these larger defense policy questions. The Commission strongly urges adoption of a process that emphasizes the element of sound, professional military advice provided within realistic confines of anticipated long-term funding.

Recommendations

To institutionalize, expand, and link a series of critical determinations within the Executive Branch and Congress, we recommend a process that would operate in substance as follows:

Defense planning would start with a comprehensive statement of national security objectives and priorities, based on recommendations of the National Security Council (NSC).

Based on these objectives, the President would issue, at the outset of his Administration and thereafter as required, provisional five-year budget levels to the Department of Defense (DoD). These budget levels would reflect competing demands on the federal budget and projected gross national product and revenues and would come from recommendations of the NSC and the Office of Management and Budget.

The Secretary of Defense would instruct the Chairman of the Joint Chiefs of Staff (JCS) to prepare a military strategy for the national objectives, and options on operational concepts and key defense issues for the budget levels provided by the President.

The Chairman would prepare broad military options with advice from the JCS and the Commanders-in-Chief of the Unified and Specified Commands (CINCs). Addressing operational concepts and key defense issues (e.g., modernization, force structure, readiness, sustainability, and strategic versus general purpose forces), the Chairman would frame explicit trade-offs among the Armed Forces and submit his recommendations to the Secretary of Defense. The Secretary of Defense would make such modifications as he thinks appropriate and present these to the President.

The Chairman, with the assistance of the JCS and the Director of Central Intelligence, would prepare a net assessment of the effectiveness of United States and Allied Forces as compared to those of possible adversaries. The net assessment would be used to evaluate the risks of options and would accompany the recommendations of the Secretary of Defense to the President.

The President would select a particular military program and the associated budget level. This program and budget level would be binding on all elements of the Administration. DoD would then develop a five-year defense plan and a two-year defense budget conforming to the President's determination.

The President would submit to the Congress the two-year budget and the five-year plan on which it is based. Congress would be asked to approve the two-year budget based upon this plan. It would authorize and appropriate funding for major weapon systems at the two key milestones of full-scale engineering development and high-rate production.

DoD would present the budget to Congress on the basis of national strategy and operational concepts rather than line items. The details of such presentation would be worked out by the Secretary of Defense and appropriate committees of Congress.

Military Organization and Command

In our *Interim Report*, the Commission recommended the changes in military organization and command described below. These were designed to assure unified action by our Armed Forces. On April 24, 1986, in a Special Message to Congress, the President endorsed these recommendations and requested early enactment of legislation required to implement them. As the culmination of a major legislative effort begun in the House of Representatives in 1982 and joined in the Senate by passage of the Barry Goldwater Department of Defense Reorganization Act of 1986, we anticipate enactment of our basic recommendations by the end of 1986.

Recommendations

Current law should be changed to designate the Chairman of the Joint Chiefs of Staff (JCS) as the principal uniformed military advisor to the President, the National Security Council, and the Secretary of Defense, representing his own views as well as the corporate views of the JCS.

Current law should be changed to place the Joint Staff and the Organization of the Joint Chiefs of Staff under the exclusive direction of the Chairman, to perform such duties as he prescribes to support the JCS and to respond to the Secretary of Defense. The statutory limit on the number of officers on the Joint Staff should be removed to permit the Chairman a staff sufficient to discharge his responsibilities.

The Secretary of Defense should direct that the commands to and reports by the Commanders-in-Chief of the Unified and Specified Commands (CINCs) should be channeled through the Chairman so that the Chairman may better incorporate the views of senior combatant commanders in his advice to the Secretary.

The Service Chiefs should serve as members of the JCS. The position of a four-star Vice Chairman should be established by law as a sixth member of the JCS. The Vice Chairman should assist the Chairman by representing the interests of the CINCs, co-chairing the Joint Requirements and Management Board, and performing such other duties as the Chairman may prescribe.

The Secretary of Defense, subject to the direction of the President, should determine the procedures under which an Acting Chairman is designated to serve in the absence of the Chairman of the JCS. Such procedures should remain flexible and responsive to changing circumstances.

Subject to the review and approval of the Secretary of Defense, Unified Commanders should be given broader authority to structure subordinate commands, joint task forces, and support activities in a way that best supports their missions and results in a significant reduction in the size and numbers of military headquarters.

The Unified Command Plan should be revised to assure increased flexibility to deal with situations that overlap the geographic boundaries of the current combatant commands and with changing world conditions.

For contingencies short of general war, the Secretary of Defense, with the advice of the Chairman and the JCS, should have the flexibility to establish the shortest possible chains of command for each force deployed, consistent with proper supervision and support. This would help the CINCs and the JCS perform better in situations ranging from peace to crisis to general war.

The Secretary of Defense should establish a single unified command to integrate global air, land, and sea transportation, and should have flexibility to structure this organization as he sees fit. Legislation prohibiting such a command should be repealed.

Acquisition Organization and Procedures

Action within the Administration and in Congress to improve national security planning and budgeting and military organization—as recommended by the Commission—will provide the element of stability required for substantial improvement of the acquisition system. This element is critical, and has been missing. While significant savings can be and have been made through better procurement techniques, more impressive savings will come from eliminating the hidden costs that instability imposes.

Our study of acquisition reveals, and our collective experience fully confirms, that there are certain common characteristics of successful commercial and governmental projects. Short, unambiguous lines of communication among levels of management, small staffs of highly competent professional personnel, an emphasis on innovation and productivity, smart buying practices, and, most importantly, a stable environment of planning and funding—all are characteristic of efficient and successful management.

These characteristics should be hallmarks of defense acquisition. They are, unfortunately, antithetical to the process the Congress and the Department of Defense have created to conduct much of defense acquisition over the years. With notable exceptions, weapon systems take too long and cost too much to produce. Too often, they do not perform as promised or expected. The reasons are numerous.

Over the long term, there has been chronic instability in top-line funding and, even worse, in programs. This eliminates key economies of scale, stretches out programs, and discourages contractors from making the long-term investments required to improve productivity.

Federal law governing procurement has become overwhelmingly complex. Each new statute adopted by Congress has spawned more administrative regulation. As law and regulation have proliferated, defense acquisition has become ever more bureaucratic and encumbered by unproductive layers of management and overstaffing.

Responsibility for acquisition policy has become fragmented. There is to-day no single senior official in the Office of the Secretary of Defense (OSD) working full-time to provide overall supervision of the acquisition system. While otherwise convinced that the Secretary should be left free to organize his Office as he sees fit, the Commission concludes that the demands of the acquisition system have become so weighty as to require organizational change within that Office.

In the absence of such a senior OSD official, policy responsibility has tended to devolve to the Services, where at times it has been exercised without the necessary coordination or uniformity.

Authority for acquisition execution, and accountability for its results, have become vastly diluted. Program managers have in effect been deprived of control over programs. They are confronted instead by never-ending bureaucratic obligations for making reports and gaining approvals that bear no relation to program success.

Deficiencies in the senior-level appointment system have complicated the recruitment of top executive personnel with industrial and acquisition experience. Recent steps to improve the professionalism of military acquisition personnel have been made within the Department of Defense and reinforced by

legislation. The existing civilian personnel management system has not, however, allowed similar improvements in career paths and education for civilian acquisition personnel. To attract and retain a good work force requires a more flexible system for management of contracting officers and other senior acquisition personnel—one comparable to the successful system for scientists and engineers recently demonstrated in the Navy's so-called China Lake personnel project. Major innovations in personnel management and regulations are needed. The Commission's recommendations in this critical area can and should be acted upon quickly and are of the highest priority.

A better job of determining requirements and estimating costs has been needed at the outset of weapons development. More money and better engineering invested at the front end will get more reliable and better performing weapons into the field more quickly and cheaply. For example, recent improvements in budgeting to most-likely cost have demonstrated that this approach can result in a reduction in overruns.

All too often, requirements for new weapon systems have been overstated. This has led to overstated specifications, which has led to higher cost equipment. Such so-called goldplating has become deeply embedded in our system today. The current streamlining effort in the Defense Department is directed at this problem.

Developmental and operational testing have been too divorced, the latter has been undertaken too late in the cycle, and prototypes have been used and tested far too little.

In their advanced development projects, the Services too often have duplicated each other's efforts and disfavored new ideas and systems. The Defense Advanced Research Projects Agency has not had a sufficient role in hardware experimentation and prototyping.

Common sense, the indispensable ingredient for a successful system, has not always governed acquisition strategies. More competition, for example, is beneficial, but the mechanistic pursuit of competition for its own sake would be inefficient and sacrifice quality—with harmful results. Multi-year procurement, baselining, and the use of non-developmental items all entail costs to management flexibility, but would yield far greater benefits in program stability. The Defense Department has initiated some baselining (the B–1 is an example) and has made progress in gaining congressional acceptance of multi-year contracting.

In sum, the Commission finds that there is legitimate cause for dissatisfaction with the process by which the Department of Defense and Congress buy military equipment and material. We strongly disagree, however, with the commonly held views of what is wrong and how it must be fixed. The nation's defense programs lose far more to inefficient procedures than to fraud and

dishonesty. The truly costly problems are those of overcomplicated organization and rigid procedure, not avarice or connivance.

Chances for meaningful improvement will come not from more regulation but only with major institutional change. Common sense must be made to prevail alike in the enactments of Congress and the operations of the Department. We must give acquisition personnel more authority to do their jobs. If we make it possible for people to do the right thing the first time and allow them to use their common sense, then we believe that the Department can get by with far fewer people.

The well-publicized spare parts cases are only one relatively small aspect of a far costlier structural problem. Each spare parts case has its own peculiarities, but there are several major recurring causes that are systemic in nature. Many of these causes have been identified by the Defense Department.

It is undoubtedly important to buy spare parts with care and at reasonable cost. It is yet more important not to let the spare parts cases lead us to ignore larger problems or, even worse, to aggravate them. Policy makers must address the root causes of inefficiency, not dwell on marginal issues. The prescription we offer for those larger problems will, we believe, result in savings on major weapon systems and minor spare parts alike.

Recommendations

Notwithstanding our view that the Secretary of Defense should be free to organize his Office as he sees fit, we strongly recommend creation by statute of the new position of Under Secretary of Defense (Acquisition) and authorization of an additional Level II appointment in the Office of the Secretary of Defense. This Under Secretary, who should have a solid industrial background, would be a full-time Defense Acquisition Executive. He would set overall policy for procurement and research and development (R&D), supervise the performance of the entire acquisition system, and establish policy for administrative oversight and auditing of defense contractors.

The Army, Navy, and Air Force should each establish a comparable senior position filled by a top-level civilian Presidential appointee. The role of the Services' Acquisition Executives would mirror that of the Defense Acquisition Executive. They would appoint Program Executive Officers (PEO), each of whom would be responsible for a reasonable and defined number of acquisition programs. Program Managers for these programs would be responsible directly to their respective PEO and report *only* to him on program matters. Each Service should retain flexibility to shorten this reporting chain even further, as it sees fit.

Establishing short, unambiguous lines of authority would streamline the acquisition process and cut through bureaucratic red tape. By this means, the Department of Defense (DoD) should substantially reduce the number of acquisition personnel.

Congress should work with the Administration to recodify all federal statutes governing procurement into a single government-wide procurement statute. This recodification should aim not only at consolidation, but more importantly at simplification and consistency.

DoD must be able to attract, retain, and motivate well qualified acquisition personnel. Significant improvements, along the lines of those recommended in November 1985 by the National Academy of Public Administration, should be made in the senior-level appointment system. The Secretary of Defense should have increased authority to establish flexible personnel management policies necessary to improve defense acquisition. An alternate personnel management system, modeled on the China Lake Laboratory demonstration project, should be established to include senior acquisition personnel and contracting officers as well as scientists and engineers. Federal regulations should establish business-related education and experience criteria for civilian contracting personnel, which will provide a basis for the professionalization of their career paths. Federal law should permit expanded opportunities for the education and training of all civilian acquisition personnel. This is necessary if DoD is to attract and retain the caliber of people necessary for a quality acquisition program.

The Joint Requirements and Management Board (JRMB) should be cochaired by the Under Secretary of Defense (Acquisition) and the Vice Chairman of the Joint Chiefs of Staff. The JRMB should play an active and important role in all joint programs and in appropriate Service programs by defining weapons requirements, selecting programs for development, and providing thereby an early trade-off between cost and performance.

Rather than relying on excessively rigid military specifications, DoD should make much greater use of components, systems, and services available "off the shelf." It should develop new or custom-made items only when it has been established that those readily available are clearly inadequate to meet military requirements.

A high priority should be given to building and testing prototype systems and subsystems before proceeding with full-scale development. This early phase of R&D should employ extensive informal competition and use streamlined procurement processes. It should demonstrate that the new

technology under test can substantially improve military capability, and should as well provide a basis for making realistic cost estimates prior to a full-scale development decision. This increased emphasis on prototyping should allow us to "fly and know how much it will cost before we buy."

The proper use of operational testing is critical to improving the operations performance of new weapons. We recommend that operational testing begin early in advanced development and continue through full-scale development, using prototype hardware. The first units that come off the limited-rate production line should be subjected to intensive operational testing and the systems should not enter high-rate production until the results from these tests are evaluated.

To promote innovation, the role of the Defense Advanced Research Projects Agency should be expanded to include prototyping and other advanced development work on joint programs and in areas not adequately emphasized by the Services.

Federal law and DoD regulations should provide for substantially increased use of commercial-style competition, relying on inherent market forces instead of governmental intervention. To be truly effective, such competition should emphasize quality and established performance as well as price, particularly for R&D and for professional services.

DoD should fully institutionalize "baselining" for major weapon systems at the initiation of full-scale engineering development. Establishment of a firm internal agreement or baseline on the requirements, design, production, and cost of weapon systems will enhance program stability.

DoD and Congress should expand the use of multi-year procurement for high-priority systems. This would lead to greater program stability and lower unit prices.

DoD must recognize the delicate and necessary balance between the government's requirement for data and the benefit to the nation that comes from protecting the private sector's proprietary rights. That balance must exist to foster technological innovation and private investment which is so important in developing products vital to our defense. DoD should adopt a data rights policy that reflects the following principles:

• If a product has been developed with private funds, the government should not demand, as a precondition for buying that product, unlimited data rights even if the government provides the only market. The government should acquire only the data necessary for installation, operation, and maintenance.

- If a product is to be developed with joint private and government funding, the government's needs for data should be defined during contract negotiations. Government contribution to development funding should not automatically guarantee it rights to all data.
- If a product is developed entirely with government funds, the government owns all the rights to it but may under certain circumstances make those rights available to the private sector.

The President, through the National Security Council, should establish a comprehensive and effective national industrial responsiveness policy to support the full spectrum of potential emergencies. The Secretary of Defense, with advice from the Joint Chiefs of Staff, should respond with a general statement of surge and mobilization requirements for basic wartime defense industries, and logistic needs to support those industries and the essential economy. The DoD and Service Acquisition Executives should consider this mobilization guidance in formulating their acquisition policy, and program managers should incorporate industrial surge and mobilization considerations in program execution.

Government-Industry Accountability

In recent years there has been increasing public mistrust of the performance of private contractors in the country's defense programs. Numerous reports of questionable procurement practices have fostered a conviction, widely shared by members of the public and by many in government, that defense contractors place profits above legal and ethical responsibilities. Others argue that contractors have been unfairly discredited through ill-conceived official actions, exaggerated press, and mistaken public dialogue. The depth of public sentiment and prospect of continuing tensions and divisions between government and industry are cause for concern.

Our nation relies heavily upon the private sector in executing defense policy. Cooperation between government and industry is essential if private enterprise is to fulfill its role in the defense acquisition process. Contractor or government actions that undermine public confidence in the integrity of the contracting process jeopardize this needed partnership.

Aggressive and sustained enforcement of civil and criminal laws governing procurement punishes and deters misconduct by the few, vindicates the vast majority who deal with the government lawfully, and recoups losses to the Treasury. As President Reagan emphasized in public remarks announcing the

formation of this Commission, "Waste and fraud by corporate contractors are more than a ripoff of the taxpayer—they're a blow to the security of our nation. And this the American people cannot and should not tolerate." Specific measures can and should be taken to make civil and criminal enforcement still more effective.

Management and employees of companies that contract with the Defense Department assume unique and compelling obligations to the people of our Armed Forces, the American taxpayer, and our nation. They must apply (and be perceived as applying) the highest standards of business ethics and conduct. Significant improvements in contractor self-governance, addressing problems unique to defense contracting, are required. Contractors have a legal and moral obligation to disclose to government authorities misconduct discovered as a result of self-review.

Improvements also should be made in the Department's administration of current standards of conduct for military personnel and civilian employees. Additional enforcement and compliance, and complementary efforts to address the respective ethical concerns of government and industry, are required.

Despite an unquestioned need for broad administrative oversight of contractor performance, defense programs have too often suffered from lack of clear direction and cooperation among oversight agencies. Proliferation of uncoordinated contractor oversight—both administrative and congressional—has added unnecessary cost and inefficiency in the procurement process.

Government action should not impede efforts by contractors to improve their own performance. The Commission is concerned that, for example, overzealous use of investigative subpoenas by Defense Department agencies may result in less vigorous internal corporate auditing.

The Services and the Defense Logistics Agency are authorized to suspend or debar contractors, prohibiting the award of new government contracts for a particular period. Suspension and debarment are powerful administrative tools. Existing regulations provide insufficient guidance, however, as to when and how these sanctions should be used to protect legitimate government interests. If poorly administered, used for impermissible purposes, or applied too broadly, the sanctions can foreclose important sources of supply and inflict substantial harm on responsible contractors. A uniform policy and more precise administrative criteria are required to assure predictable and equitable application of these sanctions throughout the Department of Defense.

Recommendations

The Commission's recommendations address each of the above aspects of the Defense Department's relations with industry—law enforcement, corporate governance, official ethics, and contractor oversight.

We recommend continued, aggressive enforcement of federal civil and criminal laws governing defense acquisition. Specific measures can be taken to make enforcement still more effective, including the passage of Administration proposals to amend the civil False Claims Act and to establish administrative adjudication of small, civil false claims cases.

To assure that their houses are in order, defense contractors must promulgate and vigilantly enforce codes of ethics that address the unique problems and procedures incident to defense procurement. They must also develop and implement internal controls to monitor these codes of ethics and sensitive aspects of contract compliance.

The Department of Defense (DoD) should vigorously administer current ethics regulations for military and civilian personnel to assure that its employees comply with the same high standards expected of contractor personnel. This effort should include development of specific ethics guidance and specialized training programs concerning matters of particular concern to DoD acquisition personnel, including post-government relationships with defense contractors.

Oversight of defense contractors must be better coordinated among the various DoD agencies and Congress. Guidelines must be developed to remove undesirable duplication of official effort and, where appropriate, to encourage sharing of contractor data by audit agencies.

Government actions should foster contractor self-governance. DoD should not, for example, use investigative subpoenas to compel such disclosure of contractor internal auditing materials as would discourage aggressive self-review. The new Under Secretary of Defense (Acquisition) should establish appropriate overall audit policy for DoD agencies and generally supervise the DoD's oversight of contractor performance.

Suspension and debarment should be applied only to protect the public interest where a contractor is found to lack "present responsibility" to contract with the federal government. Suspension and debarment should not be imposed solely as a result of an indictment or conviction predicated upon former (not ongoing) conduct, nor should they be used punitively. The Federal Acquisition Regulation should be amended to provide more precise

criteria for applying these sanctions and, in particular, determining present responsibility. Administration of suspension and debarment at DoD should be controlled by a uniform policy promulgated by the Secretary of Defense.

Final Report to the President

Introduction

I. Background

In July 1985, the Commission was charged by the President to conduct a defense management study of important dimension, including:

the budget process, the procurement system, legislative oversight, and the organizational and operational arrangements, both formal and informal, among the Office of the Secretary of Defense, the Organization of the Joint Chiefs of Staff, the Unified and Specified Command systems, the Military Departments, and Congress.*

The Commission held its first organizational meeting on August 15–16, 1985, and received briefings from Secretary of Defense Weinberger and other officials. Following this meeting, Commissioners were organized into six panels: Strategy and Resource Planning; Military Organization and Command; Acquisition; the Human Element—Personnel; Conduct and Accountability; and Implementation.

In all, between August 1985 and June 1986 the Commission had some 30 day-long working sessions. Included among these were five days of public hearings at which the Commission took testimony on a variety of defense management issues. Witnesses at these and other meetings included members of the Senate and House of Representatives, officials of the Office of the Secretary of Defense (OSD) and Military Departments, industry leaders and associations, public interest organizations, defense experts, and private citizens. In response to its published requests, the Commission received and considered numerous public comments on a wide range of acquisition related issues. The Commission also met with the three former Presidents, as well as former Secretaries of Defense and Assistants to the President for National Security Affairs. We received presentations from a broad range of current and former civilian officials and military officers. Among these were Chairmen of the Joint Chiefs of Staff, Service Secretaries and Service Chiefs, combatant and logistics commanders, other military leaders, and high-ranking civilian officials of the OSD and Military Departments. We also had the benefit of numerous briefings by major defense research centers.

^{*}See Executive Order 12526 (July 15, 1985), included as Appendix B to this Final Report.

On February 28, 1986, the Commission presented its Interim Report to the President, which contained our initial findings and recommendations. These recommendations were offered as a single blueprint for overall improvement in defense management. They have provided the tramework for three subsequent Reports to the President: Defense Acquisition, which we submitted on April 7, 1986; National Defense Planning and Budgeting, submitted June 12; and Conduct and Accountability, submitted June 30. The present document, A Quest for Excellence: Final Report to the President, compiles our detailed findings, conclusions, and recommendations from each of these separate submissions.

II. Purpose

We have tried to take a broad and searching look at defense issues, and to address the root causes of defense problems. Our overall blueprint for change flows from certain enduring propositions of sound national security policy, effective government, and basic management.

The Armed Forces of the United States are now and for the foreseeable future an essential bulwark against the advance of tyranny. The purpose set forth two centuries ago by the drafters of the Constitution—to "provide for the common defense"—is one that we can meet today only with Armed Forces of the utmost strength and readiness. Maintaining peace and freedom requires nothing less.

To achieve this military capability, a sense of shared purpose must prevail in relations between the Executive Branch and the Congress, and between government and defense industry. Public and private institutions must cooperate well, to serve the national good rather than mere partisanship or special interest. The spirit of cooperation needed to promote the common defense is today in jeopardy. This vital spirit must be preserved. Like the effectiveness of our forces, it cannot simply be taken for granted.

The United States' defense effort is an enormous and complex enterprise. It poses unique challenges—to plan sensibly for an uncertain future, to answer new and unexpected threats to our security, to husband our technological and industrial capacities and resources. Meeting these challenges will require, we believe, a rededication by all concerned to some basic principles of management. Capable people must be given the responsibility and authority to do their job. Lines of communication must be kept as short as possible. People on the job must be held accountable for the results. These are the principles that guide our recommendations on defense organization and acquisition. They apply whether one is fighting a war or managing a weapons program.

The present structure of the Department of Defense (DoD) was established

by President Eisenhower in 1958. His proposed reforms, which sprang from the hard lessons of command in World War II and from the rich experience of his Presidency, were not fully accomplished. Intervening years have confirmed the soundness of President Eisenhower's purposes. The Commission has sought to advance on the objectives he set for DoD.

Together, our recommendations are designed to achieve the following significant results:

Overall defense decision-making by the Executive Branch and the Congress can be improved.

Our military leadership can be organized and chartered to provide the necessary assistance for effective long-range planning.

Our combatant forces can be organized and commanded better for the attainment of national objectives.

Control and supervision of the entire acquisition system—including research, development, and procurement—can be strengthened and streamlined.

Waste and delay in the development of new weapons can be minimized, and there can be greater assurance that military equipment performs as expected.

DoD and defense industry can have a more honest, productive partnership working in the national interest.

III. Implementation

Having called in our earlier Reports for a new spirit of cooperation among the Executive Branch, Congress, and industry, we are especially gratified to note that important actions have been and are being taken, by each of these institutions which share responsibility for the nation's defense, to implement the Commission's recommendations.

- On April 1, 1986, the President issued National Security Decision
 Directive (NSDD) Number 219, directing DoD and other responsible
 Executive agencies to implement virtually all of those recommendations
 contained in our *Interim Report* that do not require legislative action.* On
 the same day, the Secretary of Defense issued detailed instructions to
 DoD for this purpose.
- On April 24, 1986, the President sent to Congress a Special Message requesting the early enactment of legislation in order to implement the balance of the recommendations in the Commission's Interim Report. This included statutory designation of the Chairman of the Joint Chiefs of Staff as the principal military adviser to the President, the Secretary of Defense, and the National Security Council; provision for the Chairman's exclusive direction of the Joint Staff and the Organization of the Joint Chiefs of Staff; and creation of the new position of Under Secretary of Defense for Acquisition at Level II of the Executive Schedule. The President also asked Congress to take recommended action to simplify and consolidate procurement laws, develop procedures for the authorization and appropriation of defense budgets on a biennial basis, encourage the use of multiyear procurement, and support milestone funding for major weapon systems.†
- Both the House and Senate have passed legislation, now awaiting conference, which substantially achieves the objectives of our *Interim Report* with respect to the role and authority of the Chairman of the Joint Chiefs of Staff, the establishment of a Vice Chairman, and the authority of Commanders-in-Chief of the Unified Commands. By late June 1986, both the House and Senate had approved legislation establishing the Under Secretary of Defense for Acquisition at Level II.

^{*}The unclassified portions of NSDD 219, as announced in summary form by the White House, are included as Appendix C to this *Final Report*.

[†]The President's April 24 Special Message to Congress is included as Appendix D to this Final Report.

• A substantial number of leading defense contractors recently have pledged to adopt and implement principles of business ethics and conduct that acknowledge corporate responsibilities under federal procurement laws. This important initiative, discussed more fully in our report on *Conduct and Accountability*, is in keeping with the Commission's recommendations on improvements in contractor self-governance.

It is only through a willingness to change by both public and private institutions that our recommendations will achieve their ultimate purpose of restoring stability to defense programs, saving money, and fielding better military forces. These steps toward implementation are a promising beginning. But much more remains to be accomplished. As an aid to the complete implementation of our recommendations, we offer the succeeding portions of our *Final Report*.

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Chapter One

National Security Planning and Budgeting

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I. Introduction

A mong the major tasks assigned to the Commission by the President in July 1985 was the study of resource allocation for defense, including the legislative process. While national security planning is primarily the responsibility of the Executive Branch, principally the President, the National Security Council, the Secretary of Defense, and the Joint Chiefs of Staff, the defense of the nation requires constructive collaboration between the President and Congress. Although the planning process has improved in recent years, we believe that further reforms are required. Reforms must deal with three major problems in the current national security planning and budgeting process: the need to relate military plans more adequately to available resources; the instability of the defense budget process in both the Executive Branch and Congress; and the inefficient role of Congress in the review of the defense budget. Our work has addressed each of these problems in turn.

This Chapter sets forth our findings and recommendations* on the role of the President in national security planning, a new process for planning national military strategy, and an improved defense budget process in the Executive and Legislative Branches. (A schematic representation of the process we propose is provided in Appendix E to this *Final Report*.)

^{*}Amplifying on our *Interim Report*, these were presented earlier in *National Security Planning and Budgeting: A Report to the President*, submitted June 12, 1986.

II. The Role of the President in National Security Planning

In our *Interim Report*, the Commission found that there is a need for more and better long-range planning to bring together the nation's security objectives, the forces needed to achieve them, and the resources available to support those forces. It is critically important that this relationship be clearly established through a national military strategy. At the same time, military strategy cannot be carried out in isolation from the larger questions of the nation's overall foreign policy and its domestic economic and fiscal objectives. Within the Executive Branch, only the President can make the decisions necessary to balance these elements of national policy. For this reason, the Commission sees a need to streamline the present extensive process for defense planning and budgeting within the Executive Branch by establishing a mechanism for early, firm Presidential guidance.

Today, the President provides national security objectives to the Executive Branch in the form of National Security Decision Directives (NSDDs) that are issued through the National Security Council (NSC). Formulated by an incoming President as policy guidance, these directives are updated periodically, either as a result of a continuing review of major national security issues or as additional guidance in response to crises.

Historically, this process has yielded unclear guidance for national security planning because objectives have been stated in NSDDs without recognition of the limits to fiscal resources that are finally made available. Because of the lack of early Presidential guidance on fiscal limits, defense resource plans are subject to debate and change within the Administration up to the moment the President makes final decisions before sending his annual budget to Congress. These changes can ripple throughout the entire five years of the planning period, resulting in annual change—sometimes quite large—to each year of the Five-Year Defense Program.

Based on Presidential guidance contained in NSDDs, the Secretary of Defense currently issues his own Defense Guidance document, early in the budget planning year, for development of detailed programs and budgets by the Military Departments and agencies of the Department of Defense (DoD). The Secretary's Defense Guidance incorporates fiscal guidance to the Military Departments and Defense Agencies for a five-year period. His guidance is built on a judgment of the threats to national interests and the adequacy of our

military forces to meet those threats. But it also reflects such changeable near-term factors as the previous year's congressional decisions, the current budget debate in Congress, guidance from the Office of Management and Budget (OMB) to DoD based on Presidential decisions during the previous year's budget formulation, and recent international events with national security implications.

Late in the year, two events can cause extensive changes to the Secretary's budget plan. First, Congress makes decisions on the budget submitted to it at the beginning of each calendar year. Typically, these decisions are postponed by Congress as long as possible. Congress usually does not enact a defense budget until after the fiscal year has begun on the first of October, with obvious disruptive effects not only for execution of the budget, but also for planning a defense program for subsequent years. Recently, moreover, congressional decisions increasingly have diverged not only from the President's budget proposal, but also from Congress' own pronouncements on future defense budgets as projected in earlier concurrent budget resolutions.

Second, in November of each year before the President transmits his budget to Congress in late January, OMB conducts an independent review of the Secretary's budget plan, drawing upon updated economic projections, recently enacted congressional budget decisions, and the President's budget priorities. As late as December, based on issues raised by the OMB review, the President often directs changes to the Secretary's budget plan that affect thousands of line items and require major revisions to the Five-Year Defense Program. Such Presidential decisions on the defense budget, so close in time to presentation of the President's budget to Congress, do not allow the Secretary of Defense sufficient time to review and advise the President of their effects on the national defense program.

In the Commission's view, the instability induced by the present planning and budgeting process can be substantially reduced, and its effects can be made far less disruptive. As the Commission recommended in our *Interim Report*, defense planning should start with a comprehensive Presidential statement of national security objectives and priorities based on recommendations of the NSC. On this basis, the President would issue provisional five-year budget levels to the Secretary of Defense reflecting competing demands on the federal budget as well as projections of gross national product and revenues. These budget levels would be based on recommendations from the NSC with the advice and assistance of the OMB.

Upon receipt of Presidential planning guidance, the Secretary of Defense would instruct the Chairman of the Joint Chiefs of Staff (JCS) to prepare a national military strategy that best achieves the national security objectives within provisional budget levels. The Chairman would also be instructed to

develop strategy options for each of the provisional budget levels, based on consideration of major defense policies and operational concepts, to meet the entire range of threats to these national security objectives. A recommended national military strategy and options would be prepared by the Chairman with the assistance of the other members of the JCS and the Commanders-in-Chief (CINCs) of the Unified and Specified Commands. The military capabilities provided by this strategy and options would be compared with the present and projected capabilities of potential opponents in a military net assessment.

The Secretary of Defense would review the Chairman's recommendations as described, and make such modifications as he deems appropriate. Upon completing that phase of the new defense planning process, the Secretary, and the Chairman as the principal military adviser, would present to the President a recommended national military strategy, strategy options, and the net assessment.

After review by the NSC, the President would select his preferred national military strategy and its corresponding five-year defense budget level, based upon his national security objectives and priorities, and an acceptable level of risk. He would provide this decision to the NSC, the OMB, and the Secretary of Defense. The Presidential decision, including the five-year fiscal guidance, would be binding on the Executive Branch unless changed by further Presidential decision.

Based on the President's decision, the Secretary of Defense would develop a detailed Defense Guidance for the Military Departments and Defense Agencies to launch the Planning, Programming, and Budgeting System (PPBS) internal to the DoD. The final version of the Defense Guidance would contain the Secretary's detailed guidance on defense objectives, policy, strategy, force levels, and fiscal guidance, all based on the President's decisions. The detailed fiscal guidance would be the basis for a new Five-Year Defense Program and for detailed pricing and scheduling of the new defense budget.

The Commission strongly believes that an early Presidential decision on a five-year defense budget level, clearly linked to a Presidentially approved national military strategy, is necessary to achieve a more orderly and more stable process for executive and congressional planning and budgeting for defense. Early Presidential determination of an appropriate five-year budget level would better integrate all elements of the Executive Branch in the resource allocation process, result in more coherent and stable long-range planning for national defense, and provide the Congress a proposed defense program more readily explained and justified in terms of national security requirements.

Our recommended improvements in national security planning and defense budgeting process (outlined in Appendix E to this *Final Report*) should

be commenced immediately to assist the defense planning and budgeting activities now underway in DoD and in Congress to construct the first biennial defense budget. The budget to be submitted to Congress in January 1987 for fiscal years 1988 and 1989 should be the transitional budget for the new planning process. The new defense planning and budgeting process would thereby be fully implemented for the fiscal year 1990–91 budget. To achieve that end, the President should provide the strongest guidance possible to the NSC, the OMB, the Secretary of Defense, the Chairman of the JCS, and the Military Departments.

Recommendations

To institutionalize, expand, and link a series of critical Presidential determinations, we recommend a process (Appendix E) that would operate in substance as follows:

The National Security Council would develop and direct a national security planning process for the President that revises current national security decision directives as appropriate and that provides to the Secretary of Defense Presidential guidance that includes:

- A statement of national security objectives;
- A statement of priorities among national security objectives;
- A statement of major defense policies;
- Provisional five-year defense budget levels, with the advice and assistance of the Office of Management and Budget, to give focus to the development of a fiscally constrained national military strategy. Such budget levels would reflect competing demands on the federal budget as well as projections of gross national product and revenues; and
- Direction to construct a proposed national military strategy and strategy options for Presidential decision in time to guide development of the first biennial defense budget for fiscal years 1988 and 1989.

Following receipt of the Secretary's recommended national military strategy, accompanying options, and a military net assessment, the President, with the advice of the NSC, would approve a particular national defense program and its associated budget level. This budget level would then be

provided to the Secretary of Defense as five-year fiscal guidance for the development of biennial defense budgets such that:

- The five-year defense budget level would be binding on all elements of the Administration.
- Presidential guidance, as defined above, would be issued in mid-1986 to guide development in this transitional year of the first biennial defense budget for fiscal years 1988 and 1989 to the maximum possible extent.
- The new national security planning process would be fully implemented to determine the course of the defense budget for fiscal years 1990 to 1994.

III. A New Process for Planning National Military Strategy

To provide the President and the Secretary of Defense with military advice that better integrates the views of the nation's combatant commands and Military Services, the Commission in our *Interim Report* recommended legislation creating new duties for the Chairman of the Joint Chiefs of Staff (JCS). In the Commission's view, the Chairman should become the principal military adviser to the President, the National Security Council, and the Secretary of Defense, representing his own views as well as the corporate views of the JCS. The Chairman should be given exclusive direction of the Joint Staff, and other elements of the Organization of the Joint Chiefs of Staff, to perform such duties as he prescribes to support the JCS and to respond to the Secretary of Defense. To further assist the Chairman in performing his new duties, a new position of Vice Chairman of the JCS should be created. We note that in a message to Congress on April 24, 1986, the President endorsed these recommendations and that the Senate and House have separately passed legislation along these lines.

In making these recommendations, the Commission envisioned that the new duties of the Chairman would include a major role in national security planning. The Commission recommended that the Chairman, with the advice of the other members of the JCS and the Commanders-in-Chief (CINCs) of the combatant commands, be given responsibility for preparing and submitting to the Secretary of Defense a fiscally constrained national military strategy, with strategy options, based on the President's initial guidance on national security objectives and priorities, and his provisional five-year budget levels. The Chairman would also, with the assistance of the other members of the JCS, and in consultation with the Director of Central Intelligence, prepare a military net assessment of the capabilities of United States and Allied Forces as compared to those of potential adversaries. The net assessment would be used to evaluate the misks of the strategy and the strategy options.

On April 1, 1986, the President issued a directive to the Secretary of Defense (see Appendix C to this *Final Report*) calling for a new process for planning national military strategy. The following section of this report claborates the Commission's views on the new process to aid in implementing our recommendations.

Improved Defense Strategy Development

Just as the President's guidance on national security objectives and priorities should provide a clear statement of what we must achieve, military strategy should provide a clear statement of how we will achieve it. That strategy must address how we plan to achieve particular national ends with available, or reasonably anticipated, military means. Specifically, a strategy must relate proposed military force levels to available resources.

It is incumbent upon our senior military leaders, as they chart a course for the nation's military forces into the next century, to apply financial limits to military force planning in a way not previously attempted. The questions that such planning entails must be answered in that light. These include:

- What kind and what numbers of forces should we field in the future?
- What kind of equipment should they have?
- How rapidly should we modernize their equipment?
- How, and at what pace, can we best incorporate the benefits of technological advances?
- How much should we spend on readiness and sustainability, on the one hand, and modernization, on the other?
- What balance should we strike between strategic nuclear and general purpose forces?
- How can we keep the overall cost of building and maintaining military forces within limits while achieving performance objectives?

To develop a well-designed national military strategy, the Chairman should first ensure that he has a full range of views from the Joint Chiefs, who as individual Service Chiefs are charged with developing and providing the nation's Armed Forces, and from the combatant commanders, who are charged with employing them. Second, the Chairman should integrate the sometimes conflicting perspectives arising from the different responsibilities held by these officers into a coherent military strategy. This strategy thus would reflect the best thinking of the nation's senior military leadership.

The product of such a strategy-development process would reflect the fiscal

constraints directed by the President for the planning period and would include:

- an appraisal of threats to the achievement of our national objectives across the full range of potential conflict during the five-year planning period;
- a recommended strategy to meet our objectives and to respond to these threats during the planning period; and
- the force requirements and capabilities to support the strategy.

In order to frame a wide range of decision alternatives for the President, the Chairman would be directed to provide the Secretary with strategy options resulting from the President's five-year budget levels and from variations within a given budget level. These would reflect explicit trade-offs among the Services and among competing requirements from the combatant commands. In addressing options to the proposed national military strategy, the Chairman would consider major defense policies and operational concepts (e.g., modernization, force structure, readiness, sustainability, security assistance policy and funding levels, strategic nuclear forces versus general purpose forces, etc.).

In order for the Chairman of the Joint Chiefs of Staff to provide sound military advice on the various strategy options, a companion analysis should be prepared that would identify:

- adjustments to current force levels in accordance with the President's provisional budget levels and the associated costs or savings;
- problems that may preclude attainment of needed force levels or capabilities without mobilization (e.g., personnel quality or quantity unattainable without conscription, and the adequacy of the industrial base to support force levels);
- unique regional considerations that may restrict our ability to employ military force (e.g., political or other potential disadvantages to the use of U.S. forces, maintainability of lines of supply, access to friendly ports of entry, etc.); and
- limits on deployment or mobilization that may restrict our ability to employ military forces in conflict (e.g., the availability of transport, the adequacy of the training base, etc.).

Our proposed process for strategy development does not diminish the value of force planning as currently provided in the Joint Strategic Planning Document (ISPD). The ISPD serves as the ICS contribution to the planning phase of DoD's Planning, Programming, and Budgeting System, but it could be revised to provide a more meaningful overarching framework for strategy and force planning. The analytical value of the ISPD lies in its identification of force levels for global general war that could guide the development of related *peacetime*, resource-constrained forces. Specifically, the ISPD planning force could be linked to a peacetime mobilization base for a "worst case" contingency of a global general war. The mobilization base derived from the ISPD planning force could be developed to achieve the shortest possible time to expand from mobilization base levels to planning force levels—consistent with the President's fiscal guidance. Such a peacetime posture should be a central consideration in developing the recommended national military strategy and strategy options provided to the President. In addition, forces for support of regional unified commanders in pursuit of U.S. national security objectives in peacetime, as well as the more probable, less intense forms of conflict, should also be identified in the ISPD mobilization base planning force.

An Improved Net Assessment

As an element of the planning process we propose, it would be necessary to make a more comprehensive effort to assess the capabilities of our forces to accomplish their missions in the light of projected military threats posed by potential adversaries. Where appropriate, Allied Forces should be included in this analysis.

A net assessment of military capabilities, projected five years into the future, can help identify the risks associated with alternative military strategies and force postures. It would be of major assistance to the Chairman, the Secretary of Defense, and the President in framing and selecting a defense budget level and force posture better tied to national security objectives and priorities. As an adjunct to the new strategy planning process, the net assessment could help identify existing or emerging problems and opportunities that need to be brought to the attention of the Secretary of Defense and the Chairman for further study in the development of strategy options.

The expanded planning responsibilities to be assigned to the Chairman of the Joint Chiefs of Staff would require that he prepare an independent, comprehensive military net assessment in order to evaluate the recommended national military strategy and any strategy options proposed. The Commission has recommended that the Chairman prepare this assessment for the Secretary of Defense with the assistance of the other members of the JCS and in consultation with the Director of Central Intelligence. He should also draw upon the advice of the combatant commanders.

Recommendations

The Secretary of Defense, following receipt of the Presidential guidance described previously, should direct the Chairman of the Joint Chiefs of Staff (JCS), with the advice of the other members of the Joint Chiefs of Staff and the Commanders-in-Chief (CINCs) of the Unified and Specified Commands, to:

- Appraise the complete range of military threats to U.S. interests and objectives worldwide;
- Derive national military objectives and priorities from the national security objectives, major defense policies, and priorities received from the President; and
- Provide the Secretary of Defense a recommended national military strategy that:

Best attains those national security objectives provided by the President, in accordance with his policies and priorities; Identifies the forces and capabilities necessary to execute the strategy during the five-year planning period; and Meets fiscal and other resource constraints directed by the President during the five-year planning period.

At the direction of the Secretary of Defense, the Chairman also should develop strategy options to achieve the national security objectives. Such strategy options would:

- Frame explicit trade-offs among the Armed Forces;
- Reflect major defense policies and different operational concepts, in terms of different mixes of forces or different degrees of emphasis on modernization, readiness, or sustainability;
- Respond to each provisional budget level provided by the President;

- Explore variations within a particular provisional budget level; and
- Highlight differences in capability between the recommended national military strategy, on the one hand, and feasible alternatives, on the other.

At the direction of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, with the assistance of the other members of the JCS and the CINCs, and in consultation with the Director of Central Intelligence, should also prepare a military net assessment that would:

- Provide comparisons of the capabilities and effectiveness of U.S.
 military forces with those of forces of potential adversaries for the
 Chairman's recommended national military strategy and other strategy
 options;
- Reflect the military contributions of Allied Forces where appropriate;
- Evaluate the risks of the Chairman's recommended national military strategy and any strategy options that he develops for the Secretary of Defense and the President; and
- Cover the entire five-year planning period.

The Secretary of Defense, following his review and analysis of the Chairman's recommendations, should provide to the President:

- The Secretary's recommended national military strategy and its corresponding five-year defense budget level, consistent with the President's policy and fiscal guidance;
- Appropriate strategy options and corresponding five-year defense budget levels sufficient to provide the President a wide range of alternatives in choosing a national defense program; and
- A military net assessment of the recommended national military strategy and strategy options.

IV. The Congressional Defense Budget Process—A Need for Change

The recommendations discussed above, when implemented by the President and the Secretary of Defense, will go a long way toward making defense planning and budgeting within the Executive Branch more rational and stable. But this effort will fail to achieve the desired results if Congress does not do its part to improve its role in the process. Realism in long-range planning and budgeting for defense within the Executive Branch must be met by a responsible exercise of congressional power in budget review and oversight.

In defense budgeting, as in most other matters of national policy, the President proposes but Congress disposes. The national defense program depends upon steady, long-term vision if it is to meet our long-term security needs effectively. Congressional focus, however, is myopic and misdirected. Only the upcoming budget year gets real attention, and this attention is directed at the budget's microscopic pieces, its line items.

Problems inherent in Congress' defense budget review manifest themselves in budget resolutions that reflect little or no consistency from year to year; in changes to thousands of line items within the defense budget that, taken together on this kind of scale, verge on randomness; and in defense appropriations that are invariably late in enactment.

It is true that changing political and economic circumstances may require the Congress to adjust its plans from time to time. But the Commission believes that both the number and the magnitude of changes resulting from congressional review of the defense budget are excessive and harmful to the long-term defense of the country.

Where national defense is concerned, today's congressional authorization and appropriation processes have become mired in jurisdictional disputes, leading to overlapping review of thousands of line items within the defense budget. A growing rivalry between the Armed Services Committees and the Defense Appropriations Subcommittees over the line-item makeup of the defense budget has played a major role in moving congressional review of the defense budget toward narrowly focused financial action on individual items and away from oversight based on operational concepts and military effectiveness. During the review of the 1985 defense budget, for example, Congress made changes to over 1,800 separate defense programs and directed DoD to conduct 458 studies ranging from the feasibility of selling lamb

products in commissaries to the status of retirement benefits for Philippine scouts.

This kind of tinkering and financial fine-tuning has heightened defense program instability because of its wide reach and lack of broader operational focus. Congressional action on the 1985 budget reduced the President's request by \$20.5 billion, but, of that amount, only \$0.5 billion (or 2 percent) involved outright program cancellations or procurement terminations. The other 98 percent of the reduction came from changes to procurement rates and mixes, level-of-effort cuts, miscellaneous personnel trims, and financing adjustments.

In addition, DoD now finds itself involved in a new congressional budgeting phenomenon in which the Appropriations Committees have funded programs that the Armed Services Committees have not authorized. In fiscal year 1986, the DoD Appropriation Act included over 150 line items, valued at \$5.7 billion, that were authorized at a lower level or were not authorized at all. As of this date, the fiscal year is more than half over but DoD cannot obligate funds nor conclude contract negotiations for almost \$6 billion of programs while the disagreement continues between congressional committees.

Under these circumstances, the Secretary of Defense and the Military Departments find themselves in the position of making final decisions in formulating a budget for the next fiscal year while Congress is still debating its own wide-ranging differences on the budget for the ongoing fiscal year. When Congress finally makes its appropriation decision, the Secretary and the Services are forced to adjust the proposed budget for the upcoming fiscal year, late in the budget-formulation process within the Executive Branch, in order to incorporate the impact of congressional changes. The timing and scope of these changes prevent the DoD from making coherent linkages among the three defense budgets that it manages at any one time—the budget being executed, the budget under review by Congress, and the budget that DoD is developing for the upcoming fiscal year.

Meanwhile, defense managers and defense procurement personnel around the world must implement late congressional decisions after the fiscal year has started. They are confronted with numerous changes that alter and delay their program plans, schedules, and contract decisions. This instability, in turn, spreads outward to the defense industry, whose investment and production plans must be hastily adjusted annually as a result of late congressional appropriations.

Finally, instability in defense budget planning has been further exacerbated as a result of the new Gramm-Rudman-Hollings legislation. In March 1986, the sixth month of the fiscal year, DoD was forced to take a 4.9 percent reduction in each of almost 4,000 programs, projects, and activities, for a total cut of \$13.6

billion in budget authority and \$5.2 billion in outlays. These across-the-board, automatic cuts allowed no analysis or management judgment to be exercised about priorities or about their effect on defense programs and forces. The essence of budgeting is setting priorities. Our recommendations depend upon a rational choice of priorities by responsible defense managers, as opposed to a mechanistic allocation of resources across all activities. We must assume that government will remain a place of judgment.

Many of the problems described above affecting congressional action result from major differences of opinion within Congress on the funds to be provided for defense in any one year. However, as this debate continues from year to year, congressional budget resolutions show very little consistency regarding national defense funds, and, as a result, their projections of defense budgets for future years have become unreliable measures of congressional intent.

Shortly after congressional budget resolution projections are made, the budget-formulation process begins in the Executive Branch to build budgets for the years covered by such projections. As the last guideposts of congressional intent before Executive Branch budget formulation, budget resolution projections play a central role in decisions on the levels for defense that are used for planning within DoD and that the President ultimately will propose to Congress. To the extent, then, that Congress has reflected unrealistic levels for future defense budgets in its budget resolutions, lack of realism will also affect the President's budget. This document to a large degree each year mirrors the congressional budget resolution of the previous year. That is why congressional budget resolution projections should be made with great care, with full commitment to those projections from key committees that review the defense budget.

The Commission urges the leaders of Congress to develop ways to relate projections in budget resolutions to the five-year budget levels developed within the Executive Branch (as described in the previous sections of this report) for provision, in turn, to Congress. We believe that a much-improved linkage between the new proposed process for defense planning and budgeting within the Executive Branch, and the current budget resolution process within Congress, is central to responsible decision-making on matters of national security.

Another concern is the role budget resolutions play in later phases of the overall congressional process. The practice has been for the authorizing and appropriations committees to treat Budget Committee targets as ceilings from which they could depart, rather than as congressional commitments. The steadiness that should mark long-term planning for the nation's defense has suffered as a result.

The Commission is also concerned about the lack of cooperation in review of the defense budget that marks authorization and appropriation actions today in Congress.

The Armed Services Committees need to become less concerned with attempting to control line items through authorization action and need to concentrate more on the task for which they are best suited, allocation of funds between and within major operational categories of the defense budget. In the Commission's view, the Armed Services Committees also should have an important role to play in ensuring that new weapon programs in fact contribute to military effectiveness within major operational categories. They should be the primary congressional agents for approval of acquisition programs entering full-scale development and high-rate production as recommended by the Commission in its report on *Defense Acquisition* and described later in this Chapter.

The Armed Services Committees cannot, however, simply take on such roles unilaterally. The leadership of the authorizing and appropriations bodies that deal with the defense budget must agree on a division of labor that lessens considerably the overlap and consequent rivalry that marks the process today. We agree completely with the observations made by the Senate Armed Services Committee, in an April 1986 report, on the need for congressional reform in providing for the nation's defense:

Congressional reform must extend beyond the confines of defense oversight. Ultimately, fundamental patterns of congressional behavior must change. Committee jurisdictions must be reasserted and tightened to minimize overlap and duplication. Redundant legislative phases of budgeting, authorizing, and appropriating must be consolidated.

Procedural Reforms

If leadership problems within Congress can be overcome, and stability of the defense budget and a more appropriate division of labor among committees can be achieved, procedural reforms can have further beneficial effect. The most important reform, in the Commission's view, is adoption by Congress of biennial defense budgets tied to a five-year plan.

A. Biennial Budgeting and Five-Year Planning for Defense

In our *Interim Report*, we recommended that the President submit to Congress a two-year defense budget and the five-year plan on which it is based. Congress would be asked to approve a two-year budget based upon this plan. It would do so through a two-year authorization and appropriation for national defense. We note that the 1986 Defense Authorization Act calls for the submission to Congress by the President of a two-year defense budget for fiscal years 1988 and 1989 in early 1987. DoD is now preparing such a budget. We applaud this initiative by the House and Senate Armed Services Committees, and we believe that, if Congress decides to adopt this new method of budgeting, it can lead to the two-year defense authorization and appropriation that we have recommended. We are mindful, however, that for some years the President has, at congressional direction, provided requests for two-year defense authorizations, but only the first year of each of these requests has ever been acted upon.

The Commission believes that a biennial budget process for defense, tied to a five-year defense plan, would promote stability by providing additional time to do a better job—to think through military planning options, to evaluate results of current and prior-year execution of the defense budget, and to ensure that each phase of the cycle has the attention needed. A two-year cycle also would, in particular, allow DoD to pay more attention to programming, the second phase of the Planning, Programming, and Budgeting System (PPBS) where individual defense programs are put together, refined, and compared to each other to respond to defense needs.

A new biennial defense programming process would need to be fashioned to precede the process through which biennial budgets are formulated. Stability obtained from such two-year processes would provide many benefits throughout DoD not the least of which would be found at the operational level in the field, where installation and activity commanders and program managers turn budget decisions into action.

A two-year defense budget cycle could also allow the Executive and Legislative Branches of government to spend one of the two years on a necessary, but generally ignored, evaluation process. It should help the Services to better manage their programs, and Congress to stick to its deadlines and schedules. Having spent a year reviewing ongoing activities, Congress should be able to begin earlier and move faster in the appropriation year.

One of the major arguments against biennial budgeting is that it builds too much inflexibility into the system. National security objectives and priorities,

however, ordinarily do not change appreciably from year to year, nor should military strategy or the military force structure change radically over a two-year period. In addition, the appropriate tools needed to make any changes required in the second year of budget execution are already in existence. Current reprogramming, supplemental, and budget amendment procedures are more than adequate to address the need. Reprogramming thresholds and transfer limitations within program categories should be reviewed by both Congress and DoD in a biennial budget context, and additional flexibility should be provided if needed. Rescissions and deferrals are also techniques that can be used when necessary.

Primarily, however, a two-year appropriation for defense would stop the yearlong chaos of budget-making that we now have, or at minimum, allow it to happen only every two years rather than annually. This would surely provide a greater degree of stability over a longer period of time.

We applaud DoD support for two-year defense budgets and growing support within the Congress. We are particularly encouraged by Secretary Weinberger's commitment to the concept. He echoed the Commission's sentiments in his letter transmitting the April 1, 1986, Report on Two-Year Defense Budgeting to the Armed Services Committees and Appropriations Committees when he stated:

... The resulting improved stability could increase the efficiency of defense operations. Such an approach could also serve to simplify the currently lengthy and time consuming budget process. Both Congress and the Executive Branch would have significantly more time to focus on the resolution of policy issues and the establishment of priorities. Moreover, the adoption of biennial budgeting should reduce the need for Congress to fund our (defense) operations through limited and ineffective Continuing Resolution Authority procedures. . . .

B. Milestone Authorization, Baselining, and Multi-Year Procurement

To complement biennial budgeting, the Commission believes that milestone authorization, baselining, and multi-year procurement should be instituted and expanded by both DoD and Congress for all major defense programs.

Milestone authorization would allow the Armed Services Committees to focus their review of major acquisition programs on two key program milestones, the beginning of full-scale engineering development and the start of

high-rate production. Programs advancing through these milestones in either the first or second year of a particular biennial authorization request would be identified to Congress by DoD, which would provide a program baseline for each identified program. A program baseline would describe the cost, schedule, and operational performance of the systems to be acquired during the production lifetime of the program, would be certified at the highest level of responsible officials within DoD, and would establish a contract between the Executive and Legislative Branches based on mutual expectations for the program.

If such a process were in place, the Armed Services Committees would not need to subject defense programs performing well, relative to an approved baseline previously established at a key milestone, to the same level of scrutiny as programs arriving at key milestones. In fact, to the maximum possible extent, programs that proceed successfully through congressional authorization at the high-rate production milestone should be executed through multi-year procurement. Once multi-year procurement is initiated, changes to a program baseline, either through DoD action or through later congressional authorization or appropriation action, should be avoided because of the financial penalties involved. In the Commission's view, milestone authorization, baselining, and multi-year procurement would promote the kind of stability and proven cost savings in budgeting for national defense that are central objectives of our recommendations.

C. Changing the Structure of the Defense Budget

Finally, the Commission believes that the Congress, DoD, and the Office of Management and Budget must together begin the hard work necessary to reduce an overly detailed line-item review of the defense budget and to bring a broader, operational perspective to the defense budget and its companion Five-Year Defense Program.

The Five-Year Defense Program has been constructed to provide a crosswalk between the input (financial) side of the nation's defense budget and the output (forces, weapon systems, manpower, etc.) side where defense programs are grouped according to the operational purposes they serve. However, the relative lack of attention historically directed at operational concepts to guide defense spending has resulted in relatively poor structural development of the output side. While the basic foundation of an operationally oriented structure has been in place in the Five-Year Defense Program for some time, much more work must be done to build a new, and more adequate, budget structure for congressional biennial defense authorizations and appropriations.

For example, such a new budget structure might better show the contribution of the B–1 bomber to national defense by grouping the B–1 program and other appropriate programs within a budget account titled "Modernization of Strategic Nuclear Forces" rather than, as is now the case, a budget account called "Aircraft Procurement, Air Force." A revised budget structure of this type would allow a better review of the different types of strategic nuclear systems, in relationship to each other and to overall national security objectives, than is now the case.

In addition, it would allow for more management judgment to be introduced by aggregating, consolidating, and reorganizing thousands of line items into fewer budget activities within the Military Departments. For example, if all Army cargo and utility helicopters and their modifications, spares, and simulators were placed in a new, single, aggregated activity, 39 line items could be reduced to 4. Similarly, 358 line items for trucks could be reduced to 11. This would permit more reasoned, practical, and balanced decisions to be made.

Recommendations

CONGRESS

A joint effort among the Appropriations Committees, the Armed Services Committees, the Office of Management and Budget (OMB), and the Department of Defense (DoD) should be undertaken as soon as possible to work out the necessary agreements, concepts, categories, and procedures to implement a new biennial budget process for defense. Biennial budgeting for defense should be instituted in 1987 for the fiscal year 1988–89 defense budget. Congress should authorize and appropriate defense funding for those two years. The second year of this new biennial budgeting process should be used by both Congress and DoD to review program execution where appropriate.

Congress should reduce the overlap, duplication, and redundancy among the many congressional committees and subcommittees now reviewing the defense budget.

The leadership of both parties in the House and the Senate should review the congressional process leading up to annual budget resolutions with the intent of increasing stability in forecasts for defense budgets for future years. We cannot stress strongly enough that a responsible partnership in providing for the national defense means agreement between Congress and the President on an overall level of a five-year defense program early in a new President's term in office and adherence to this agreement during his Administration.

The chairmen and ranking minority members of the Armed Services Committees and the Defense Appropriations Subcommittees should agree on a cooperative review of the defense budget that has the following features:

- Review by the Armed Services Committees of the defense budget in terms of operational concepts and categories (e.g., force structure, modernization, readiness, and sustainability, etc.);
- Review and authorization of individual programs by the Armed Services Committees that concentrate on new defense efforts at key milestones—specifically the beginning of full-scale development and the start of high-rate production—in terms of their contributions to major defense missions; and
- Review by the Appropriations Committees, using the new budget structured in terms of operational concepts and categories, to adjust the the President's defense budget to congressional budget resolution levels through refinements based on information not available when the President's budget was formulated months earlier.

Congress should adhere to its own deadlines by accelerating the budget review process, so that final authorizations and appropriations are provided to DoD on time, and less use is made of continuing resolutions.

Congress should review and make major reductions in the number of reports it asks DoD to prepare and should closely control requirements for new reports in the future.

EXECUTIVE BRANCH

The President should direct the Secretary of Defense and OMB to institute biennial budgeting for defense in 1987 for the fiscal year 1988–89 defense budget and budgets thereafter.

The Secretary of Defense should develop and submit to Congress defense budgets and five-year plans within an operationally oriented structure. He should work with the appropriate committees of Congress and with OMB to establish the necessary mechanisms and procedures to ensure that a new budget format is established.

The Secretary of Defense should institute a biennial programming process within DoD to complement the proposed biennial planning and budgeting processes.

The Secretary of Defense should work with the Armed Services Committees to define procedures for milestone authorization of major defense programs.

Baselining and multi-year procurement should be used as much as possible to reinforce milestone authorization.

V. Conclusion

D efense of the nation demands that better links be forged among national security objectives, national military strategy, and defense budgets.

The President must initiate the effort. He must challenge the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the nation's key military leaders to create a national military strategy that can become the basis of America's protection into the next century. Only the President can define the terms and boundaries necessary to set such a broad gauge effort in motion, and he must be confident that it will yield the proper result.

Prepared with this kind of a national military strategy, the President can provide Congress a blueprint for national security, and a constructive partnership can be formed to carry it out—through a five-year national defense program that logically follows. This partnership will, however, require Congress to improve its methods and make them more responsive to the requirements of national defense.

In the end, all responsible senior officials must exercise leadership if better methods are to take hold and yield a better national defense. We must depend upon dedicated and talented people to take the concepts we have presented and build upon them for the future.

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Chapter Two

Military Organization and Command

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To accomplish meaningful, long-range defense planning, certain modifications are needed in our defense establishment.*

The President and the Secretary of Defense require military advice that better integrates the individual views of the nation's combatant commanders and the Chiefs of the Services. Today, there is no one uniformed officer clearly responsible for providing such an integrated view, who can draw upon the best thinking of, and act as an effective spokesman for, our senior military leadership. The current authority of the Chairman of the Joint Chiefs of Staff is insufficient to enable him to perform effectively in this capacity. The Chairman's advisory relation to the President and the Secretary of Defense, the Chairman's mandate over the Joint Staff and the Organization of the Joint Chiefs of Staff, and the Chairman's place in the channel of communications between the Secretary of Defense and the Commanders-in-Chief of the Unified and Specified Commands (CINCs), all must be strengthened to this end.

So, too, must the views of the CINCs be more strongly and purposefully represented than they are at present within the councils of the Joint Chiefs and in weapons requirements decision-making. Because it is the responsibility of the Chairman to integrate the sometimes conflicting advice of the Service Chiefs and the CINCs into a national strategy, the necessity for impartiality and objectivity in doing so argues for another voice in the Joint Chiefs of Staff to represent the views of the CINCs. For these purposes, and to assist the Chairman in his existing and additional responsibilities, we conclude that the position of Vice Chairman of the Joint Chiefs of Staff should be established.

There is an important need to provide for continuity of advice to the Secretary of Defense and the President in the absence of the Chairman of the Joint Chiefs of Staff. The current system, in which the members of the Joint Chiefs of Staff (JCS) rotate quarterly as Acting Chairman, has provided continuity better than earlier systems. It also has served to enhance a needed joint perspective among the Service Chiefs and increase their effectiveness in both their JCS and Service roles. The establishment of a Vice Chairman as a member of the Joint Chiefs of Staff having special responsibilities for representing the interests of the CINCs and reviewing weapons requirements would be an important innovation. While underscoring the importance of continuity, the

^{*}With certain important additions, this Chapter represents relevant findings and recommendations presented earlier in our *Interim Report*.

Commission believes the procedures under which an Acting Chairman is designated should remain flexible. Under the President's direction, the Secretary of Defense should be permitted to adopt those procedures which are best suited to the particular circumstances and to revise them in accordance with changing needs.

The Commission believes that the present authority of the Chairman of the Joint Chiefs of Staff to influence the quality of the personnel assigned by the Armed Services to the Joint Staff is adequate to assure proper support for him, and for the Joint Chiefs of Staff. We note that the JCS corporately control all military personnel, and therefore are in the best position to provide the Chairman with the best possible staff. We do not believe that Congress can usefully legislate new rules for selecting and promoting Joint Staff officers.

We find that improvements also are needed in the several Unified (i.e., multi-Service) and Specified (i.e., single Service) Commands into which our combat forces are organized.

The measure of command now accorded the nation's combatant commanders is not always sufficient for our forces to perform with high confidence of success and coherence of effort. Unified Commanders require broader authority than "operational command," as now understood and practiced, in order to meet the heavy responsibilities that their missions place on them.

In our *Interim Report*, we expressed the conviction that, were combatant commanders authorized and directed to do so, they could reduce significantly the numbers of headquarters subordinate to them and their components, as well as the numbers of personnel assigned to staff duties in these headquarters. We remain convinced that increased authority for each CINC should enable him so to rationalize his command structure. We therefore urge that the Secretary of Defense elicit, through the JCS, specific recommendations to that end.

The Unified Command Plan divides responsibilities among combatant commanders too arbitrarily on the basis of geographical boundaries. Today, some threats overlap those boundaries and must be dealt with functionally.

Moreover, the current command structure reflects command arrangements that evolved during World War II to deal with high-intensity conflict across vast regions of the globe. However well the layers of the present command structure suit the contingency of general war, they are not always well-suited to the regional crises, tensions, and conflicts that are commonplace today.

Finally, loose coordination of strategic lift of military forces throughout the world now constrains military effectiveness. There are demonstrated managerial shortfalls in our ability to allocate available air, land, and sea transportation among many claimants. The specific changes recommended by the Commission are necessary to assure unified action by our Armed Forces. On April 24, 1986, in a Special Message to Congress (see Appendix D to this *Final Report*), the President endorsed our recommendations on military organization and command and requested early enactment of legislation required to implement them. As the culmination of a major legislative effort begun in the House of Representatives in 1982 and joined in the Senate by passage of the Barry Goldwater Department of Defense Reorganization Act of 1986, we anticipate enactment of our basic recommendations by the end of 1986.

Recommendations

The Commission recommends the following reforms in federal law and DoD practices.

Current law should be changed to designate the Chairman of the Joint Chiefs of Staff (JCS) as the principal uniformed military advisor to the President, the National Security Council, and the Secretary of Defense, representing his own views as well as the corporate views of the JCS.

Current law should be changed to place the Joint Staff and the Organization of the Joint Chiefs of Staff under the exclusive direction of the Chairman, to perform such duties as he prescribes to support the JCS and to respond to the Secretary of Defense. The statutory limit on the number of officers on the Joint Staff should be removed to permit the Chairman a staff sufficient to discharge his responsibilities.

The Secretary of Defense should direct that the commands to and reports by the Commanders-in-Chief of the Unified and Specified Commands (CINCs) should be channeled through the Chairman so that the Chairman may better incorporate the views of senior combatant commanders in his advice to the Secretary.

The Service Chiefs should serve as members of the JCS. The position of a four-star Vice Chairman should be established by law as a sixth member of the JCS. The Vice Chairman should assist the Chairman by representing the interests of the CINCs, co-chairing the Joint Requirements and Management Board, and performing such other duties as the Chairman may prescribe.

The Secretary of Defense, subject to the direction of the President, should determine the procedures under which an Acting Chairman is designated to serve in the absence of the Chairman of the JCS. Such procedures

should remain flexible and responsive to changing circumstances.

Subject to the review and approval of the Secretary of Defense, Unified Commanders should be given broader authority to structure subordinate commands, joint task forces, and support activities in a way that best supports their missions and results in a significant reduction in the size and numbers of military headquarters.

The Unified Command Plan should be revised to assure increased flexibility to deal with situations that overlap the geographic boundaries of the current combatant commands and with changing world conditions.

For contingencies short of general war, the Secretary of Defense, with the advice of the Chairman and the JCS, should have the flexibility to establish the shortest possible chains of command for each force deployed, consistent with proper supervision and support. This would help the CINCs and the JCS perform better in situations ranging from peace to crisis to general war.

The Secretary of Defense should establish a single unified command to integrate global air, land, and sea transportation, and should have flexibility to structure this organization as he sees fit. Legislation prohibiting such a command should be repealed.

Chapter Three

Acquisition Organization and Procedures

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I. Introduction

The President established the Blue Ribbon Commission on Defense Management in part because public confidence in the effectiveness of the defense acquisition system has been shaken by a spate of "horror stories"—overpriced spare parts, test deficiencies, and cost and schedule overruns. Unwelcome at any time, such stories are particularly unsettling when the Administration and Congress are seeking ways to deal with record budget deficits. A major task of this Commission has been to evaluate the defense acquisition system, to determine how it might be improved, and to recommend changes that can lead to the acquisition of military equipment with equal or greater performance but at lower cost and with less delay. For this purpose, the Commission formed an Acquisition Task Force.*

We analyzed the horror stories, as others have done, but concluded that a diagnosis based on recognized deficiencies could lead only to band-aid treatments for a system more fundamentally ill. Therefore, our basic methodology has been deliberately quite different.

We compared the defense acquisition system with other systems, both government and commercial, that develop and produce equipment of comparable complexity, in order to find success stories that could provide a model on which reforms of the defense acquisition system could be based. Defense acquisition represents the largest and, in our judgment, the most important business enterprise in the world. It deserves to be managed with the highest standards. We therefore conducted a "search for excellence" by examining organizations that had been most successful in acquisition, in order to find a model of excellence for defense acquisition.

Chances for meaningful improvement will come not from more regulation but only with major institutional change. During the last decade or so a new theory of management has evolved. It has been developed by a limited number of U.S. companies, and it has flourished in Japan. These new management

^{*}The findings and recommendations of this Chapter are substantially those presented earlier in A Formula for Action: A Report to the President on Defense Acquisition, submitted April 7, 1986. Additional recommendations, first presented here, relate to rights in technical data and industrial mobilization.

The work of the Acquisition Task Force was directed by William J. Perry. In addition to David Packard, its members included Louis W. Cabot, Charles J. Pilliod, Jr., R. James Woolsey, and the late Ernest C. Arbuckle.

practices have resulted in much higher productivity and much higher quality in the products being produced. They involve the participation of all of the people in the organization in deciding among themselves how the job can best be done. They involve, above all, trust in people. They involve the belief that people in an organization want to do a good job, and that they will—if given the opportunity—all contribute their knowledge, skill, and enthusiasm to work together to achieve the aims and goals of their organization. Supervision can be minimized, and detailed review of work can be greatly reduced. A real sense of teamwork can be established. Every group in an organization can become a center of excellence, and in this way the entire organization achieves a level of excellence in every aspect of its work.

Centers of excellence have evolved here and there in the acquisition process, in the form of project teams that have developed and produced new weapons rapidly, efficiently, and with high quality performance. Unfortunately, this is not the way DoD typically operates. All too many people in DoD work in an environment of far too many laws, regulations, and detailed instructions about how to do their work. Far too many inspectors and auditors check their work, and there is a hierarchy of oversight in far too many layers, requiring much wasteful reporting and paperwork.

The quest for excellence in defense management will be successful only if a new management philosophy can replace the old. Instead of concentrating on the things that are being done wrong and trying to fix them with more laws, more regulations, and more inspectors, DoD should concentrate on those things that are done right and use them as models.

Common sense must be made to prevail alike in the enactments of Congress and the operations of the Department. We must give acquisition personnel more authority to do their jobs. We must make it possible for people to do the right thing the first time and allow them to use their common sense. When this is done, layers of supervision can be eliminated, reporting can be minimized, and DoD can get by with far fewer people. Only then will productivity and quality become hallmarks of defense acquisition.

II. The Scope of the Defense Acquisition System

Defense acquisition is the largest business enterprise in the world. Annual purchases by the Department of Defense (DoD) total almost \$170 billion—more than the combined purchases of General Motors, EXXON, and IBM. DoD's research and development (R&D) expenditures are more than fifteen times those of France, Germany, or the United Kingdom, and eighty times those of Japan. Defense acquisition involves almost 15 million separate contract actions per year—or an average of 56,000 contract actions every working day.

DoD makes only a small percentage of its equipment. It depends primarily on the nation's industrial companies to develop its weapons and to manufacture everything from belt buckles to aircraft carriers. In general, these companies do not work solely on defense contracts. Most of the top 50 defense contractors also engage in substantial commercial production. Boeing, for example, supplies aircraft both to DoD and to commercial airlines. IBM supplies computers for military and commercial applications. In this way, the technological base developed for commercial products can be effectively applied to military products, and vice versa. On the other hand, this dual commercial-military product base greatly complicates DoD's task of regulating and auditing the technical and financial performance of industry.

DoD employs more than 165,000 people, both civilian and military, to manage this vast array of R&D, procurement, and logistics programs. Nearly all of these people work for the Services, which directly manage these programs subject to the oversight of a relatively small staff in the Office of the Secretary of Defense (OSD). Further oversight is provided by the Executive Office of the President, including the Office of Management and Budget, particularly in connection with the President's defense budget. And the Congress, in exercising its constitutional responsibility to provide for our Armed Forces, authorizes and appropriates funds for each of more than 2,600 specified procurement and R&D line items, and plays a major role in overseeing acquisition programs.

A responsible analysis of problems in the defense acquisition system must take into account the complexity and scope of acquisition programs. A responsible prescription for change must address the actions of everyone who—for better or worse—can influence these programs, from defense contractors and program managers to OSD officials and Members of Congress.

III. Problems With the Present Acquisition System

All of our analysis leads us unequivocally to the conclusion that the defense acquisition system has basic problems that must be corrected. These problems are deeply entrenched and have developed over several decades from an increasingly bureaucratic and overregulated process. As a result, all too many of our weapon systems cost too much, take too long to develop, and, by the time they are fielded, incorporate obsolete technology.

Recent public attention has focused on cases of spare parts overpricing that have been prominently reported by the media. Many of these cases were uncovered by DoD itself, which has a major effort underway to detect spare parts overpricing and to minimize such problems in the future. By contrast, we have focused on the acquisition of major weapon systems, because improved efficiency there can lead to cost savings greater by orders of magnitude. We nonetheless also analyzed the spare parts cases to determine whether they are indicative of systemic problems and, if so, how these should be addressed. Although each of the cases we examined had its own peculiarities, we identified a number of problems that frequently recurred: for example, government insistence on rigid custom specifications for products, despite the commercial availability of adequate alternative items costing much less; the ordering of spare parts so late in a program, after the close of the production line, that they must be expensively hand tooled; the use of unsuitable cost allocation procedures that grossly distort the price tags of inexpensive spare parts; the buying of spare parts in uneconomically small quantities and hence at higher prices; and the simple exercise of poor judgment by acquisition personnel.

In general, we discovered, these problems were seldom the result of fraud or dishonesty. Rather they were symptomatic of other underlying problems that affect the entire acquisition system. Ironically, actions being prescribed in law and regulation to correct spare parts procurement tend to exacerbate these underlying problems by making acquisition procedures even more inflexible and by removing whatever motivation exists for the exercise of individual judgment. This Chapter will concentrate on ways of improving the efficiency of the overall acquisition system. Removing bureaucratic inefficiencies in our acquisition of major weapon systems also will realize significant improvements in our procurement of associated spare parts.

Problems with the present defense acquisition system begin with the establishment of approved "military requirements" for a new weapon, a step that occurs before development starts. Two common methods exist for establishing the need for a new system—"user pull" and "technology push." Both methods are unsatisfactory.

User pull defines the institutional process by which users (notably the Services) assess the adequacy of existing weapons to meet military needs, and state the characteristics of the next generation of equipment desired to overcome identified inadequacies. In general, this process does not adequately involve participants with a sophisticated knowledge of the cost and schedule implications of technical improvements required to satisfy these characteristics. Consequently, user pull often leads to goldplating—that is, the inclusion of features that are desirable but whose cost far exceeds their real value. If users understood the likely impact of their requirements on the schedule, quantity, and maintainability of the weapons they eventually received, they would have strong motivation for compromise. Generally, however, that compromise—a conscious trade-off between performance and cost—does not take place to an adequate degree. Implicitly, it is assumed that military requirements should be "pure," and that any necessary trade-offs will take place later in the process.

Alternatively, requirements often are established by technology push. A government or industry team conceives of a new or advanced technology. It then tries to persuade users to state requirements that will exploit the new technology. Most of the really significant improvements in military technology—radar, jet engines, and the atomic bomb, for example—have occurred by technology push rather than by an abstract statement of requirements. Because participants in this process tend to push technology for its own sake, however, this method is no less prone to result in goldplating than user pull.

Once military requirements are defined, the next step is to assemble a small team whose job is to define a weapon system to meet these requirements, and "market" the system within the government, in order to get funding authorized for its development. Such marketing takes place in a highly competitive environment, which is desirable because we want only the best ideas to survive and be funded. It is quite clear, however, that this competitive environment for program approval does not encourage realistic estimates of cost and schedule. So, all too often, when a program finally receives budget approval, it embodies not only overstated requirements but also understated costs.

Funding having been approved, the DoD program team is then enlarged and given the task of preparing detailed specifications. Weapon system specifications for a major program typically run to thousands of pages, not counting generic military specifications included by reference. System specifications effectively become a surrogate for overstated military requirements, which tend to fade from view.

DoD then invites industry to bid on the program. The overly detailed system specifications serve as a basis for defense contractors to prepare competitive proposals describing how they would meet the specifications, and at what cost to them and price to the government. The preparation of competitive proposals may very well expose technical problems with the specifications, or reveal modifications that would be cost effective. The environment in which program competition typically takes place, however, encourages improvements within specifications, but discourages modifications that deviate from specifications. This effectively forecloses one principal factor—trade-offs between performance and cost—on which the competition should be based. The resulting competition, based instead principally on cost, all too often goes to the contractor whose bid is the most optimistic.

In underbidding, contractors assume there will be an opportunity later in a program to negotiate performance trade-offs that make a low bid achievable, or to recover understated costs through engineering change orders. Today, however, most production and many development contracts are negotiated on a firm, fixed-price basis. For the government, the advantages of a fixed-price arrangement, particularly the incentives it creates for realistic bidding, are obvious. The disadvantages to the government, while more subtle, are nevertheless of real concern. Fixed-price contracts effectively can enshrine overstated requirements and understated costs in a legal arrangement that allows little or no flexibility for needed trade-offs between cost and performance. This contractual arrangement, intended to protect the government, may cause both sides to lose.

In the face of these daunting problems, DoD selects a successful bidder and launches the program. The DoD program manager sets out to accomplish the improbable task of managing his overspecified and underfunded program to a successful conclusion.

But what was merely improbable soon becomes impossible. The program manager finds that, far from being the manager of the program, he is merely one of the participants who can influence it. An army of advocates for special interests descends on the program to ensure that it complies with various standards for military specifications, reliability, maintainability, operability, small and minority business utilization, and competition, to name a few. Each of these advocates can demand that the program manager take or refrain from taking some action, but none of them has any responsibility for the ultimate cost, schedule, or performance of the program.

None of the purposes they advocate is undesirable in itself. In the aggregate, however, they leave the program manager no room to balance their many demands, some of which are in conflict with each other, and most of which are in conflict with the program's cost and schedule objectives. Even more importantly, they produce a diffusion of management responsibility, in which everyone is responsible, and no one is responsible.

Meanwhile, throughout this process, various committees of Congress are involved. During the marketing phase, it is not enough for the program manager to sell the program to his Service leaders and the various staffs in the Office of the Secretary of Defense. He also must sell the program to at least four committees and to numerous subcommittees of Congress, and then resell it for each fiscal year it is considered. In so doing, the program manager is either assisted or opposed by a variety of contractors, each advocating its own views of the program on Capitol Hill. While congressmen have an abstract interest in greater program effectiveness, they also have an intense pragmatic interest in their own constituencies. These two interests are frequently in conflict, as they exert pressure on specific programs through legislative oversight.

All of these pressures, both internal and external to DoD, cause the program manager to spend most of his time briefing his program. In effect, he is reduced to being a supplicant for, rather than a manager of, his program. The resulting huckster psychology does not condition the program manager to search for possible inconsistencies between performance and schedule, on the one hand, and authorized funding, on the other. Predictably, there is a high incidence of cost overruns on major weapon systems programs.

But a much more serious result of this management environment is an unreasonably long acquisition cycle—ten to fifteen years for our major weapon systems. This is a central problem from which most other acquisition problems stem:

- It leads to unnecessarily high costs of development. Time is money, and experience argues that a ten-year acquisition cycle is clearly more expensive than a five-year cycle.
- It leads to obsolete technology in our fielded equipment. We forfeit our five-year technological lead by the time it takes us to get our technology from the laboratory into the field.
- And it aggravates the very goldplating that is one of its causes. Users, knowing that the equipment to meet their requirements is fifteen years away, make extremely conservative threat estimates. Because long-term forecasts are uncertain at best, users tend to err on the side of overstating the threat.

This description of the acquisition system is stark, but it by no means exaggerates the environment of many, if not most, defense programs. Given this pernicious set of underlying problems, it is a tribute to the dedication of many professionals in the system, both in and out of DoD, that more programs do not end up in serious trouble.

IV. An Acquisition Model To Emulate

Problems attendant to defense acquisition are not new, nor are such problems unique to DoD. Rather, they are typical of the way in which large bureaucracies, particularly government bureaucracies, manage large, complex projects. With this in mind, we compared how other large institutions have managed programs of similar complexity—that is, multi-year, multi-billion dollar programs incorporating state-of-the-art technology.

Two recent efforts have been made to draw such a comparison (see Appendix F). Notably, average cost growth in major defense programs has been found to be less than that experienced by many comparable civil programs, including highway projects, water projects, public buildings, and large processing plants. The good news from these studies is that DoD is no worse than other large bureaucratic organizations in managing major programs.

This leaves unanswered, however, what level of excellence can be achieved in defense programs. To answer this question, a landmark study was undertaken by the Defense Science Board (DSB) last year. The DSB compared typical DoD development programs with successful programs from private industry. It used as case studies the development of the IBM 360 computer, the Boeing 767 transport, the AT&T telephone switch, and the Hughes communication satellite. Each of these programs compares in complexity and size to a major weapon system development, yet each took only about half as long to develop and cost concomitantly less. These commercial programs clearly represent the models of excellence we are seeking, but it is not obvious that DoD, or any large bureaucratic organization, can follow successfully the management procedures used in private industry.

To address that question, the Acquisition Task Force examined several DoD programs that were developed under special streamlined procedures—the Polaris missile, the Minuteman missile, the air-launched cruise missile (ALCM), and several highly classified projects. We found that, in these programs, DoD achieved the accelerated schedules of the successful commercial programs.

It is clear that major savings are possible in the development of weapon systems if DoD broadly emulates the acquisition procedures used in outstanding commercial programs. In a few programs, DoD has demonstrated that this can be done. The challenge is to extend the correct management

techniques to all major defense acquisitions, and more widely realize the attendant benefits in schedule and costs.

To this end, we analyzed a number of successful programs to identify management features that they had in common, and that could be incorporated in the defense acquisition system. We identified six underlying features that typified the most successful commercial programs:

- 1. Clear command channels. A commercial program manager has clear responsibility for his program, and a short, unambiguous chain of command to his chief executive officer (CEO), group general manager, or some comparable decision-maker. Corporate interest groups, wishing to influence program actions, must persuade the responsible program manager, who may accept or reject their proposals. Major unresolved issues are referred to the CEO, who has the clear authority to resolve any conflicts.
- 2. **Stability.** At the outset of a commercial program, a program manager enters into a fundamental agreement or "contract" with his CEO on specifics of performance, schedule, and cost. So long as a program manager lives by this contract, his CEO provides strong management support throughout the life of the program. This gives a program manager maximum incentive to make realistic estimates, and maximum support in achieving them. In turn, a CEO does not authorize full-scale development for a program until his board of directors is solidly behind it, prepared to fund the program fully and let the CEO run it within the agreed-to funding.
- 3. Limited reporting requirements. A commercial program manager reports only to his CEO. Typically, he does so on a "management-by-exception" basis, focusing on deviations from plan.
- 4. **Small, high-quality staffs.** Generally, commercial program management staffs are much smaller than in typical defense programs, but personnel are hand-selected by the program manager and are of very high quality. Program staff spend their time managing the program, not selling it or defending it.
- 5. Communications with users. A commercial program manager establishes a dialogue with the customer, or user, at the conception of the program when the initial trade-offs are made, and maintains that communication throughout the program. Generally, when developmental problems arise, performance trade-offs are made—with the user's concurrence—in order to protect cost and schedule. As a result, a program manager is motivated to seek out and address problems, rather than hide them.
- 6. **Prototyping and testing.** In commercial programs, a system (or critical subsystem) involving unproven technology is realized in prototype hardware and tested under simulated operational conditions before final design approval or authorization for production. In many cases, a program manager establishes

a "red team," or devil's advocate, within the program office to seek out pitfalls—particularly those that might arise from operational problems, or from an unexpected response by a competitor. Prototyping, early operational testing, and red teaming are used in concert for the timely identification and correction of problems unforeseen at a program's start.

It is clear from our earlier description that defense acquisition typically differs from this commercial model in almost every respect. Yet a number of successful DoD programs have incorporated some or all of these management features to a greater or lesser degree. We therefore concentrated our efforts on deriving a formula for action—steps by which defense acquisition can come to emulate this model to the maximum extent practical.

V. A Formula for Action

While we would model defense acquisition after the practices of the best industrial companies, we recognize the unique problems DoD faces. Management of the acquisition of military equipment requires a unique blend of flexibility and judgment. The contributions of innovative scientists and engineers, necessary for equipment to achieve maximum performance, must be matched by those of military personnel who will use and maintain the equipment. Overlaying these complexities is the need for an informed trade-off between quantity and quality. At some point, more weapons of lower performance can overcome fewer weapons of higher performance. Hence it is necessary to achieve a critical balance between high military capability and low life cycle cost. In these and other respects, defense acquisition is one of the most difficult management jobs.

Despite the difficulties, we believe it is possible to make major improvements in defense acquisition by emulating the model of the most successful industrial companies. Surely this will not be easy, because present procedures are deeply entrenched. Acquisition problems have been with us for several decades, and are becoming more intractable with the growing adversarial relationship between government and the defense industry, and the increasing tendency of Congress to legislate management solutions. In frustration, many have come to accept the ten-to-fifteen-year acquisition cycle as normal, or even inevitable.

We believe that it is possible to cut this cycle in half. This will require radical reform of acquisition organization and procedures. It will require concerted action by the Executive Branch and Congress, and the full support of defense industry. Specifically, we recommend that the Administration and Congress join forces to implement the following changes in the defense acquisition system.

A. Streamline Acquisition Organization and Procedures

As we noted in our *Interim Report*, federal law governing acquisition has become steadily more complex, the acquisition system more bureaucratic, and acquisition management more encumbered and unproductive. In the absence of a single, senior DoD official working full time to supervise the overall

acquisition system, policy responsibility has become fragmented. As a result, the Services have tended to assume policy responsibilities and to exercise them at times without necessary coordination or uniformity. Worse still, authority for executing acquisition programs—and accountability for their results—has become vastly diluted.

For these reasons, it is fundamental that we establish unambiguous authority for overall acquisition policy, clear accountability for acquisition execution, and plain lines of command for those with program management responsibilities. It is also imperative that we streamline acquisition procedures. This can be facilitated by five related actions:

1. We strongly recommend creation by statute of the new position of Under Secretary of Defense (Acquisition) and authorization of an additional Level II appointment in the Office of the Secretary of Defense (OSD).

This new Under Secretary should have full-time responsibility for managing the defense acquisition system. He should be a Level II Presidential appointee and should have a solid industrial background in the management of complex technical programs. The new Under Secretary should be the Defense Acquisition Executive. As such, he should supervise the performance of the entire acquisition system and set overall policy for R&D, procurement, logistics, and testing. He should have the responsibility to determine that new programs are thoroughly researched, that military requirements are verified, and that realistic cost estimates are made before the start of full-scale development. (In general, we believe, cost estimates should include the cost of operating and maintaining a system through its life.) He should assure that an appropriate type of procurement is employed, and that adequate operational testing is done before the start of high-rate production. He also should be responsible for determining the continuing adequacy of the defense industrial base.

Appendix G sets out an illustrative reorganization of acquisition responsibilities within OSD. Reporting to the new Under Secretary should be a Director of Research and Engineering*; an Assistant Secretary of Defense for Production and Logistics*; the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence; the Director of Operational Test and Evaluation; and such other offices and agencies as the Secretary of Defense may designate. The Under Secretary should be responsible to the Secretary of Defense for balancing the sometimes conflicting views and interests of these various offices. He should establish overall acquisition policy,

^{*}We use these new titles to represent a reorganization of acquisition responsibilities for officials reporting to the new Under Secretary.

as well as contract audit policy; should promulgate and issue appropriate directives and regulations; and, except for criminal investigations, should supervise oversight of defense contractors. Finally, he should prepare annual and other reports to Congress on major issues of acquisition policy and on acquisition programs.

2. The Army, Navy, and Air Force should each establish a comparable senior position filled by a top-level civilian Presidential appointee.

The Commission considered recommendations to consolidate all defense acquisition activities under the Defense Acquisition Executive, but concluded that such centralization would not serve the cause of reducing the bureaucracy, because it would tend to separate further the acquisition staff from the military user. We believe that it is important to maintain the Services' traditional role in managing new weapon programs.

Accordingly, we recommend that each of the Military Departments establish a Service Acquisition Executive selected by the Service Secretary in consultation with the Defense Acquisition Executive. The Service Acquisition Executive should be a top-level civilian Presidential appointee, of rank equivalent to a Service Under Secretary. He should be responsible for administering Service acquisition programs under policy guidance from the Defense Acquisition Executive; accordingly, he should have substantial experience in acquisition and should devote full time to his acquisition responsibilities. For major programs, the Defense Acquisition Executive and his Service counterpart should function respectively like chief executive officers of a corporation and a principal corporate subsidiary. They should resolve major issues and conflicts as they arise, and represent programs before most senior decision-makers (here, the Secretary of Defense, the President, and Congress, rather than a board of directors).

3. Each Service Acquisition Executive should appoint a number of Program Executive Officers.

Each Service Acquisition Executive should appoint a number of Program Executive Officers (PEO) who, like group general managers in industry, should be responsible for a reasonable and defined number of acquisition programs. Program managers for these programs should be responsible directly to their respective PEO and, on program matters, report *only* to him. In other words, every major program should be set up as a center of excellence and managed with modern techniques. The Defense Acquisition Executive should insure that no additional layers are inserted into this program chain of command.

4. Federal laws governing procurement should be recodified into a single, greatly simplified statute applicable government-wide.

A streamlined organization for defense acquisition is not enough. It must

be matched by streamlined procedures. Over the years, Congress and DoD have tried to dictate management improvements in the form of ever more detailed and extensive laws or regulations. As a result, the legal regime for defense acquisition is today impossibly cumbersome. For example, we have identified 394 different regulatory requirements in the Federal Acquisition Regulation (FAR) and the DoD FAR supplement that are pegged to some 62 different dollar thresholds, ranging from as little as \$15 to as much as \$100 million or more. In our judgment, there can be far fewer of these requirements, and those that are retained can apply at far fewer dollar thresholds.

The sheer weight of such requirements often makes well-conceived reform efforts unavailing. At operating levels within DoD, it is now virtually impossible to assimilate new legislative or regulatory refinements promptly or effectively. For these reasons, we recommend that Congress work with the Administration to recodify federal laws governing procurement in a single, consistent, and greatly simplified procurement statute.

5. DoD should substantially reduce the number of acquisition personnel.

The fundamental intent of the Commission's recommendations is to simplify the acquisition system by consolidating policy and oversight, reducing reporting chains, eliminating duplicative functions and excessive regulations, and establishing an environment in which program managers and their staffs can operate as centers of excellence. This should allow for a substantial reduction in the total number of personnel in the defense acquisition system, to levels that more nearly compare with commercial acquisition counterparts. Eliminating a layer of management by moving the functions and people of that layer to some other layer clearly will not suffice.

B. Use Technology to Reduce Cost

We recommend a high priority on building and testing prototype systems to demonstrate that new technology can substantially improve military capability, and to provide a basis for realistic cost estimates prior to a full-scale development decision. Operational testing should begin early in advanced development, using prototype hardware. The early phase of R&D should employ extensive informal competition and use streamlined procurement processes. To promote innovation, the Defense Advanced Research Projects Agency should engage in prototyping and other advanced development work on joint programs and in areas not adequately emphasized by the Services.

Fully exploiting our technological leadership is critical to the national security. The Soviet Union has twice as many personnel in its armed forces,

and produces military equipment in far greater quantities than the United States. We depend on our technological advantage to offset this quantitative disadvantage. But our technology can be exploited in two quite different ways: to reduce cost (so that we can better compete in quantity), or to increase performance (so that we can compensate for our smaller quantity).

We believe that DoD should place a much greater emphasis on using technology to reduce cost—both directly by reducing unit acquisition cost and indirectly by improving the reliability, operability, and maintainability of military equipment. Cost reduction has been a primary motivation in the introduction of new technology to commercial products. This emphasis has led to a tenfold reduction in the cost of computer products during the past decade. DoD should give a similar high priority to cost reductions by exerting greater discipline in the setting of performance requirements for new platforms, and by increasing the use of technology to extend the life of existing platforms. We could, for example, extend the effective life of most of our existing aircraft ten to twenty years by replacing their electromechanical subsystems with modern microelectronics. This would reduce the cost of operating and maintaining our aircraft, and at the same time improve their performance.

In some of our new weapon systems—fighter aircraft, for example—the need for maximum performance will be sufficiently compelling to justify the introduction of state-of-the-art technology. But this is not the case for all new systems. A weapon system should be predicated on state-of-the-art technology only when the benefits of the new technology offset the concomitant risks. This principle, easy to state, is hard to apply because of the difficulty in getting reliable information with which to make the trade-off of risks and benefits.

The only consistently reliable means of getting such information is by building prototypes that embody the new technology. Accordingly, we recommend that such prototyping, either at the system or critical subsystem level, be done as a matter of course for all major weapon systems. Operational tests should be combined with developmental tests of the prototype to uncover operational as well as technical deficiencies before a decision is made to proceed with full-scale development.

The early phase of R&D should follow procedures quite different from those of approved production programs, in order to complete the entire prototyping cycle in two or three years. Contracting should be streamlined to speed up the process of evaluating diverse new ideas. In the advanced technology phase of a program, competition should play a critical role, but the emphasis should be on an informal competition of ideas and technologies, rather than a formal competition of cost. At this stage, a formal competition based on detailed specifications not only is ineffective, but also introduces

substantial delay. In fact, recent emphasis on cost competition has stretched out the time required to let some R&D contracts from a few months to as much as a year.

In general, prototyping and testing in the early stage of R&D should be done by the Service that would be the primary user of the resulting system. In order to promote the use of prototyping, however, we recommend expanding the role of the Defense Advanced Research Projects Agency (DARPA).

At present, DARPA conducts research and exploratory development in high-risk, high-payoff technologies. DARPA should have the additional mission of stimulating a greater emphasis on prototyping in defense systems. It should do this by actually conducting prototype projects that embody technology that might be incorporated in joint programs, or in selected Service programs. On request, it also should assist the Services in their own prototyping programs. The common objective of all of these prototyping programs should be to determine to what extent a given new technology can improve military capability, and to provide a basis for making realistic cost estimates prior to a decision on full-scale development. In short, the prototype program should allow us to fly—and know how much it will cost—before we buy.

C. Balance Cost and Performance

A restructured Joint Requirements and Management Board (JRMB), cochaired by the Under Secretary of Defense (Acquisition) and the Vice Chairman of the Joint Chiefs of Staff, should play an active and important role in all joint programs and in all major Service programs. The JRMB should define weapon requirements for development, and provide thereby an early trade-off between cost and performance.

Full-scale development of a new weapon system is the single most critical step in the acquisition process. At this point, a number of fundamental decisions must be made—whether to undertake a new development or adapt an existing system, how far to push the new technology being incorporated in the system, what cost and schedule to authorize, and what the management structure will be. Misjudgment about any of these items can start a program off on a course that dooms it to failure. Currently, this critical decision is made by the Secretary of Defense, acting on advice from the Defense Systems Acquisition Review Council (DSARC), after the DSARC has made a detailed review of whether the proposed system will meet the stated user requirements and whether the cost and schedule estimates are credible. The recommended new emphasis on prototyping will contribute materially to improving the

judgments about cost and schedule estimates. But the DSARC process, while adequate to determine whether the proposed specifications will meet the stated user requirements, lacks a viable mechanism for *challenging* those requirements.

Fundamental to the ultimate success of a new program is an informed trade-off between user requirements, on the one hand, and schedule and cost, on the other. A delicate balance is required in formulating system specifications that allow for a real advance in military capability but avoid goldplating. Generally, users do not have sufficient technical knowledge and program experience, and acquisition teams do not have sufficient experience with or insight into operational problems, to strike this critical balance. It requires a blend of diverse backgrounds and perspectives that, because the pressures for goldplating can be so great, must be achieved at a very high level in DoD.

The DSARC is not the proper forum for effecting this balance. It has had very little success, for example, in stimulating the use of nondevelopmental items as an alternative to developing unique military products. Any time the military needs new trucks, tractors, radios, computers, and transport aircraft, for example, it should be the rule rather than the exception that DoD adapts products already developed by industry or by the armed forces of an allied nation. Much greater reliance on such items could realize major savings of money and time, but experience indicates that a decision to use non-developmental items must come from a high level in DoD, and must reflect operational judgment as well as technical sophistication.

We recommend, therefore, that the JRMB be restructured to make such trade-offs and then to decide whether to initiate full-scale development. The JRMB should have this authority for all joint programs and appropriate Service programs. It should evaluate major trade-offs proposed as a program progresses. Its determination, in effect, should substitute for the decision now made by the DSARC at what is called Milestone II. The JRMB should be cochaired by the Under Secretary of Defense (Acquisition) and the Vice Chairman of the Joint Chiefs of Staff.

Thus, the JRMB should be responsible for two decisions commonly made in industry, but not now an explicit part of DoD's decision-making process. One of these is the "affordability" decision, and the other is the "make-or-buy" decision.

The affordability decision requires that a subjective judgment be made on how much a new military capability is worth. If a new weapon system can be developed and produced at that target cost, it may be authorized for development; otherwise, ways should be found to extend the life of the existing system. Determining a target cost is difficult, to be sure, but CEOs in industry must make comparably difficult decisions on which their companies' survival depends.

The make-or-buy decision requires that the JRMB assess the need for a unique development program, and determine if it is possible instead to buy or adapt an existing commercial or military system. At present, DoD passes up many valid opportunities for adapting existing systems, opportunities that could improve military capability more quickly and at reduced cost.

D. Stabilize Programs

Program stability must be enhanced in two fundamental ways. First, DoD should fully institutionalize "baselining" for major weapon systems at the initiation of full-scale engineering development. Second, DoD and Congress should expand the use of multi-year procurement for high-priority systems.

In connection with the decision to begin full-scale development of a major new program, the program manager should prepare a brief baseline agreement describing functional specifications, cost, schedule, and other factors critical to the program's success. This baseline agreement should be submitted, through the responsible Program Executive Officer and the Service Acquisition Executive, for approval by the Defense Acquisition Executive.

Within the terms of this agreement, the program manager should have full authority to execute the program. He should be fully committed to abide by the program's specified baseline and, so long as he does so, the Defense and Service Acquisition Executives should support his program and permit him to manage it. This arrangement would provide much-needed program stability, which could be enhanced significantly if the program were approved for multi-year funding. We recommend that Congress approve multi-year funding for the development and low-rate production of all major programs approved for full-scale development by the JRMB. In this way, Congress could join in the baseline agreement with the program manager, enhance program stability, and promote lower unit prices.

A program manager should agree to a baseline for all phases of his program. For the Acquisition Executives, however, the agreement should extend only to the first two phases of a program, full-scale development and low-rate production. Before a program could enter its third phase, high-rate production, it must be subjected to developmental and operational testing. Operational tests are particularly critical, and should continue through full-scale development. The first units that come off a low-rate production line should be subjected to intensive operational testing. Low-rate production should continue during testing, but a program should not be approved for high-rate production until the results of these tests are evaluated.

The JRMB should then reconsider the program at its second major milestone—whether to authorize high-rate production, at what level of

funding, and on what schedule. At this stage, available test results should provide a realistic portrait of the weapon's probable performance under operational conditions, current intelligence data should yield a realistic threat estimate, and low-rate production experience should provide a realistic estimate of production costs. Thus, the JRMB would possess the necessary data to make an informed judgment on high-rate production.

If the JRMB so determines, a program manager could proceed in accordance with the balance of his baseline agreement. Congress would be asked to authorize multi-year funding for the production phase of the program.

E. Expand the Use of Commercial Products

Rather than relying on excessively rigid military specifications, DoD should make greater use of components, systems, and services available "off-the-shelf." It should develop new or custom-made items only when it has been established that those readily available are clearly inadequate to meet military requirements.

No matter how DoD improves its organization or procedures, the defense acquisition system is unlikely to manufacture products as cheaply as the commercial marketplace. DoD cannot duplicate the economies of scale possible in products serving a mass market, nor the power of the free market system to select and perpetuate the most innovative and efficient producers. Products developed uniquely for military use and to military specifications generally cost substantially more than their commercial counterparts. DoD program managers accordingly should make maximum use of commercial products and devices in their programs.

A case in point is the integrated circuit or microchip—an electronic device used pervasively in military equipment today. This year DoD will buy almost \$2 billion worth of microchips, most of them manufactured to military specifications. The unit cost of a military microchip typically is three to ten times that of its commercial counterpart. This is a result of the extensive testing and documentation DoD requires and of smaller production runs. (DoD buys less than ten percent of the microchips made in the U.S.) Moreover, the process of procuring microchips made to military specifications involves substantial delay. As a consequence, military microchips typically lag a generation (three to five years) behind commercial microchips.

When military specifications for microchips were first established, they assured a high standard of quality and reliability that was worth a premium price. The need for quality and reliability in military equipment is as great as

ever. In the last few years, however, industrial consumers of microchips have come to demand equivalent standards, and manufacturing processes and statistical methods of quality control have been greatly improved. It is now possible for DoD program managers to buy the bulk of their microchips from commercial lines with adequate quality and reliability, and thus to get the latest technology at a substantially lower cost. The Electronic Systems Division, responsible in the Air Force for the quality of electronic devices, recently began revising its procedures to achieve these objectives. We recommend that the Air Force accelerate its efforts and that the other Services follow its lead.

This same principle—the expanded use of commercial items—can apply to a great variety of products and services bought by DoD. These range from personal computers, computer software, and professional services, to a host of non-technical products such as bath towels and steak sauce.

We recommend that the Defense Acquisition Executive take steps to assure a major increase in the use of commercial products, as opposed to those made to military specifications. He should direct that program managers get a waiver before using a product made to military specifications, if there is an available commercial counterpart. When a "make-or-buy" decision must be made, the presumption should be to buy. This would invert present procedures, biasing the system in favor of commercial products and services, but permitting the use of items made to military specifications whenever a program manager believes it necessary to do so.

In addition, we recommend that the DoD Supplement to the Federal Acquisition Regulation be changed to encourage streamlining military specifications themselves. Applying full military specifications, far from being ideal, can be wasteful. A program manager should strive to invoke neither minimum nor maximum, but only relevant, requirements; and he should think in terms of optimization rather than deviations and waivers.

Thus, DoD should reduce its use of military specifications when they are not needed, and should take steps to improve the utility of military specifications when they are needed. This will require a serious effort to harmonize military specifications with the various commercially used specifications. For example, required military drawings for integrated circuits could incorporate a manufacturer's standard design specifications, test methods, and test programs. More generally, military specifications could be based on industry standards, such as those promulgated by the American National Standards Institute and the American Society for Testing and Materials. This would provide the technical underpinning for DoD to make substantially greater use of commercial devices and products, and thereby take advantage of the much lower costs that result from larger production runs.

One indirect benefit of buying commercial products is that the price is determined by market forces. This should relieve DoD of the administrative burden and cost of verifying a producer's overhead costs. For DoD to realize the full benefit of commercial buying, it should let competitive market forces provide a check on price and direct its own attention to validating quality.

A more detailed explanation of current issues concerning the expanded use of commercial products is contained in Appendix H.

F. Increase the Use of Competition

Federal law and DoD regulations should provide for substantially increased use of commercial-style competition, emphasizing quality and established performance as well as price.

Even when commercial products are not suitable for DoD's purposes, it can still use commercial buying practices to real advantage. Foremost among these practices is competition, which should be used aggressively in the buying of systems, products, and professional services. DoD clearly understands the need for such competition, which was articulated in the 1981 Carlucci Initiatives. Although DoD has made major efforts in this direction, much more can be done. It is particularly important to focus on achieving more effective competition, modeled after the competitive procurement techniques used in industry.

Commercial procurement competition simultaneously pursues several related objectives: attracting the best qualified suppliers, validating product performance and quality, and securing the best price. Price is, of course, as important a factor in commercial procurement as it is in DoD procurement. But it is only one of several equally important factors. Price should not be the sole determinant, especially for procurement of complex systems and services. Defense procurement tends to concentrate heavily on selecting the lowest price offeror, but all too often poorly serves or even ignores other important objectives.

In validating product quality, for example, DoD places too much emphasis on specific details of how the manufacturing process is to be done and too little on modern techniques of quality control. Industry makes extensive use of statistical sampling, and will accept or reject an order on that basis. Typically, an industrial company will keep lists of qualified suppliers that have maintained historically high standards of product quality and reliability. As long as these standards are maintained, industrial buyers do not require exhaustive inspection, and thereby save expense on both sides. Suppliers are highly motivated to get—and stay—on lists of qualified suppliers by

consistently exceeding quality control standards.

Moreover, because competition is not a one-way street for the buyer, defense procurement practices must be less cumbersome if DoD is to attract the best suppliers. Procurement officers must be allowed and encouraged to solicit bids through purchase descriptions that are stated as functional performance characteristics rather than through detailed design and "how-to" specifications; to limit bids to qualified suppliers; to give preference to suppliers that have demonstrated the quality and reliability of their products; and to recognize value (quality and price) based on products' commercial acceptance in the marketplace. These practices have been found to yield effective competition in the commercial field, and their use in defense acquisition could provide better military equipment at no increase in cost.

Although Congress has ardently advocated increasing competition, some provisions of recent legislation in fact work at cross purpose to that objective. For example, burdening suppliers of off-the-shelf catalog items to identify all component parts and their producers, or to submit detailed pricing certifications, inhibits qualified companies from competing for government contracts. Regulatory implementation—for example, DoD's efforts to require contractors to release rights in technical data on their products—has a similar effect.

A further problem stems from confusion regarding the intent of recent legislation—notably the Competition in Contracting Act's (CICA) requirement of "full and open competition," which some have interpreted to mean that the government must buy from the lowest offeror. CICA sought to make it clear that the award of a contract through competitive negotiation is a method of procurement no less acceptable than an award using formal advertising or sealed bids, and thus to recognize that competition entails more than just an assessment of lowest price. This goal has been obscured by the notion that full and open competition precludes the government from establishing qualification criteria, and forces the award of a contract based on price without regard, for example, to technical expertise or life cycle costs. This reinforces DoD's proclivity for writing detailed military specifications rather than functional product descriptions—in this context, in order to insure that all bidders offer identical items. At the same time, however, these narrow product specifications preclude the acquisition of most commercial products and, in effect, DoD's doing business with many qualified suppliers. Thus, the full potential of CICA is not being realized because of a focus on the quantity rather than the quality of competition.

In sum, we believe that DoD should greatly increase its use of truly effective competition, using as a model the competitive buying practices of

major corporations and their suppliers. We recommend the elimination of those legal and regulatory provisions that are at variance with full establishment of commercial competitive practices.

G. Clarify the Need for Technical Data Rights

DoD must recognize the delicate and necessary balance between the government's requirement for technical data and the benefit to the nation that comes from protecting the private sector's proprietary rights. That balance must be struck so as to foster technological innovation and private investment which is so important in developing products vital to our defense. DoD should adopt a technical data rights policy that reflects the following principles:

- If a product has been developed with private funds, the government should not demand, as a precondition for buying that product, unlimited data rights (except as necessary for installation, operation, and maintenance), even if the government provides the only market. Should the government plan later to seek additional (competitive) sources, the required data rights should be obtained through the least obtrusive means (e.g., directed licensing) rather than through the pursuit of unlimited rights.
- If a product is to be developed with mixed private and government funding, the government's rights to the data should be defined during contract negotiations. Significant private funding should entitle the contractor to retain ownership of the data, subject to a license to the government on a royalty-free or fair royalty basis.
- If a product is developed entirely with government funds, the government normally acquires all the rights in the resulting data. To foster innovation, however, the government should permit the rights to reside in the contractor, subject to a royalty-free license, if the data are not needed for dissemination, publication, or competition.

DoD is a major developer and user of high technology, most of which comes from government contractors. DoD can use its unique position to enhance U.S. industry's worldwide technological position; or unwittingly, through the pursuit of other shorter term goals, to reduce incentives for developing new technology; or, even worse, make commercially valuable technology available to

international competitors. It is in our national interest to encourage innovation in the U.S.; and we should heed the words of Abraham Lincoln: "The patent system added the fuel of interest to the fire of genius."

In order to operate and maintain the systems it acquires, DoD must have certain rights to use internally technical data pertaining to products developed by its contractors. DoD's suppliers fully understand this need. Recently, however, these suppliers have become alarmed by DoD's increasingly vigorous pursuit of unlimited rights in technical data to be used in fostering competition.

DoD's search for technical data needed to obtain competition is reflected in the Department's new rights-in-data regulations and in its contracting actions. This search has been intensified as a result of unfavorable publicity, as well as recent legislative initiatives regarding competitive procurement practices in both DoD and the civil agencies. The two principal statutes resulting from these initiatives are broad and are thus susceptible to varying interpretation, particularly where the statutes use different words to address the same point. But DoD's approach to these problems is shaped less by statute than by its own policies. Because no concrete, plainly stated government-wide rights-in-data policy has been adopted or insisted upon, the Department (and each of the Services within DoD) has been left to develop an individual approach.

An authoritative statement of government-wide policy on balancing the interest of the parties in technical data is required. This in turn must be followed by specific implementing guidance in the Federal Acquisition Regulation (FAR), supplemented as necessary in the DoD FAR Supplement (DFARS). This guidance must embody uniform concepts and definitions to overcome the confusion and disagreement that now prevail among the separate components of DoD and among the departments and agencies of the executive branch.

The technical data rights regulations as now proposed need much work if they are to be fully responsive to the statutes, clear and consistent enough to be followed, and equitable. In this regard, DoD's rights-in-technical-data contract clause should be simplified and made more precise and workable.

In addition to refinement of the statutes and basic reworking of the procurement regulations touching on technical data, improvements are needed in the areas of commercial product data, software (which should have special treatment), and technical data management. A detailed analysis of the technical data rights issue is contained in Appendix I.

H. Enhance the Quality of Acquisition Personnel

DoD must be able to attract and retain the caliber of people necessary for a quality acquisition program. Significant improvements should be made in the senior-level appointment system. The Secretary of Defense should have increased authority to establish flexible personnel management policies necessary to improve defense acquisition. An alternate personnel management system should be established to include senior acquisition personnel and contracting officers as well as scientists and engineers. Federal regulations should establish business-related education and experience criteria for civilian contracting personnel, which will provide a basis for the professionalization of their career paths. Federal law should permit expanded opportunities for the education and training of all civilian acquisition personnel.

Our study convinces us that lasting progress in the performance of the acquisition system demands dramatic improvements in our management of acquisition personnel at all levels within DoI).

A pivotal recommendation of the Commission is the establishment of the position of Under Secretary of Defense (Acquisition) and comparable Service positions, all to be filled by leaders with outstanding business management credentials. Recruiting the most capable executives for jobs of such importance to the nation is extremely difficult, however, in the face of current disincentives to entering public service. A recent report of the Presidential Appointee Project of the National Academy of Public Administration* analyzes this problem and details twenty-three separate recommendations for improving the recruitment of senior-level Executive Branch personnel. These include, for example, specific suggestions for simplifying financial disclosure reports and for allowing Presidential appointees to defer capital gains taxes incurred by divesting assets to comply with conflict-of-interest provisions. Such steps would improve the government's ability to attract and retain the highly qualified people needed for effective senior management of defense acquisition. We strongly support these proposals.

Comparable improvements also are required for effective middle management and better line personnel. The defense acquisition work force mingles civilian and military expertise in numerous disciplines for management and staffing of the world's largest procurement organization. Each year billions of dollars are spent more or less efficiently, based on the competence and experience of these personnel. Yet, compared to its industry counterparts, this workforce is undertrained, underpaid, and inexperienced. Whatever other changes may be made, it is vitally important to enhance the quality of the defense acquisition workforce—both by attracting qualified new personnel and

^{*}Leadership In Jeopardy: The Fraying of the Presidential Appointments System (Final Report of the Presidential Appointee Project), November 1985.

by improving the training and motivation of current personnel.*

The General Accounting Office (GAO) has been engaged in an important study to evaluate the capabilities of DoD program managers and contracting officers. The results of GAO's study[†] confirm the central importance of improving the quality of training for these two critical acquisition specialties.

The caliber of uniformed military personnel engaged in program management has improved significantly of late. Military officers manage over 90 percent of DoD's roughly 240 program offices. Their ranks range from 0–5 (lieutenant colonel/commander) to 0–8 (major general/rear admiral). Each of the Services has established a well-defined acquisition career program for its officers. These include the Army's Materiel Acquisition Management (MAM) program, the Navy's Materiel Professional (MP) programs, and detailed career planning regulations for Air Force technical personnel and program managers. We strongly support these measures. We also support recent legislation that has further defined career paths for all program managers. In 1984, Congress established a minimum four-year tenure for program management assignments. The 1986 Authorization Act prescribed requisite qualifications and training, including at least eight years of acquisition-related experience and appropriate instruction at the Defense Systems Management College (or equivalent training).

By contrast, much more remains to be done concerning civilian acquisition personnel generally. Civilians frequently cite the rigid pay grades and seniority-based promotion standards of the federal civil service as disincentives to continued employment. Higher pay and better opportunities in private industry lure the best college graduates and the brightest trainees away from government, particularly in such highly competitive fields as science, engineering, and contracting. One extremely important means to improve the acquisition workforce is to establish an alternative personnel management

^{*}To this end, the Assistant Secretary of Defense for Acquisition and Logistics recently proposed creating a single Defense Acquisition Corps, modeled after the State Department's Foreign Service. See *DoD Acquisition Improvement—The Challenges Ahead*, Perspectives of the Assistant Secretary of Defense for Acquisition and Logistics: White Paper No. 2—Revitalization of the DoD Acquisition and Logistics Workforce (Nov. 5, 1985). We studied this proposal carefully, and support many of its specific features. Because it would have the undersirable result of putting too much distance between acquisition programs and users, however, we do not support the proposal in its full form.

[†]See U.S. General Accounting Office, DoD Acquisition: Capabilities of Key DoD Personnel in System Acquisition (GAO/NSIAD-86-45).

system permitting greater flexibility with respect to the status, pay, and qualifications of civilian employees.

We reviewed the results of the Navy's so-called China Lake personnel project, in which recruitment and retention of key civilians were correlated with pay, incentives, and advancement based on performance. The China Lake experiment, which is outlined briefly in Appendix J, served to increase the retention of engineers and scientists, improve supervisor-employee relationships, and dramatically reduce management paperwork. Legislation is now pending to implement such a system for all federal scientists and engineers. The China Lake personnel system has produced significant benefits. It merits expansion. We therefore recommend that federal law permit the Secretary of Defense to include other critical acquisition personnel in such a system, and facilitate greater professionalism among civilian acquisition employees through government sponsorship of graduate instruction in acquisition management.

Among acquisition personnel, contract specialists have an especially critical role. More than 24,000 members of DoD's acquisition workforce specialize in the award and administration of contracts. Eighty-five percent of these contract specialists are civilians. Contract specialists must master the extensive, complex body of knowledge encompassing materials and operations management, contract law, cost analysis, negotiation techniques, and industrial marketing. Yet, the Office of Personnel Management designates the Contract Specialist personnel series (GS 1102) as an administrative and not a professional series under Civil Service Title VIII. This administrative designation prohibits the establishment of any business education requirement for contract specialists. As a result, only half of DoD's contract specialists have college degrees, which may or may not be business-related. We recommend establishing a minimum education and/or experience requirement for the Contract Specialist series. Such a requirement, similar to that now established for the Accounting personnel series, would mandate an entry-level criterion of twenty-four semester hours in business-related courses or equivalent experience.

Independently, DoD should enhance the professional status of contract specialists by increasing the number of outside hires, conducting on-campus recruitment, mandating the use of written tests for in-service placement and promotion, and establishing upward mobility programs for purchasing agents (GS 1105) and procurement clerks (GS 1106). DoD already has established acquisition training programs at five major facilities, and requires that all civilian contract specialists complete an average of six-hundred hours of mandatory training. According to a 1984 report of the DoD Inspector

General,* however, approximately two-thirds of all DoD contract specialists had not completed this training. In a recent report, the Executive Committee on Federal Procurement Reform[†] also recognized the inadequate training given contract specialists.

Insufficient management attention and financial resources are serious impediments to adequate training of contract specialists and, for that matter, all acquisition personnel. Such training—like that provided generally in DoD intern programs—should be centrally managed and funded. This is necessary to improve the utilization of teaching faculty, to enforce compliance with mandatory training requirements, and to coordinate overall acquisition training policies.

Training, promotion opportunities, acquisition regulations, education levels, and public perceptions were among the many issues addressed in the Commission-sponsored 1986 Survey of Department of Defense Acquisition Workforce. The Commission conducted its survey to determine the opinions and perceptions of those who must translate procedures and policy into contract decisions and to learn from the workers themselves how to attract, motivate, and retain a team of excellence. The study, which is summarized in Appendix K, focuses on contract specialists, with a matched sample of other acquisition team members responding for comparison.

This survey provides powerful support for many key Commission recommendations—clarifying regulations, streamlining organization, enhancing education and training, building a personnel system based on performance, and designing a compensation system sufficiently flexible to attract and retain the best available team players.

Key findings of the survey are:

- DoD's acquisition team members say they operate under inefficient, confusing regulations which often are inconsistent with sound business practices.
- In evaluating the relative competence of their fellow DoD team players, contract specialists, in every case, express greater confidence in the capabilites of defense industry personnel.

^{*}Office of the Inspector General, DoD, Report on the Audit of Department of Defense Procurement Training, No. 84-047 (Feb. 14, 1984).

[†]Executive Committee on Federal Procurement Reform Task Group No. 6, Guidance on Establishing Procurement Career Management Programs, Vol. I (May 1985).

- Members of headquarters staff are rated as least likely to provide needed support to other team members.
- Nearly one-third of the respondents feel that their supervisors do not really know whether or not jobs are performed well. Another 30 percent feel their formal evaluations do not accurately reflect performance.
- Civilians, who form the majority of the work force, name pay and benefits as their most valued work reward and overwhelmingly believe private sector compensation for similar work to be much greater.
- A majority of the respondents say that important resources such as time, office space and equipment, and clerical support are lacking to such a degree that professional effectiveness is significantly hampered.

In spite of such difficulties, these acquisition workers describe themselves as possessing a healthy self-respect, taking great pride in meeting the challenges of defense acquisition, and using their talents to serve their country. They want to provide quality defense products and services to the American military. They take seriously their moral responsibilities to the taxpayers, saying that the nature of defense contracting requires higher ethical standards than does normal business practice.

The wealth of data produced by the survey has immense potential for use by management to improve both efficiency and effectiveness of the acquisition process. The Commission commends the survey and its data base to the new Under Secretary for Acquisition, with a strong recommendation to make maximum use of them as management tools in striving for excellence.

I. Improve the Capability for Industrial Mobilization

We recommend that the President, through the National Security Council, establish a comprehensive and effective national industrial responsiveness policy to support the full spectrum of potential emergencies. The Secretary of Defense, with advice from the Joint Chiefs of Staff, should respond with a general statement of surge mobilization requirements for basic wartime defense industries, and logistic needs to support those industries and the essential economy. The DoD and Service Acquisition Executives should consider this mobilization guidance in formulating their acquisition policy, and program managers should incorporate industrial surge and mobilization considerations in program execution.

Historically, the United States has not worried much during peacetime about industrial mobilization. All the major wars fought in this century have allowed ample time for unhindered industrial buildup after the beginning of hostilities. At this time there is no effective national policy on industrial mobilization even though the missions of various agencies include responsibilities in these areas.

The DoD's own industrial facilities (e.g. arsenals, shipyards, and manufacturing equipment) are aging. United States industry is becoming increasingly dependent on foreign sources for not only strategic raw materials but subassemblies and manufactured components. American industry essentially does no mobilization planning. With a few exceptions, contractors are not given firm requirements upon which to base their planning; and in any case, the preparation of such plans is not funded by DoD.

Our concepts of stockpiling—historically done at the raw-materials level and driven by domestic politics—need modernization. Components and structures that can make a difference in the early period of a crisis should be stockpile candidates—not solely ores (that require a year or more to move through the economy).

In mobilizing industry to meet crisis and wartime needs, time, not money, is the major constraint. DoD can no longer assume that American industry will be able to respond automatically to production surge requirements. Additionally, dependence on foreign sources is becoming common for economic reasons. This can have serious consequences for maintenance of our technology base for the next generation of weapons and equipment.

Finally, DoD's procurement practices lead to significant disincentives for U.S. manufacturers to modernize their production processes, and thus impact both peacetime efficiency as well as crisis responsiveness.

Production surge capability is essential for improved readiness and sustainability of United States forces. Up to now, planning for surge and industrial mobilization has been an ad hoc affair, largely the result of individual initiatives rather than done on a regular basis or in response to a shift in the threat, U.S. national strategy, or world economic conditions. Industrial preparedness typically loses out in the competition for DoD funds. The problem has been studied, reviewed, and analyzed by many—with documented findings. There is a need now for selective and prudent investments to obtain real improvement in industrial base responsiveness.

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Chapter Four

Government-Industry Accountability

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I. Introduction

Our study of defense management compels us to conclude that nothing merits greater concern than the increasingly troubled relationship between the defense industry and government. We have, therefore, given highest priority to development of recommendations which, if implemented, will result in a more satisfactory working relationship between government and that industry. In our *Interim Report*, we made six broad recommendations directed toward improving that relationship. In this conclusion of our work, we offer more detailed observations that will treat the more troublesome aspects of government-industry accountability.

From its earliest days, the United States has relied on private industry for procurement of needed military equipment. The vigor of industry is indispensable to the successful defense of America and the security of our people.

The Department of Defense (DoD) annually conducts business with some 60,000 prime contractors and hundreds of thousands of other suppliers and subcontractors. In 1985, the Department placed contracts worth approximately \$164 billion, seventy percent of which went to a group of 100 contractors. Twenty-five contractors did business of \$1 billion or more, 147 did \$100 million or more, and almost 6,000 did \$1 million or more.

Acquisition of the tools of defense is an immense and complex enterprise. The Commission believes that DoD reliance on private industry has not been misplaced. The success of this enterprise, however, is now clouded by repeated allegations of fraudulent industry activity. With notable results, DoD has devoted increased attention and resources to detecting and preventing unlawful practices affecting defense contracts.² But a plethora of departmental auditors

¹See The Government's Role in Preventing Contractor Abuse: Hearings before the Subcommittee on Oversight and Investigations of the House Committee on Energy and Commerce, 99th Cong., 1st Sess. 402 (1985) (Statement of Joseph H. Sherick, Inspector General, DoD). As noted in our Report on Defense Acquisition, defense contracting is a business of nearly 15 million separate contract actions each year — an average of 56,000 such actions every working day. Contract goods and services sustain 5,500 defense installations and activities throughout the world.

²As of May 1985, 131 separate investigations were pending against 45 of the DoD's 100 largest contractors. These involved such issues as defective pricing, cost and labor mischarging, product substitution, subcontractor kickbacks, and false claims. From June 1983 to April 1985, 12 separate investigations were instituted against one major contractor alone.

and other overseers—and the burgeoning directives pertaining to procurement—also have tended to establish a dysfunctional and adversarial relationship between DoD and its contractors.

Widely publicized investigations and prosecutions of large defense contractors have fostered an impression of widespread lawlessness, fueling popular mistrust of the integrity of defense industry. A national public opinion survey, conducted for the Commission in January 1986, revealed that many Americans believe defense contractors customarily place profits above legal and ethical responsibilities. The following specific conclusions can be drawn from this survey:³

- Americans consider waste and fraud in defense spending a very serious national problem and one of major proportions. On average, the public believes almost *half* the defense budget is lost to waste and fraud.
- Americans believe that fraud (illegal activity) accounts for as much loss in defense dollars as waste (poor management).
- While anyone involved in defense procurement is thought likely to commit fraudulent and dishonest acts, defense contractors are widely perceived to be *especially* culpable for fraud in defense spending.
- In overwhelming numbers, Americans support imposition of the severest penalties for illegal actions by contractors—including more criminal indictments—as a promising means to reduce waste and fraud.
- Nine in ten Americans believe that the goal of reduced fraud and waste also could be served through development and enforcement of strict codes of conduct. Americans are almost evenly divided, however, on whether defense contractors can be expected to live up to codes they develop for themselves.

³The survey — U.S. National Survey: Public Attitudes on Defense Management (Jan. 1986) — was designed to provide the Commission information about American public opinion on a broad range of defense management issues. These included, among others, the seriousness and causes of waste and fraud in defense spending, as well as possible solutions for these problems. The survey was performed by Market Opinion Research, whose compilation and analysis of survey results are included as Appendix L to this Final Report.

• Four in five Americans think that defense contractors should feel an obligation, when doing business with DoD, to observe ethical standards higher than those observed in their normal business practices.

The depth of public mistrust of defense contracting is deeply disquieting for a number of reasons. First, the public is almost certainly mistaken about the extent of corruption in industry and waste in the Department. While fraud constitutes a serious problem, it is not as extensive or costly as many Americans believe. The nation's defense programs lose far more to inefficiency than to dishonesty.

Second, a lack of confidence in defense contractors may affect public support for important defense programs, and thus weaken our national security. Restoring public confidence in our acquisition system is essential if we are to ensure our defense.

Third, the current popular impression of runaway fraud and waste undermines crucial support for implementing precisely those management reforms that would increase efficiency. These include executive and congressional support for sensible new longer-term planning and budgeting procedures, recommended by the Commission, to eliminate major but hidden costs that instability imposes on our overall defense effort.

Fourth, the Commission is concerned that the current adversarial atmosphere will harm our industrial base. It is important that innovative companies find it desirable to contract with DoD. In current circumstances, important companies could decide to forego this opportunity.

Finally, it is significant that private businesses bear the brunt of public indignation over waste and fraud in our defense programs. With most Americans, we believe that those who contract in the defense of our country must perform at a higher level than business as usual. It stands repeating, from our *Interim Report*, that:

management and employees of companies that contract with the Defense Department assume unique and compelling obligations to the people of our Armed Forces, the American taxpayer, and our nation. They must apply (and be perceived as applying) the highest standards of business ethics and conduct.

By this measure, the national opinion survey represents a striking vote of no confidence in defense contractors generally.

Though government oversight is critically important to the acquisition process, no conceivable number of additional federal auditors, inspectors, investigators, and prosecutors can police it fully, much less make it work more

effectively. Nor have criminal sanctions historically proved to be a reliable tool for ensuring contractor compliance. We conclude there is a particular urgency in dealing affirmatively with contractor practices.

To this end, leaders in the defense industry recently have committed themselves to an initiative, consistent with recommendations of our *Interim Report* on Government-Industry Accountability, that promises collective and highly constructive action. This noteworthy effort is embodied in a document signed to date by at least 32 major defense contractors who pledge to adopt and to implement a set of principles of business ethics and conduct that acknowledge and address their corporate responsibilities under federal procurement laws and to the public.⁵ All signatories pledge to:

- have and adhere to written codes of conduct;
- train their employees in such codes;
- encourage employees to report violations of such codes, without fear of retribution;
- monitor compliance with laws incident to defense procurement;
- adopt procedures for voluntary disclosure of violations and for necessary corrective action;
- share with other firms their methods for and experience in implementing such principles, through annual participation in an industry-wide "Best Practices Forum"; and
- have outside or non-employee members of their boards of directors review compliance.

⁴Prosecutorial resources are limited. Evidence of criminal conduct is often insufficient for proof beyond reasonable doubt. Some cases lack prosecutive merit or jury appeal. In others, criminal sanctions are deemed less appropriate than administrative remedies. Still other cases involve little or no financial loss to the federal government. For these and other reasons, the Department of Justice declines to prosecute approximately six in ten possible fraud cases referred to it by federal agencies. See U.S. General Accounting Office, *Fraud in Government Programs: How Extensive Is It? How Can It Be Controlled?* GAO/AFMD-81-57, at 28-30 (May 7, 1981).

⁵See Defense Industry Initiatives on Business Ethics and Conduct (June 1986), included as Appendix M to this Final Report.

To lend additional force and credibility to their initiative, these contractors further propose that a respected organization, independent of both the government and defense industry, be commissioned to report annually the results of a survey assessing compliance with the above principles.

Such a commitment by its leaders would be an impressive undertaking for any industrial group, and it is particularly appropriate for defense contractors. We hope many other firms will make this pledge of self-governance and share in an initiative voluntarily begun and freely joined by defense contractors themselves. At least one major industry association is, we understand, considering making adherence to these principles a condition of membership.

We are convinced that significant improvements in corporate self-governance can redress shortcomings in the procurement system and create a more productive working relationship between government and industry. Corporate managers must take bold and constructive steps that will ensure the integrity of their own contract performance. Systems that ensure compliance with pertinent regulations and contract requirements must be put in place so that violations do not occur. When they do occur, contractors have responsibilities not only to take immediate corrective action but also to make disclosures to DoD.

We do not underestimate this task—it is enormous and demanding. Requirements of diligence imposed on contractor management are unquestionably stringent but are not more stringent than the public has a right to expect of those who hold positions of authority with businesses on which the national security depends. Contractor effort to improve performance should not be impeded by DoD action; instead DoD should foster effective contractor self-governance. It is in this context that we offer the recommendations that follow.

II. Industry Accountability: Contractor Self-Governance

In our view major improvements in contractor self-governance are essential.

Contracting with DoD is markedly different from other commercial contracting activity. Defense contractors must observe various unique and complex contractual, regulatory, and statutory requirements in bidding for, performing, and warranting fixed-price and cost-type contracts. A distinct body of contract principles has evolved in the defense contracting field.

Recent cases have involved violations of specific contractual and regulatory provisions. Many of these violations have resulted from management failure to establish internal controls to assure compliance with unique DoD requirements. Contractors historically relied on DoD auditors to identify instances where standards were not followed, and contractor failure to establish internal controls has developed in this regulated environment. Also in this environment, contractor defaults were largely resolved contractually rather than through criminal or civil actions.

Today, defense contractors should be aware that a concerned and responsible government will aggressively enforce compliance. Contractors will be required to do *much more* than they have done in the past to comply with contractual, regulatory, and statutory standards and to provide adequate supervision and instruction for employees. To do so will necessitate their putting in place broad and effective systems of internal control. The effectiveness of such systems depends upon a host of factors, including:

- good organizational structure, providing for proper delegation of authority and differentiation of responsibilities;
- clear policies and procedures, well adapted to business objectives and to specific tasks and functions;
- training of and communication with employees at all performance levels;
 and
- ongoing arrangements to monitor compliance with, and to evaluate the continuing efficacy of, internal control.

The requirements of defense contracting establish an especially high standard against which the adequacy of systems of contractor internal control must be measured. It is not prudent or possible to detail specific systems of control adequate to the needs of every defense contractor. This must be determined in light of each contractor's circumstances, including its size, operating habits, nature of business, range of products and services, and geographical dispersion of operations. Contractors should undertake careful review of the adequacy of their specific internal control systems, evaluate potential improvements, and determine what steps will provide greater assurance of compliance with contracting requirements.

Information developed by the Commission indicates that corporate controls could be greatly improved in at least three fundamental areas:

- development of codes of conduct addressing problems and procedures incident to defense procurement;
- promulgation and enforcement of more effective internal control systems to ensure compliance with those codes and the establishment of internal auditing capacity to monitor, among other things, compliance with codes and the efficacy of the control systems; and
- establishment of a more effective oversight of the entire process by an independent committee, such as an outside audit committee of the board of directors.

A. Contractor Standards of Conduct

Defense contractors must promulgate and enforce codes of conduct that address their unique problems.

Written standards of conduct are necessary to establish an environment in which a contractor's goals and its administrative and accounting controls become understood and functional. A well-drafted code is more than a mere direction to employees on what is and what is not permissible conduct, although that is certainly a major function of the code. It can provide a conceptual framework for both management and employees to understand how company policy interrelates with other applicable policies. It can articulate principles on the basis of which decisions should be made when government regulations fail to address issues specifically. In the broad sense, a code of conduct should be designed to

preserve or enhance a contractor's reputation for integrity. In our *Interim Report* we recommended:

Defense contractors must promulgate and vigilantly enforce codes of ethics that address the unique problems and procedures incident to defense procurement. They must also develop and implement internal controls to monitor these codes of ethics and sensitive aspects of contract compliance.

This recommendation was based, in part, on a study undertaken for the Commission by the Ethics Resource Center, Inc.⁶ In surveying the practices of a representative sampling of major defense contractors, the Center inquired about the:

- processes for establishing, and the form and content of, corporate policies and procedures for ensuring ethical conduct in dealings with the federal government and with subcontractors, suppliers, and others;
- means contractors use for communicating these policies and procedures;
- internal systems contractors use for monitoring and enforcing their policies and procedures; and
- internal contractor systems for adjudicating and punishing violations.

The Center's survey documents more widespread adoption of business codes of conduct among defense firms than among American companies generally, and suggests relatively greater appreciation by contractors of the risks of unethical conduct and the value of explicit standards of behavior. The survey also indicates, however, that contractors' codes often fail to address areas in government contracting where the incidence of misconduct is highest. For example, matters such as cost allocation, quality control, bidding and billing practices, defective pricing, materials substitution, contract negotiation, the monitoring of contract compliance, and the hiring of former Defense Department personnel were explicitly addressed in only a third of the codes of those defense contractors surveyed.

⁶Ethics Resource Center, Inc., a non-profit organization located in Washington, D.C., has done extensive study of issues involved in ethical corporate governance. The results of its work for the Commission are set forth in a *Final Report and Recommendations on Voluntary Corporate Policies, Practices, and Procedures Relating to Ethical Business Conduct* (Feb. 18, 1986), which is included as Appendix N to this *Final Report* of the Commission.

There are also inadequacies in the communication and enforcement of standards of conduct. For example, only half the contractors with written codes indicated that they distribute copies to all employees, and many reported that distribution was limited to only senior management. Only half the codes specified procedures for employees to follow in reporting possible misconduct, and barely one in five provided procedures for protecting employees who bring unethical practices to light. Finally, although trends indicate an increasing attention by upper management to business ethics issues, the survey documents the need for much better mechanisms at highest corporate levels to monitor and enforce compliance. Too often industry regards promulgation of a code of conduct as the end product and does not aggressively pursue its enforcement.

The Commission makes the following specific recommendations regarding codes of conduct for defense contractors:

- 1. Each contractor should review its internal policies and procedures to determine whether, if followed, they are sufficient to ensure performance that complies with the special requirements of government contracting. Contractors should adopt—or revise, if they have adopted—written standards of ethical business conduct to assure that they reasonably address, among other matters, the special requirements of defense contracting. Such standards of conduct should include:
- a. procedures for employees to report apparent misconduct directly to senior management or, where appropriate, to a member of the committee of outside directors—ideally the audit committee—that has responsibility for oversight of ethical business conduct; and
- b. procedures for protecting employees who report instances of apparent misconduct.
- 2. To ensure utmost propriety in their relations with government personnel, contractor standards of ethical business conduct should seek to foster compliance by employees of DoD with ethical requirements incident to federal service. To this end, contractor codes should address real or apparent conflicts of interest that might arise in conducting negotiations for future employment with employees of DoD and in hiring or assigning responsibilities to former DoD officials. Codes should include, for example, existing statutory reporting requirements that may be applicable to former DoD officials in a contractor's employ.

- 3. Each contractor must develop instructional systems to ensure that its internal policies and procedures are clearly articulated and understood by all corporate personnel. It should distribute copies of its standards of ethical business conduct to all employees at least annually and to new employees when hired. Review of standards and typical business situations that require ethical judgments should be a regular part of an employee's work experience and performance evaluations.
- 4. Contractors must establish systems to monitor compliance with corporate standards of conduct and to evaluate the continuing efficacy of their internal controls, including:
- a. organizational arrangements (and, as necessary, subsequent adjustments) and procedural structures that ensure that contractor personnel receive appropriate supervision; and
- b. development of appropriate internal controls to ensure compliance with their established policies and procedures.
- 5. Each major contractor should vest its independent audit committee—consisting entirely of nonemployee members of its board of directors—with responsibility to oversee corporate systems for monitoring and enforcing compliance with corporate standards of conduct. Where it is not feasible to establish such a committee, as where the contractor is not a corporation, a suitable alternative mechanism should be developed. To advise and assist it in the exercise of its oversight function, the committee should be entitled to retain independent legal counsel, outside auditors, or other expert advisers at corporate expense. Outside auditors, reporting directly to the audit committee or an alternative mechanism, should periodically evaluate and report whether contractor systems of internal controls provide reasonable assurance that the contractor is complying with federal procurement laws and regulations generally, and with corporate standards of conduct in particular.

The Commission believes that *self*-governance is the most promising mechanism to foster improved contract compliance. It follows that each contractor must individually initiate, develop, implement, and enforce those elements of corporate governance that are critical to contract compliance, including a proper code of conduct. The extent of each contractor's efforts in doing so will reflect the level of reputation for integrity it intends to set for itself.

B. Contractor Internal Auditing

Contractors must develop and implement internal controls to ensure compliance with corporate standards of conduct and the requirements of defense contracting.

Contractors must also establish an internal audit capacity to monitor whether the controls they have put in place are effective. Internal auditing will help ensure contractor compliance with internal procedures, standards of conduct, and contractual requirements. An internal audit organization, to serve these purposes, must be staffed with competent personnel able to operate with the requisite degree of independence and candor.

Use of internal auditing to review adherence to procurement requirements involves a significant broadening of the traditional application of this monitoring device. In developing new auditing processes to review these issues, contractors must consider which areas are most sensitive and in need of audit review, as well as which auditing devices will be most cost-effective and efficient.

Recommendations in our *Interim Report* encouraging increased self-governance were based, in part, on an internal audit study completed for the Commission by the certified public accounting firm of Peat, Marwick, Mitchell & Co.⁷ Over 210 business units—aggregating approximately \$90 billion in DoD fiscal year 1985 outlays for negotiated contracts—participated in the survey. The survey was designed to ascertain, among other things, the following:

- the extent to which internal auditing, in addition to its traditional applications, has been utilized to monitor defense contract compliance;
- the scope and coverage of such expanded auditing efforts;
- the effectiveness and usefulness of such internal auditing; and
- the extent to which, in view of recent developments, contractors intend to expand their internal audit capability or coverage.

⁷Peat, Marwick's Report on Survey of Defense Contractors' Internal Audit Processes (Feb. 1986) is included as Appendix O to this Final Report of the Commission. For survey purposes, "internal auditing" was considered to include any regular, cyclical, or special examination conducted by or on behalf of a company's management to assess the extent of compliance with the company's established policies, procedures, and systems of internal controls. This excluded normal supervisory efforts as well as financial audits performed by a company's independent accountants.

The survey indicates that most contractors have internal audit functions of some kind and that many companies recently have expanded internal auditing to cover more aspects of their government contract operations. But it also provides compelling evidence of a need for defense industry generally to upgrade the capabilities and broaden the mission of its internal auditors. Among other important results of the survey are the following:

Internal Auditing Capacity. Over one-quarter of the business units surveyed had no formal internal audit function; over two-thirds had no such function at their operating levels. Seven in ten indicated that they rely for audit coverage, in whole or in part, on the work of independent accountants and on government auditors. Given the added degree of effort needed to monitor government contract work, internal audit staffs are too small: 58 percent of the business units surveyed had fewer than 10 internal auditors, and almost two-thirds reported that their internal audit staffs do not complete a full cycle of auditable areas within a three-year period.

Scope of Internal Auditing. To serve the purpose of improving compliance with federal procurement laws, internal auditing must address a variety of practices specific to government contracts. Effective audits of such practices require more penetrating evaluations performed more frequently than do traditional financial audits. The survey shows that, despite recent efforts by contractors to broaden internal auditing efforts, sensitive issues of contract compliance are not reviewed adequately. These include key areas of labor cost distribution and controls, material management, estimating practices, cost allowability, accuracy of costing and reporting, and contract administration.

Competence of Internal Audit Staff. Internal audit staffs—where they exist—generally have a satisfactory professional background. They need substantially more formal training, however, in areas critical to compliance with federal procurement law, including Cost Accounting Standards, Federal Acquisition Regulation, Truth in Negotiations Act, and fraud detection. Approximately a quarter of the units surveyed provide training in none of these areas, and less than a quarter provide training in all of them.

Effectiveness of Internal Auditing. Internal auditors must operate with independence and objectivity. By this measure, the basic design of contractors' internal audit programs appears to be good. The survey nonetheless indicates

⁸The independence of internal auditors depends in part upon the organizational levels to which they communicate results of their work and to which they report administratively. These are indicative of internal auditors' ability to act independently of individuals responsible for the functions being audited. The objectivity of internal auditors may be judged from findings and recommendations made in their reports, the frankness of which can depend in important part

several areas of concern. Audit design may be inadequate because its scope is determined largely by management requests. Management may not in all cases be assuming proper responsibility or taking necessary action for follow-up on problems identified through internal auditing. Moreover, the wide availability to government personnel of internal audit reports and supporting work papers may not be conducive to auditors' candor and objectivity concerning the performance of the individuals responsible for the functions being audited.

We conclude that defense contractors have failed to take advantage of assistance that internal auditors may provide to management responsible for the design and function of systems of internal control of government contracting. Identifying important elements of such systems and remedying their weaknesses and deficiencies should be matters of the highest priority to all defense contractors. This demands ongoing study and evaluation of a sort that cannot be provided by either a company's outside auditors or by government auditors.⁹

Defense contractors must individually develop and implement better systems of internal controls to ensure compliance with contractual commitments and procurement standards. To assist in this effort and to monitor its success, we recommend contractors take the following steps:

1. Establish internal auditing of compliance with government contracting procedures, corporate standards of conduct, and other requirements. Such auditing should review actual compliance as well as the effectiveness of internal control systems.

2. Design systems of internal control to ensure that they cover, among

on the extent to which such reports are regularly accessible to others, particularly to government agencies. See American Institute of Certified Public Accountants, *Statement on Auditing Standards No. 9*, "The Effect of an Internal Audit Function on the Scope of the Independent Auditor's Examination."

⁹A company's outside auditors ordinarily review and evaluate internal control (primarily accounting control) only to determine the nature, extent, and timing of audit tests they must conduct annually in examining a contractor's financial statements. Even for this limited purpose, however, internal control of government contracting poses audit considerations broader than has yet been reflected in the accounting profession's formal guidance to its own members on traditional financial audits of government contractors. See American Institute of Certified Public Accountants, *Audits of Government Contractors* (2d ed. 1983). A Task Force of the American Institute of Certified Public Accountants is now at work on a revised industry audit guide that promises to be of greater assistance to outside auditors, internal auditors, and contractor management.

other things, compliance with the contractor's standards of ethical business conduct.

- 3. Establish internal audit staffs sufficient in numbers, professional background, and training to the volume, nature, and complexity of the company's government contracts business.
- 4. Establish sufficient direct reporting channels from internal auditors to the independent audit committee of the contractor's board of directors to assure the independence and objectivity of the audit function. Auditors should not report to any management official with direct responsibility for the systems, practices, or transactions that are the subject of an audit. Such structure assures frank reporting of and prompt action on internal audit results. To encourage and preserve the vitality of such an internal auditing and reporting process, DoD should develop appropriate guidelines heavily circumscribing the use of investigative subpoenas to compel disclosure of contractor internal auditing materials.

Major contractor improvements in recommended self-governance will, no doubt, require considerable effort over several years. Making these improvements will also require greater involvement by contractors' boards of directors and top management. The importance of the executive leadership role in achieving a proper control environment cannot be overemphasized. The necessary initiatives must be instituted by industry, not government. Defense contractors must take the steps described above or run the risk of action by government, in response to public expectations, that may be both excessive and unavailing. We share the concerns of the Ethics Resource Center that:

intensive federal regulation has not only increased costs and lead-time, but may have actually decreased the sense of individual and corporate responsibility for the quality of products and services delivered to the federal government. The standard of ethical business conduct seems to have become regulatory compliance, rather than responsible decision making. In areas where these are not coincidental or where regulations do not dictate conduct, the management conscience may fail. The sense of moral agency and ethical responsibility may be overridden by the "gamesmanship" attitude fostered by regulatory adversarialism.

Whatever actions the present Administration or the Congress may take to improve the effectiveness of federal regulations and oversight activities, serious attention must be paid to the inherent limitations and possible counter-productivity of an approach that is almost entirely a matter of external policing.¹⁰

The process by which a contractor recognizes and distinguishes responsibility for compliance from a mere facade of compliance is self-governance, and essential elements of that process are implementation and enforcement of proper codes of conduct and internal auditing systems.

Vigorous programs of the sort recommended hold far greater potential for ensuring the integrity of defense contracting than does increased government oversight. Successful self-policing by defense contractors has the considerable advantage of making such oversight more efficient and effective. For very practical reasons, therefore, government must exert its authority to oversee the defense acquisition process in ways calculated to hasten the progress of responsible companies toward improved self-governance. Our study of DoD practices—with respect to administering its own standards of ethical conduct, coordinating its own auditing and oversight efforts, and employing the range of possible sanctions against contractor misconduct—suggests various areas for improvement. These we address below.

¹⁰See Ethics Resource Center, Final Report and Recommendations, Appendix N.

III. Government Accountability: DoD Auditing and Oversight, Standards of Conduct, and Enforcement

To ensure accountability for its own operations and programs, the federal government has systems of administrative and accounting control that are analogous to those in the private sector. Their effectiveness is dependent on comparable factors such as organization, policies and procedures, and personnel. Our study persuades us that, much as with defense industry, DoD must exert substantially better internal control if it is to improve the effectiveness of its programs for contract auditing and oversight, employee standards of conduct, and civil and administrative enforcement.

A. Department of Defense Auditing and Oversight

Oversight of defense contractors must be better coordinated among DoD agencies and Congress. Guidelines must be developed to remove undesirable duplication of official effort and, when appropriate, to encourage sharing of contractor data by audit agencies. The new Under Secretary of Defense (Acquisition) should establish appropriate overall contract audit policy.

As stated in our *Interim Report*, there is an unquestioned need for broad and effective administrative oversight of defense acquisition. DoD monitors the performance of defense contractors and the integrity of contractor compliance by a number of processes, including investigations, inspections, and special-purpose reviews conducted by personnel of:

- the Defense Contract Administration Services (DCAS) of the Defense Logistics Agency (DLA);
- the Services' respective plant representative offices (PRO), audit agencies, investigative services, and inspectors general;
- the Defense Contract Audit Agency (DCAA);
- the Defense Criminal Investigative Service;

- the DoD Office of the Inspector General (OIG); and
- DoD's many procurement and contract management organizations.

Overseeing these efforts are the General Accounting Office (GAO), committees and subcommittees of Congress, and congressional staff.

The oversight apparatus within DoD has evolved over time. As various organizations and activities have been established, their jurisdictions, functions, and responsibilities have emerged, often without clear delineation. Today, a distinction may be drawn between criminal investigative and internal auditing responsibility—largely consolidated under the OIG—and procurement and contract administrative responsibility—traditionally exercised by the DCAS and cognizant Service PRO with the advice and assistance of DCAA auditors. Proper coordination and economy of oversight effort have proven particularly difficult to achieve in view of the multiplicity of DoD organizations involved.

At the outset of our work we were aware of concerns that control over DoD contract oversight efforts had degenerated. Most notably, the Senate Armed Services Committee has expressed the view that contract auditing requires sound overall coordination to promote efficiency and minimize duplication of effort. In December 1985, the OIG reported the results of a survey conducted by that office to determine whether effective coordination exists among various DoD organizations involved in the oversight of contractor operations in order to avoid unnecessary duplicative efforts. The survey examined 25 separate DoD reviews conducted in 1984 at two major contractor locations. Fourteen of these 25 oversight exercises—involving altogether some 13 different DoD organizations, the GAO, and a prime contractor—were found to involve elements of needless duplication. The Inspector General concluded, "Unless specific actions are taken to address the problems of coordination, unnecessary duplicative reviews (of this sort) are likely to continue."

Our own work confirms the Inspector General's conclusion. It also underscores the enormity of the problem.

In December 1985, we engaged the certified public accounting firm of Arthur Andersen & Co. to study DoD contract auditing and oversight, including

¹¹S. Rep. No. 41, 99th Cong., 1st Sess., 214 (1985).

¹²See Office of the Inspector General, DoD, Report on The Survey of Department of Defense Oversight of Contractors' Operations, No. APO 86-001, at 4 (Dec. 1985).

its overall design and any duplication of effort.¹³ Arthur Andersen & Co. reviewed pertinent laws and regulations, consulted with responsible DoD officials, and made nationwide field visits to ascertain the recent experience of some 15 major defense contractors that together do substantial work for each of the Services and for the DLA. Figure 1 reflects the principal findings and recommendations that emerged from this study. It is noteworthy that Arthur Andersen & Co. and the OIG found identical problems of a systemic nature among DoD contract oversight organizations:

- Their efforts lack advance planning and coordination.
- Their respective responsibilities are ill-defined.
- They are unwilling to rely on each other's work.
- They are reluctant to share information.

Arthur Andersen & Co. concluded that "duplication in the oversight process is *extensive*. Changes are clearly required to enhance efficiency and reduce costs to both contractors and the government." (Emphasis added.)

In our view, necessary changes are not likely to be accomplished, however, without first consolidating the authority to make and implement contract audit policy in a senior DoD official.

For these purposes, we recommend the following:

- 1. Among his other responsibilities, the new Under Secretary of Defense (Acquisition) should:
- a. oversee DoD-wide establishment of contract audit policy, particularly policy for audits conducted in support of procurement and contract administration;
- b. except for criminal investigations and DoD internal audits, supervise establishment of policy for all DoD oversight of defense contractors, including oversight performed by procurement and contract management organizations; and
 - c. recognize established GAO and professional auditing standards.

¹⁸The full report of Arthur Andersen & Co.'s work — Study of Government Audit and Other Oversight Activities Relating to Defense Contractors (Feb. 25, 1986) — is included as Appendix P to this Final Report.

Figure 1 ARTHUR ANDERSEN & CO. STUDY OF GOVERNMENT OVERSIGHT ACTIVITIES

PRINCIPAL PROBLEMS IDENTIFIED

PERVASIVE LACK OF COORDINATION AMONG DOD ORGANIZATIONS

- * Reluctant to rely on each other's work
- * Unwilling to share information
- * Deficient in advance planning
- * Inconsistent in interpreting
 - -contract and other requirements
 - -results of audits and reviews
- Respective responsibilities poorly defined
 - —e.g., increased DCAA involvement in non-financial areas
- * Not observing DoD regulations designed to ensure coordination of audit and oversight
- * Organizations possess no centralized coordinating authority

INDISCRIMINATE APPROACH BY DOD ORGANIZATIONS

- * Nature, timing, and extent of audit and oversight shows inadequate attention to
 - —contractors' past performance
 - -results of prior and ongoing reviews
 - -relative costs and benefits

ERODING AUTHORITY OF ADMINISTRATIVE CONTRACTING OFFICERS (ACOs)

- * DoD Directive 7640.2 (Dec. 29, 1982) limits ACO authority to resolve audit recommendations
- * ACO no longer functioning as government's "team leader"
- * Indecision, delays, unnecessary and costly disputes

RECOMMENDATIONS AND COMMENTS

REAFFIRM AUTHORITY OF ACO

- * To function as DoD's team leader in all dealings with contractor
- * Responsible for
 - —determining final overhead rates
 - —coordinating all DoD auditing and other oversight at contractor location
- * Supported by DCAA in advisory capacity —reevaluate DoD Directive 7640.2

REEVALUATE AND CLARIFY RESPECTIVE AUDIT AND OVERSIGHT RESPONSIBILITIES

- * For example, those of contract administrative organizations versus DCAA in the areas of
 - —operational auditing
 - —compensation and insurance reviews
- * More generally, to improve planning, organization, and control

IMPROVE DAY-TO-DAY WORKING RELATIONSHIPS

- * Organizations should rely on each other's work
- * Share data base of contractor information

ADHERE TO REGULATORY PRINCIPLES THAT PROMOTE EFFICIENCY

- * Audit and oversight plans should reflect appropriate consideration of
 - —contractors' past performance
 - —effectiveness of their internal control systems
 - -results of prior and ongoing reviews
 - -relative costs and benefits

- 2. To optimize the use of available oversight resources by eliminating undesirable duplication of official effort, contract audit policy should be designed to:
- a. delineate clearly respective responsibilities and jurisdictions of DoD oversight organizations;
- b. develop guidelines and mechanisms for DoD oversight organizations to share contractor data and otherwise to rely more extensively upon each other's work; and
- c. improve audit strategies for the conduct, scope, and frequency of contract auditing. These strategies should reflect due consideration for contractors' past performance, the proven effectiveness of their internal control systems, the results of prior and ongoing reviews conducted by DoD organizations and by contractors themselves, and relative costs and benefits.

B. Department of Defense Standards of Conduct

DoD should vigorously administer current ethics regulations for military and civilian personnel to assure that its employees comply with the same high standards expected of contractor personnel. This effort should include development of specific ethics guidance and specialized training programs concerning matters of particular concern to DoD acquisition personnel, including post-government relationships with defense contractors.

An extensive body of law and regulation exists to prevent conflicts between personal interest and public duty of current and former uniformed personnel and civilian employees of DoD. These laws and regulations:

- impose financial disclosure reporting obligations on broad categories of DoD personnel, including extremely detailed reporting by the most senior officials;
- describe standards of behavior for all DoD personnel, including the general requirement that they avoid any circumstance, whether or not expressly prohibited, that might create the "appearance" of impropriety;
- broadly penalize conduct by DoD or other federal employees that could involve personal enrichment in connection with ongoing official duty, including bribes and gratuities, the so-called private supplementation of federal salaries, representation of private parties in matters of federal concern, and official acts that affect personal or family finances or the financial interests of a prospective private employer; and

• restrict in various ways what former federal employees generally, and DoD personnel specifically, may do upon leaving government service. Figure 2 summarizes current post-employment disqualifications and certain related statutory provisions.

Standards thus established for the conduct of current and former DoD acquisition personnel seek to maintain an environment in which DoD's internal fiscal and managerial controls can work. Like codes of conduct adopted by private contractors, they help protect the integrity and promote the efficiency of the contracting process, minimize conflicts of interest, and assure the public that defense contracting is managed effectively and honestly.

The Commission conducted a careful review of the adequacy of DoD's ethics programs for military and civilian acquisition personnel. Several facts prompted this review. In defense acquisition, as throughout the government, there is a substantial incidence of federal employee involvement in reported cases of fraud and other unlawful conduct. Many cases have involved bribery or other criminal activity by relatively low-level purchasing officials at military procurement facilities, and others have involved gratuities for senior personnel. Such official misconduct in the acquisition system is doubly destructive: it subverts operations of DoD and defense industry, and corrodes public confidence in government and business generally. It is critical in defense management to establish and maintain an environment where official standards of conduct are well understood, broadly observed, and vigorously enforced. We believe that significant improvements are required.

Our study indicates, for example, that—much as is the case with the defense industry—DoD's published conduct regulations do not provide timely or effective guidance to personnel engaged in the acquisition process. DoD Directive 5500.7, Standards of Conduct, has not been updated since 1977 or revised to reflect such subsequent legal developments as passage of the Ethics in Government Act of 1978. Even in its current version, Directive 5500.7 provides only general ethical guidance to personnel and components throughout DoD. No comparable directive provides more specific guidance to all of DoD's acquisition personnel.

Nor does any system exist to ensure that all DoD acquisition personnel receive, on a periodic basis, a prescribed minimum of ethics training specifically

¹⁴Our public meeting of May 5, 1986, was devoted exclusively to testimony on this subject. As part of our review of relevant laws and administrative practices, we received an extensive briefing and detailed conclusions and recommendations from the Office of the Inspector General.

related to the acquisition function. Just as among defense contractors, considerable disparity exists in the efforts that DoD acquisition organizations expend in this area. An effective program of instruction and compliance concerning ethics matters, including post-employment disqualifications and reporting, should be established and implemented. To do so will require sustained leadership throughout DoD and a commitment of greater personnel and administrative resources.¹⁵

In our *Interim Report*, we thus expressed the general view that the important challenge for defense management lies in improving compliance with existing ethical standards, not in defining new or more stringent standards. We nonetheless also have reviewed the substance of current laws and regulations from two distinct points of view: first, for their effect on recruitment of capable senior-level personnel to run the acquisition system; and second, for their adequacy to protect the integrity of that system from perceived dangers posed by the so-called revolving door phenomenon. The "revolving door" refers, in this context, to the movement of a DoD acquisition employee into a position with a private company for whose government contracts he has or had some official responsibility.

Both our *Interim Report* and our *Report on Defense Acquisition* emphasize the importance of improving the government's ability to attract and retain the highly qualified people needed for effective senior management of defense acquisition. We agree with the Presidential Appointee Project of the National Academy of Public Administration that ethics regulations:

have assumed a very important role in the appointment process. Their impact is mixed. In some ways, these laws have brought genuine benefits to the American people by eliminating blatant potential conflicts of interest and enhancing opportunities for the identification and prosecution of those who would violate the public trust. On the other hand, these changes have been costly: *costly to the government's ability to recruit presidential appointees*, costly to the relations between the news media and public

¹⁵At the Commission's May 5, 1986, meeting, DoD's General Counsel reviewed plans, pursuant to the President's April 1986 directive, for improved administration of current ethics regulations for DoD personnel, as recommended in our *Interim Report*. We support this effort. It should, we believe, focus in important part on the need for specialized guidance and training of DoD acquisition personnel. It should also seek to establish better mutual understanding between, and promote complementary efforts to address the respective ethical concerns of, government and industry.

officials, and costly in financial sacrifices to a number of honest and dedicated public officials.¹⁶

Our examination of the substance of current ethics regulations underscores an important truth: ethical standards are only as easy to observe, administer, and enforce as they are certain in scope, simple in concept, and clear in application. Undue complexity and vagueness—for example, that we believe characterizes current financial disclosure reporting requirements—serve no legitimate public purpose. Either can transform ethical standards from matters of principle to mere traps for the unwary, and put at risk the reputation of anyone who enters or leaves a responsible position in government.

Figure 2 outlines established criminal statutory restrictions on what federal employees and retired military officers may or may not do once they have left government. Actions of officials still in federal service have been restricted to exclude matters in which they, or prospective private employers with whom they are negotiating, have a financial interest. These statutes should be enforced more vigorously, and their import made clear to DoD employees far more effectively, than is now done.

Figure 2 also outlines the one current criminal statute, Public Law 99-145, concerning for whom defense acquisition officials may work after they have left DoD. This new provision, and comparable measures now pending in Congress, significantly depart from prior law in attempting to define as criminal conduct certain post-government employment per se. They do so on a highly selective basis—applying only to personnel involved in the acquisition process, and only to such personnel as are employed by DoD. More significantly, they pose serious problems of definition, never satisfactorily resolved in statutory form, concerning precisely which DoD personnel should be covered and precisely what sort of exposure to a contractor should lead to the employment prohibition. In practice, these definitions are very difficult to work out sensibly and fairly. This is reflected in the confusion concerning the applicability of Congress' one current venture into restricting post-government employment per se, Public Law 99-145. The highly uncertain impact of these new and proposed statutes, and the understandable desire of law-abiding individuals to avoid even the remote chance of a criminal violation, may well prompt talented people not to work for DoD in the first place or to leave once such restrictions appear imminent.

¹⁶Leadership in Jeopardy: The Fraying of the Presidential Appointments System (Final Report of the Presidential Appointee Project), November 1985, at 13 (emphasis added).

Figure 2 THE REVOLVING DOOR: CURRENT POST-EMPLOYMENT DISQUALIFICATIONS AND CERTAIN RELATED PROVISIONS

STATUTE 18 U.S.C. 207(a)	PROVISIONS Permanently bans representation to the government of any person on any "particular matter involving a specific party" in which a former Executive Branch employee "participated personally and substantially" while in government.*
18 U.S.C. 207(b)(i)	Bans for two years representation to the government of any person on any particular matter over which a former Executive Branch employee exercised "official responsibility" while in government.*
18 U.S.C. 207(b)(ii)	Bans for two years representation by a former "senior employee" of Executive Branch, through his "personal presence at any formal or informal appearance" before the government, of any person on any particular matter in which such former employee personally and substantially participated while in government.*
18 U.S.C. 207(c)	Bans for one year representation by a former "senior employee" of Executive Branch of any person to his former agency on any particular matter before or of substantial interest to that agency.*
18 U.S.C. 208	Prohibits an employee of Executive Branch from participating "personally and substantially" as such in any "particular matter" in which any person with whom he is "negotiating" or has any "arrangement" concerning post-government employment has a financial interest.*
18 U.S.C. 281	Prohibits retired military officers from representing any person in the sale of anything to the government through their former department.*
18 U.S.C. 283	Bans for two years following retirement participation by military officers in prosecution of claims against the United States involving their former department.*
37 U.S.C. 801	Prohibits payment of compensation to military officers engaged, within three years after retirement, "in selling, or contracting or negotiating to sell, supplies or war materials" to DoD or other agencies.
10 U.S.C. 2397	Requires reporting by certain military personnel and civilian officials of DoD of employment by defense contractors occurring within two years prior or subsequent to government service.†
10 U.S.C. 2397a	Requires reporting by military personnel and civilian officials having procurement responsibilities in DoD of "contacts" regarding postgovernment employment opportunities with certain defense contractors.†
P.L. 99-145, 99 Stat. 693	Prohibits a "Presidential appointee" who acts as a "primary government representative" in the "negotiation" or "settlement" of a contract with a defense contractor to accept, within two years thereafter, employment from that contractor.*

^{*}Violation punishable by fine and/or imprisonment.

[†]Violation subject to administrative penalty in amount up to \$10,000.

While mindful of the critical need to recruit and retain capable acquisition personnel, we do not minimize the importance of upholding the real and apparent integrity of the acquisition process. Our recommendations seek to achieve vigorous enforcement of ethical requirements and steadfast attention to ethics programs and training by government and industry alike. We believe that our recommendations, if fully implemented, would go much further toward improving the ethical environment of defense acquisition than would any legislative proposal. Had such administrative efforts been undertaken by DoD heretofore, the adequacy of the existing legislative scheme would be far more evident.

Public Law 99-145, and the additional revolving-door restrictions now proposed, in part reflect a legitimate dissatisfaction with individual enforcement of existing DoD standards of conduct. They also reflect a widespread concern that opportunities for post-government employment with defense contractors may seem to tempt acquisition officials to favor improperly those contractors over whose affairs they exercise authority. We do not dismiss this concern. Acquisition officials must scrupulously avoid any action that might create even the appearance of giving preferential treatment to any contractor or losing complete independence or impartiality of action. Existing standards of conduct demand nothing less. The real challenge, we believe, is to establish and maintain an ethical environment for defense acquisition that applies this principle across the board. This will not be accomplished through piecemeal legislation that subjects special classes of government employees to imprecise standards, unpredictable restrictions on future conduct, and harsh criminal penalties.

Instead, the revolving-door concern must be addressed where it originates, in the relations of DoD and the defense industry. Complementary efforts must be undertaken by DoD and defense industry to define appropriate and highly specific limitations in the area of post-government employment relationships. These limitations should not be legislated but instead should be articulated through complementary prohibitions in both government and industry standards of conduct, for the clear guidance of putative employers (i.e., contractors) and employees (i.e., former DoD officials) alike. This exercise would reinforce a healthy, ongoing dialogue between industry and government. Appropriate voluntary disqualifications by private employers and prospective employees could and should become an accepted aspect of the official and professional responsibilities assumed by those who work in and contract with DoD. Were statutory requirements to report employment with defense contractors properly observed and administered, DoD, industry, and the public could monitor the success of the approach we recommend. In this way, DoD and defense industry could assume leadership roles for the public and private

sectors, and set a standard that others—notably Congress and other Executive departments—should emulate.

For these purposes, we recommend the following:

- 1. DoD standards of conduct directives should be developed and periodically reviewed and updated, to provide clear, complete, and timely guidance:
- a. to all components and employees, on ethical issues and standards of general concern and applicability within DoD; and
- b. to all acquisition organizations and personnel, on ethical issues and standards of particular concern to DoD acquisition process.
- 2. The acquisition standards of conduct directive should address, among other matters, specific conflict-of-interest and other concerns that arise in the course of official dealings, employment negotiations, and post-government employment relationships with defense contractors. With respect to the last category, the Secretary of Defense should develop norms concerning the specific personnel classification, type of official responsibility, level of individual discretion or authority, and nature of personal contact that, taken together, should disqualify a former acquisition official from employment with a given contractor for a specified period after government service. These recommended norms, observance of which should be monitored through existing statutory reporting requirements, would establish minimum standards to guide both acquisition officials and defense industry.*

*Comment by Herbert Stein:

Although I do not disagree with what the Commission says about the "revolving door," I wish to add the following comment:

Department of Defense officials whose position in the acquisition process enables them to affect substantially the interests of particular contracting companies should not be employed by those companies for a period, such as two years, after leaving the Department, except in special cases where the national security clearly dictates otherwise. This principle is not now adequately recognized in the standards of proper conduct in the Department or among defense contractors. For the Department, the Secretary should clearly state the principle, define the categories of officials to which it applies and identify the individual officers and their contractor-relationships covered. Undoubtedly the line between covered and uncovered relationships will be difficult to draw, but

3. DoD should vigorously administer and enforce ethics requirements for all employees, and commit necessary personnel and administrative resources to ensure that relevant standards of conduct are effectively communicated, well understood, and carefully observed. This is especially important for all acquisition personnel, to whom copies of relevant standards should be distributed at least annually. Review of such standards should be an important part of all regular orientation programs for new acquisition employees, internal training and development programs, and performance evaluations.

C. Civil and Administrative Enforcement

Suspension and debarment should be applied only to protect the public interest where a contractor is found to lack "present responsibility" to contract with the federal government. The Federal Acquisition Regulation should be amended to provide more precise criteria for applying these sanctions and, in particular, determining present responsibility.

Specific measures should be taken to make civil enforcement of laws governing defense acquisition still more effective.

Failure to establish internal disciplines necessary to responsible self-governance subjects a defense contractor to a variety of governmental enforcement remedies. Thus, the government may seek relief against a contractor for breach of contract and, even in the absence of technical breaches, criminal and civil sanctions for contractor and contractor-employee misconduct. Our *Interim Report* recommended "continued, aggressive enforcement of federal civil and criminal law governing defense acquisition." This was predicated on the view that such enforcement "punishes and deters misconduct by the few, vindicates the vast majority who deal with the government lawfully,

Comment cont'd.

it will be better to draw the line imperfectly than either to ignore the revolving door problem or to leave officials and contractors in a state of uncertainty. Contractors' codes of conduct should include a bar to employment that violates this principle.

I believe that if the standards of permissible employment are clearly defined both officials and contractors will voluntarily abide by them. In line with the Commission's desire to foster an atmosphere of trust among the Department, contractors and the public, I would much prefer to see the problem handled in this voluntary way. But if experience shows that reliance on voluntary observance of the principle is inadequate, legislative remedies should be considered.

and recoups losses to the Treasury." In this section we discuss noncriminal sanctions by which the government can protect its interests.

Unlike criminal or other punitive measures, suspension and debarment are sanctions intended to ensure that DoD may "solicit offers from, award contracts to, and consent to subcontracts with *responsible contractors only*."¹⁷ The Federal Acquisition Regulation sets forth specific circumstances in which suspension (disqualification pending the completion of investigation or legal proceedings) or debarment (disqualification for a specific period of time) may be applied.¹⁸ Imposed in appropriate circumstances, these sanctions seek to serve "a public interest for the Government's protection" rather than to provide for increased punishment for wrongdoing.¹⁹

While suspension and debarment are indispensable tools in assuring that DoD not contract with those lacking present responsibility, they nevertheless are severe remedies that should be applied only in accordance with their stated purpose and legal standards. Members of the defense contracting industry claim that neither the purpose nor the standards have been observed, and that the threat of imposition of the sanctions has become the government's primary negotiating weapon in criminal prosecutions to force contractors to enter guilty pleas to avoid suspension or debarment.²⁰ There is concern that DoD has improperly concluded that the fact of a criminal indictment of a contractor or a management employee is an "automatic" ground for suspension, without sufficient regard for corrective actions already taken.²¹ Such claimed abuses are said not only to constitute arbitrary denials of protected personal and property

¹⁷Federal Acquisition Regulation (hereinafter FAR) § 9.402(a) (emphasis added).

¹⁸FAR §§ 9.406-1, 9.407-1(b). Following imposition of the sanction, a contractor and its subcontractors may continue to perform work on ongoing contracts, but the contractor is rendered ineligible for future awards during the period of suspension or debarment.

¹⁹FAR § 9.402(b).

²⁰There is little doubt that suspension or debarment, whether properly or improperly imposed, can be devastating to a contractor wholly or heavily engaged in the defense industry. While such contractors may suffer but survive heavy civil and criminal penalties, they may not survive a lengthy suspension or debarment. Not intended and not imposed as punitive measures, suspension or debarment may nevertheless be the most severe sanction confronting a wayward contractor.

²¹It is generally conceded by suspending/debarring authorities that suspension occurs upon issuance of an indictment, and that the contractor is thereafter afforded opportunity to show cause why the suspension should not be terminated. Any one of the three Military Services and the Defense Logistics Agency (DLA) may suspend or debar a contractor, and the other Services and the DLA will honor the sanction.

rights, but also to eliminate as the criteria for suspension, the measure of a contractor's "present" responsibility.²²

Whatever the merit of defense industry claims, it is clear that nowhere is the attitude of mutual mistrust between DoD and the defense industry more in evidence than in DoD's exercise of its powers of suspension and debarment.

In recent years there has been a marked increase in the number of actions taken to suspend or debar individual or corporate contractors from entering into new contracts with DoD. In 1975 there were 57 suspensions and debarments by DoD; in 1980 there were 78. In 1985 there were 652 suspensions and debarments, a greater than eightfold increase in just five years. This increase is due in part to a more determined and aggressive enforcement stance by DoD and a greater willingness to apply the sanctions.

Today's problems can be addressed by developing a sounder basis for both government and industry to carry out their respective functions. By working together with more cooperation and dedication to performance and less mistrust and suspicion, a renewed commitment to excellence can be made.

1. Circumstances in Which a Contractor May Be Suspended or Debarred

a. Current Rules for Suspension

Suspension of a contractor is in the nature of a preliminary remedy available to the government before full development of the facts. It should be imposed "on the basis of adequate evidence . . . when it has been determined that immediate action is necessary to protect the government's interest."²³ Adequate evidence is defined as "information sufficient to support the reasonable belief that a particular act or omission has occurred."²⁴

²²While contractor conduct that justifies a criminal indictment may be *prima facie* evidence of irresponsibility, such conduct often precedes an indictment in the contracting industry by two or more years. The bare fact of an indictment may thus be an improper measure of the contractor's "present responsibility" should suspension occur at the time of indictment. During the period following the misconduct alleged in the indictment, the contractor may have replaced employees guilty of wrongdoing, corrected faulty systems, made restitution, better communicated and implemented a corporate code of conduct, improved internal auditing practices, and otherwise taken actions demonstrating its current responsibility. An "automatic" suspension does not afford opportunity for such proof, and may defeat incentives for implementing more responsible self-governance.

²³FAR § 9.407-1(b).

²⁴FAR § 9.403.

The Federal Acquisition Regulation sets forth particular conditions in which suspension may be applied. A contractor may be suspended, for example, upon "adequate evidence" of the commission of a fraud or criminal offense in the procurement process, the violation of federal or state antitrust statutes, the commission of various other criminal offenses, and the commission of any other offense showing "lack of business integrity or business honesty" that "directly affects" the contractor's present responsibility. Indictment for any of these delineated actions constitutes adequate evidence for suspension. A contractor may also be suspended for any other cause that shows an absence of present responsibility.²⁵

b. Current Rules for Debarment

Regulations governing debarment provide that the responsible official "may debar" a contractor if it has been convicted for any offense listed above that may provide a basis for suspension. The regulations further state that the existence of one of the described causes does not require debarment. "[T]he seriousness of the contractor's acts or omissions and any mitigating factors should be considered in making any debarment decision."²⁶

²⁵FAR § 9.407-2, Causes for Suspension, provides:

⁽a) The suspending official may suspend a contractor suspected, upon adequate evidence, of—

⁽¹⁾ Commission of a fraud or a criminal offense in connection with (i) obtaining, (ii) attempting to obtain, or (iii) performing a public contract or subcontract;

⁽²⁾ Violation of Federal or State antitrust statutes relating to the submission of offers;

⁽³⁾ Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; or

⁽⁴⁾ Commission of any other offense indicating a Lick of business integrity or business honesty that seriously and directly affects the present responsibility of Government contractor or subcontractor.

⁽b) Indictment for any of the causes in paragraph (a) above constitutes adequate evidence for suspension.

⁽c) The suspending official may upon adequate evidence also suspend a contractor for any other cause of so serious or compelling a nature that it affects the present responsibility of a Government contractor or subcontractor.

²⁶FAR § 9.406-1(a).

2. Improvements in Regulations Governing Conditions Under Which a Contractor May Be Suspended or Debarred

Existing regulations can be improved in crucial respects by providing criteria for government officials making present responsibility determinations.

a. Determination of Present Responsibility

The requirement that all suspension/debarment decisions be based on a present responsibility determination should be more clearly set forth by amendment of particular provisions of the Federal Acquisition Regulation. Such amended provisions should include an explicit requirement that suspension and debarment must be related to a lack of present responsibility before either sanction is applied. For example, adequate evidence of the occurrence of a criminal offense by a contractor or its employee should not necessarily result in suspension. Nor should conviction for a prior offense be the sole predicate for debarment. Basis for imposition of suspension or debarment is lacking unless the suspending or debarring authority determines that conditions causing the criminal misconduct are *present* problems within the company. Provisions referred to above setting forth particular conditions in which a contractor may be suspended or debarred should be amended to clarify that such a condition is a sufficient basis *only* if it can be linked to a lack of contractor present responsibility.²⁷

b. Criteria for Present Responsibility

Administration of suspension/debarment would also be improved if regulations were amended to include specific criteria to be considered in determining whether a contractor is "presently responsible." Such criteria are not now set forth in the regulations. The following are recommended for consideration as proper criteria:

²⁷The cited regulatory provision (FAR 9.407-2(b)), stating that indictment for any of the listed causes "constitutes adequate evidence of suspension," is particularly troublesome. Given the time-consuming nature of litigation, indictments are invariably based on prior misconduct. The events causing an indictment generally precede an indictment by one or more years. Thus, where an agency suspends a contractor on the sole basis of an indictment, it applies this sanction without regard to the requirement that suspension should be predicated on lack of *present* responsibility. Such administrative action involves an abdication of the suspending authority's obligation under current law. This provision of the Federal Acquisition Regulation — stating that indictment constitutes adequate evidence — should be reexamined.

- The nature of integrity programs, if any, currently being implemented by the contractor. The debarring/suspending authority should be particularly interested in the extent of the contractor's affirmative efforts to implement ethical standards of conduct that address contract performance and systems of internal controls to monitor compliance with those standards.
- The contractor's reputation for probity on recent procurements with DoD and other federal agencies.
- The reputation of the contractor's management and directors in recent circumstances as persons of good character and integrity.
- The extent to which misconduct is symptomatic of basic systemic problems within the corporation as opposed to isolated, aberrational corporate behavior.
- The nature and extent of voluntary disclosure and cooperation offered by the contractor in identifying and investigating the misconduct.
- The sufficiency of remedial measures taken to eliminate the causes of the misconduct.

c. Determination of Public Interest

Before suspending or debarring a contractor the responsible official must determine, in addition to present responsibility, whether such action serves the "public interest." To an extent, consideration of public interest is subsumed in the determination whether the contractor is currently responsible. Some factors affecting public interest are, however, distinct from those affecting present responsibility and should be considered separately. Except where a contractor's misconduct endangers life or property, in which case the government's interest is clearly indicated, the Federal Acquisition Regulation should be amended to mandate review of the effect a proposed suspension/debarment might have on the ability of DoD and other government agencies to obtain needed goods or services.

In making the public interest determination, the suspending or debarring agency should consult with agencies both within and outside DoD. The decision that suspension or debarment will serve the public interest requires a careful

balancing of public needs against any potential harm that might occur from continued dealings with the contractor.

d. Cursory Suspension of Contractors

The current practice of "automatic" suspension of contractors following indictment on contract fraud should be reconsidered by DoD with a view that it be more discriminating and take into account all circumstances of a particular situation. In our *Interim Report* we stated, "Suspension and Debarment should not be imposed solely as a result of an indictment or conviction predicated upon former (not ongoing) conduct"

A device that has been used by a military department in lieu of "automatic" suspension is the so-called "shock and alarm" letter. Such a letter brings sharply to the attention of the executive of a defense firm DoD's cause for concern of wrongdoing, and the executive is urged to take immediate corrective action. What distinguishes the "shock and alarm" technique is that it does not carry with it the formal and immediate sanction of suspension. It provides the contractor an opportunity to put its own house in order before suspension becomes imperative.

e. Scope of Suspension or Debarment Orders

Once a determination is made to suspend or debar a contractor, the Military Service or DLA must determine the appropriate scope of the order. The government may elect to suspend or debar a particular division or similar organizational component of the contractor, a number of divisions or organizational components, or the entire corporate structure of which the contractor is a part.

An overly broad suspension or debarment of a contractor involved in numerous procurements can deny DoD important sources of supply and cause economic and commercial harm to the contractor. On the other hand, an inappropriately narrow application of these sanctions can lead to continued government dealings with irresponsible parties.

Current regulations give the responsible agency wide authority to tailor the scope of a suspension or debarment order without providing guidance about how the agency should exercise its discretion. Suspension applies to "all divisions or other organizational elements of the contractor, unless the suspension decision is limited by its terms to specific divisions, organizational elements or

commodities."²⁸ Similarly, "debarment constitutes debarment of all divisions or other organizational elements of the contractor, unless the debarment decision is limited by its terms to specific divisions, organizational elements or commodities."²⁹

Given the significance and difficulty of these determinations, responsible officials should have more specific guidance in considering the scope of possible suspension or debarment actions. The Federal Acquisition Regulation should mandate review of the following criteria:

- the extent to which the misconduct was confined to a particular organizational unit and the autonomy of that unit;
- the extent of knowledge corporate management and directors had of the relevant misconduct;
- the extent to which sanctions must be imposed to provide minimum protection of the public interest; and
- other effects that could occur if organizational units other than that within which the misconduct occurred are suspended or debarred.

Suspending and debarring authorities should craft application of these sanctions as narrowly as possible to exclude only those organizational units that threaten the integrity of the procurement process.

f. Independence of Determinations

The government, because of broad discretionary powers entailed in declaring contractors ineligible for awards, carries a heavy burden. It must affirmatively seek to avoid arbitrary action. DoD should ensure that opportunities for abuse are reduced by insulating decisionmakers in the suspension and debarment process from untoward pressure from within or without DoD. Present policies do not provide sufficient insulation for officials involved in the process.

²⁸FAR § 9.407-1(c).

²⁹FAR § 9.406-1(b).

g. Procedures Guiding Suspension and Debarment Within Components of DoD

Under current regulations, the several suspending and debarring authorities are given discretion to "establish procedures" governing suspension and debarment "decision-making" processes.³⁰ This discretion has resulted in each of the authorized agencies developing different and somewhat inconsistent procedures. The Inspector General made the following pertinent observations:

Each suspension/debarment authority within DoD has developed its own method of processing suspension and debarment determinations and implementing suspension and debarment procedures regarding the provision of notice to contractors and the conduct of hearing procedures.

For example, if a contractor requests and is provided a hearing on a debarment matter in DLA, the General Counsel, as the suspension/debarment authority, conducts the hearings. Argument and testimony is directly presented to the suspension/debarment authority, who can assess the credibility of witnesses and can examine all evidence. In the Air Force, suspension and debarment hearings are held before the Debarment and Suspension Review Board, which in turn makes recommendations to the suspension/debarment authority.³¹

Given the severity of suspension and debarment, the Commission believes that uniform procedures should guide the review and decision-making process in each of the agencies. It is, for example very important that debarring officials in each agency should be of a similar stature and that hearing procedures should be comparable. In the absence of uniformity, inconsistent and unfair results may follow. The Secretary of Defense should ensure that uniform policies govern each agency's decision-making process and the Federal Acquisition Regulation should be amended to so require.

h. Alternative Civil Remedies

The government should expand its use of and more aggressively pursue civil remedies. To make civil enforcement more effective, our *Interim Report* recommended specific measures that included the passage of Administration

³⁰FAR §§ 9.406-3(b)(1), 9.407-3(b)(1).

³¹Office of the Inspector General, DoD, Review of Suspension and Debarment Activities within the Department of Defense, at 86-87 (May 1984).

proposals to amend the Civil False Claims Act and to establish administrative adjudication of small civil false claims cases.

It is suggested that those officials charged with administration of suspension/debarment — in particular instances when the propriety of imposition of suspension is questionable — give greater consideration to civil sanctions as a complete remedy. For such an alternative to be effective, DoD must have available to it expanded civil remedies for recovery of assets. Expansion of traditional civil money judgments is a much needed resource, and by endorsing legislation still pending in the Congress — i.e., the Program Fraud Civil Remedies Act — the Commission has sought to encourage the grant of sweeping new administrative powers to levy fines more effectively against individuals and corporations engaged in wrongdoing of a lesser nature.

3. Voluntary Disclosure of Irregularities

Contractors have a legal and moral obligation to report to government authorities misconduct discovered in the process of self-review. The Departments of Defense and Justice should jointly initiate a program encouraging the voluntary disclosure of irregularities by contractors. Such a program, if successful, could afford the government timely notice of improprieties that otherwise might not be available, and provide details of known wrongdoing without the expense and compulsion of an adversarial investigation.

A voluntary disclosure program will be effective if there are inducements that assure skeptical contractors they will not suffer greater sanctions by coming forward. Private companies that fail to disclose should not be rewarded by the fortuitous inability of government investigators to make a timely discovery of an irregularity. Nor should contractors benefit that come forward only under compulsion of imminent discovery.

Guidelines considered by DoD in a voluntary disclosure program should include:

- The timing of the disclosure with respect to the contractor's initial awareness of the irregularity and the proximity of government oversight action.
- The completeness, accuracy, and truthfulness of the disclosure, as well as other factors supporting voluntariness.
- Management levels at which the wrongdoing occurred and at which the decision to disclose was made.

- Whether internal corporate procedures or standards of conduct covered the conduct of those involved in the wrongdoing and in the disclosure decision.
- Whether there were in place internal auditing systems that, when properly implemented, addressed the irregularity.

For these purposes, we recommend the following:

- 1. The Federal Acquisition Regulation should be amended:
- a. to state more clearly that a contractor may not be suspended or debarred except when it is established that the contractor is not "presently responsible," and that suspension or debarment is in the "public interest"; and
- b. to set out criteria to be considered in determining present responsibility and public interest.
 - 2. The Department of Defense should reconsider:
- a. "automatic" suspensions of contractors following indictment on charges of contract fraud;
- b. suspending and debarring the whole of a contractor organization based on wrongdoing of a component part;
- c. insulating its suspending/debarring officials from untoward pressures; and
- d. establishing uniform procedures to guide the review and decision-making process in each agency exercising suspension/debarment authority.
 - 3. DoD should give serious consideration to:
- a. greater use of broadened civil remedies in lieu of suspension, when suspension is not mandated; and
- b. implementation of a voluntary disclosure program, and incentives for making such disclosures.
- 4. Specific measures should be taken to make civil enforcement of laws governing defense acquisition still more effective. These include passage of Administration proposals to amend the Civil False Claims Act and to establish administrative adjudication of small, civil false claims cases. In appropriate circumstances, officials charged with administration of suspension/debarment should consider application of civil monetary sanctions as a complete remedy.

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