A Quest for Excellence

Appendix

Final Report
by the President's
Blue Ribbon Commission
on Defense Management

June 1986

TABLE OF CONTENTS

(continued)

*These appendices were prepared for the President's Blue Ribbon Commission on Defense Management. The analyses and recommendations they contain do not necessarily represent the views of the Commission.

APPENDIX A

Recommendations

PRESIDENT'S BLUE RIBBON COMMISSION
ON DEFENSE MANAGEMENT

TABLE OF CONTENTS

I. National Security Planning and Budgeting

A. The Role of the President in National Security Planning

To institutionalize, expand, and link a series of critical Presidential determinations, we recommend a process 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 (OMB), 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 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.

B. A New Process for Planning National Military Strategy

The Secretary of Defense, following receipt of the Presidential guidance described in the previous section of this report, should direct the Chairman of the Joint Chiefs of Staff (JCS), with the advice of the other members of the JCS 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 JCS, 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.

C. The Defense Budget Process

CONGRESS

A joint effort among the Appropriations Committees, the Armed Services Committees, the 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);
- 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 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, and should develop a formal review process with the Services to ensure that, where appropriate, major programs receive a complete evaluation during the off-year of the biennial budget process.

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

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

II. Military Organization and Command

Current law should be changed to designate the Chairman of the JCS as the principal uniformed 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.

Current law should be changed to place the Joint Staff and the Organization of the JCS 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 CINCs of the Unified and Specified Commands 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 JRMB, 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.

III. Acquisition Organization and Procedures

A. Streamline Acquisition Organization and Procedures

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 (PEOs), 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.

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.

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

B. Use Technology To Reduce Cost

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.

C. Balance Cost and Performance

A restructured JRMB, co-chaired by the Under Secretary of Defense (Acquisition) and the Vice Chairman of the JCS, 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.

D. Stabilize Programs

Program stability must be enhanced in two fundamental ways. First, DoD should fully institutionalize "baselining" (*i.e.*, establishment of a firm internal agreement or baseline on requirements, design, production, and cost) 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. This would lead to greater program stability and lower unit prices.

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.

F. Increase the Use of Competition

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.

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.

H. Enhance the Quality of Acquisition Personnel

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 Navy's so-called China Lake personnel 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.

I. Improve the Capability for Industrial Mobilization

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 JCS, 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.

IV. Government-Industry Accountability

A. Contractor Standards of Conduct

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 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.

B. Contractor Internal Auditing

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 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. Government actions should foster contractor self-governance. 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.

C. DoD 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. 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 General Accounting Office (GAO) and professional auditing standards.

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.

D. DoD 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. 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.

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.

E. 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.

There should be continued, aggressive enforcement of federal civil and criminal laws governing defense acquisition.

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. DoD 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.

B

APPENDIX B

Executive Order 12526

July 15, 1985

EXECUTIVE ORDER 12526

President's Blue Ribbon Commission on Defense Management

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to establish, in accordance with the provisions of the Federal Advisory Committee Act, as amended (5 U.S.C. App. I), a Blue Ribbon Commission on Defense Management, it is hereby ordered as follows:

Section 1. *Establishment.* (a) There is established the President's Blue Ribbon Commission on Defense Management. The Commission shall be composed of no fewer than ten and no more than seventeen members appointed or designated by the President.

(b) The composition of the Commission shall include persons with extensive experience and national reputations in commerce and industry, as well as persons with broad experience in government and national defense.

(c) The President shall designate a Chairman from among the members of the Commission. The Chairman shall appoint a professional and administrative staff to support the Commission.

Section 2. *Functions.* (a) The Commission shall study the issues surrounding defense management and organization, and report its findings and recommendations to the President and simultaneously submit a copy of its report to the Secretary of Defense.

(b) The primary objective of the Commission shall be to study defense management policies and procedures, 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 system, the Military Departments, and the Congress. In particular, the Commission shall:

1. Review the adequacy of the defense acquisition process, including the adequacy of the defense industrial base, current law governing Federal and Department of Defense procurement activities, departmental directives and management procedures, and the execution of acquisition responsibilities within the Military Departments;
2. Review the adequacy of the current authority and control of the Secretary of Defense in the oversight of the Military Departments, and the efficiency of the decisionmaking apparatus of the Office of the Secretary of Defense;
3. Review the responsibilities of the Organization of the Joint Chiefs of Staff in providing for joint military advice and force development within a resource-constrained environment;
4. Review the adequacy of the Unified and Specified Command system in providing for the effective planning for and use of military forces;
5. Consider the value and continued role of intervening layers of command on the direction and control of military forces in peace and in war;
6. Review the procedures for developing and fielding military systems incorporating new technologies in a timely fashion;
7. Study and make recommendations concerning congressional oversight and investigative procedures relating to the Department of Defense; and

8. Recommend how to improve the effectiveness and stability of resources allocation for defense, including the legislative process.

(c) In formulating its recommendations to the President, the Commission shall consider the appropriate means for implementing its recommendations. The Commission shall first devote its attention to the procedures and activities of the Department of Defense associated with the procurement of military equipment and materiel. It shall report its conclusions and recommendations on the procurement section of this study by December 31, 1985. The final report, encompassing the balance of the issues reviewed by the Commission, shall be submitted not later than June 30, 1986, with an interim report to be submitted not later than March 31, 1986.

(d) The Commission shall be in place and operating as soon as possible. Shortly thereafter, the Commission shall brief the Assistant to the President for National Security Affairs and the Secretary of Defense on the Commission's plan of action.

(e) Where appropriate, implementation of the Commission's recommendations shall be considered in accordance with regular administrative procedures coordinated by the Office of Management and Budget, and involving the National Security Council, the Department of Defense, and other departments or agencies as required.

Section 3. *Administration.* (a) The heads of Executive agencies shall, to the extent permitted by law, provide the Commission such information as it may require for purposes of carrying out its functions.

(b) Members of the Commission shall serve without additional compensation for their work on the Commission. However, members appointed from among private citizens may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in the government service (5 U.S.C. 5701-5707), to the extent funds are available.

(c) The Secretary of Defense shall provide the Commission with such administrative services, facilities, staff, and other support services as may be necessary. Any expenses of the Commission shall be paid from such funds as may be available to the Secretary of Defense.

Section 4. *General.* (a) Notwithstanding any other Executive order, the functions of the President under the Federal Advisory Committee Act, as amended, except that of reporting to the Congress, which are applicable to the Commission, shall be performed by the Secretary of Defense, in accordance with guidelines and procedures established by the Administrator of General Services.

(b) The Commission shall terminate 30 days after the submission of its final report.

Ronald Reagan

The White House,
July 15, 1985.

C

APPENDIX C

National Security Decision Directive 219

(White House Summary)

April 1, 1986

DEFENSE DEPARTMENT REFORMS

Statement by the Principal Deputy Press Secretary to the President

The President has signed a directive to implement virtually all of the recommendations presented to him in the interim report of the Blue Ribbon Commission on Defense Management. The Presidential directive and separate instructions issued by Secretary of Defense Weinberger include all of the Commission's recommendations that can be implemented by Executive action.

The President takes pride and satisfaction with the many reforms already started by Secretary Weinberger and stresses that the Commission recommendations should provide the basis for structural reform which would permit the Department of Defense to build upon and go beyond what has already been accomplished. The President appreciates the Commission's statement that many of their recommendations have already been started by Secretary Weinberger. This was one of the factors that encouraged the Commission and gave them confidence that their proposals would be implemented.

The President also is indebted to David Packard, the Commission's chairman, and the Commission for their excellent work. The recommendations of the Commission are among the most extensive reforms of the Defense establishment since World War II. The Packard Commission will continue to advise the President and Secretary Weinberger during the process of implementing the report. The President expects the Commission to elaborate on its interim recommendations by issuing additional reports prior to its final report this summer.

In signing the necessary directives to implement the Commission's recommendations, the President noted that he will send a formal message to the Congress asking for Congress to join him in implementing the Commission's recommendations. He will call on the Congress to help in the implementation of executive branch reform and also to make the important congressional reforms outlined by the Commission. The President is pleased that the Congress has begun to take the first steps in this process.

April 2, 1986

FACT SHEET

Summary of a Directive Implementing the Recommendations of the Blue Ribbon Commission on Defense Management

This directive outlines the steps approved for the implementation of the initial recommendations of the Commission on Defense Management. The Commission will make additional recommendations which will be evaluated in due course and elaborate on those it has already made, as required. We must, however, be especially mindful of the need to move quickly and decisively to implement those changes approved in this directive.

I. *National Security Planning and Budgeting*

The current Department of Defense planning, programming, and budgeting system (PPBS) is a sophisticated and effective process for the allocation of defense resources. Effective planning is a key element of PPBS. In striving to achieve the objectives of our five-year defense program within a constrained resource environment, the requirement for stable and effective planning is becoming even more important. The planning process requires that we consider the entire scope of national policies and priorities.

In this regard, it has been determined that defense planning should convey the initial guidance from senior civilian and military officials to those required to implement such guidance by: (1) the NSC reviewing our national security strategy to determine if changes are required; (2) strengthening the process through which the President provides policy and fiscal guidance to the Department of Defense; and (3) enhancing the role of the Chairman of the Joint Chiefs of Staff in the resource allocation process.

The NSC, with the advice and assistance of the Office of Management and Budget, will develop revised schedules and procedures to improve the integration of national security strategy with fiscal guidance provided to the Department of Defense. Toward this end, within 90 days of the date of this directive, the Secretary of Defense shall recommend to the NSC and OMB procedures for:

A) the issuance of provisional five-year budget levels to the Department of Defense. Those budget levels would reflect competing demands on the federal budget and gross national product, and revenue projections;

B) a military strategy to support national objectives within the provisional five-year budget levels. Such strategy would include broad military options developed by the Chairman with the advice of members of the JCS and the Commanders of the Combatant Commands;

C) a net assessment of military capabilities; and

D) selection by the President of a military program and the associated budget level.

The NSC and OMB will ensure that such procedures are fully in place prior to the beginning of the budget cycle for Fiscal Year 1989. In the meantime, the Secretary of Defense will ensure that improvements to the planning process, which result from the guidance above, are integrated with the preparation of the Fiscal Year 1988 defense budget to the greatest possible extent. In addition, OMB and DoD will undertake the appropriate steps necessary to produce a two-year defense budget for Fiscal Years 1988-89.

Our objective is to improve and stabilize strategic planning at the highest level, so that public and congressional debate can be elevated and brought to bear on these larger questions of defense policy.

II. *Military Organization and Command*

This directive fully endorses the recommendations of the Commission concerning military organization and command. To continue to strengthen command, control, and military advice, the following measures will be undertaken:

A. Within 90 days of this directive, the Secretary of Defense will report to the President concerning changes to appropriate DoD Directives undertaken to increase the effectiveness of communications between the Secretary of Defense and the Combatant Commanders. Such changes shall include improved procedures for the Chairman of the JCS to:

(1) channel the reports of the Combatant Commanders to the Secretary of Defense, subject to the direction of the Secretary, so that the Chairman may better incorporate the views of the Combatant Commanders in his advice to the President and the Secretary; and

(2) channel to the Combatant Commanders the orders of the President and the Secretary of Defense.

B. Within 180 days of the date of this directive, the Secretary of Defense will report to the President on revisions made to Joint Chiefs of Staff Publication #2 (Unified Action Armed Forces), the Unified Command Plan, and any other such publications and directives as may be necessary to accomplish the following:

(1) to provide broader authority to the Combatant Commanders to structure subordinate commands, joint task forces and support activities, subject to the approval of the Secretary of Defense;

(2) to provide options in the organizational structure of Combatant Commands to accommodate the shortest possible chains of command consistent with proper supervision and support, which the Secretary of Defense may implement during contingencies short of general war;

(3) to provide increased flexibility to deal with situations that overlap the current geographical boundaries of the Combatant Commands; and

(4) to ensure the continuing responsiveness of the Combatant Commands to current and projected national security requirements.

We also support the recommendation of the Commission that the current statutory prohibition on the establishment of a single Unified Command for transportation be repealed. Assuming this provision of law will be repealed, the Secretary of Defense will take those steps necessary to establish a single Unified Command to provide global air, land, and sea transportation.

III. *Acquisition Organization and Procedures*

To continue to improve acquisition management, the following measures will be undertaken:

A. Within 60 days of the date of this directive, in anticipation of the enactment of legislation establishing a level II position of Under Secretary of Defense for Acquisition, the Secretary of Defense will issue a DoD Directive outlining the roles, functions, and responsibilities of the Under Secretary of Defense for Acquisition. The Under Secretary of Defense for Acquisition, who should have a solid industrial background, will serve as the Defense Acquisition Executive. The existing Defense Acquisition Executive will immediately begin implementation of these actions pending the passage of a bill authorizing appointment of a new USD(A) as contemplated by the Packard Commission. The Directive will encompass the following:

(1) definition of the scope of the "acquisition" function;

(2) responsibility for setting policy for procurement and research and development;

(3) supervision of the performance of the entire department acquisition system;

(4) policy for administrative oversight of defense contractors; and

(5) develop appropriate guidance concerning auditing of defense contractors.

B. Within 60 days of the date of this directive, in anticipation of enactment of legislation to establish the position of Under Secretary of Defense for Acquisition, the Secretary of Defense will direct the Secretaries of the Military Departments to prepare Military Department Directives establishing Service Acquisition Executives. The Service Acquisition Executives, acting for the Service Secretaries, will appoint Program Executive Officers (PEO) who will 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. Thus, no program manager would have more than one level of supervision between himself and his Service Acquisition Executive, and no more than two levels between himself and the Department of Defense Acquisition Executive. Each Service should retain flexibility to shorten this reporting chain even further, as it sees fit. By this means, DoD should substantially reduce the number of acquisition personnel.

C. The Administration should work with the Congress 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. Within 120 days of this directive, the Director of OMB should

submit a legislative initiative to the President that accomplishes the needed consolidation, simplification and consistency. In preparing this initiative, OMB should work with the DoD and all other appropriate Federal Agencies.

D. Within 60 days the Secretary of Defense shall report to the President on measures to strengthen personnel management policies for civilian managers and employees having contracting, procurement or other acquisition responsibilities.

E. Within 45 days of this directive the Secretary of Defense shall establish procedures which call for the Joint Requirements Management Board (JRMB) to be co-chaired by the Under Secretary of Defense (Acquisition) and the Vice Chairman of the JCS. These procedures should call for the JRMB to 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. The JRMB will conduct its activities under the general supervision of the Secretary of Defense and in coordination with the Defense Resources Board.

F. Within 90 days after the appointment of the Under Secretary of Defense for Acquisition, the Secretary of Defense shall report to the President on measures, already taken or to be taken, to enhance the cost-efficiency, quality, and timeliness of procurements.

IV. *Government, Industry, Accountability*

Within 90 days of the date of this directive, the Secretary of Defense shall begin implementation and report to the President on the implementation of the recommendations of the President's Commission on Defense Management relating to Government/Industry accountability. Steps taken in this regard should not, however, reduce the Department's ability to monitor and audit contractor performance and procedures.

V. *Reporting and Coordination*

This directive contains numerous actions, plans, and implementation procedures. In order to keep the President fully informed on the progress of these events, the Secretary of Defense will advise him regularly on implementation progress.

D

APPENDIX D

President's Special Message to Congress

April 24, 1986

MESSAGE TO CONGRESS OUTLINING PROPOSALS FOR IMPROVEMENT TO THE DEFENSE ESTABLISHMENT

April 24, 1986

To The Congress of The United States:

On February 26, I spoke to the American people of my highest duty as President—to preserve peace and defend the United States. I outlined the objectives on which our defense program has rested. We have been firmly committed to rebuilding America's strength, to meeting new challenges to our security, and to reducing the danger of nuclear war. We have also been dedicated to pursuing and implementing defense reforms wherever necessary for greater efficiency or military effectiveness.

With these objectives in mind, I address the Congress on a subject of central importance to all Americans—the future structure and organization of our defense establishment.

Extensive study by the Armed Services Committees of the Senate and the House of Representatives has produced numerous proposals for far-reaching changes in the structure of the Department of Defense, including the organization of our senior military leadership. These proposals, sponsored by members with wide knowledge and experience in defense matters, are now pending before the Congress.

In addition, a few weeks ago I endorsed the recommendations of the bipartisan President's Blue Ribbon Commission on Defense Management, chaired by David Packard, for improving overall defense management including the crucial areas of national security planning, organization, and command.

For more effective direction of our national security establishment and better coordination of our armed forces, I consider some of these proposals to be highly desirable, and I have recently taken the administrative steps necessary to implement these improvements. In this message, I wish to focus on the essential legislative steps that the Congress must take for these improvements to be fully implemented.

Together, the work of the Packard Commission and the Congress represents certainly the most comprehensive review of the Department of Defense in over a generation. Their work has been the focus of an historic effort to help chart the course we should follow now and into a new century. While we will continue to refine and improve our defense establishment in the future, it will be many years before changes of this scope are again considered. Given these unique circumstances, I concluded that my views as President and Commander in Chief should be laid before the Congress prior to the completion of legislative action.

Executive and Legislative Responsibilities

In forwarding this message, I am cognizant of the important role of the Congress in providing for our national defense. We must work together in this endeavor. However, any changes in statute must not infringe on the constitutionally protected responsibilities of the President as Commander in Chief. Any legislation in which the issues of Legislative and Executive responsibilities are confused would

be constitutionally suspect and would not meet with my approval.

My views concerning legislation on defense reorganization now pending in the House and Senate reflect a reasoned and open-minded approach to the issues, while maintaining a close watch on the constitutional responsibilities and prerogatives of the Presidency. While I had considered forwarding a separate bill to the Congress, I concluded that this was not necessary since many of the legislative recommendations of the Packard Commission are already pending in one or more bills. However, additional changes in law are also proposed in those other bills, and such changes must be carefully weighed.

Certain changes in the law are necessary to accomplish the objectives we seek. Among these are the 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, and the Chairman's exclusive control over the Joint Staff; the creation of a new Vice Chairman of the Joint Chiefs of Staff; and the creation of a new Level II position of Under Secretary of Defense for Acquisition.

Other proposed changes in law are, in my judgment, not required. It is not necessary to place in law those aspects of defense organization that can be accomplished through executive action. Nevertheless, if such changes are recommended by the Congress, I will carefully consider them, provided they are consistent with current policy and practice and do not infringe upon the authority or reduce the flexibility of the President or the Secretary of Defense.

General Principles

The organization of our present-day defense establishment reflects a series of important reforms following World War II. These reforms were based upon the harsh lessons of global war and were hastened by the new military responsibilities and threats facing our Nation. They culminated in 1958 with the reorganization of the Department of Defense under President Eisenhower.

President Eisenhower's experience of high military command has few parallels among Presidents since George Washington. The basic structure for defense that he laid down in 1958 has served the Nation well for over 25 years. The principles that governed his reorganization proposals are few but fundamental. They are of undiminished importance today.

First, the proper functioning of our defense establishment depends upon civilian authority that is unimpaired and capable of strong executive action.

As civilian head of the Department, the Secretary of Defense must have the necessary latitude to shape operational commands, to establish clear command channels, to organize his Office and Department of Defense agencies, and to oversee the administrative, training, logistics, and other functions of the military departments.

Second, if our defense program is to achieve maximum effectiveness, it must be genuinely unified.

A basic theme of defense reorganization efforts since World War II has been to preserve the valuable aspects of our traditional service framework while nonetheless achieving the united effort that is indispensable for our national security. President Eisenhower counseled that separate "service responsibilities and activities must always be only the branches, not the central trunk of the national security tree."

Unified effort is not only a prerequisite for successful command of military operations during wartime, today, it is also indispensable for strategic planning and for the effective direction of our defense program in peacetime. The organization of our senior military leadership must facilitate this unified effort. The highest quality military advice must be available to the President and the Secretary of Defense on a continuing basis. This must include a clear, single, integrated military point

of view. Yet, at the same time, it must not exclude well-reasoned alternatives.

Third, the character of our defenses must keep pace with rapid changes in the military challenges we face.

President Eisenhower observed a revolution taking place in the techniques of warfare. Advancing technology, and the need to maintain a vital deterrent, continually test our ability to introduce new weapons into our armed forces efficiently and economically. It is increasingly critical that our forces be able to respond in a timely way to a wide variety of potential situations. These range across a spectrum from full mobilization and deployment in case of general war, to the discriminating use of force in special operations. To respond successfully to these changing circumstances and requirements, our defense organization must be highly adaptable.

Where the roles and responsibilities of each component of our defense establishment are necessarily placed in law, they must be clear and unambiguous, but not so constrained or detailed as to impair operational flexibility or the common sense of those in positions of responsibility. Laws must not be written in response to the strengths and weaknesses of individuals who now serve. Instead, they should establish sound, fundamental relationships among and between civilian and military authorities, relationships that reflect the proper balance between our traditions and heritage and the practical considerations unique to military matters.

Special Relationships Between the President and Certain Subordinates

I noted earlier that President Eisenhower brought to his Presidency a unique perspective and unprecedented military experience. Few Presidents have come into this office as well prepared as he to assume the responsibilities of Commander in Chief. This fact places a heavy burden on our defense establishment and requires the continued development of key institutions and relationships that constitute the framework of our current organization.

It has been my experience that within this framework there is a special relationship between the President, the Secretary of Defense, and the Combatant Commanders. In providing for the timely and effective use of the armed forces in support of our foreign policy, our entire defense establishment is focused on supporting this special relationship and making it as effective as possible. All other aspects of our defense organization must be subordinate to this purpose.

The Secretary of Defense. In particular, the law places broad authority and heavy responsibilities on the Secretary of Defense. The Secretary, in his responsibility as head of the defense establishment and in executing the directives of the Commander in Chief, embodies the concept of civilian control. No one but the President of the United States and the Secretary of Defense is empowered with command authority over the armed forces. In managing the Department of Defense the Secretary must retain the authority and flexibility necessary to fulfill these broad responsibilities.

Thus, where the Congress seeks statutory changes that would affect the Secretary of Defense, I will apply the following criteria:

—I will support efforts to strengthen the authority of the Secretary of Defense if there are areas in the law where his current authority is not sufficiently clear.

—The Secretary's authority should be delegated as he sees fit, and such delegation should never be mandated in the law apart from his concurrence and approval.

—The strengthening of other offices or components of the defense establishment should never be, nor appear to be, at the expense of the authority of the Secretary of Defense.

The Combatant Commanders. The Unified and Specified Commanders are the individuals in whom the American people and our defense establishment place warfighting responsibilities. The Secretary and I consult the Combatant Commanders for their joint and operational points of view in determining how our military forces should be used and in determining our military requirements for important geographic and functional areas. Their successes in any future conflict would depend in large measure on how well we plan for their needs in today's defense budgets.

With this in mind, the Secretary initiated regular meetings with the Combatant Commanders and has provided them greater access to the Department's internal budget process. In addition, I am implementing the recommendations of the Packard Commission to improve the channel of communications between the President, the Secretary, and the Combatant Commanders; to provide broader authority to those Commanders to structure their subordinate commands; to provide options in the organizational structure of Combatant Commands for the shortest possible chains of command consistent with proper supervision and support; and to provide for flexibility where issues or situations overlap the current geographical boundaries of the Combatant Commands.

These changes reflect an evolutionary and positive trend toward strengthening the role of the operational commanders within the defense establishment. While I hope and expect this trend will continue, it is not necessary that these efforts be mandated in the law. If the Congress wishes to elaborate on the current law, there are several important issues that should be considered:

—In organizing our forces to maximize their combat potential under a variety of circumstances, the President and Secretary of Defense must retain the authority for establishing Combatant Commands; for prescribing their force structure; and for oversight of the assignment of forces by the Military Departments. To be effective, this authority requires broad latitude and flexibility and calls for a minimum amount of statutory constraint. Restrictions in the law that prohibit the establishment of certain command arrangements should be repealed. My authority as Commander in Chief is sufficient to deal with any necessary command arrangements or adjustments in the assignment of forces that unforeseen circumstances could require.

—In moving to strengthen the role of the Combatant Commanders we must establish an appropriate balance between enhancing their influence in resource allocation and maintaining their focus on joint training and operational planning. The Combatant Commanders must have sufficient authority and influence to accomplish their mission, within the constraints necessarily established by the Secretary, without being burdened with administrative responsibilities that detract from their primary role as operational commanders.

—Finally, we must not legislate departmental procedures. The changes I have initiated concerning the defense planning and budgeting process provide for the further development of the role of the Combatant Commanders. It is neither necessary nor appropriate for the Department's internal resource allocation process to be defined in law. The establishment and evolution of such procedures must remain the prerogative of the Secretary of Defense.

The Chairman of the Joint Chiefs of Staff. In the relationship between the President, the Secretary of Defense, and the Combatant Commanders, there is a special role for the Chairman of the Joint Chiefs of Staff. The Chairman ranks above all other officers and devotes all of his time to joint issues. I deal with him or his representative on a regular basis and he serves as the primary contact for the Secretary and me on operational military matters. As a matter of practice, the Chairman

also functions within the chain of command by transmitting to the Combatant Commanders those orders I give to the Secretary. Under the directive I recently signed to implement the recommendations of the Packard Commission, this practice will be broadened and strengthened.

In this regard, I have concluded that the Chairman's unique position and responsibilities are important enough to be set apart and established in law, and that he should be supported by a military staff responsive to his own needs and those of the President and the Secretary of Defense. In reaching this judgment I have carefully weighed the view that concentration of additional responsibility in the Chairman could limit the range of advice provided to me and the Secretary, or somehow undermine the concept of civilian control. While this concern is understandable, it does not apply to the structural changes I would endorse. Since the Chairman and the Joint Chiefs of Staff will continue to function together as military advisors and the Secretary's military staff, and the Chairman will continue to report directly to the President and the Secretary of Defense, none of the new responsibilities of the Chairman that I propose would diminish the authority or control of the Secretary of Defense. Accordingly, I support legislation that will accomplish the following objectives:

—Designate the Chairman of the Joint Chiefs of Staff as the principal uniformed military advisor to the President, the National Security Council, and the Secretary of Defense;

—Place the Organization of the Joint Chiefs of Staff and the Joint Staff under the exclusive direction of the Chairman, to perform such duties as he prescribes to support the Joint Chiefs of Staff and respond to the President and the Secretary of Defense; and

—Create the new position of Vice Chairman of the Joint Chiefs of Staff and make the Vice Chairman a member of the Joint Chiefs of Staff.

While recognizing and providing for the special role of the Chairman in the law, the basic structure of the Joint Chiefs of Staff should be retained. The advantages and disadvantages of the current system, in which the Chiefs of the Services provide advice concerning both their military Service and joint issues, have been debated for many years and are well known. I believe that certain disadvantages will be remedied by a stronger Chairman without sacrificing the advantages of the current system. I find that the Chiefs of the Services are highly knowledgeable regarding particular military capabilities. And, just as important, joint military perspectives on both resource allocation and operations, developed under the Chairman's leadership, must be upheld and supported at the highest levels of the Military Departments.

For these reasons, as we take the appropriate steps to strengthen the role of the Chairman, the law must ensure that:

—The Service Chiefs remain members of the Joint Chiefs of Staff; and that, in addition to the views of the Chairman, the President is also provided with the views of other members of the Joint Chiefs of Staff.

—In addition, in creating the new position of Vice Chairman, the law must provide flexibility for the President and Secretary of Defense to determine who shall serve as Acting Chairman in the Chairman's absence.

In our efforts to strengthen the ability of the Chairman and the Joint Chiefs of Staff to be responsive to the civilian leadership, we must also make certain that the military establishment does not become embroiled in political matters. The role of the Chairman and other members of the Joint Chiefs of Staff is strictly advisory in nature and, with the armed forces as a whole, they serve the American people with great fidelity and dedication. In my view, changes in the tenure of the Chairman or other senior officers that are tied to the civilian

electoral process would endanger this heritage. I oppose any bill whose provisions would have the effect of politicizing the military establishment.

Acquisition Reform

The Packard Commission has pointed out what we all know to be true: that our historic ups and downs in defense spending have cost us dearly over the long term. For many years there has been chronic instability in both top-line funding and individual programs. This has eliminated key economies of scale, stretched out programs, and discouraged defense contractors from making the long-term investments required to improve productivity. To end this costly cycle, we must find ways to provide the stability that will allow the genius of American ingenuity and productivity to flourish.

We also know that Federal law governing procurement has become overwhelmingly complex. Each new statute adopted by the Congress has spawned more administrative regulation. As laws and regulations have proliferated, defense acquisition has become ever more bureaucratic and encumbered by overstaffed and unproductive layers of management. We must both add and subtract from the body of law that governs Federal procurement, cutting through red tape and replacing it with sound business practices, innovation, and plain common sense.

The procurement reforms I have begun within the Executive branch cannot reach their full potential without the support of the Congress. We must work together in this critical period, where so many agree that our approach to defense procurement in both the Executive and Legislative branches is in need of repair. However, in moving forward to implement needed reforms, I urge the Congress to show restraint in the use of more legislation as a solution to our current problems.

The Commission identified the need for a full-time defense acquisition executive with a solid industrial background. This executive would set overall policy for procurement and research and development, supervise the performance of the entire acquisition system, and establish policy for the oversight of defense contractors. I concur with this recommendation.

—The Congress should create by statute the new Level II position of Under Secretary of Defense for Acquisition through the authorization of an additional Level II appointment in the Office of the Secretary of Defense.

Beyond this initiative, however, further change to the acquisition organization of the Department of Defense should be left to the Executive branch. The procurement reforms I have recently set in motion are fundamental and far-reaching and should be allowed to proceed without the burden of further piecemeal changes in two particular areas:

—First, with the exception of changes to procurement or anti-fraud laws I have already endorsed, we should refrain from further action to add new procurement laws to our statutes pending the complete review of all Federal statutes governing procurement that I have recently directed. The vast body of procurement that now exists must be simplified, consolidated, and made responsive to our national security needs.

—And second, we should take no further action to add new laws that would restrict the authority of the Secretary of Defense to hire and retain the high quality of personnel needed to administer the Department of Defense's acquisition program.

If citizens from the private sector who participate in the conduct of government are unfairly prohibited from returning to their livelihood, it will not be just their willingness to serve that will suffer. The Nation will suffer as well. I will later report to the Congress on steps I am taking or that I propose the Congress take

in these areas. And I will also review and report on the accountability of the defense industry to the Department of Defense, and to the American people. This review will address the ethics of the industry, the Department of Defense's oversight responsibility, and the role of the Department's Inspector General. I urge the Congress not to act in these important areas until it has had an opportunity to review my report.

While the Department of Defense and Executive branch are focused on implementing the details of these reforms, I urge the Congress to focus its attention on the structural and procedural reforms that are also essential for the stability we seek.

Two-year defense budgets are an essential step toward stability. I urge the Congress to develop internal procedures for the authorization and appropriation of defense budgets on a biennial basis, beginning with the FY 1988 budget. My FY 1988 defense budget will be structured with this in mind.

The Congress should encourage the use of multiyear procurement where appropriate on a significantly broader scale. Multiyear procurement is a strong force for stability and efficiency. We have already saved billions of dollars through multiyear procurement and have never broken a contract or suffered a single loss to date. We want to continue and expand our efforts in this important area.

Milestone funding of research and development programs is also a form of multiyear contracting. I will work with the Congress to select appropriate programs to be base-lined in cost over a multiyear period so that these programs can be funded in an orderly and stable fashion. If we know what we want to accomplish, we can set a proper ceiling on costs and manage our program within those costs. I urge the Congress to support milestone funding and the base-lining concept of placing a ceiling on research and development costs.

Finally, there are some forty different committees or subcommittees that claim jurisdiction over some aspect of the defense program. This fragmented oversight process is a source of confusion, and it impedes the cooperation between the Congress and the Executive branch so necessary to effective defense management. I urge the Congress to return to a more orderly process involving only a few key committees to oversee the defense program. Only with such reform can we achieve the full benefits of those changes now underway within the Department of Defense.

Working together, we have accomplished a great deal over the past five years. Yet there is more to be done. This effort represents a new beginning for our defense establishment. When these reforms have been achieved we will have:

—developed a rational process for the Congress and the President to reach enduring agreement on national military strategy, the forces to carry it out, and the stable levels of funding that should be provided for defense;

—strengthened the ability of the military establishment to provide timely and integrated military advice to civilian leadership;

—improved the efficiency of the defense procurement system and made it more responsive to future threats and technological needs; and

—reestablished the bipartisan consensus for a strong national defense.

The Packard Commission has charted a three-part course for improving our Nation's defense establishment. I have already directed implementation of its recommendations where that can be accomplished through Executive action. In this message, I ask that the Congress enact certain changes in law that will further improve the organization and operation of the Department of Defense. Now, the remaining requirement for reform lies within the Congress itself.

I began this message by emphasizing the important role of Congress in our defense establishment. In the organizational changes we now address, the Congress should be commended for fulfilling its broad responsibility to make laws to organize and govern the armed forces. However, with respect to the changes we must consider in the areas of budget, resource allocation, and procurement, the future is much less certain. To establish the stability essential for the successful and efficient management of our defense program, the Congress must be more firmly committed to its constitutional obligations to raise and support the armed forces.

Within the limits of my authority as President, I will continue to improve and refine the national security apparatus within the Executive branch. And I will support any further changes in procedures, regulations, or statutes that would improve the long-term stability, effectiveness, and efficiency of our defense effort.

In having fully committed ourselves to implementing the Packard Commission's recommendations, this Administration has overcome the difficult bureaucratic terrain that has stood in the path of previous efforts. Now, we face a broad ocean of necessary congressional reforms in which the currents of politics and jurisdiction are equally treacherous. We must not stop at the water's edge.

Only meaningful congressional reform can complete our efforts to strengthen the defense establishment and develop a rational and stable budget process—a process that provides effectively and efficiently for America's security over the long haul.

With a spirit of cooperation and bipartisanship, confident that we can rise to this occasion, I stand ready to work with the Congress and meet the challenge ahead.

Ronald Reagan

The White House,
April 24, 1986.

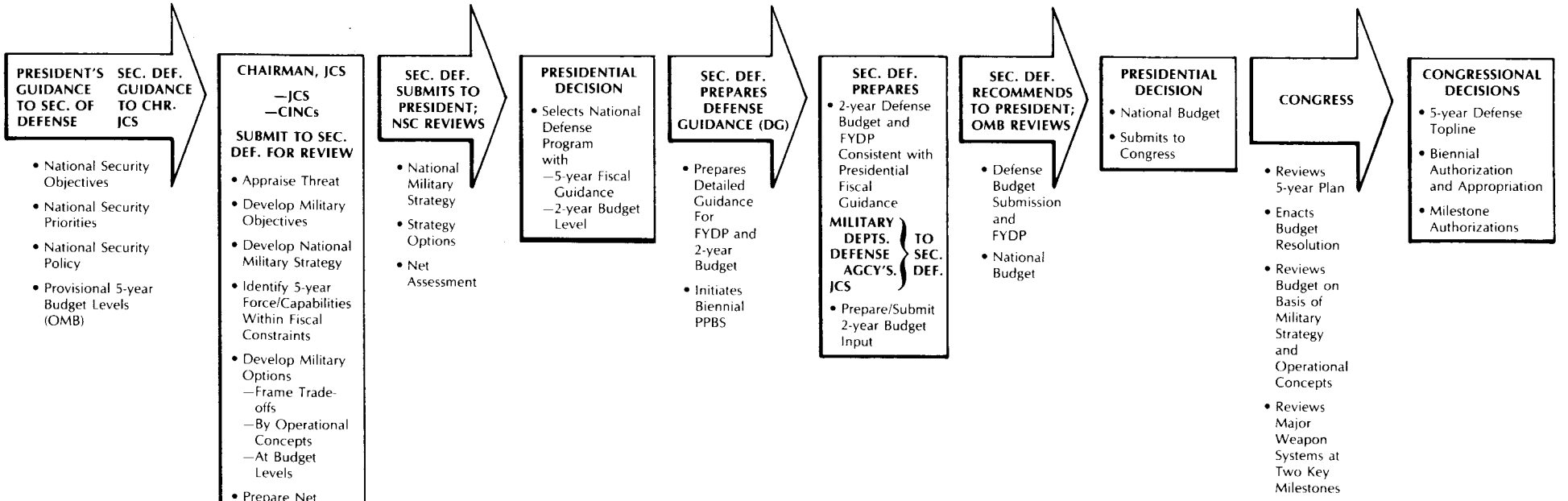
E

APPENDIX E

Proposed National Security Planning and Defense Budgeting Process

Figure 1

PROPOSED
NATIONAL SECURITY PLANNING AND DEFENSE BUDGETING PROCESS



*Five-Year Defense Program

F

APPENDIX F

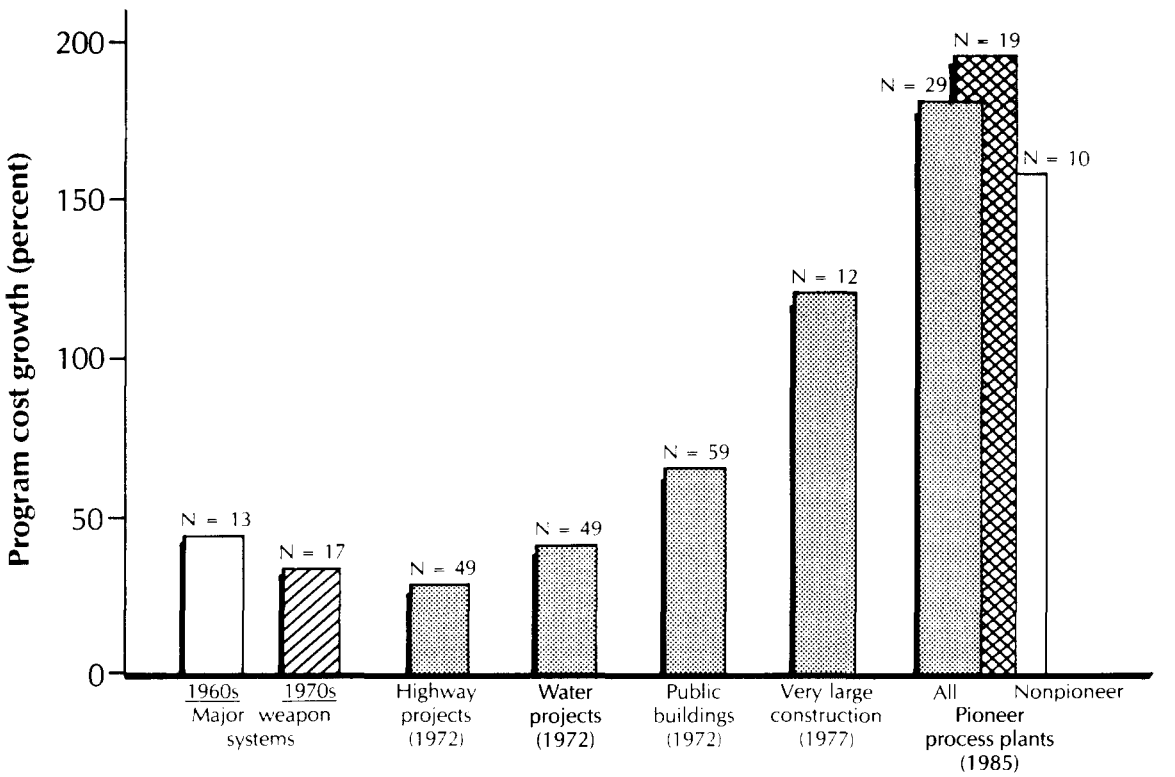
A Comparison of Cost Growth in Defense and Non-Defense Programs

COST GROWTH IN DEFENSE AND NON-DEFENSE PROGRAMS

Rand Corporation and The Analytic Sciences Corporation (TASC) separately analyzed the cost growth experienced by major DoD weapon system programs and comparably large, complex civil programs. The civil programs included numerous public and private sector projects that typically required many years to develop, involved substantial technical risks, and depended on the performance of many contractors. The results of these studies are outlined in Figures A-1 and A-2. Both studies lead to the conclusion that average cost growth in major DoD weapon system programs is lower than cost growth in many large scale civil programs.

Figure A-1

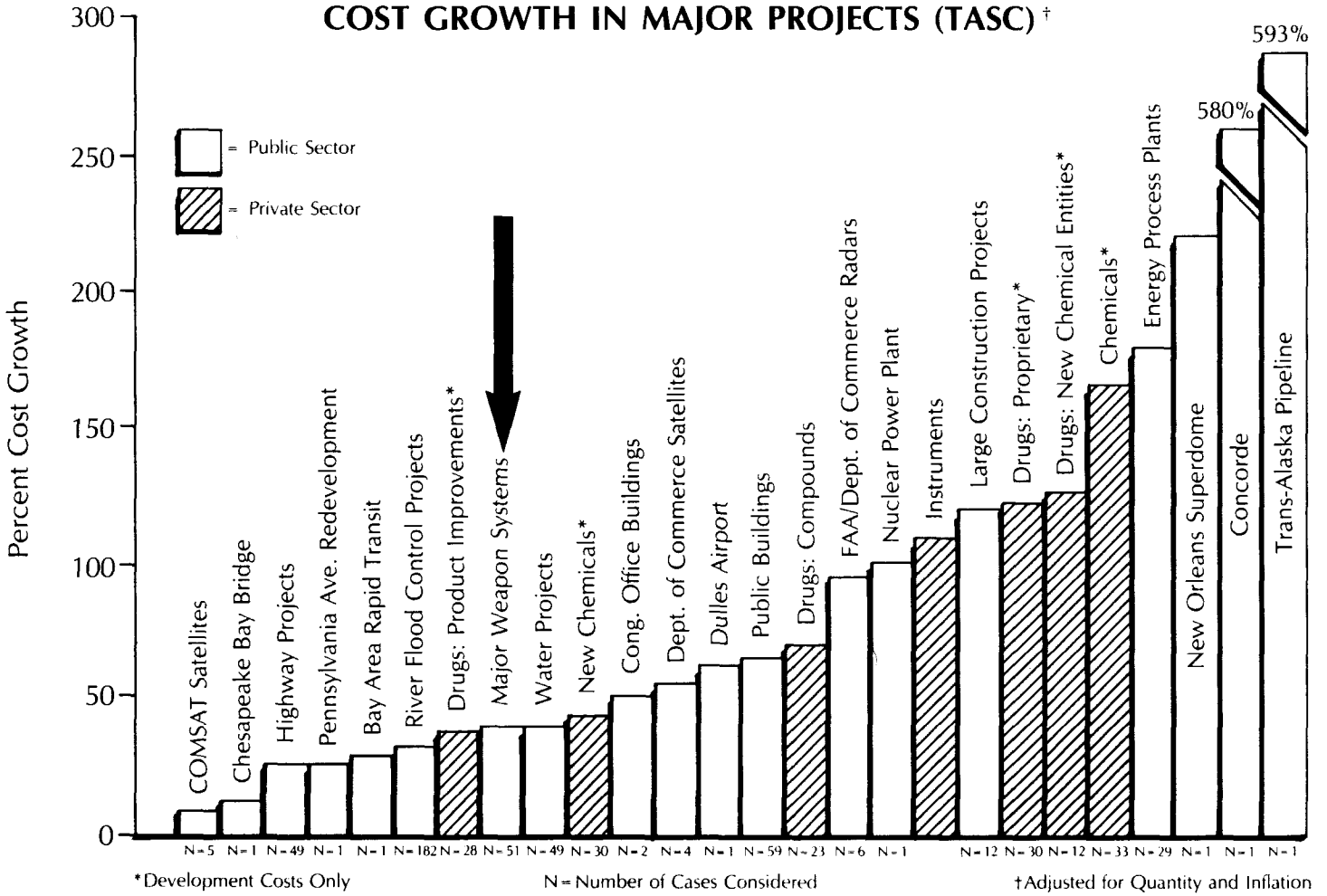
COST GROWTH IN MAJOR PROJECTS (RAND)



Source: "Improving the Military Acquisition Process—Lessons from Rand Research," (R-3373-AF/RC) The Rand Corporation, 1986.

Figure A-2

COST GROWTH IN MAJOR PROJECTS (TASC) †



Source: F. Biery, The Analytic Sciences Corporation (TASC), "Cost Growth and the Use of Competitive Acquisition Strategies," The National Estimator (Journal of The National Estimating Society), Vol. 6, No. 3 (Fall 1985).

G

APPENDIX G

An Illustrative Organization of the Acquisition Staff of the Secretary of Defense

AN ILLUSTRATIVE ORGANIZATION OF THE ACQUISITION STAFF OF THE SECRETARY OF DEFENSE

The current organization of the Office of the Secretary of Defense (OSD) allocates acquisition responsibilities generally as follows among eight senior OSD officials*:

1. The Under Secretary of Defense for Research and Engineering (USDR&E) provides policy and oversight for weapon system program development through full-scale engineering. USDR&E is responsible for managing the Defense Advanced Research Projects Agency (DARPA) and for developmental test and evaluation.

2. The Assistant Secretary of Defense (Comptroller) is responsible for all DoD financial matters and for management of the Defense Contract Audit Agency (DCAA).

3. The Assistant Secretary of Defense (Acquisition and Logistics) is responsible for policy and oversight of weapon system production, logistics, contracting policy and regulation, and management of the Defense Logistics Agency (DLA).

4. The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (C^3I) is responsible for C^3I systems and policy and oversight of all associated research, development, and production activities.

5. The Director of Program Analysis and Evaluation (PA&E) is responsible for providing the Secretary of Defense with an independent assessment of DoD programs, including force structure, mission areas, weapon systems, manpower, etc. The Cost Analysis Improvement Group, which provides independent cost assessment of weapon system programs, reports to the Director of PA&E.

6. The Inspector General (IG) has authority to evaluate all DoD operations and activities, to oversee all phases of the acquisition process, to establish contract audit policy, and to investigate potential criminal conduct and evidence of fraud, waste, or abuse.

7. The Director of Operational Test and Evaluation (OT&E) provides policy and oversight for operational testing and evaluation, and assesses the success of weapon system testing conducted by the Services.

8. The Director of Small and Disadvantaged Business Utilization establishes, and monitors the achievement of, policy and budget goals for utilization of small and disadvantaged businesses.

To consolidate diverse policy-making responsibilities for improved management of the overall acquisition system, the Commission has recommended establishment by law of the position of Under Secretary of Defense for Acquisition (USD(A)). In the

*Certain of these officials—notably the Comptroller, Assistant Secretary of Defense (C^3I), the Director of PA&E, and the Inspector General—have various non-acquisition responsibilities not fully described here.

Commission's view, this new Under Secretary should have extensive experience in industrial management, and should:

- Be a Level II appointee.
- Work full-time on acquisition matters.
- Cochair the restructured Joint Requirements and Management Board.
- Serve as a member of the Defense Resources Board.
- Develop and implement DoD-wide acquisition policy, including policy for research and development and operational testing, and contract audit.
- Oversee the execution of weapon system programs, so that development and production decisions are validated by program requirements, technical performance, and cost.
- Generally supervise contractor performance.

For these broad purposes, the USD(A) should have authority over all elements of the OSD necessary to place the following functions under his direct supervision:

- All acquisition policy, including contract audit policy.
- Oversight of all acquisition programs (including C^3I programs) at all stages (including conceptualization, research, development, testing, production, and logistics).
- Oversight of advanced technology programs.
- Oversight of Test and Evaluation (T&E), including both developmental and operational T&E.
- Oversight of small and disadvantaged business utilization.
- Responsibility for independent cost assessments, including those of weapon system programs.

H

APPENDIX H

Expanding the Use of Commercial Products and "Commercial-Style" Acquisition Techniques in Defense Procurement: A Proposed Legal Framework

Prepared by
WENDY T. KIRBY*

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission. Ms. Kirby is associated with the law firm of Hogan and Hartson, Washington, D.C.

TABLE OF CONTENTS

INTRODUCTION

In February 1986, the President's Blue Ribbon Commission on Defense Management (the "Commission") issued an interim report containing the Commission's major recommendations for improving the organization and operations of the Department of Defense (DoD). Among these were two recommendations relating to the expanded use of commercial products and "commercial-style" competition in the defense procurement process:

> 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.[1]
>
> 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.[2]

In April 1986, the Commission issued a second report, entitled "A Formula for Action," in which it provided additional detail in support of its major recommendations. Sections V.E and V.F of that report carried forward the two recommendations cited above:

> 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.[3]
>
> 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.[4]

Finally, Section VI of that report, entitled "Recommended Executive and Legislative Changes," specifically urged Congress to:

> Recodify federal laws governing acquisition in a single, consistent, and greatly simplified procurement statute; and remove those features of current law and regulation that are at variance with the expanded acquisition of commercial products and the establishment of effective commercial-style procurement competition.[5]

That same report urged the Secretary of Defense to ensure that DoD take the steps necessary to amend the DoD Supplement to the Federal Acquisition Regulation (FAR) so as to:

> 1. Effect a major increase in the acquisition of available commercial components and systems by requiring program managers to obtain waivers for use of products made to military specifications when commercial alternatives are available; and
>
> 2. Establish commercial-style competitive procurement practices to the full extent permitted by law.[6]

The purpose of this paper is to propose a legal framework for implementing these recommendations. Specifically, this paper will (1) examine the Commission's recommendations that DoD expand the use of commercial products and commercial-style competition; (2) identify "those features of current law and regulation that are at variance" with these recommendations; and (3) suggest areas in which existing laws, regulations, and procurement policy should be changed to permit effective implementation of the Commission's recommendations.

The success of the Commission's recommendations ultimately will depend on the skill with which the laws and regulations necessary to their implementation are drafted, and the strength of will with which they are applied and enforced. The complex and difficult task of drafting detailed legislation or regulations implementing the Commission's recommendations is beyond the scope of this paper. Still further beyond this paper's scope is any consideration of the management steps that must be taken to make a commercial procurement policy work. It is hoped, however, that the conceptual analysis this paper offers will provide a helpful framework for the challenging task of implementation that lies ahead.

I. BACKGROUND

The idea of increasing the government's use of commercial products and commercial-style competition is not new. It dates from at least 1972, when the Commission on Government Procurement issued its report.[7] The idea has been expressed in numerous laws, regulations, and internal agency directives since that time. Yet now, fourteen years later, the consensus is that the idea still has not been successfully implemented. Why should this be?

There are a number of explanations. Despite general exhortations to "buy commercial," existing statutes and regulations do not provide a strong direction in favor of commercial procurement, and most procurement policies and procedures obviously were not written with commercial procurements in mind. Moreover, even some rules written specifically for commercial procurement are inconsistent and ineffective, either as written or as applied on a case-by-case basis. Finally, there are certain acquisition policies and habits, deeply imbedded in the defense procurement process, that stand in the way of any effective implementation of a commercial product policy. Unless these problems are specifically identified and overcome, the Commission's recommendations are likely to fare no better than past efforts in effecting a substantial change in procurement policy.

The implementation framework proposed in this paper consists of three basic elements. First, there must be a strong and enforceable requirement—preferably statutory—that commercial products be given preference over "made to order" items. Second, DoD needs to develop a comprehensive commercial procurement program that distinguishes between various types of commercial procurement, and effectively takes advantage of the commercial marketplace. Third, this program must be carefully integrated into the overall procurement system, with particular attention given to the removal of "those features of current law and regulation that are at variance" with the expanded acquisition of commercial products and the establishment of effective commercial-style procurement competition.

II. THE NEED FOR A STRONG AND ENFORCEABLE STATUTORY DIRECTIVE IN FAVOR OF COMMERCIAL PRODUCTS

Existing statutes, regulations, and other sources of policy already favor, in a general way, the procurement of commercial products. The following are just a few examples:

> [P]rocurement policies and procedures for the [Department of Defense] shall . . . promote the use of commercial products whenever practicable.[8]
>
> * * *
>
> [T]he Secretary should . . . direct that standard or commercial parts be used whenever such use is technically acceptable, and cost effective.[9]
>
> * * *
>
> In a manner consistent with statutes, Executive Orders, and the requirements of Part 6 [of the Federal Acquisition Regulation] regarding competition, agencies shall acquire commercial products and use commercial distribution systems whenever these products or distribution systems adequately satisfy the Government's needs . . . .[10]
>
> * * *
>
> [The Government should] [e]stablish criteria for enhancing effective competition, . . . [including] such actions as eliminating unnecessary Government specifications and simplifying those that must be retained, expanding the purchase of available commercial goods and services, and, where practical, using functionally-oriented specifications or otherwise describing Government needs so as to permit greater latitude for private sector response . . . .[11]
>
> * * *
>
> [DoD shall] acquire commercial, off-the-shelf products when such products will adequately serve the Government's requirements, provided such products have established commercial market acceptability.[12]

The very frequency with which the policy in favor of commercial products is expressed suggests that the policy is, or should be, an important element of the defense procurement process. By their nature, however, these various policy statements have proven difficult to implement and enforce in any meaningful way. For example, in *Terex Corp., Caterpillar Tractor Co.*,[13] the General Accounting Office (GAO) refused to require an agency to "buy commercial":

> We note that, while [the Competition in Contracting Act and the various directives and circulars] state the government's policy of "promot[ing] the use of commercial products" and "authoriz[ing] and encourag[ing]" acquisition of commercial products, there is nothing in [them] which mandates acquisition of commercial products in any specific procurement.[14]

Many other procurement cases indicate a similar reluctance to enforce existing "commerciality" requirements strictly or literally.[15]

This suggests that, in order to ensure the effective implementation of a "buy commercial" policy, there needs to be a stronger, more specific directive that commercial products be purchased whenever possible. While this directive could conceivably be regulatory in nature, it would

be far more effective if enacted by statute.

Any such statute should not merely restate the existing policy favoring commercial product procurement "whenever practicable." Rather, it should clearly establish a preference for commercial procurement, and require procuring agencies to justify affirmatively any proposed acquisition of custom-made items. Instituting such a presumption in favor of commercial products will encourage procurement personnel to conduct the necessary market research to determine what commercial products are available to meet DoD's needs. More importantly, it will emphasize to procurement personnel that they are deviating from the "norm" whenever they do *not* "buy commercial."

Such an approach would be analogous to that used by Congress in the Competition in Contracting Act of 1984 (CICA) to increase the number of competitive procurements. Rather than merely stating a general preference in favor of competitive procurements, Congress created a presumption in favor of competition, requiring agency procurement personnel to justify each non-competitive procurement by making an affirmative showing that the procurement falls within one of several narrowly defined exceptions.[16] The approach taken in CICA appears to have achieved its intended effect,[17] and there is every reason to believe that a similar approach would work for commercial procurement.

In drafting such a statutory preference, it will be necessary to recognize that the concept of "commercial procurement" is not easy to define. Despite almost universal agreement over the desirability of purchasing commercial products, there is currently no single definition of what a "commercial product" is, or what is meant by "commerciality."[18]

Some of the differences in definitions of commerciality are accidental—the result of different people drafting definitions at different times with insufficient regard for internal consistency. To a significant extent, however, these definitional differences reflect important distinctions that should not be blurred in an effort to achieve a single comprehensive definition of what constitutes a "commercial product." The fact is that the government relies on the "commerciality" of products for different reasons in different contexts. It would therefore be impossible to fashion any single definition of "commerciality" that could be applied on a rational basis to all products under all circumstances.

Perhaps the best-known definition is the "commerciality" exemption from the requirement to submit cost or pricing data. Under the Truth in Negotiations Act,[19] offerors in certain negotiated procurements are required to submit certified cost or pricing data in order for the contracting officer to ensure that the prices offered to the government are reasonable. The Act provides that cost or pricing data need not be submitted by offerors whose prices are "based on . . . established catalog or market prices of commercial items sold in substantial quantities to the general public."[20] The rationale for this exemption is that a price that is set through competition in the marketplace can be deemed reasonable without resorting to a detailed analysis of the offeror's potential profit.[21] Because the government is relying on the existence of market forces to ensure a reasonable price, it is important for purposes of this statute that the definition of commerciality include some form of quantitative measure of the amounts sold in the commercial marketplace. Thus, the regulations incorporate specific percentage tests designed to help the contracting officer determine whether a catalog-priced item has been sold in "substantial quantities" at the catalog price.[22]

Outside the pricing context, the government may also rely on commerciality as a source of assurance that the product in question meets certain standards of commercial acceptability, or is available for prompt delivery. Thus, many solicitations—

particularly those for automated data processing (ADP) equipment—contain a requirement that a product be "commercially available."[23] For this purpose, it may not be necessary that the commercial item has been sold in "substantial quantities," as long as it has reached a stage of development at which it is suitable for commercial release. Thus, a definition of commerciality designed to satisfy the "price reasonableness" objective would probably be unsuitable where the reason for choosing a commercial product is simply to ensure product availability or quality.

Finally, even if it were possible to identify a particular category of products or procurements as "commercial" for all purposes, it would still be virtually impossible to fashion a single set of procedures applicable to all such products or procurements. For example, it may very well be that certain procurements of consumables and other commodities such as those currently purchased by the Defense Logistics Agency (DLA) can be procured using a special set of simplified "commercial" techniques. But creating such simplified procedures would not necessarily solve the problem of encouraging more use of commercial products in major weapons system acquisitions, either during the initial production process or in the acquisition of spare parts. For one thing, it is the prime contractor, not the government itself, that does much of the purchasing of commercial products in weapons procurement; while the government influences that process, its influence is indirect. A set of procedures governing when DoD could designate particular procurements as "commercial" and limit those eligible to bid to suppliers meeting some standard of "commerciality" simply would have little direct effect on most weapons procurement.

For these reasons, it is recommended that in enacting a statutory preference for the procurement of commercial products, Congress should not attempt a comprehensive or all-purpose definition of that term. Instead, Congress should direct DoD to take advantage of certain specifically identified features of the commercial marketplace for certain specific purposes (such as price reasonableness and quality assurance). DoD should retain the flexibility to fashion definitions and categories of commercial products depending upon the particular types of products and procurements involved, and the particular purposes for relying on an item's commerciality.

III. DEVELOPING A COMPREHENSIVE SYSTEM TO IMPLEMENT THE PREFERENCE FOR COMMERCIAL PRODUCTS AND TO INCREASE THE USE OF "COMMERCIAL-STYLE" PROCUREMENT TECHNIQUES

Obviously, no statutory preference for commercial products, no matter how specific, will be effective in actually increasing the use of commercial products or commercial competition unless DoD develops the appropriate policies and procedures to implement it. Although DoD has made strides toward this goal in the past,[24] these have all been undertaken on an *ad hoc* basis. To date, there has been no comprehensive approach to the problem.

The Commission has not attempted to specify in detail the precise elements of such a comprehensive system. The Commission has, however, made the following suggestions as to the major elements of such a system:

(1) Eliminating the existing "preference" for products made to military specifications, and substituting a preference for commercial products;

(2) "Streamlining" existing military specifications, and harmonizing them with existing commercially used specifications;

(3) "Prequalifying" suppliers based on proven quality;

(4) Increasing the emphasis on quality and performance, rather than relying solely on price; and

(5) Ensuring maximum participation in DoD procurement by qualified suppliers.

Although not all of these elements would necessarily be appropriate in all categories of procurements, it is fair to say that each of them is essential, at some level, to the effective implementation of the Commission's recommendation that DoD expand its use of commercial products and commercial acquisition techniques. It is not the purpose of this paper to elaborate on the Commission's recommendations, or to draft a comprehensive system for their implementation. Before any such comprehensive implementation is attempted, it is necessary to consider carefully how each of the major elements of the Commission's proposed commercial procurement system might be integrated into existing procurement procedures. The following section attempts to explore how that integration might be effected.

IV. INTEGRATING THE "BUY COMMERCIAL" SYSTEM INTO THE EXISTING LEGAL FRAMEWORK

Once the comprehensive system described above has been developed, it must then be integrated into the overall procurement framework. The Commission recognized this necessary step when it recommended that Congress, in the context of a "single, consistent" procurement statute, "remove those features of current law and regulation that are at variance with the expanded acquisition of commercial products and the establishment of effective commercial-style procurement competition."[25]

Eliminating the legal obstacles to implementation of effective commercial-style procurement, however, is not simply a matter of weeding out useless or wrong headed statutes or regulations that impede commercial procurement objectives. To be sure, there are scores of statutory and regulatory provisions that place burdens upon a commercial supplier selling to the government that the supplier does not face in its dealings with commercial customers. Removing these burdens or reducing their impact on commercial contractors would undoubtedly improve the federal procurement process significantly. But the overall problem is even deeper than that.

Any attempt to integrate a comprehensive commercial procurement program into the existing DoD acquisition system must honestly take into account the existence of, and reasons for, fundamental differences between the way the commercial marketplace works and the way the DoD system works. There often are important and valid reasons underlying those differences; sometimes there are not. But valid or not, the peculiarities of the DoD procurement system have spelled the doom of commercial procurement initiatives in the past, and will do so again if they are ignored.

This does not mean that DoD cannot adopt more commercial procurement techniques for many of its purchases. DoD cannot, however, simply adopt the practices of the commercial marketplace without honestly attempting to reconcile those practices with certain basic concepts underlying government procurement philosophy and procedures.

The most obvious difference between defense and commercial procurement is that DoD has certain needs that are simply non-existent in the commercial world. Some military items clearly must be held to standards higher than, or at least different from, those of the commercial marketplace. Any statutory or regulatory scheme establishing a preference for commercial procurement must recognize that the products DoD buys, and to some extent the way in which it buys, are dictated by military considerations with no counterpart in the commercial marketplace. There is general consensus, however, that with careful attention to quality control, commercial products can be used for many of the purposes now served by items made to detailed specifications.

A far more formidable obstacle to the adoption of commercial procurement techniques is the traditional emphasis in federal procurement on demonstrably objective procedures and quantifiable standards. Specifically, existing procurement practices are built upon the principles (1) that all potential offerors must be given an equal opportunity to bid; (2) that the agency's procurement decisions must be objectively justifiable to the public or others outside the agency; and (3) that unsuccessful offerors must be given an opportunity to protest decisions with which

they disagree. While ostensibly designed to promote fairness and competition, these concepts are virtually unknown in the commercial marketplace. As will be discussed below, these principles, and their many ramifications, constitute perhaps the greatest "impediment" to the effective implementation of a "buy commercial" policy.

In addition to the concepts of "defense mobilization" and "objectivity," increasing the use of commercial products and procurement techniques also squarely conflicts with various socioeconomic goals currently implemented through the procurement process. This was graphically illustrated in the controversy over the restrictions on commercial procurement that appeared in the DoD appropriations statutes for fiscal years 1983, 1984, and 1985.[26] The government's well-documented concern for small business[27] and the "buy American" policy[28] are perhaps the two most visible socioeconomic goals currently implemented through the procurement process; both conflict to some extent with the concept of commercial procurement.

This does not mean that the effective implementation of a "buy commercial" policy requires the wholesale abandonment of fundamental concepts underlying governmental procurement. It would be naive, for example, to expect that the procurement process will not be used as a vehicle for implementing social policy to at least some extent. What it does mean, however, is that Congress and DoD must recognize that a serious approach to expanding DoD's use of commercial products may well involve tradeoffs in some of these areas, for particular types of products or procurements.

With this in mind, this paper now addresses each of the broad elements suggested by the Commission, and specifically discusses both the existing legal "impediments" to their implementation and other factors DoD should take into account in developing a comprehensive commercial procurement system.

A. Eliminating the Existing "Preference" for Products Made to Military Specifications, and Substituting a Preference for Commercial Products

Commission Recommendations. As stated above, the Commission's February 1986 "Interim Report" contained the following recommendation:

> 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.[29]

In its April 1986 report, "A Formula for Action," the Commission expanded upon this recommendation that DoD eliminate any existing "preference" for the use of specifications:

> 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.[30]

The Commission explained that 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."[31]

In place of detailed specifications, the Commission suggested the adoption of functional purchase descriptions:

> 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. . . .[32]

Analysis. The so-called "preference" for specifications does not appear in any existing procurement statute. Indeed, as noted above, both CICA[33] and the Defense Procurement Reform Act of 1984[34] specifically set forth a policy favoring the procurement of commercial products whenever possible. Nor is there any clear statutory impediment to DoD's use of "functional," as opposed to "design," specifications.[35] Indeed, at least since CICA's passage in 1984, DoD has been under a statutory mandate to "require descriptions of agency requirements, whenever practicable, in terms of functions to be performed or performance required."[36]

Section 10.006(a) of the Federal Acquisition Regulation, on the other hand, clearly provides that use of specifications is "mandatory" unless (1) otherwise authorized by law; (2) "deviation" from their use is approved under the procedures set forth in FAR 10.007; or (3) one of the five exceptions set forth in FAR 10.006(a) applies.[37] Deviation is permitted only if an existing specification does not meet the agency's "minimum needs."[38]

In addition to the five basic exceptions, however, FAR 10.006(b) provides a separate "commercial exception," which states:

> (b) *Commercial exception.* (1) In addition to the exceptions given in paragraph (a) above, agencies should consider stating their needs in a purchase description, when appropriate under Part 11 and implementing agency regulations, even though there is an indexed specification.
>
> (2) The agency responsible for a specification may designate it as one for which this exception cannot be used, if the agency head or a designee determines this to be necessary.

Thus, although a contracting officer need not follow the "deviation" procedures in order to purchase a commercial product, the regulations still speak of commercial procurement as an "exception" to the "rule" of using a mandatory specification. While this language does not *preclude* the acquisition of commercial products in lieu of products made to specification, the regulations clearly do not require decisionmakers to look to commercial products in the first instance.

Merely requiring a program manager to get a waiver before using a product made to military specifications, however, will not solve the problem. Serious attention must also be devoted to how acquisition personnel are to determine the existence of "commercial counterparts" that will meet DoD's needs in a particular procurement. While Part 11 of the Federal Acquisition Regulation (entitled "Acquisition and Distribution of Commercial Products") does contain a brief set of procedures for "market research and analysis" designed "to ascertain the availability of commercial products to meet [the agency's] needs,"[39] these regulations do not provide very specific guidance. Similarly, Part 7 of the Federal Acquisition Regulation provides only brief guidance on "determining availability of private commercial sources."[40] Thus, any comprehensive approach to implementing a preference for commercial products should incorporate revisions to or supplementation of Parts 7, 10, and 11 of the FAR.

Moreover, particularly in this area, a comprehensive approach to commercial procurement must distinguish between different products or categories of procurement. Requiring acquisition personnel to seek a waiver before purchasing ketchup under a military specification makes perfect sense, and it would not be difficult to prescribe guidelines for how to conduct market research to determine the availability of ketchup or even of sophisticated office equipment. The questions are far more complex, however, when the end

item to be procured is a ship, an airplane, or some other major weapons system.

For these purchases, the question of whether there exists a "commercial counterpart," such as a commercial ship or airplane that can be adapted for military use, is only the tip of the iceberg. While a waiver provision could be helpful in forcing DoD to identify such commercially adaptable systems, such as the purchase of modified Chevy Blazers, and to identify major components of such systems (*e.g.*, the engine) that can be purchased off-the-shelf with minor adaptations, a more comprehensive approach is necessary to ensure the effective integration of commercial products at all levels of the systems acquisition process.

For example, even if there are no readily adaptable commercial counterparts for the system or its major components, there will almost certainly be commercial counterparts for lesser components and spare parts. Many of these items are purchased not by DoD but by the prime contractors themselves. A comprehensive approach to the specifications issue in the major systems acquisition context, therefore, should provide mechanisms for ensuring that detailed specifications do not get "locked in" at too early a stage in the development process. Program managers should continue to refine specifications at all stages of the process prior to full-scale development so that both the government and the prime contractor retain the flexibility to incorporate commercial products at later stages of the process. This is essentially the approach being taken under the "streamlining" initiative currently being implemented by DoD.[41]

B. Streamlining Existing Military Specifications, and Harmonizing Them With Existing Commercially Used Specifications

Commission Recommendations. The Commission has recommended that, in those circumstances in which military specifications are appropriate, those specifications should be "streamlined":

> In addition, we recommend that the DoD Supplement to the Federal Acquisition Regulation be changed to encourage streamlining military specifications themselves.
>
> * * *
>
> 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.[42]

Analysis. There is no existing statutory or regulatory impediment to the implementation of this goal. While the number of industries that have usable, available product specifications may be limited, there is nothing to prevent DoD from undertaking a review of existing specifications with a view toward simplification and the removal of superfluous requirements. Indeed, this recommendation is entirely consistent with the existing principle that the government should state its requirements in terms of "minimum needs."[43]

In developing a comprehensive approach designed to implement either this or the previous recommendation, however, DoD must keep in mind the reasons for the military's traditional reliance on specifications, and should provide appropriate mechanisms to meet the concerns underlying those reasons as necessary.

Prior to the passage of the Competition in Contracting Act, one explanation given for the use of detailed specifications was the statutory and regulatory preference for formal advertising, as opposed to negotiated procurement.[44] Under formal advertising (now referred to as "sealed bidding"), agencies are not permitted to distinguish among offerors on any basis other than price.[45] As long as the low

bidder meets each of the requirements set forth in the specification, his bid is considered responsive, and the agency may not award the contract to another bidder, even though that other bidder is offering a product of substantially greater quality at only a slightly higher price. Thus, in a formally advertised procurement the procuring agency has an incentive to describe every conceivable characteristic in the specification in order to be sure of getting a product sufficient to meet its needs.

The Competition in Contracting Act, by eliminating the preference for formal advertising,[46] might have been expected to reduce DoD's reliance on detailed specifications. In fact, however, there is no evidence that a significant reduction in the use of detailed specifications has occurred. Some of the explanation for this may be inertia on the part of DoD employees, who are reluctant to deviate from a specification that has gone through numerous levels of review. Some is undoubtedly due to the fact that those purchasing products are not the ones who are using them, and there is often little communication between the two functions as to what the user's real needs are.

The reluctance to abandon detailed specifications, however, also appears to be tied to a legitimate concern that, without a specific statement of what the contractor is expected to provide, acquisition personnel will lose their leverage to force a contractor to supply products of sufficiently high quality. Without sufficiently detailed specifications, the argument goes, the agency has nothing to hold the contractor to in the event that the product does not turn out to perform as promised. Thus, even in negotiated procurement there appears to be a link between the use of specifications and quality assurance. This suggests that the use of detailed specifications will not be eliminated without providing some accompanying mechanism for ensuring product quality.

In theory, this is precisely what the increased use of commercial products is designed to do. By purchasing products that have been "tested" in the commercial marketplace, a contracting officer should be freed from many of the concerns over quality that he faces when he purchases a product from someone who has never sold the product before. Thus, limiting a given procurement to "commercial" products should greatly reduce the need for detail in describing the government's needs.

An additional mechanism for ensuring quality would be the imposition of a "prequalification" requirement on suppliers—*i.e.*, limiting procurements to "qualified suppliers" based on their demonstrated track record in supplying commercial and government customers. As discussed in the next section, however, the concept of prequalification may be inconsistent with existing law.

C. "Prequalifying" Suppliers Based on Proven Quality

Commission Recommendations. In Section V.E of its April 1986 report, the Commission recommended that DoD focus on achieving more effective competition, modeled after the competitive procurement techniques used in industry. The Commission noted that one of the ways in which industrial companies ensure quality control is to maintain "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.[47]

Accordingly, the Commission stated:

> Procurement officers must be allowed and encouraged to . . . limit bids to qualified

> suppliers; [and] to give preference to suppliers that have demonstrated the quality and reliability of their products[.][48]

Analysis. This recommendation raises what is probably the greatest obstacle to the effective implementation of a "buy commercial" policy—the clash between the concept of "prequalification" and the principle that all suppliers should have the opportunity to bid. The conflict between these principles has arisen before, and the history of the conflict is instructive.[49]

Briefly stated, following the recommendations of the Commission on Government Procurement in 1972 and the creation of the Office of Federal Procurement Policy in 1974, DoD undertook a variety of efforts to bring its procurement practices more in line with those of the commercial marketplace. Chief among these were the Commercial Commodity Acquisition Program (CCAP), the Commercial Item Support Program (CISP), and a "specifications review" effort undertaken in response to various memoranda from the Office of Federal Procurement Policy. On September 29, 1978, the Department of Defense (DoD) issued DoD Directive 5000.37, which established policies for the "Acquisition and Distribution of Commercial Products" (later known as ADCoP). The first listed objective of the Directive was to "acquire commercial, off-the-shelf products when such products will adequately serve the Government's requirements provided such products have an established market acceptability."[50]

Subsequently, DoD began including "established market acceptability" as a requirement in appropriate solicitations. Because the Directive did not have the force of law, however, the Comptroller General either construed these requirements loosely or ignored them altogether in bid protests brought by excluded bidders.[51] Moreover, the requirement met with considerable opposition from companies (primarily small businesses) whose sales were exclusively or primarily to the government, and who therefore could not meet the test of "established market acceptability."

The concerns of these small businesses resulted in the addition of the following restrictive language to the statutes appropriating funds for DoD in fiscal years 1983, 1984, and 1985:

> None of the funds appropriated by this Act may be obligated or expended to formulate or to carry out any requirement that, in order to be eligible to submit a bid or an offer on a Department of Defense contract to be let for the supply of commercial or commercial-type products, a small business concern (as defined pursuant to section 3 of the Small Business Act) must (1) demonstrate that its product is accepted in the commercial market. . . ., or (2) satisfy any other prequalification to submitting a bid or an offer for the supply of any such product.[52]

The following portions of the legislative histories of these provisions are particularly enlightening:

> The intent [of the restriction] is to delay Defense Department implementation of procedures under the acquisition and distribution of commercial products policy. . . . There is concern among small businesses that do not have a commercial market for their products that the proposed procedures will prevent them from competing for defense contracts. The recommended restriction will defer implementation until the Committee can ascertain that no unfair discrimination will result from any proposed changes.[53]
>
> * * *
>
> [This language] provides small business the chance to compete for . . . commercial or commercial-type contracts, since prequalification based on commercial acceptance would not be allowed. *At the same time, this language does not preclude the Department of Defense, after bids are received, from rejecting any low bid that did not meet quality or responsibility criteria.*[54]

In fiscal year 1986, the restriction was finally removed from the appropriations legislation. The controversy surrounding its inclusion, however, strongly suggests that any move to "institutionalize" a prequalification requirement, even for particular categories of procurements, is likely to meet with opposition from small businesses and others who are unable to meet the requirement.

Prequalification and CICA. Since the passage of the Competition in Contracting Act in 1984, the central question to be addressed prior to imposition of any "prequalification" requirement is whether that requirement is consistent with CICA's mandate that "full and open competitive procedures shall be used by the Department of Defense. . . ."[55] The definition of "full and open competition" appears in the Office of Federal Procurement Policy Act, 41 U.S.C. § 403, expressly made applicable to DoD by 10 U.S.C. § 2302(3):

> (7) the term "full and open competition," when used with respect to a procurement, means that all responsible sources are permitted to submit sealed bids or competitive proposals on the procurement. . . .

The extent to which this language permits DoD to use some form of "prequalification" to exclude suppliers thus depends upon the interpretation of the term "all responsible sources." Again, the definition of "responsible source" is provided by the Office of Federal Procurement Policy Act, 41 U.S.C. § 403(8):

> (8) the term "responsible source" means a prospective contractor who—
>
> (A) has adequate financial resources to perform the contract or the ability to obtain such resources;
>
> (B) is able to comply with the required or proposed delivery or performance schedule, taking into consideration all existing commercial and Government business commitments;
>
> (C) has a satisfactory performance record;
>
> (D) has a satisfactory record of integrity and business ethics;
>
> (E) has the necessary organization, experience, accounting and operational controls, and technical skills, or the ability to obtain such organization, experience, controls, and skills;
>
> (F) has the necessary production, construction, and technical equipment and facilities, or the ability to obtain such equipment and facilities; and
>
> (G) is otherwise qualified and eligible to receive an award under applicable laws and regulations. . . .

This language, which is mirrored in FAR 9.104-1, appears to be inconsistent with "limiting bids to qualified suppliers"; it clearly conflicts with the idea of giving a preference to suppliers based on superior performance. The concept of "responsibility" requires only a "satisfactory" performance record; under the applicable regulations, even a contractor "that is or recently has been seriously deficient in contract performance" can be found to be "responsible" if the contracting officer determines that the contractor has taken appropriate corrective action.[56] It is thus highly questionable whether this relatively liberal concept of "responsibility" would permit any form of supplier "prequalification" at all, let alone one based on excellent, rather than merely satisfactory, past performance.[57]

The only portion of the "responsible source" definition that might conceivably authorize the prequalification of suppliers is subsection 8(G), which states that a contractor must be "otherwise qualified and eligible to receive an award under applicable laws and regulations. . . ."[58] The Act gives no guidance, however, as to what "qualification" means in this context, and this language would appear to provide only a tenuous basis for what otherwise appears to be a major departure from the basic philosophy of "full and open competition." Thus, it is fair to say that the

language of CICA is ambiguous at best on the question of prequalification of suppliers.

The legislative history of CICA is also ambiguous on the question. In explaining the substitution of the term "full and open competition" for the previous Senate language establishing "effective" competition as the standard for awarding federal contracts, the conferees stated:

> The conference substitute uses "full and open" competition as the required standard for awarding contracts in order to emphasize that all responsible sources are permitted to submit bids or proposals for a proposed procurement. The conferees strongly believe that the procurement process should be open to all capable contractors who want to do business with the Government. *The conferees do not intend, however, to change the long-standing practice in which contractor responsibility is determined by the agency after offers are received.*[59]

The Conference Report also contained the following language, however, which seems to support the concept of prequalification:

> The conferees also intend that where competition is conducted among all sources that have been prequalified, in accordance with statute and regulations, and where prequalification is essential to ensure satisfaction of an agency's needs, such procedures shall be considered full and open competitive procedures, provided all responsible sources are given a reasonable opportunity to qualify.[60]

It is possible, however, that Congress was referring here only to prequalification of *products,* rather than of suppliers. This would be consistent with the approach Congress took in the Defense Procurement Act of 1984,[61] which was passed shortly after CICA. That Act established procedures for the implementation of "qualification requirements," including the establishment of Qualified Products Lists (QPL's), Qualified Manufacturers Lists (QML's), and Qualified Bidders Lists (QBL's) for use by DoD.[62]

Eligibility for these lists, however, is product-, rather than supplier-oriented. Inclusion on a Qualified Bidders List, for example, means only that a manufacturer has had its products tested and has been found to satisfy "all applicable qualification requirements for that product or [has] otherwise satisfied all applicable qualification requirements."[63] Moreover, Congress specifically stated that a potential offeror may not be excluded from a procurement solely because he (1) is not on one of these lists or (2) has not been identified as meeting a qualification requirement, if he can demonstrate that he or his product meets the standards established for qualification or can meet such standards before the date specified for award.[64] Thus, the regulations currently do not appear to contemplate the creation of a list of manufacturers who have performed good work for DoD or other federal agencies in the past. It is this feature of the commercial marketplace that the Commission seeks to transport to DoD.[65]

Prequalification and the Small Business Act. An additional statutory impediment to the effective implementation of a prequalification requirement based upon the proven quality and reliability of a supplier is posed by the requirements of the Small Business Act.[66] Under current law, the Small Business Administration (SBA) retains final authority to determine whether a small business is "responsible" to receive and perform a specific government contract. As stated in the statute, the SBA has the authority to certify "all elements of responsibility, including, but not limited to, capability, competency, capacity, credit, integrity, perseverance, and tenacity."[67] The Act goes on to state that a government procurement officer on a particular contract may not, for any of these reasons,

> preclude any small business concern or group of such concerns from being awarded such contract without referring the matter for a final disposition to the Administration.[68]

As discussed previously, it was the imposition of a prequalification requirement upon small businesses that led to the demise of the ADCoP Program through the insertion of restrictive language in the DoD appropriations statutes in fiscal years 1983-85. Thus, any attempt to implement the Commission's recommendations will have to address the interplay between the goal of commercial products procurement and the well-established policy of protecting small businesses.

Suggested Implementation. Particular care will need to be taken in implementing this portion of the Commission's recommendations. One possible approach would be to enact a statutory provision—perhaps in the same statute establishing a "preference" for commercial procurement[69]—making it clear that DoD is authorized to implement prequalification requirements as part of the comprehensive commercial procurement system mandated by the statute, "notwithstanding any other provision of law." Such an approach should also be sufficient to rebut any contention that a prequalification requirement is inconsistent with the concept of "minimum needs."[70]

Such an approach would be analogous to that taken in CICA for reconciling the procedures of the General Services Administration's (GSA) Multiple Award Schedule program with the requirement of "full and open competition." Not insignificantly, the Multiple Award Schedule program is the vehicle through which the GSA negotiates contracts for the purchase of commercial products by many federal agencies. Negotiations are conducted simultaneously with several offerors in each product category, and all of the offerors potentially may receive a contract. Thus, the offerors are not "competing" against each other for the contract awards in the traditional sense. Nevertheless, Congress has acknowledged that this program achieves the benefits of competition for the government purchasers, and thus included specific language in CICA to confirm that contracts awarded pursuant to this program shall be deemed to have been awarded pursuant to full and open competitive procedures.[71]

The analogy to the Multiple Award Schedule program is helpful in another context as well: in establishing prequalification criteria, DoD should give serious consideration to the possibility of developing lists of qualified suppliers in particular areas, or otherwise establishing the acceptability of suppliers or products in advance, rather than making a case-by-case determination. The case-by-case approach not only is tedious and inefficient for both the government and the contractor, but also may well result in inconsistent determinations.

Of course, any attempt to establish a master list of "approved" suppliers would raise the not inconsiderable logistical problems of how the list should be implemented and maintained, and how to establish criteria to determine which suppliers to include. Here again, DoD would have to approach these questions differently depending upon the type of procurement involved. The statute implementing the "buy commercial" mandate could require DoD to identify one or more programs or types of procurement in which to test, on a "pilot program" basis, the use of such a list. Such a system should, to the greatest extent possible, incorporate commercial marketplace performance and acceptability as a criterion (although this probably should not be the only criterion). Contractors should be required to requalify periodically, and their performance on government contracts could be evaluated at that time as well. In particular, the comparison of a supplier's pricing to DoD and its commercial customers could be included in the requalification process; this would not only be more efficient, but would also be less burdensome to contractors, than is the existing

system of requiring the contractor to haggle with the government separately on each individual procurement over the differences between the government and its commercial customers.

Another logistical problem that would be raised by the implementation of a qualified supplier list would be whether and how to provide suppliers with an opportunity to challenge their exclusion or removal from the list. Under existing law, a supplier would probably be held to have a right to protest its exclusion from the list, either before the General Accounting Office (GAO)[72] or in federal court.[73] Once a supplier had been placed on a list of qualified suppliers, its removal from the list probably would also form a basis for protest.[74] In the case of suppliers already on the list, existing law might also require some form of procedural protection prior to removal.[75] In either case (exclusion or removal), it should be possible to provide sufficient procedural protections within DoD itself that the likelihood of protest to GAO or a court would be minimized.[76] In any event, this system offers the advantage that these issues would be raised in advance, outside the context of any particular procurement, and any protests based on DoD's actions thus would not delay particular contract awards.

D. Increasing the Emphasis on Quality and Performance Rather Than Relying Solely on Price

Commission Recommendations. While the Commission recognized that obtaining "the best price" is an important factor both in commercial procurement and in DoD procurement, it noted that it is only one of several equally important factors considered in the commercial marketplace:

> Commercial procurement competition simultaneously pursues several related objectives: attracting the best qualified suppliers, validating product performance and quality, and securing the best price. . . . Defense procurement tends to concentrate heavily on selecting the lowest price offeror, but all too often poorly serves or even ignores other important objectives.[77]

Accordingly, the Commission's recommendation that DoD increase the use of "commercial-style competition" suggests that DoD place less emphasis on price, and more on quality:

> Federal law and DoD regulations should provide for substantially increased use of commercial-style competition, emphasizing quality and established performance as well as price.[78]

Analysis. The concern that the government places too much emphasis on price was raised at least as early as 1972 by the Commission on Government Procurement.[79] The current Commission has concluded that the problem still exists. Yet, for the most part, existing statutes and regulations are entirely consistent with the recommendation that DoD emphasize "value" rather than "price."

For example, 10 U.S.C. § 2305, amended by the Competition in Contracting Act, provides that, in addition to "specifications" reflecting the agency's needs, any solicitation for sealed bids or competitive proposals shall, at a minimum, include "a statement of all significant factors (including price) which the head of the agency reasonably expects to consider" in evaluating offers. This suggests that factors other than price are relevant, and may be considered as long as they are spelled out in the solicitation. Nevertheless, the statute goes on to provide that contracts using the sealed bid procedure must be awarded to the offeror whose bid "is most advantageous to the United States, considering only price and the other price-related factors included in the solicitation."[80]

The statutory provisions governing the award of contracts pursuant to competitive proposals permit more leeway in considering factors other than price:

> [T]he head of the agency shall award a contract with reasonable promptness to the responsible source whose proposal is most advantageous to the United States, considering only price and the *other factors included in the solicitation.*[81]

Similarly, while the regulations governing procurement by negotiation list price or cost as the first relevant factor, they clearly state that quality-based considerations are equally relevant:

> (b) The evaluation factors that apply to an acquisition and the relative importance of those factors are within the broad discretion of agency acquisition officials. *However, the price or cost to the Government shall be included as an evaluation factor in every source selection.* Other evaluation factors that may apply to a particular acquisition are cost realism, technical excellence, management capability, personnel qualifications, experience, past performance, schedule, and any other relevant factors.
>
> (c) *While the lowest price or lowest total cost to the Government is properly the deciding factor in many source selections, in certain acquisitions the Government may select the source whose proposal offers the greatest value to the Government in terms of performance and other factors. . . .*[82]

Indeed, in discussing the concept of contractor responsibility, the Federal Acquisition Regulation expressly recognizes that insistence on the lowest price often is not to the government's advantage:

> The award of a contract to a supplier based on lowest evaluated price alone can be false economy if there is subsequent default, late deliveries, or other unsatisfactory performance resulting in additional contractual or administrative costs. While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer.[83]

Thus, there appears to be no current provision of law or regulation that would prohibit procurement personnel from placing more emphasis on value and less on price. Perhaps here, as in the overall area of encouraging "commercial procurement," the problem is that procurement personnel are given broad exhortations to take factors other than price into account, but are given no specific instruction in how to do so. As discussed above, the current system encourages procurement personnel to make decisions that can be justified on objective, quantifiable grounds. The existence of the protest right may well exacerbate this tendency, since the decisionmaker knows that his decision is subject to review not only by his superiors within DoD but also by the GAO, or in some other forum in a protest brought by a disappointed bidder.

If this is the problem—and it seems logical that it is—then the way to overcome it is not by generally exhorting decisionmakers to focus on value over price, but rather by providing specific guidance as to how to establish value. In the ADP area, the government has already begun to move in this direction, by setting forth specific criteria for the determination of such relevant factors as life-cycle costing and present value.[84] There is no reason why this movement could not be expanded to other areas.

A second step that could be taken to alleviate this problem would be to attract and retain the calibre of procurement personnel necessary to make the kinds of subtle distinctions among products that will be necessary to ensure value. Accordingly, this recommendation should be implemented concurrently with the Commission's other recommendations regarding the overall improvement of DoD personnel and management structures.[85]

If these steps are taken, the existence of the protest right, rather than exacerbating the problem, may actually contribute to the solution, by leaving in the hands of the contractors the ability to force improvements in the system.[86]

E. Ensuring Maximum Participation in DoD Procurement by Qualified Suppliers

Commission Recommendations. No degree of improvement in the procedures governing "commercial" procurement will be effective unless qualified commercial suppliers actually participate in the procurement process. The Commission, in its April 1986 report, correctly recognized that the government places burdens on commercial suppliers that they do not face in the commercial marketplace, and that may well stand in the way of this goal:

> [B]ecause 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.
>
> 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.[87]

Implicit in the Commission's report is the recommendation that those burdens that discourage qualified commercial contractors from competing for government contracts be identified and eliminated.

Analysis. There are scores of "socio-economic" contract clauses and requirements, many imposed by statute, which have no counterpart in the commercial marketplace, and which arguably constitute a real burden on commercial contractors.[88] Even more burdensome, however, are numerous other contract clauses and requirements governing the acquisition process itself, which differ substantially from the way in which business is conducted in the commercial marketplace under the Uniform Commercial Code. Government-specific contract clauses apply to virtually every facet of the contracting process, from offer and acceptance to termination — including, in many instances, the right to audit the supplier's records even after the contract is completed. There are hundreds of such clauses; many are included for good reasons. Some, however, were obviously not written with commercial suppliers in mind. Moreover, some of these requirements are imposed only indirectly on commercial suppliers through "flow-down" provisions included in subcontracts with prime contractors.

It would be imprudent, however, to simply identify all such clauses and delete them from contracts with commercial suppliers. Rather, DoD needs to review each and make an affirmative determination of how it should apply, if at all, to the various categories of procurement identified in response to the recommended statutory directive to "buy commercial." Examples of actions DoD might take with respect to each such requirement include: (1) retain it as it is; (2) retain it for prime contractors but not require it to "flow down" to subcontractors; (3) adjust the dollar threshold for its application; or (4) require some form of advance compliance so as to remove the inefficiencies inherent in making a case-by-case determination of compliance. In addition, DoD might want to consider implementing more centralized buying of commercial items in order to take advantage of the efficiencies of volume purchasing, and to relieve contractors of the burden of negotiating with numerous

DoD users simultaneously.

A prime example of the misapplication of a contract requirement to commercial suppliers is the recent controversy over the commercial pricing certification requirement imposed by the Defense Procurement Reform Act of 1984.[89] This statute requires that a prospective contractor offering products to the government which he also offers for sale to the public must either certify that the price offered to the government is the lowest price at which he sells that item to the public or disclose that lowest price and provide a written justification for the difference. As originally written, this section was limited to suppliers of spare parts; as enacted, however, the statute referred simply to suppliers of commercial items, and DoD has taken a broad approach in defining the scope of the statute. Moreover, while the statute is limited to noncompetitive procurements, the regulations promulgated by DoD permit a contracting officer to include the clause whenever he decides that there has not been "adequate price competition" in a particular procurement, "despite full and open competition."[90] As a practical matter, the clause has been routinely included in many DoD procurements.

The certification requirement, particularly the justification process, imposes a heavy burden upon contractors who must keep track of every price at which every item they sell to the government is sold to the general public. Although the statute recognizes that there may be differences between the government and a supplier's commercial customers that justify different prices, these differences may be hard to justify without resort to the supplier's cost data, information that is closely guarded by commercial companies. Moreover, the justification process must be repeated in every procurement, possibly leading to inconsistent results. Insistence by the government upon the terms of this and similar requirements may well produce the undesired result of having more and more commercial firms decide not to continue to do business with the government.

DoD should work with commercial suppliers in determining which of these various burdens should be reduced or eliminated. In so doing, however, DoD must bear in mind that many features of the current procurement system, although they may stand in the way of the effective acquisition of commercial products, are in place to serve valid objectives, and they cannot simply be removed without some attention being given to how those objectives will be met in their absence.

It must also be recognized, however, that the government is not, and never will be, free to adopt this approach in its entirety. Congress, the press, and other interested observers will inevitably continue to search for the $400 hammers and the $700 toilet seats as evidence of DoD mismanagement. It is hoped that the implementation of the recommendations contained in the Commission's report will eliminate, or at least greatly reduce, the possibility that such embarrassments will occur in the future. It must be borne in mind, however, that while adopting commercial marketplace techniques should save money over the long run, it will not ensure that the government will receive the lowest possible price on every contract. For one thing, placing an increased emphasis on value (quality *and* price) rather than price alone may mean that DoD is spending *more* on a given product or system than it has in the past, but receiving greater value in return. For another, some of the costs savings the system is intended to accomplish will result from increased efficiencies in the procurement process itself, which will not necessarily be reflected in the price paid under a particular procurement. Thus, there needs to be some kind of mechanism in place to provide the information necessary to establish that the system is achieving its goals—if in fact it is—and to answer those who will inevitably continue to condemn the entire acquisition process on the basis of a single transaction.

V. CONCLUSION

Increasing the government's acquisition of commercial products is not an end in itself. Each of the various bodies that has recommended an increase in the government's purchases of "commercial products" has done so with certain objectives in mind. Chief among these is the goal of achieving lower costs, both through avoiding the necessity of developing new products to meet every need, and through streamlining the acquisition process itself by, for example, relying on commercial marketplace acceptability as a measure of reasonable price and good quality.

Thus, the Commission has correctly chosen not to focus solely on the acquisition of commercial products *per se,* but has also recommended the adoption of "commercial-style" procurement techniques for all types of products and procurements. This paper has attempted to analyze both aspects of the Commission's recommendations, and to suggest an approach for their effective implementation.

Briefly stated, this paper recommends:

1. That Congress enact a specific and enforceable statutory directive in favor of the acquisition of commercial products, defining the concept of "commercialty" broadly to permit DoD to exercise sufficient flexibility in its implementation.

2. That, concurrently with the enactment of the statutory preference for the acquisition of commercial products, Congress direct DoD to develop a comprehensive system for the implementation of this preference and of the Commission's recommendations that DoD increase the use of "commercial-style" procurement procedures, as appropriate, for all types of products and procurements. The directive should require that DoD report back to Congress within a specified period on its progress in implementing these recommendations, including specific recommendations, if any, for amendments to existing statutes.

In addition, this Congressional directive should specifically require that, in developing this comprehensive system, DoD should:

a. Develop workable definitions and categories of commercial products and commercial procurements;

b. Address each of the following elements of the Commission's proposed "system," and identify how each can be incorporated into the categories of procurement identified under (a) above, or show why the element is inappropriate for the particular category of procurement:

—Eliminating the existing preference for products made to military specifications, and substituting a preference for commercial products;

—"Streamlining" existing military specifications, and harmonizing them with existing commercially used specifications;

—"Prequalifying" products and suppliers based on proven quality;

—Increasing the emphasis on quality and performance, rather than relying solely on price; and
—Ensuring maximum participation in DoD procurement by qualified suppliers.

3. That DoD develop a mechanism for reviewing the implementation process to ensure that DoD has sufficient information to judge whether the intended goals of the system are in fact being accomplished.

NOTES

[1]"An Interim Report to the President" at 17 (Feb. 28, 1986).
[2]*Id.* at 18.
[3]"A Formula for Action" at 23 (April 1986).
[4]*Id.* at 25.
[5]*Id.* at 31.
[6]*Id.* at 33.
[7]*See Report of the Commission on Government Procurement,* Vol. 3, Part D, "Acquisition of Commercial Products" (Dec. 1972). The Commission called for "a shift in the fundamental philosophy relative to commercial product procurement" and concluded that the government should take greater advantage of the efficiencies offered by the commercial market.
[8]10 U.S.C. § 2301(b), as amended by the Competition in Contracting Act of 1984, Pub. L. No. 98-369, § 2721, 98 Stat. 1175, 1186 (1984) (10 U.S.C. note).
[9]Defense Procurement Reform Act of 1984, Pub. L. No. 98-525, § 1201, 98 Stat. 2588. 2588-89 (1984).
[10]Federal Acquisition Regulation (FAR) 11.002.
[11]Exec. Order No. 12353 (March 17, 1982).
[12]DoD Directive 5000.37, published in Defense Acquisition Circular No. 76-18, [1976-1980 Transfer Binder] Government Contracts Reporter (CCH) ¶ 79,075, at 75,163-15 (Mar. 12, 1979).
[13]Comp. Gen. Dec. Nos. B-217053, B-218535, 85-2 CPD ¶ 76 (1985).
[14]*Id.* at 5. In *Terex Corp.*, GAO denied a protest based on the Department of the Army's decision to delete from a solicitation a "standard commercial product" clause for the purchase of construction equipment that was nondevelopmental in nature. The standard clause required that offerors provide off-the-shelf commercial construction equipment that had been used by civilian industry in significant numbers for at least a year. GAO reasoned that the various directives and circulars encouraging the Army to "buy commercial" provided no basis for objecting to the Army's decision:

> The Army directives do not have the force and effect of law and do not provide a basis for determining the legality of a proposed award. . . . [W]e regard the Army's commercial construction equipment program to be a matter of executive branch policy which is ordinarily not for review under our bid protest function.

Id. at 4 (footnote omitted). Similarly, in *Timeplex, Inc., et al.*, Comp. Gen. Dec. No. B-197346, *et al.*, 81-1 CPD ¶ 280 (1981), GAO refused to give effect to a DoD directive requiring purchase of off-the-shelf commercial components "whenever such products will adequately serve the Government's requirements," stating: "A DoD Directive does not have the effect of law and does not provide this Office with a basis for determining the legality of an award." *Id.* at 12.
[15]*See, e.g., Digital Equipment Corp.*, Comp. Gen. Dec. No. B-219435, 85-2 CPD ¶ 456 (1985) (commercial availability of a product is a broad concept that generally may be satisfied in different ways); *E.C. Campbell, Inc.*, Comp. Gen. Dec. No. B-203581.2, 82-1 CPD ¶ 256 (1982) (offered product was "commercial product" even though the bidder had not listed the product in its current price list or catalog; as long as there is "some

evidence" to support the contracting officer's decision, even the mere assertion of commerciality by the contractor, GAO will uphold the contracting officer's decision); *Data Test Corp.*, Comp. Gen. Dec. No. B-181199, 75-1 CPD ¶ 138 (1975) (solicitation requirement calling for a "commercial off-the-shelf" item does not require a bidder to have the item available as of the date of award; rather, the bidder must merely "have the capacity or ability to provide such an item on the date set for delivery").

[16]Competition in Contracting Act of 1984, Pub. L. No. 98-369, § 2723(a)(1), 98 Stat. 1175, 1187 (1984) (adding a new 10 U.S.C. § 2804(c)).

[17]*See, e.g.*, Preston, "Improving the Acquisition Process—The Role of Congress" at 5 (CSIS Acquisition Study).

[18]Attachment A sets forth various definitions of "commercial product," "commercial item," and similar terms appearing in past and current laws, regulations, directives, and other sources of authority. The obvious thread running through these definitions is the concept that a "commercial" item is one sold to customers other than the government. The primary difference among them is the extent to which they attempt to quantify what proportion of the supplier's sales must be made to the public in order to qualify.

[19]10 U.S.C. § 2306(f).

[20]10 U.S.C. § 2306(f)(3); *see* FAR 15.804-3(c).

[21]Accordingly, the Act also exempts offerors from the cost or pricing data requirements in competitive procurements where the contracting officer is satisfied that the offeror's prices are "based on adequate price competition." 10 U.S.C. § 2306(f)(3). *See also* FAR 15.804-3(b).

[22]FAR 15.804-3(f)(2).

[23]*See, e.g., System Development Corp.*, Comp. Gen. Dec. No. B-193487, 79-1 CPD ¶ 303 (1979) ("commercially available" connotes only that the equipment can be acquired in the commercial marketplace, importing the notion that it is available for delivery within a reasonable time); *KET, Inc.*, Comp. Gen. Dec. No. B-199149, 78-2 CPD ¶ 305 (1978) (system need not be in actual production to be responsive to commerciality requirement); *Data Test Corp.*, Comp. Gen. Dec. No. B-181199, 75-1 CPD ¶ 138 (1975) (requirement calling for a "commercial off-the-shelf" item does not require a bidder to have the item available as of the date of the award; the bidder must merely "have the capacity or ability to provide such an item on the date set for delivery"). *See also Maremont Corp.*, Comp. Gen. Dec. No. B-186276, 76-2 CPD ¶ 181 (1976) (Army initiated plans to replace weapon with an off-the-shelf design "because the Army needed a replacement machine gun as soon as possible, in view of [the existing gun's] unreliability and the unacceptable time frame incident to the development of a new coaxial machine gun").

[24]For example, Attachment B to this paper gives a brief chronology of the actions taken by DoD in the wake of the recommendations made by the Commission on Government Procurement in 1972, particularly those relating to the initiative known as the Acquisition and Distribution of Commercial Products program (ADCoP).

[25]"A Formula for Action" at 31.

[26]*See* discussion *infra* at notes 49-54 and accompanying text.

[27]The Small Business Act, Pub. L. No. 85-536, § 2, 72 Stat. 384, 384 (1958) states:

> It is the declared policy of the Congress that the Government should aid, counsel, assist and protect . . . the interests of small-business concerns in order to preserve free competitive enterprise, to ensure that a fair proportion of the total purchases and contracts . . . [of] the Government . . . be placed with small-business enterprises, . . . and to maintain and strengthen the over-all economy of the nation.

Section 8(d)(1) of that act, 15 U.S.C. § 637(d)(1), states:

> It is the policy of the United States that small business concerns, and small business concerns owned and controlled by socially and economically disadvantaged individuals, shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency.

See also FAR 19.201(a) (it is the government's policy "to place a fair proportion" of its acquisitions with . . . small business concerns and small business disadvantaged concerns").

[28]*See, e.g.*, Buy American Act § 2, 41 U.S.C. § 10a; FAR 25.102.

[29]"Interim Report" at 17.

[30]"A Formula for Action" at 24.

[31]*Id.*

[32]*Id.* at 26.

[33]Pub. L. No. 98-369, § 2721, 98 Stat. 1175, 1186 (1984) (amending 10 U.S.C. § 2301(b)).

[34]Pub. L. No. 98-525, § 1201, 98 Stat. 2588, 2588-89 (1984) (10 U.S.C. note).
[35]Much of the controversy surrounding the "specification" issue involves not whether specifications should be used at all, but whether they should be stated in terms of what the agency wants the product to do (*i.e.*, "functional" specifications) as opposed to how the product should be built (*i.e.*, "design" specifications). Similarly, much of the criticism of specifications is directed toward the amount of detail given in the (usually design) specification, rather than toward the use of the specification itself.
[36]Competition in Contracting Act of 1984. Pub. L. No. 98-369, § 2721, 98 Stat. 1175, 1191 (amending 10 U.S.C. § 2301(b), 2305).
[37]The exceptions include (1) unusual or compelling urgency; (2) items purchased under the small purchase procedures of FAR Part 13; (3) products acquired and used overseas; (4) items acquired for authorized resale (excluding military clothing); and (5) construction or new installations of equipment where nationally recognized industry or technical source specifications standards are available.

In fact, the FAR provides that DoD is even more firmly tied than are other agencies to the use of indexed specifications. FAR 10.006(a)(2) provides that only one of these exceptions (that use of a military specification or standard, or of a voluntary standard listed in the DoD Index of Standards and Specifications, would delay obtaining a product that is "required under an unusual and compelling urgency") may be used by DoD.
[38]FAR 10.007.
[39]*See* FAR 11.004.
[40]FAR 7.303.
[41]*See* DoD Directive 5000.43 (Jan. 25, 1986).
[42]"A Formula for Action" at 26.
[43]While there is no express statutory requirement to this effect, 10 U.S.C. § 2305(a)(1)(B)(ii) states that specifications may include restrictive provisions or conditions "only to the extent necessary to satisfy the needs of the agency," and Congress has established competition advocates among whose duties are to challenge "barriers to . . . promoting full and open competition. . . , including unnecessarily detailed specifications and unnecessarily restrictive statements of need." 10 U.S.C. § 2318(a)(2); 41 U.S.C. § 418(c).

Moreover, the regulations are replete with references to a "minimum needs" requirement. *See, e.g.*, FAR 10.004(a)(1) (specifications, standards, or purchase descriptions "shall state only the Government's actual minimum needs"); FAR 10.002(a)(3) (specifications and purchase descriptions shall include restrictive provisions or conditions only to the extent necessary to satisfy the minimum needs of the agency or as authorized by law); FAR 10.007 (deviations may be authorized when existing specification does not meet an agency's minimum needs); FAR 14.101 (invitations for bids must describe the requirements of the government "clearly, accurately, and completely"; unnecessarily restrictive specifications or requirements that might unduly limit the number of bidders are prohibited).
[44]*See, e.g.*, Defense Acquisition Regulation (DAR) § 2-102.1(a).
[45]10 U.S.C. § 2305(a)(3); *see* DAR §§ 2-407.1, 2-407.5.
[46]*See Essex Electro Engineers, Inc.*, Comp. Gen. Dec. No. B-221114, 86-1 CPD § 92 (1986).
[47]"A Formula for Action" at 25.
[48]*Id.* at 26.
[49]*See* Attachment B.
[50]DoD Directive 5000.37, *published in* Defense Acquisition Circular No. 76-18, [1976-1980 Transfer Binder] Government Contracts Reporter (CCH) ¶ 79.075, at 75,163-15 (Mar. 12, 1979).
[51]*See* discussion *supra* at notes 13-15 and accompanying text.
[52]*See* Pub. L. No. 98-63, § 723, 97 Stat. 301, 309-10 (1983) (FY 1983); Pub. L. No. 98-212, § 779, 97 Stat. 1421, 1452-53 (1984) (FY 1984); Pub. L. No. 98-473, § 8071, 98 Stat. 1837, 1938 (1984) (FY 1985).
[53]S. Rep. No. 98-148, 98th Cong., 1st Sess. at 37 (1983) (FY 1983).
[54]H. Rep. No. 98-1086, 98th Cong., 2d Sess. at 262 (1984) (FY 1984) (emphasis added).
[55]Pub. L. No. 98-369, § 2721, 98 Stat. 1175, 1185 (1984), amending 10 U.S.C. § 2301. *See also* FAR Subpart 9.2.
[56]FAR 9.104-3. Moreover, under the existing definition of "responsibility," the government may not require that the supplier have (1) adequate financial resources, (2) the necessary business organization and skills, or (3) the

necessary equipment and facilities to perform the contract—it need only have "the ability to obtain them." 41 U.S.C. § 403(8).

[57]It should be noted that current regulations contemplate the possibility that special standards of responsibility may be developed "for a particular acquisition or class of acquisitions." FAR 9.104-2(a). The regulations state, however, that special standards "may be particularly desirable when experience has demonstrated that unusual expertise or specialized facilities are needed for adequate contract performance." Thus, they do not appear to contemplate the imposition of an across-the-board preference for suppliers with an established reputation for quality and reliability.

[58]41 U.S.C. § 403(8)(G).

[59]H. Rep. No. 98-861, 98th Cong., 2d Sess. at 1422 (1984), *reprinted in* 1984 U.S. Code Cong. & Admin. News 2109 (emphasis added).

[60]*Id.* at 1423, 1984 U.S. Code Cong. & Admin. News at 2111.

[61]Pub. L. No. 98-525, 98 Stat. 2588 (1984).

[62]*Id.* § 1216, 98 Stat. at 2593-95 (adding 10 U.S.C. § 2319). The Act defines "qualification requirement" as "a requirement for testing or other quality assurance demonstration that must be completed by an offeror before award of a contract." 10 U.S.C. § 2319(a).

[63]FAR 9.201.

[64]10 U.S.C. § 2319(c)(3).

[65]*See* "A Formula for Action" at 25.

[66]15 U.S.C. §§ 631, *et seq.*

[67]Small Business Act § 8(b)(7)(A), 15 U.S.C. § 637(b)(7)(A).

[68]*Id. See also* FAR 9.104-3.

[69]See discussion *supra* at notes 13-17 and accompanying text.

[70]The statutes and regulations establishing the "minimum needs" concept clearly show that this principle is closely tied to the philosophy that all potential offerors should be given an opportunity to compete. *See* authorities cited *supra* at note 44. While an agency's determination of its minimum needs traditionally has been given broad deference (*see, e.g., Julie Research Laboratories, Inc.*, Comp. Gen. Dec. No. B-218598, 85-2 CPD ¶ 194 (1985); *JLS Rentals*, Comp. Gen. Dec. No. B-219662, 85-2 CPD ¶ 570 (1985); *Stabbert and Associates, Inc.*, Comp. Gen. Dec. No. B-218427, 85-1 CPD ¶ 692 (1985)), recent cases have been less lenient in assessing whether restrictions in specifications have the effect of limiting competition. For example, in *Memorex Corp.*, GSBCA No. 7927-P, 85-3 BCA ¶ 18,289 (1985), the Board held that an absolute performance requirement was an impermissible limitation upon competition, characterizing the agency's action as follows:

> What DLA is asking for is not a given level of performance but a track record, and a track record measured not by DLA or any other Government agency but by a [commercial] third party.

Id. at 91,788.

[71]Competition in Contracting Act of 1984, Pub. L. No. 98-369, § 2721, 98 Stat. 1175, 1186-87 (1984). The conferees explained their action as follows:

> By providing the GSA multiple awards schedule program with a statutory base, the conferees intend that any responsible vendor wishing to compete for this business is, in fact, allowed and encouraged to compete. As long as the schedule contracts managed by GSA maintain this objective, GSA is complying with the intent of [CICA] and should be supported.

H. Rep. No. 98-861, 98th Cong., 2d Sess. at 1423 (1984), *reprinted in* 1984 U.S. Code Cong. & Admin. News 2111.

[72]While it is well established that the right to seek administrative review of an adverse agency action derives solely from statute, the General Accounting Office has broadly interpreted its statutory authority to "settle all accounts," pursuant to 31 U.S.C. 3526(a), to confer authority to determine the legality of all government expenditures, including those for contracts, and to ensure compliance with the various laws and regulations governing the expenditure of public funds. *See, e.g., Arrow Transportation. Inc.*, Comp. Gen. Dec. No. B-201882, 81-1 CPD ¶ 90 (1981).

[73]The arbitrary and capricious action of the agency in excluding a supplier from the list (for example, if the supplier clearly met all published criteria for eligibility) would probably be subject to judicial review under the terms of the Administrative Procedure Act, 5 U.S.C. §§ 551 *et seq.* Section 10 of that Act provides for review of

adverse agency action except to the extent that (1) a statute expressly precludes judicial review; or (2) agency action is "committed to agency discretion by law." 5 U.S.C. § 701(a)(1), (2). Thus, unless the statute establishing the "qualified supplier list" concept specifically precluded review of such determinations, existing law probably would be construed to permit such review. One question courts would face in determining whether to accept such challenges would be whether the excluded suppliers had suffered sufficient injury to confer standing. It is well established that a disappointed bidder has standing to challenge the award of a contract to another. *See, e.g., Scanwell Laboratories, Inc.* v. *Shaffer*, 424 F.2d 859, 864 (D.C. Cir. 1970). In the case of a supplier who has merely been excluded from a list of qualified suppliers, and who may never have been awarded a contract even if admitted to the list, the injury is more remote.

[74]Again, under existing law, unless Congressional intent were clearly spelled out in a statute, nothing would preclude such a protest to GAO, and the only question would be whether GAO would choose to exercise jurisdiction over such matters. Similarly, the question of judicial review would depend upon whether the courts would consider the injury suffered by an excluded contractor as a sufficient basis for standing.

[75]Such removal might be seen as analogous to suspension or debarment from government contracting. In that area courts have held that, although a citizen has no right to a government contract, and a bidder has no constitutionally protected property interest in such a contract, a bidder may have a "liberty" interest at stake, at least insofar as the adverse agency action is based on charges of fraud, dishonesty, or other factors that reflect adversely on a contractor's integrity. *See. e.g., ATL, Inc.* v. *United States*, 736 F.2d 677, 683 (Fed. Cir. 1984). This does not mean, however, that a supplier necessarily would be entitled to the full panoply of "due process" rights, including the right to an oral hearing or the opportunity to cross-examine witnesses. *See Mathews* v. *Eldridge*, 424 U.S. 319 (1976).

[76]In analogous situations, GAO has declined to hear protests relating to a supplier's status when the statutes describing the status determination impliedly commit this determination to another agency. For example, GAO will not review the propriety of a small business size determination, as such determinations are squarely within the authority of the Small Business Administration. *See, e.g., Cottrell Eng'r Corp.*, Comp. Gen. Dec. No. B-185830, 76-1 CPD ¶ 152 (1976). Similarly, GAO will not consider disputes regarding whether a bidder is a "manufacturer" or "regular dealer" within the meaning of the Walsh-Healey Act, since those determinations are left to the Department of Justice. *See, e.g., CNC Co.*, Comp. Gen. Dec. No. B-188176, B-188441, 77-1 CPD ¶ 221 (1977). *See generally* Tieder & Tracy, *Forums and Remedies for Disappointed Bidders on Federal Government Contracts*, 10 Pub. Cont. L.J. 92, 99 & n. 48-49 (1978).

[77]"A Formula for Action" at 25.

[78]*Id.*

[79]*See Report of the Commission on Government Procurement*, Vol. 3, Part D, "Acquisition of Commercial Products" (Dec. 1972).

[80]10 U.S.C. § 2305(a)(3).

[81]10 U.S.C. § 2305(a)(4)(B) (emphasis added).

[82]FAR 15.605 (emphasis added).

[83]FAR 9.103(c).

[84]*See, e.g.*, 41 C.F.R. Parts 201-24, 201-30 (Federal Information Management Regulations).

[85]*See* "A Formula for Action" at 27-30.

[86]It has been held that permitting unsuccessful bidders to challenge contract awards serves the legitimate function of providing a "check" on the agency's activities. *See, e.g., Scanwell Laboratories, Inc.* v. *Shaffer*, 424 F.2d 859, 864 (D.C. Cir. 1970).

[87]"A Formula for Action" at 26.

[88]Attachment C contains a non-exhaustive sample of the various "socioeconomic" solicitation provisions and contract clauses that currently appear in Part 52 of the Federal Acquisition Regulation.

[89]Pub. L. No. 98-525, § 1201, 98 Stat. 2588, 2598-99 (1984) (adding a new 10 U.S.C. § 2323).

[90]FAR 15.813-2(c).

ATTACHMENT A

DEFINITIONS RELATING TO "COMMERCIAL PRODUCTS"

1. *Statutory Definitions:*

a. *Truth in Negotiations Act*

[Provides exemption from cost or pricing data requirement for contracts "where the price is based on . . . established catalog or market prices of commercial items sold in substantial quantities to the general public. . . ."][1]

b. *Defense Procurement Reform Act of 1984: "Commercial Pricing Certification" Requirement*

[Imposes pricing certification requirement on contractors who sell to the government "items that are offered for sale to the public."][2]

2. *Current Definitions Appearing in the FAR:*

a. *"Commercial Product"*

"[A] product, such as an item, material, component, subsystem, or system, sold or traded to the general public in the course of normal business operations at prices based on established catalog or market prices (see 15.804-3(c) for explanation of terms)."[3]

b. *"Commercial Items"*

"[S]upplies or services regularly used for other than Government purposes and sold or traded to the general public in the course of normal business operations."[4]

c. *"Commercial-Type Product"*

"[A] commercial product (a) modified to meet some Government-peculiar physical requirement or addition or (b) otherwise identified differently from its normal commercial counterparts."[5]

3. *Definitions Developed During Implementation of the ADCoP Program:*

a. *"Commercial, Off-the-Shelf Product"*

"[A] commercially developed product in regular production sold in substantial quantities to the general public and/or industry at an established market or catalog price."[6]

b. *"Established Commercial Market Acceptability"*

"[R]elates to commercial products that are currently marketed in substantial quantities for the general public and/or industry. These marketed items involve commercial sales that predominate over Government purchases. To have become acceptable in the market place, products must have been priced competitively and performed acceptably, as judged by a wide range of users."[7]

"Commercial market acceptability is an evaluation of the product offered, performed for the purpose of determining a prospective contractor's ability to provide a commercial product that will conform to the Government's need. To be market acceptable, a product must be marketed in substantial quantities to the general public. To be substantial, sales to the general public must predominate over sales to the Government. If the commercial products were previously defined by a Government specification, offers of products which were acceptable

under the Government specification may be considered under solicitations requiring a product to have established commercial market acceptability."[8]

4. *Sample Definitions Imposed in Individual Procurements:*

"The standard commercial product clause basically requires that offers be based upon providing off-the-shelf commercial construction equipment which has been used by civilian industry in significant numbers for at least 1 year."[9]

"[A 'commercial product' is] a privately developed product with a reliable history of performance in industry. The item is available off the shelf and is completely supported by spare parts, technical assistance, and repair facilities. The Contracting Officer may consider items which are existing commercial equipment with minor modification, employing alternative methods and ranges, provided the equipment offered meets, as a minimum, the requirement of the . . . salient characteristics."[10]

Notes

[1]10 U.S.C. § 2306(f)(3).
[2]10 U.S.C. § 2323 ("Commercial Pricing for Supplies").
[3]FAR 11.001. FAR 15.804-3(c) defines the so-called "commerciality" exemption to the requirement that offerors under negotiated procurements submit certified cost or pricing data in order to establish the reasonableness of their prices. *See* 10 U.S.C. § 2806(f)(3) (Truth in Negotiations Act). Under that exception, a proposal is exempt from the cost or pricing data requirement "if the prices are, or are based on, established catalog or established market prices of commercial items sold in substantial quantities to the general public."
[4]FAR 15.804-3(a)(3).
[5]FAR 11.001.
[6]DoD Directive 5000.37, *published in* Defense Acquisition Circular No. 76-18 [1976-1980 Transfer Binder] Government Contracts Reporter (CCH) 79,075-15 (Mar. 12, 1979).
[7]Memorandum from Hugh E. Witt, Administrator, Office of Federal Procurement Policy, to Secretary of DoD and Administrators of Veterans Administration (VA) and GSA (Dec. 6. 1976).
[8]DoD Directive 5000.37, *published in* Defense Acquisition Circular No. 76-18 [1976-1980 Transfer Binder] Government Contracts Reporter (CCH) ¶ 79,075-15 (Mar. 12, 1979).
[9]*Terex Corporation; Caterpillar Tractor Company,* Comp. Gen. Dec. No. B-217053, B-218535, 85-2 CPD ¶ 76 (1985).
[10]*AUL Instruments, Inc.*, Comp. Gen. Dec. No. B-186319, 76-2 CPD ¶ 212 (1986).

ATTACHMENT B

A CHRONOLOGY
OF MAJOR FEDERAL GOVERNMENT/ DoD ACTIONS RELATING TO THE ACQUISITION AND DISTRIBUTION OF COMMERCIAL PRODUCTS (ADCoP)

1. *December 1972* — The Commission on Government Procurement issues its report. *See Report of the Commission on Government Procurement*, Vol. 3, Part D, "Acquisition of Commercial Products" (Dec. 1972).

> —The Commission calls for a "shift in the fundamental philosophy relative to commercial product procurement and for the establishment of a continuous oversight function to review agency policies and procedures."
>
> —The report concludes that the government should take greater advantage of the efficiencies offered by the commercial market.

2. *1974* — Congress establishes the Office of Federal Procurement Policy (OFPP) to provide overall direction for federal procurement policy. Pub. L. No. 93-400, 41 U.S.C. § 401 *et seq.*

3. *December 30, 1975* — DoD announces the establishment of the *Commercial Commodity Program*, designed to increase the percentage of off-the-shelf products purchased by DoD. [Memorandum from Acting Assistant Secretary of Defense, to Assistant Secretaries of the Army, Navy, and Air Force, December 30, 1975]

4. *May 24, 1976* — OFPP issues a memorandum to DoD, the GSA, and the Veterans Administration (VA) establishing the federal government's policy of encouraging the acquisition and distribution of commercial products. The memorandum calls on the agencies to implement the following policy:

> The Government will purchase commercial, off-the-shelf, products when such products will adequately serve the Government's requirements, provided such products have an established commercial market acceptability. The Government will utilize commercial distribution channels in supplying commercial products to its users. [Memorandum at 2]

5. *August 11, 1976* — DoD announces the establishment of the CCAP, the pilot program for the effort first announced in its December 30, 1975 memorandum. CCAP is designed to determine whether products produced for the public and industry can meet the requirements of the military services, and to test different techniques for acquiring commercial products.

> —The program is initiated by a memorandum dated *January 14, 1977.*
>
> —On *February 24, 1977,* DoD issues a memorandum suspending the mandatory use of military specifications and standards in the CCAP pilot program.

6. *December 6, 1976* — OFPP issues a memorandum to DoD, GSA, and VA entitled. "Incremental Implementation of Policy on Procurement and Supply of Commercial Products — Planning and Analysis Phase."

—OFPP notes that DoD has already begun implementation of the commercial products policy through the CCAP program.

—The memorandum includes definitions explaining how "commerciality" will be established:

> (a) *Commercial, off-the-shelf products* — "a commercially developed product in regular production sold in substantial quantities to the general public and/or industry at an established market or catalog price." [*Id.* at 4]
>
> (b) *Established commercial market acceptability* — "relates to commercial products that are currently marketed in substantial quantities for the general public and/or industry" which "involve commercial sales that predominate over Government purchases." [*Id.* at 4-5]

7. *November 15, 1977* — DoD establishes the Commercial Item Support Program (CISP), focusing on distribution, as opposed to acquisition, of commercial products. The purpose of the program is to determine if commercial distribution channels can supply products to the military services based on cost effectiveness (over the government's depot system) and military readiness.

8. *December 27, 1977* — OFPP issues a memorandum entitled "Implementation of Policy on Acquisition and Distribution of Commercial Products," describing agency efforts to implement the commercial product policy, assigning tasks relating to specification refinement and management controls, and announcing OFPP's objective of fully implementing the policy by July 1979.

9. *June 1978* — In response to OFPP's December 1977 memorandum, DoD begins a "specifications review" effort, to be used when specifications are revised, amended, or reviewed for any reason.

10. *September 29, 1978* — DoD issues DoD Directive 5000.37, establishing policies and responsibilities for the implementation of the Acquisition and Distribution of Commercial Products (ADCoP) Program within DoD. *See* Defense Acquisition Circular No. 76-18 (Mar. 12, 1979).

—In keeping with OFPP's May 24, 1976 memorandum, the first listed objective of the Directive is to:

> Acquire commercial, off-the-shelf products when such products will adequately serve the Government's requirements provided such products have an established market acceptability.

—DoD adopts the "commerciality" standards set forth in OFPP's December 6, 1976 memorandum (*i.e.*, sales to the public must "predominate" over sales to the government). In addition, commercial products previously deemed acceptable under government specifications are "grandfathered in" and deemed to have "established commercial market acceptability" for these purposes.

11. *December 12, 1979* — The Deputy Under Secretary of Defense issues a memorandum entitled, "Implementation of Acquisition and Distribution of Commercial Products (ADCoP) Policies," authorizing the

use of Commercial Item Descriptions (CIDs) as the preferred method for acquiring commercial products. CIDs are described as "a new series of simplified descriptions," which "concisely describe the salient physical and functional/ performance characteristics of commercially available products. The memorandum provides that a contractor submitting an offer for a product described by CIDs would be required to certify that "the product offered . . . is the same as the product offered for sale in the commercial marketplace."

12. *1980-1982* — At congressional committee hearings, small businesses whose sales are exclusively or primarily to the government express their fear that the "commerciality" requirements might preclude them from competing for DoD contracts.

13. *March 17, 1982* — President Reagan issues Executive Order 12352 ("Federal Procurement Reforms") ordering agencies to, *inter alia*:

> Establish criteria for enhancing effective competition, . . . [including] such actions as eliminating unnecessary Government specifications and simplifying those that must be retained, expanding the purchase of available goods and services, and, where practical, using functionally-oriented specifications or otherwise describing Government needs so as to permit greater latitude for private sector response. . . .

14. *July 29, 1983* — The concern raised by small business results in the insertion of the following language in the FY 1983 Supplemental Appropriations Act, Pub. L. No. 98-63:

> None of the funds appropriated by this Act may be obligated or expended to formulate or to carry out any requirement that, in order to be eligible to submit a bid or an offer on a Department of Defense contract to be let for the supply of commercial or commercial-type products, a small business concern (as defined pursuant to Section 3 of the Small Business Act) must (1) demonstrate that its product is accepted in the commercial market (except to the extent that may be required to evidence compliance with the Walsh-Healey Public Contracts Act), or (2) satisfy any other prequalification to submitting a bid or an offer for the supply of any such product.

These restrictions are repeated in the appropriations acts for fiscal years 1984 and 1985. *See* Pub. L. No. 98-212 (December 18, 1983), Pub. L. No. 98-473 (October 12, 1984).

ATTACHMENT C

EXAMPLES OF "SOCIOECONOMIC" SOLICITATION PROVISIONS AND CONTRACT CLAUSES APPEARING IN PART 52 OF THE FEDERAL ACQUISITION REGULATION

FAR Section	*Solicitation Provision or Clause*
52.208-1	Required Sources for Jewel Bearings and Related Items
52.208-2	Jewel Bearings and Related Items Certificate
52.219-1	Small Business Concern Representation
52.219-2	Small Disadvantaged Business Concern Representation
52.219-3	Women-Owned Small Business Representation
52.219-4	Notice of Small Business-Small Purchase Set-Aside
52.219-5	Notice of Total Small Business-Labor Surplus Area Set-Aside
52.219-6	Notice of Total Small Business Set-Aside
52.219-7	Notice of Partial Small Business Set-Aside
52.219-8	Utilization of Small Business Concerns and Small Disadvantaged Business Concerns
52.219-9	Small Business and Small Disadvantaged Business Subcontracting Plan
52.219-10	Incentive Subcontracting Program for Small and Small Disadvantaged Business Concerns
52.219-11	Special 8(a) Contract Conditions
52.219-12	Special 8(a) Subcontract Conditions
52.219-13	Utilization of Women-Owned Small Businesses
52.220-1	Preference for Labor Surplus Area Concerns
52.220-2	Notice of Total Labor Surplus Area Set-Aside
52.220-3	Utilization of Labor Surplus Area Concerns
52.220-4	Labor Surplus Area Subcontracting Program
52.222-1	Notice to Government of Labor Disputes
52.222-2	Payment for Overtime Premiums
52.222-3	Convict Labor
52.222-4	Contract Work Hours and Safety Standards Act — Overtime Compensation
52.222-19	Walsh-Healey Public Contracts Act Representation
52.222-20	Walsh-Healey Public Contracts Act
52.222-21	Certification of Nonsegregated Facilities
52.222-22	Previous Contracts and Compliance Reports
52.222-23	Notice of Requirement for Affirmative Action To Ensure Equal Employment Opportunity
52.222-24	Preaward On-Site Equal Opportunity Compliance Review
52.222-25	Affirmative Action Compliance
52.222-26	Equal Opportunity
52.222-27	Affirmative Action Compliance Requirements for Construction

FAR Section	*Solicitation Provision or Clause*
52.222-28	Equal Opportunity Preaward Clearance of Subcontracts
52.222-29	Notification of Visa Denial
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans
52.222-36	Affirmative Action for Handicapped Workers
52.222-45	Notice of Compensation for Professional Employees
52.222-46	Evaluation of Compensation for Professional Employees
52.223-1	Clean Air and Water Certification
52.223-2	Clean Air and Water
52.223-3	Hazardous Material Identification and Material Safety Data
52.223-4	Recovered Material Certification
52.224-1	Privacy Act Notification
52.224-2	Privacy Act
52.225-1	Buy American Certificate
52.225-3	Buy American Act — Supplies
52.225-5	Buy American Act — Constructed Materials
52.225-6	Balance of Payments Program Certificate
52.225-7	Balance of Payments Program
52.225-8	Buy American Act — Trade Agreements Act — Balance of Payments Program Certificate
52.225-9	Buy American Act — Trade Agreements Act — Balance of Payments Program
52.225-10	Duty-Free Entry
52.225-11	Certain Communist Areas
52.228-3	Workers' Compensation Insurance (Defense Base Act)
52.228-4	Workers' Compensation and War-Hazard Insurance Overseas
52.247-63	Preference for U.S.-Flag Air Carriers

APPENDIX I

The Department of Defense and Rights in Technical Data

Prepared by
THE LOGISTICS MANAGEMENT INSTITUTE*

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission.

TABLE OF CONTENTS

I. BACKGROUND

The government—including the Department of Defense (DoD)—requires rights in data for many reasons, among them logistic support, the dissemination of knowledge, and the need to operate, maintain, and repair the systems procured (and to train personnel to execute these functions). The need for DoD to have access to technical data for these purposes has never been at issue, nor is it now. What is new, and what is causing industry concern, is a heavy emphasis in DoD on receiving unlimited rights in technical data pertaining to proprietary items so that the data can be used to enable other firms to compete with the firm providing the data.

While the question of rights in technical data has never been simple or trouble-free and no ideal solutions have been found, industry and government usually have been able to agree on the basis of precedent, commonly accepted principles, good will, common sense, and negotiation on a case-by-case basis. But DoD's new push for competition has caused an imbalance in weighing the contractor's legitimate interest in protecting data, and hence its competitive position and economic interests, against the government's need for data, especially for competitive procurement.

Keeping the various elements in balance is in the public interest. Doing so encourages innovation, keeps suppliers in the industrial base, and increases contractors' willingness to permit government access to and use of data. Recent DoD actions and the proposed DoD technical data regulations represent a tilt, and the balance must be restored.

The spare parts storm of 1983 and 1984 led to a flood of studies and legislative initiatives to avoid the overpricing of spare and replacement parts. While lack of adequate, accurate, legible data was identified as a major impediment to competition for spare parts, treatment of the government's rights in technical data acquired from contractors was also found to result in sole sourcing for spares.[1]

The legislative initiatives referred to above led to the enactment of two largely identical laws covering technical data acquisition and rights. One, the Small Business and Federal Procurement Competition Enhancement Act of 1984, Public Law (P.L.) 98-577, dealt with the technical data aspects of civil agency procurement; the other, the Defense Procurement Reform Act of 1984 (P.L. 98-525),[2] related to DoD procurements. Both acts required the promulgation of regulations concerning technical data acquisition and rights as a part of the "single system of government-wide procurement regulations," that is, the Federal Acquisition Regulation (FAR) System.

In the absence of a uniform regulation, each federal agency has pursued its own data acquisition and rights policies. This lack of uniformity was exacerbated within DoD by a blanket deviation (effective from August 1983 until December 30, 1985) from the DoD FAR Supplement (DFARS) technical data rights policy. During this period, the various Services used differing approaches to data acquisition and rights, raising concern in private industry. This concern was brought to a head by DoD's late-1985 proposal to issue new technical data rules in the DFARS. The resulting outcry caused the proposed rules to be suspended; interim rules, close to those previously in existence, were put in place (and are now in effect) to meet minimum statutory requirements until these issues could be worked out. Industry's concerns were expressed to the Commission at an April 14, 1986, public hearing on how DoD acquires rights in technical data.

Representatives from DoD and industry testified. Annex A lists the witnesses heard.

From the information provided the Commission, plus our own survey of the field, it is evident that three primary areas need to be considered: the new statutes; policy (much of it independent of statute), which is often reflected in regulations but which also operates in other ways; and the regulations themselves. We will start with the statutes.

II. THE STATUTES

The data policy in P.L. 98-577 and P.L. 98-525 is based on a number of legislative compromises. First, regarding basic data rights policy considerations, the legislative history indicates that the following principles were agreed upon:

- The legitimate proprietary interests (as defined in the FAR) of the contracting parties may not impair any right of the parties as to patents or copyrights, or any other right established by law (e.g., state trade secret law).
- Since ambiguity increases uncertainty as to the allocation of rights, the FAR should define the legitimate proprietary interests of the government and the contractor, including what items of technical data qualify for restrictive legends.
- With respect to acquisition of commercial products, the surrender of design, development, or manufacturing technical data should not be a condition of the acquisition except to the extent technical data are necessary for operation and maintenance.
- In determining the rights in technical data, the FAR should require agencies to consider:
  (1) whether the item or process to which the technical data pertain was developed exclusively with federal or private funds, or with a mix of such funds;
  (2) the policy and objectives of 35 U.S.C. 200;
  (3) the Small Business Innovation Development Act of 1982 and the policy of the Small Business Act;
  (4) the interest of the government in increasing competition; and
  (5) for DoD, the prohibition against acquiring certain technical data pertaining to commercial products.
- With respect to civil agencies, the following additional policy guidance was established: The government should obtain unlimited rights in technical data pertaining to products developed exclusively with federal funds, if the delivery of such data is required *and* the data are needed for the future competitive procurement of substantial quantities of supplies or services; otherwise the government should obtain royalty-free, unrestricted rights to use the data for governmental purposes (excluding the right to publish).
- Computer software, except for computer software documentation (as technical data), was not specifically covered by these laws.
- With respect to DoD, a period of up to seven years may be negotiated after which the government would obtain unlimited rights in certain technical data delivered with limited rights.
- The regulations shall specify that the contractor will not unreasonably restrict suppliers from selling directly to the government items or processes produced under a subcontract.

The legislative agreements also specified adoption of a number of data management techniques, many of which had been recommended by the Air Force Management

Analysis Group (AFMAG). In this regard, the acts and the underlying legislative history required that the regulations call for appropriate contractual provisions that:

- specify the technical data to be delivered and the delivery schedules for the data (this requirement should reflect a coordinated strategy based on the acquisition, program management, and integrated logistic support plans for the system; the plans in turn should consider what technical data will be needed and when the data will be needed);
- specify or reference procedures for determining the acceptability of the technical data delivered, in terms of usability, completeness, and legibility (at this point, the agencies should consider challenging any restrictive markings on delivered technical data);
- require that technical data items to be delivered be specified as separate line items (to permit separate pricing for such data items);
- permit techniques, such as pre-notification, to be used to identify restrictively marked technical data in advance of delivery (to permit the government to take remedial action);
- require contractors to deliver updated versions of technical data previously delivered to the government;
- provide, at the time of delivery, written assurances that the technical data are complete and accurate and satisfy the contract requirements;
- establish remedies, including payment withholding, if the technical data delivered are incomplete or inaccurate; and
- with respect to DoD, require that supplies furnished under a contract identify the name of the actual manufacturer of the item; the national stock number, if any; the identity of the contractor; and the source of any delivered technical data.

Finally, recognizing that a contractor's legitimate proprietary rights should not be violated merely because the government obtained access to them through a federal procurement, the acts established (1) a due-process procedure for reviewing the legitimacy of asserted restrictions on delivered technical data and (2) sanctions to ensure adherence with the contract terms:

- A contracting officer may challenge any prime contractor's or subcontractor's assertion of restrictions on the use of delivered technical data if the contracting officer determines that a challenge is warranted; that is, that "reasonable grounds" or "probable cause" exists to question the current validity of the asserted restrictions *and* that continued adherence to them would make it impracticable to procure the item competitively.
- The challenge must be in writing and specify the grounds for the challenge.
- The contractor or subcontractor must, within 60 days, respond to the challenge with a justification of the restrictions.
- The contracting officer should then issue a final decision on the legitimacy of the restrictions. This decision is appealable under the Contract Disputes Act.
- The government will adhere to the restrictions on the technical data until final disposition of the challenge.
- If the restrictions are found not to be substantially justified, the contractor or subcontractor shall be liable for the government's cost of the challenge. If the restrictions are upheld, the government is liable to the contractor or subcontractor if the challenge is found not to have been made in good faith.

- As to the administrative burden on the contractor or subcontractor to retain records to prove proprietary assertions, the Congress rejected the concept of prepackaging justification for restricted markings and instead adopted the requirement that the contractor or subcontractor be prepared to furnish written justification of any restrictions on technical data for so long as the contractor or subcontractor asserts them.

Analysis of the statutes is contained in Annex B.

Findings and Recommendations

Our findings and recommendations regarding the statutes whose technical data provisions have been described above are as follows:

1. The intellectual property statutes and recent legislation bearing on technical data—such as P.L. 98-525 and P.L. 98-577—are not the basic problem.[3] DoD's troubles with technical data are not caused by poorly drawn laws, nor are they likely to be overcome by adding to, changing, or deleting current statutory provisions. We have, however, identified areas in which changes to the legislation would correct problems, resolve ambiguities, and create a beneficial uniformity; these areas are discussed in Annex B.
2. While we have found no fundamental statutory impediment to development of a satisfactory technical data rights policy for DoD, we note that P.L. 98-525 and P.L. 98-577 differ in some respects and that this leaves the way open for widely diverging interpretations, resulting in unnecessary confusion, delay in implementation, and lack of uniformity. We therefore recommend adoption of a single statute covering technical data or, if dual statutes are required in this area, that they be identical.

III. POLICY

DoD's approach to rights-in-technical-data issues is not driven solely or even primarily by statute. It is largely a matter of DoD policy, expressed to some degree in the DFARS but also handed down by nonregulatory directives and memoranda. Because no government-wide rights-in-technical-data policy has been arrived at, clearly articulated, or strongly enforced, the federal agencies, as has been noted, are free to go their own ways. A stronger and more definitive Executive statement of government-wide policy is required to balance the interests of the parties.

We have not found problems with DoD's policies regarding copyrights or its well-established policy of obtaining limited rights in the case of products developed at private expense. "Limited rights" and "developed at private expense," to be sure, are terms requiring careful definition. On the other hand, we find in general that a policy of *invariably* acquiring unlimited rights whenever development has occurred at public expense removes incentive to commercialize. More importantly, we find that a policy of permitting contractors *no* rights in data developed with mixed funding creates even greater disincentives.

Recommendations

We recommend that the Executive Branch develop an overall technical data rights policy embracing the following principles:

1. Except for data needed for operation and maintenance, the government should not, as a precondition for buying the product, acquire unlimited rights in data pertaining to commercial products or products developed exclusively at private expense. If, as a condition of the procurement, the government seeks additional rights in order to establish competitive sources, it should normally acquire lesser rights (such as directed licensing or sublicensing) rather than unlimited ones. The rights least obtrusive to the private developer's proprietary position should be selected.
2. The government should encourage a combination of private and government funding in the development of products. Significant private funding in this mix should entitle the developer to ownership of the resulting data, subject to a license to the government permitting use internally and use by contractors on behalf of the government. If government funding is substantial, the license should be on a royalty-free basis; otherwise, it should be on a reduced or fair-royalty basis. Whenever practicable, the rights of the parties should be established before contract award.
3. If products are developed exclusively with government funding, the contractor/developer should be permitted to retain a proprietary position in the technical data (a) not required to be delivered under the contract or (b) delivered but not needed by the government for competition, publication, or other public release. Use by or for the government should be without additional payment to the contractor/developer.

The analysis from which these recommendations have been drawn is set forth in Annex C.

IV. REGULATIONS

There should be more specific guidance than is now provided on procedures for ensuring that DoD's valid needs for data are met without placing contractors at an undue disadvantage that is ultimately not in the public interest. Implementation in the FAR is the appropriate means for translating this overall guidance into uniform policies and procedures. The DFARS should cover only those implementing and supplementing policies and procedures required for DoD but not suitable for civil agencies.

We have said that the statutory treatment of technical data is generally satisfactory. However, further and better policy guidance is necessary before satisfactory regulations—for DoD and for the government as a whole—can be written. The proposed FAR coverage is not comprehensive enough for DoD's needs. On the other hand, the proposed DFARS coverage is unnecessarily complicated and difficult to understand. In important ways, the statutory requirements regarding technical data are not being followed in the implementations proposed for the FAR and DFARS. This is partly because there is no adequate structural basis for consistent, uniform regulatory implementation.

Industry comments to the Commission criticized DoD's proposed technical data regulations implementing P.L. 98-525. In addition to objecting to the substance, industry saw no reason for independent DoD technical data coverage that did not follow the FAR, especially since the data provisions of P.L. 98-525 and P.L. 98-577 refer to the FAR System. The proposed DFARS treatment of technical data rights was seen as inconsistent with and supplanting (rather than supplementing) the technical data rights coverage proposed for the FAR. Furthermore, some considered the proposed DFARS too long, too complicated, poorly organized, and ambiguous, especially when compared with the proposed FAR coverage. Annex D traces the currently proposed regulatory implementation of the statutory requirements for technical data and summarizes our analysis of it.

Recommendations

1. The FAR System (a single uniform regulation applicable to all agencies, with supplements by agencies as needed) should be used to cover data rights. Without the discipline of a uniform system, similar terms and concepts are defined and treated differently. The differences are not justified. The FAR should provide common definitions of basic terms, since there is no apparent reason for agencies to use differing definitions, a practice that causes great confusion.

2. In determining whether an item or process was "developed at private expense," the following definitions should apply: *Developed* means the item or process exists and is workable. The demonstration of workability may occur either prior to, or under, the contract. *At private expense* means that the funding for the development work has not been reimbursed by the government, or such work was not required as an element of performance under a research or development government contract or subcontract (however, private expense includes independent research and development (IR&D) or bid and proposal (B&P) costs even though reimbursed).

3. Detailed guidance specifying the circumstances under which additional rights

will be acquired in limited rights data, to establish alternative sources of supplies, should be incorporated into DFARS Subpart 227.4. The existing requirement to obtain approval for any deviation from policy and contract clauses prescribed in this subpart should be adhered to. The use of technical data clauses that acquire additional rights for the government in limited rights data, if not specifically prescribed in the regulations, should require prior deviation approval.

4. There is a great need to reduce the complexity of the contractual treatment of rights in technical data. We recommend the following steps:
   - Separate the coverage for technical data from that for computer software. Provide for separate clauses covering each.
   - Combine and simplify the three mandatory clauses concerning technical data rights required to be included in all prime contracts and subcontracts calling for the delivery of technical data.
   - Consider providing basic technical data rights coverage with alternates for differing contractual situations (e.g., basic research, hardware development, production, supply) rather than the lengthy and detailed technical data rights clause now used to cover all situations.
5. The subcontract provision of the rights-in-technical-data clause should be modified to require the prime contractor and higher tier subcontractors to obtain, after written request from a proposed subcontractor, a government contracting officer's determination that the need to acquire the right to use the subcontractor's limited rights data for competitive reprocurement has been established in accordance with the regulations.

In summary, our most important recommendations regarding the regulations are to (1) adopt uniform government-wide definitions and concepts and (2) simplify DoD's basic rights-in-data clause, with a provision for alternates to be added when necessary to cover various types of situations.

V. ADDITIONAL MATTERS

Commercial Product Data

The overall balancing of interests of the contracting parties in technical data adopted by P.L. 98-525 and P.L. 98-577 was that the government would obtain rights in the technical data pertaining to products developed with public funds; the implementing regulations would define the rights of the parties to data pertaining to products developed with private or mixed funding; and (except for data needed for operation and maintenance) design, development, or manufacturing technical data pertaining to commercial products would generally not be acquired as a condition of the procurement. Industry, in its comments to the Commission, showed particular concern over the proposed and interim DFARS provisions implementing the statutory restriction concerning the acquisition of commercial product data. This concern related to the proposed DFARS definition of commercial products as those offered or sold in substantial quantities to the public at established catalog or market prices, and to the exceptions permitting contracting officers to negotiate to acquire commercial product data, including rights in the data, if advantageous to the government.

The concept of limiting DoD's acquisition of commercial product data is a throwback to DoD's pre-1964 data rights policy. That policy permitted a contractor to withhold from delivery, even if called for by the contract, data concerning items sold or offered to the public commercially if the contractor identified the source and characteristics of the product sufficiently to permit it or an adequate substitute to be purchased. P.L. 98-525 now requires DoD to blend its present limited rights/unlimited rights policy with limitations on acquiring certain technical data for commercial products. Technically, this can be accomplished by using the data-withholding provisions of the prior policy or by strict limitations on the contract data requirements or order provisions.

P.L. 98-525, unlike P.L. 98-577, does not *mandate* the restriction on acquiring design, development, or manufacturing data for commercial products. Further, the requirements for planning for the procurement of supplies for future competition in both acts[4] encourage obtaining, during the award of a production contract for a major system, proposals for acquiring rights to use technical data for competitive reprocurement purposes. Therefore, the DFARS must contain detailed guidance specifying when the general restriction concerning the acquisition of design, development, or manufacturing data for commercial products is or is not to apply. As indicated elsewhere in this paper, the restriction should apply to the acquisition of unlimited rights in limited rights data rather than to acquisition of the data themselves, and should be extended to products developed at private expense in general, not just commercial products.

Annex E gives additional background on commercial product data.

Software

Software poses a peculiar problem in that it represents a category of information as well as an end item to be delivered under the contract. While it is possible—and has been found convenient—to treat software simply as a subset of data, it would be an improvement to treat software as a special case, partly because to do so would simplify the treatment of technical data.

Software and DoD's handling of it are

analyzed and discussed in a series of 1986 technical memoranda and a technical report resulting from research sponsored by DoD and performed by Professor Pamela Samuelson.[5] Samuelson discusses software's hybrid nature, saying that in its machine-readable form, software has some characteristics of hardware and some characteristics of technical data. She concludes that this hybrid character has led to confusion about the manner in which software should be acquired and maintained after acquisition: should it be treated like hardware, like technical data, or differently from both? She says that a central problem for DoD, among others, is that software development is not thoroughly understood and that, as a consequence, DoD has not been able to fashion rules that make sense in terms of the technology and the economics of the industry.

The problems associated with acquisition and maintenance of software are bothersome and probably could be avoided if DoD were operating under policies and procedures more closely aligned with the realities of the software industry.

At the beginning, software was acquired by DoD under its technical data policy. It soon became apparent that the cost of acquiring government-wide rights—which is what the technical data rights policy provides—to software needed at only one government installation was impeding the acquisition of such software. While rights attaching to proprietary software now are different from those that attach to technical data, the same standard data rights clause is used to acquire rights in both types of items.

Samuelson has said that, with one or two exceptions, all the problems discussed in her report are problems identified by DoD personnel. The inescapable conclusion is that it is time to adopt a new policy that is (1) clear and coherent, (2) no more divergent from commercial practice than is necessary for DoD to achieve its mission, (3) appropriate in terms of DoD's need to use the technology, and (4) appropriate in terms of the intellectual property rights associated with software. The first step in this direction should be to establish a separate standard software rights clause.

Recommendations

1. The contractual coverage of computer software (programs and data bases), including the associated documentation, should be separated from technical data clauses and included in a separate clause or set of clauses. The associated documentation should be accorded treatment similar to that given the computer programs and data bases.

2. The regulations should uniformly define common software terms such as "computer software" and "developed at private expense" and should provide for equitable allocation of rights in software developed with mixed funding, so as to encourage the development of new computer software having a military application.

Annex E gives additional background and details regarding software.

Mask Works

The Semiconductor Chip Protection Act of 1984, P.L. 98-620, 17 U.S.C. 901-914, created a new form of intellectual property rights to protect persons who create original mask works for semiconductor chips.[6] P.L. 98-525 and P.L. 98-577 require the FAR and DFARS to define the legitimate proprietary interests of the government and the contractor. Since this new form of intellectual property falls within this requirement, the FAR and DFARS should include this area.

Recommendation

The technical data rights clause should be expanded to cover mask works related to semiconductor chips (a new form of intellectual

property established by Congress in 1984, P.L. 98-620).

Data Management

In the technical data area, DoD faces a problem even more serious and less amenable to solution than the rights-in-data issues. This problem is the overall one of data management, defined to include, as a minimum, procedures for:

- deciding under what conditions to acquire or require data from the contractor;
- deciding *which* data to acquire or require and when;
- verifying that the data delivered are adequate, current, accurate, legible, and useful (a particular difficulty here is with items for which the manufacturing *techniques* are all-important, as distinguished from those for which ordinary engineering drawings will suffice); and
- determining the best means of storing, maintaining, updating, retrieving, and disseminating the data.

Guidance on the several facets of data management is contained in DoD Instruction 5010.12, Management of Technical Data, the latest version of which was released in December 1968, and in DoD Directive 5000.19, March 12, 1976, Policies for the Management and Control of Information. Despite the existence of these regulations, data management continues to be a significant problem. Appearing before the Commission, Assistant Secretary of Defense (Acquisition and Logistics) James Wade cited a June 1984 DoD data rights study[7] that concluded that "a far more serious problem concerned our inability to manage the data in our possession." It is apparent from review of this material and DoD's technical data regulations that the preparation of the instruction and directive was not adequately coordinated with the preparation of the acquisition regulations covering the same subject.

Recognition of this problem led the Joint Logistics Commanders to form a panel to develop a DoD-wide program to improve data quality. The panel has been given six months to develop a program that will:

- establish uniform procedures for identification, specification, acquisition, and enforcement of data requirements, including treatment of mismarking of data and missing or incomplete data;
- assign responsibilities for acquisition and for enforcement of data requirements prior to acceptance;
- establish a program to challenge restrictive legends on data stored in data repositories; and
- establish a small team of full-time technical experts to train and assist others in the acquisition and enforcement of data rights.

Recommendation

We recommend that DoD energetically pursue its ongoing efforts to improve data management, including those directed to enhancing the capabilities of its people in this area, and that these efforts be coordinated with the Defense Acquisition Regulatory Council's activities in preparing technical data acquisition regulations.

ANNEX A

APRIL 14, 1986, PUBLIC HEARING ON TECHNICAL DATA—WITNESSES HEARD

James P. Wade, Jr.—Assistant Secretary of Defense for Acquisition and Logistics

James R. Ambrose—Under Secretary of the Army

Paul Seidman, Esq.—On behalf of National Tooling and Machinery Association

Bruce Hahn—Government Affairs Manager, National Tooling and Machinery Association

Walter C. Rideout—Chairman, Technical Data Task Group, Council of Defense and Space Industry Associations (CODSIA)

Charles W. Stewart—President, Machinery and Allied Products Institute

Paul J. Gross—Director, Proprietary Industries Association

Stuart F. Platt—Rear Admiral, Supply Corps, USN, Competition Advocate General of the Navy

Daniel S. Rak—Deputy Assistant Secretary of the Air Force for Acquisition Management

Jefferson Z. Amacker—President and CEO, Leach Corporation, on behalf of American Electronics Association

Dennis M. Biety—Counsel, Pneumo Abex Corporation

Richard C. Geib—Patent Counsel, Grumman Corporation

Donald F. Ridley—Senior Vice President, Marine Division, Bird-Johnson Company

ANNEX B

RECOMMENDED CHANGES TO STATUTES BEARING ON TECHNICAL DATA

Applicability Issue

The comments and testimony received by the Commission at its April 14, 1986, hearing on data rights highlighted the present practices of the Services in acquiring data and data rights as well as general concern over the impact of the proposed regulatory implementation of P.L. 98-525 on innovators and developers of new products and technology. We examined the data rights and management provisions of P.L. 98-525 along with the largely identical provisions in P.L. 98-577, which apply to civil agencies other than NASA. Both P.L. 98-525 and P.L. 98-577 contemplate basic coverage for data rights and data acquisition management as a part of the FAR, with implementation and supplementation as needed by DoD.

Since the data provisions of P.L. 98-525 and P.L. 98-577 have been only partially implemented, no information exists on their actual impact on DoD's mission. Nevertheless, on the basis of information presented to the Commission and experience with the concepts embodied in these acts, we have attempted to determine whether there are flaws in their data provisions that require correction. Our assessment is that some improvements are called for, but in general it is the *applicability* of these statutes that causes concern.

Table D-1 in Annex D reviews the data-related requirements of P.L. 98-525 and P.L. 98-577 and the proposed FAR[8] and DFARS[9] implementation of these requirements. This review highlights a major interpretive difference between the FAR and DFARS regarding the types of acquisitions covered by these requirements. For example, the proposed FAR proprietary data validation procedures[10] would be limited to the acquisition of major systems by civil agencies (except for NASA), whereas DoD in the interim DFARS Subpart 227.4 applies the identical validation procedures in P.L. 98-525 to *all* procurements involving technical data.[11]

Similarly, the proposed FAR, interpreting P.L. 98-577, limits the technical data certification requirements, the remedies for incomplete or inadequate data, payment withholding, and so on, to major system acquisitions. The interim DFARS, on the other hand, interprets the same requirements in P.L. 98-525 as applying to all contracts that require the delivery of technical data and therefore applies these requirements to a very broad range of contracts. The only difference between the language of P.L. 98-525 and that of P.L. 98-577 in this regard is that P.L. 98-577 defines the terms "item," "item of supply," and "supplies" as being related to major systems, whereas P.L.98-525 does not. Evidently, if one carries this relationship over into the definition of "technical data" (which refers to "supplies"), the result is to limit the civil agency coverage to major systems but let the DoD coverage extend to all acquisitions.

These differences in interpretation may be part of the cause of the problem that DoD is experiencing in considering its use of the proposed FAR data provisions. While we do not disagree with DoD's interpretation[12] of P.L. 98-525, DoD's approach in its interim implementation of P.L. 98-525 may, in some instances, be too onerous for many contracting situations. For example, in basic research contracts, the need for a technical data certification or prenotification of limited rights is probably unnecessary. If P.L. 98-525 is interpreted as requiring such provisions in all contracts calling for the delivery of any technical data, corrective legislation should be sought.

Part of the interpretation problem stems from the differing legislative histories of P.L. 98-577 and P.L. 98-525. Clearly, the concern of the legislators in drafting the data portions of these acts involved major system acquisitions

and the related problem of overpriced spare parts. The differences in interpretation could be resolved if a single statute covered this subject; or, if dual statutes are used, they should be identical in language and include statements of legislative intent that they be implemented uniformly.

Recommended Revisions

Other statutory changes that should be considered are as follows:

Commercial Product Data

P.L. 98-577 and P.L. 98-525 both contain prohibitions against acquiring design, development, or manufacturing data pertaining to products offered or to be offered for sale to the public, except data required for operation and maintenance.[13] Annex E reviews these provisions and their legislative history, noting that the prohibition, although mandatory for civil agencies, is not mandatory for DoD, and that, as worded, it is a prohibition against acquiring technical data, not rights in data.

Since we recommend that DoD not seek unlimited rights in technical data pertaining to products developed at private expense as a precondition for buying the product (regardless of whether the product is commercial), these provisions should be modified to extend the prohibition now applying to commercial products to apply to *all* products developed at private expense. Concurrently, the provisions should be restated to generally prohibit forced acquisition of *unlimited rights* in limited rights technical data pertaining to commercial products and products developed at private expense, rather than to forbid acquisition of the data themselves.

In light of our recommendation, we reviewed two related provisions of P.L. 98-525 for possible change. These are the provision for planning for future competition (10 U.S.C. 2305(d)(2)) and the 7-year limitation on limited rights markings (10 U.S.C. 2320(c)). Although the legislative history clearly establishes that these provisions could be used to justify acquisition of unlimited rights for competitive reprocurement purposes, they do not specifically mandate acquisition of unlimited rights in data delivered with limited rights. Since competitive reprocurement can be accomplished with less-than-unlimited rights (see the variety of techniques available, as outlined in Annex C), and implementation of our recommendation should override the general language of these provisions, no modification of them is necessary.

Definition of Technical Data

Both P.L. 98-525 and P.L. 98-577 define "technical data" as excluding computer software but including computer software documentation. This distinction differs from commercial practice, which includes documentation within the term "computer software." Its effect is to place vendors of commercial-type software unsuspectingly in a position of losing their proprietary rights in software when dealing with DoD unless they are knowledgeable about the intricacy of the DoD technical data rights policy and take precautionary steps. Although the drafters of the proposed FAR have "solved" this problem by contriving a series of definitions arranged so that software documentation is not treated as technical data (see Table E-1 in Annex E), it is questionable whether this definitional approach will ultimately be successful. Therefore, we recommend that a minor change be made in both acts to exclude computer software documentation from the definition of "technical data."

Expansion and Modification of Validation Procedures

The proprietary data validation procedures (10 U.S.C. 2321 and 41 U.S.C. 253d) now apply only to contracts awarded on solicitations

issued after October 19, 1985, by DoD and after January 1, 1986, by civil agencies. Since validation was adopted as a fair procedure for challenging data restrictions[14] in an area that has been notably deficient in applying due process,[15] we recommend expanding validation procedures to *all* assertions of technical data rights restrictions by prime contractors or subcontractors, regardless of when the contract was entered into.

We recognize that a full-blown challenge over data rights restrictions as specified in both acts, including court or board appeals, or both, is costly and time-consuming for both parties and does not provide the quick access to technical data sought by the government for its use in competitive procurements. This has led, in the proposed FAR and interim DFARS, to a short-cutting of some of the statutory time requirements. Since the statutory validation procedure, especially with regard to appeals, can be time-consuming, the validation procedure in P.L. 98-525 should be amended to provide for an expedited appeals procedure in the Armed Services Board of Contract Appeals (ASBCA) and in the courts, similar to the appeals procedures in the Freedom of Information Act.[16]

ANNEX C

POLICY REVIEW

With regard to the basic concepts governing the allocation of rights in copyrights, software, and technical data, there is no overall government policy similar to the treatment accorded to inventions developed under government contract; nor is there clear specific statutory policy guidance. This lack of policy guidance was addressed in 1972 by the Commission on Government Procurement, which recommended that a government-wide data rights and copyright policy statement be issued.[17] Various organizations within the Executive Branch have attempted to implement this recommendation without success. While the development of government-wide policy is not a matter to be undertaken solely by DoD, a number of the data rights problems presented to the Commission could have been solved long ago by the issuance of such a government-wide statement. With the advent of the FAR System, there now exists a unique opportunity to achieve uniformity in policy and in contract language regarding technical data rights.

DFARS Subpart 227.4, Technical Data, Other Data, Computer Software, and Copyrights, recognizes the government's and the contractor's competing interests in technical data, especially for innovative contractors "who can best be encouraged to develop at private expense items of military usefulness where their rights in such items are scrupulously protected." It attempts to strike a balance, recognizing the controls necessary to "insure Government respect for its contractors' economic interests in technical data relating to their privately developed items."

The DFARS approach to weighing these competing interests has been studied by DoD over the years. The most recent general study, *Who Should Own Data Rights: Government or Industry? Seeking a Balance,*[18] found that "the current technical data rights policy is basically sound in its approach to balancing the interests of DoD and its contractors."[19] James Wade, Assistant Secretary of Defense (Acquisition and Logistics), in his prepared statement to the Commission during its data rights hearing on April 14, 1986, noted that DoD's "drive to compete must be balanced" against DoD's need for access to the most advanced technology and the innovative capability that can be developed by our industrial base. Most of the industry witnesses at this hearing testified that, in the recent drive for competition, the scales have shifted significantly in favor of the government. Examples were cited of DoD contracting officers using their economic leverage to acquire, for little or no consideration, contractors' proprietary rights in limited rights technical data. It is therefore proper to examine just how DoD has balanced these interests in the past and, if an unbalancing of interests has occurred, what should be done to restore equilibrium.

The components of this equation are (1) how the DFARS allocates rights in technical data between the contracting parties, and (2) DoD's acquisition techniques for privately developed items. Allocation of rights in technical data is covered in DFARS Subpart 227.4; the guidance on acquisition techniques, which resulted from a 1966 DoD study on protecting the private innovator, is included in DFARS 217.7201, Privately Developed Items, and to some extent in DFARS Subpart 227.4.

Allocation of Rights in Technical Data

The basic technical data rights clause used by DoD, set forth in DFARS 252.227-7013, identifies the technical data rights of the government only, but impliedly the contractor also has rights in technical data. The major classes of government rights are *limited rights* and *unlimited rights*. Table C-1 highlights the complexity of defining these rights and shows that, even when a product has been fully developed with private funds, DoD acquires a significant amount of the technical data pertaining to it with unlimited rights. Table C-2 lists the government's and contractor's rights in

technical data.

Limited rights attach to a contractor's technical data pertaining to a product developed at private expense and delivered under a prime contract or subcontract of DoD. However, not all technical data meeting this test may be subject to a limited rights restriction upon delivery to the government. A number of other tests must also be met. The technical data must not be published, must not fall within the five unlimited rights categories enumerated in Table C-1, and must be properly identified. In addition, the contractor, in placing the DFARS-prescribed limited rights legend on the technical data, must explain the method used to identify the limited rights technical data and must establish and follow a restrictive-marking quality review system.

Unlimited rights generally apply to: all technical data "resulting directly from performance of experimental, developmental, or research work which was specified as an element of performance in a Government contract or subcontract" (category (1) in Table C-1); changes to government-furnished data; form, fit, and function data; operation, installation, training, or maintenance manuals; and technical data normally released by the contractor without restrictions on further disclosure.

TABLE C-1

DEFINITIONS DFARS SUBPART 227.4

LIMITED RIGHTS TECHNICAL DATA

- Pertains to an item, component, or process.
- Developed at private expense.
- Not within categories (1) to (5) of unlimited rights.[a]
- Unpublished and delivered to government.
- Containing:
  (1) prime contract number;
  (2) name of contractor generating the data; and
  (3) an explanation of method used to identify limited rights technical data.
- Contractor is in compliance with restrictive-marking quality review system.

UNLIMITED RIGHTS TECHNICAL DATA

- Technical data falling into categories (1)-(5), whether or not delivered to government:[a]
  (1) resulting directly from performance of any government contract or subcontract requiring research and development (R&D);
  (2) changes to government-furnished data;
  (3) form, fit, and function data;
  (4) operation, installation, training, or maintenance manuals; and
  (5) public domain data.
- Published copyrighted data.
- Delivered limited rights technical data where the contractor breached the restrictive-marking quality control requirements.
- Limited rights technical data delivered to government without restrictive markings.

[a]A sixth category is described in DFARS 227.403-2(b) as manufacturing technical data for items, components, or processes developed under a government research and development (R&D) contract. This category appears redundant or possibly inconsistent with category (1).

Mix of Development Funds

A critical element of these definitions is the split between what technical data properly fall within or outside of the term "limited rights," since all contract technical data outside this term are acquired with "unlimited rights." This distinction turns on the undefined phrase "developed at private expense." Although the DFARS does not specifically so state, DoD's long-held interpretation of the "private expense" portion of this phrase is that private expense includes IR&D indirect funds but excludes all cases where there is any *mixture* of government and private funds in the development of the item or process.[20] This rather strict interpretation of "private expense" emphasizes the definition of "developed," since a loose definition of "developed" could result in a claim of limited rights, while a rigid definition could virtually exclude such a claim for most military hardware.

DoD's lack of recognition that a mix of public and private funds in developing new militarily useful items or processes is desirable and should be encouraged has resulted in a policy that discourages private investment in such technology. It is important, in our view, that DoD restore the balance of interests by clearly defining the rights of both parties when development funds are mixed, rather than adopting a government-take-all approach. Proposed FAR 27.408 defines the mix-of-funds situation for civil agencies as a cosponsored effort with more than 50 percent of the funds provided by the contractor. In such cases, the contractor may claim limited rights in the technical data resulting from the cosponsored project. However, this concept is of little value for DoD, since most mixes of development funds for DoD do not occur under cosponsored or cost-shared contracts; rather, they result from a sequencing of development activities (some portions or segments are funded by the government, others by a private firm). DoD should encourage sharing of development costs, whether or not a 50 percent level of private funding is achieved, and can do so by permitting the funding contractor to retain proprietary rights in the resulting technical data on some equitable basis.

Ownership of Publicly Developed Technology

The rights of the government and the contractor in limited rights and unlimited rights technical data under the basic technical data rights clause of DFARS 252.227-7013 and its related regulations are specified in Table C-2. As this table indicates, DoD obtains unlimited rights (*i.e.*, broad government license and sublicense rights) in technical data resulting from the performance of R&D specified by a government contract or falling into any of the enumerated unlimited rights categories, whether or not the data would otherwise be within the sphere of the contractor's legitimate proprietary interests. In addition to unlimited rights, DoD acquires limited rights (or a limited license) to use internally a contractor's legitimately protected technical data. A most important element of this limited license is the right to use the data, without paying a fee to the owner, for incoming inspection purposes. Thus, if DoD acquires a spare part competitively using only form, fit, and function data, loans a spare part for copying, or solicits competition on a brand-name-or-equal basis, DoD may use the original contractor's limited rights technical data in its possession to ascertain whether the supplying vendor has properly met the contract requirements.

Unlimited rights have been categorized as a license right in technical data rather than an ownership interest in the government.[21] This license is of rather broad scope, since it is not limited in purpose and permits unrestricted sublicensing by the government, which can effectively place the data in the public domain. This broad license attaches to all technical data falling within the enumerated unlimited rights categories, whether or not the technical data are delivered to the government. It has been

TABLE C-2

RIGHTS OF THE PARTIES

	LIMITED RIGHTS	UNLIMITED RIGHTS
Government	• License to use internally (including incoming inspection) but not for manufacture, or, if computer software documentation, not for preparing same or similar computer software; • License to disclose externally (subject to further disclosure and use limitations) for (1) certain emergency repair or overhaul or (2) evaluation by a foreign government; • Must include restrictive legend on any reproductions. • May also negotiate for certain sublicense rights: —Contractor will license others to use data for governmental purposes (directed license); —Government may sublicense third parties for government use only; or —Government may remove legends after a period not to exceed seven years. • If copyrighted, copyright license equal to limited rights license.	• Right to use, disclose, or duplicate for any purpose, and to permit others to do so; and • Right not to pay charges for any use of the data. • If copyrighted, copyright license is equal to unlimited rights.
Contractor	• Ownership of proprietary rights in such technical data (including copyrights); right to enforce limitations against government for so long as contractor protects proprietary position; and right to enforce proprietary position against third parties who improperly obtain such data. • Subcontractor may deliver such technical data directly to government.	• Right to claim copyright ownership; and • Right to use, disclose, or duplicate delivered technical data. If not delivered, may be able to claim ownership interest to some extent.

argued that this broad license right often exceeds the government's needs, removes incentives from innovators to develop and exploit publicly funded technology commercially, makes publicly funded technology more readily accessible to foreign competitors, and is out of line with congressional and executive statements concerning inventions made under government contracts. A number of alternative concepts have been adopted in legislation to provide the developing contractor with certain proprietary rights in technical data resulting from the performance of government-funded research and development. These include:

Limited Rights Treatment for a Specified Time Period. The Small Business Innovation Development Act of 1982, P.L. 97-219, provides for the "retention of rights in data generated in the performance of the contract by the small business concern." The Small Business Administration implementing regulation for the Small Business Innovation Research (SBIR) program provides that, for a two-year period from the completion of the project, technical data generated under the contract will not be disclosed by the government.[22] After this period, the government has a royalty-free license for government use of any technical data delivered under the contract. DFARS 252.227-7025 sets forth a technical data clause for use in the DoD SBIR program that provides the government with limited rights in the technical data generated under the contract for a two-year period, and thereafter a royalty-free license right to use or disclose the technical data for government purposes only.

Unrestricted vs. Unlimited Rights. P.L. 98-577, applicable to the civil agencies, requires the preparation of implementing regulations that will provide the government with unlimited rights in technical data developed exclusively with federal funds *if* delivery of the data was required as an element of performance under the contract *and* the data are needed to "ensure the competitive acquisition of supplies or services that will be required in substantial quantities in the future." Otherwise, the agency will acquire "an unrestricted, royalty-free right to use, or to have its contractors use, for governmental purposes (excluding publication outside the government) technical data developed exclusively with federal funds." This provision, which has not yet been proposed for implementation in the FAR, provides the contractor with a limited proprietary position in undelivered technical data and in certain delivered technical data even though federal funds were used to generate the technical data.

Where delivered technical data are needed for competitive purposes for a substantial number of items, the government obtains unlimited rights. The definition of data that qualify for unlimited rights seems too narrow, since reasons other than competition may drive a need for unlimited rights in technical data. Further, this concept of unlimited rights may well deny the contractor any copyright in the data. The "unrestricted rights" category is puzzling, since it merely prohibits the publication of the technical data outside the government, not disclosure. Thus, "unrestricted rights" technical data may be found to be subject to release to the public under the Freedom of Information Act. Therefore, it is not clear what "legitimate proprietary interests" are established by the unrestricted rights category, especially with respect to third parties.

Providing additional incentives to contractors developing new technology under government contracts to establish domestic commercial uses for the technology is a goal worth pursuing. This goal is easier to achieve with regard to patents, copyrights, or mask works, since the underlying invention or work may, within a short period of time, be broadly released to the public and used by the government with the inventor, author, or mask-work developer still retaining ownership of the technology. In return for its funding, the government can obtain a royalty-free license for the further use of the technology by or for the

government. The legitimate proprietary rights in technology other than patents, copyrights, or mask works depend upon contract and trade secret law. Contracts can protect technology among the contracting parties even though the technology may subsequently be disclosed to the public. To obtain broader protection for technology disclosed in technical data, the government must agree to a trade secret type of protection (*i.e.*, the government may not disclose the technical data without limitations on its subsequent use or disclosure by third parties). Undertaking such an obligation with respect to technical data pertaining to products developed with public funds entails administrative costs that must be weighed against any benefits to be achieved by such a policy.

Developing Competition for Proprietary Products

DoD previously considered and adopted regulations to ensure that the pursuit of full and open competition did not in actual practice violate the government policy of honoring rights in technical data resulting from private development. This policy, now contained in DFARS 217.7201, provides for full and open competition for items available from more than one source as a result of independent development, licensing, or competitive copying. Where DoD lacks an unlimited rights technical data package for the competitive acquisition of privately developed items, contracting officers are required to use the following procedures for obtaining alternative sources, in the stated order of preference:

- Where identical designs are not required, use competitive procurement, relying on performance specifications in which the government has unlimited rights.
- Where identical designs are required and sole-source acquisition is authorized pursuant to DFARS Part 6, purchase from the private developer or its licensee if the price is fair and production and quality are adequate.
- If additional sources are needed for the acquisition of identical items, encourage the developer to license others, or consider the specific acquisition of adequate rights in data, and if technical assistance is also needed from the primary source, consider leader-follower techniques (FAR Subpart 17.4).
- As a last alternative, use reverse engineering by the government if cost savings can reasonably be demonstrated and the action is authorized by the head of the contracting activity.

The only policy guidance on this subject previously in the DFARS technical data coverage of Subpart 227.4 is paragraph 227.403-2(f), on the specific acquisition of unlimited rights in technical data. This paragraph permits the specific acquisition of unlimited rights in limited rights data, by negotiation or as part of a competition among several entities at the prime or subcontractor level, and requires line-item identification and separate pricing of the rights sought. Before unlimited rights are to be acquired, a finding upon a documented record is required that (1) there is a clear need for a reprocurement of the product involved, (2) no suitable alternative is available, (3) the data to be acquired will suffice for use by other competent manufacturers, and (4) anticipated net savings exceed the acquisition cost of the data and the rights therein.

Now paragraph 227.403-2(h) of the interim DFARS has added a sentence requiring contracting officers to consider use of alternative proposals for obtaining the right to use limited rights data for competitive reprocurement, and 227.403-2(a)(3)(i) contains a new provision restricting contracting officers

—as a condition for obtaining the contract—from acquiring technical data (except for operation and maintenance) pertaining to design, development, or manufacture of products developed at private expense and offered or to be offered for sale, license, or lease to the public. However, exceptions to this restriction are authorized if the agency head determines that the interest of the government in increasing competition and lowering costs by developing alternative sources is best served by obtaining the data or, in the absence of such a finding, if the contracting officer nevertheless negotiates for the data, such acquisition having been found (presumably by the contracting officer) advantageous to the government. The offeror's willingness to provide the data may be evaluated as a part of source selection.

Proposed DFARS 227.473-2 would significantly expand the techniques available to contracting officers for obtaining additional rights in limited rights technical data by providing for (in addition to specific acquisition of unlimited rights as provided for in DFARS 227.403-2(f)) licensing rights, direct licensing, negotiating time limits for limited rights legends, and options to acquire such rights. But specific guidance on the use of these techniques and the need to balance the government's interests and economic leverage with the negative impact these techniques may have on private developers is sadly missing from this proposed regulation. The lack of specific guidance, along with a blanket deviation in the data rights area, has resulted in some overreaching by the Services and great industry concern.

The widespread use of techniques for acquiring rights or options to rights—especially the broad requirement for acquiring, as a precondition of procurement, unlimited rights in data for products developed at private expense, so that the product to which they pertain may be reprocured competitively—has in our view been driven by a strong desire for competitive reprocurement and expected cost savings, often at the expense of the private developer's proprietary position. Where there is a significant existing or potential commercial market for the product and DoD seeks to acquire unlimited rights, the private developer will likely either price the data to include their commercial value or forego the sale. Where DoD is the only market, the private developer's choices are more limited, since the developer must accommodate DoD's requirements. When faced with the choice between loss of the sale to DoD and loss of a proprietary position, the developer will either forego the sale or price its product higher to recoup its development costs over a shorter period. Neither choice will in the long run benefit DoD.

In addition, acquiring unlimited rights is often unnecessary. Before considering acquisition of such data rights for a particular system, subsystem, or component so that a technical data package can be assembled for reprocurement purposes, the contracting officer should determine whether identical or functionally equivalent items are required, whether additional sources already exist in the marketplace, whether competitive copying or use of form, fit, and function data will suffice, and whether the package will be adequate for use by a second source to manufacture the product.

We recommend that DoD's policy be changed to restore the delicate balance between the drive for competition and the need for incentives of private developers. Forced acquisition for unlimited rights in limited rights technical data pertaining to commercial products or products developed at private expense should generally be prohibited. Where second sourcing is contemplated, rather than acquiring unlimited rights in limited rights technical data, DoD should consider other techniques for establishing competitive production sources (*e.g.*, directed licensing, sublicensing rights limited to use for the government, contract teaming, use of performance and interface specifications (form, fit, and function data), competitive copying) and should select the technique least obtrusive

to the developer's proprietary data rights. The guidance of DFARS 217.7201 should be updated to implement this recommendation.

Furthermore, the present guidance does not deal with new techniques for acquiring additional sources for privately developed items, such as sublicense rights in the government to use limited rights technical data for competition, loan of replenishment parts, use of expiration dates on limited rights technical data, directed licensing, or the establishment of a not-to-exceed ceiling price for the acquisition of unlimited rights in limited rights data during a competitive negotiation.

To restore the balance, DFARS 217.7201, along with DFARS Subpart 227.4, should be revised to establish a hierarchy of techniques that may be used in order to seek additional sources for privately developed items, but with a requirement that unlimited rights generally not be acquired in limited rights data and that the method least obtrusive to the private developer be selected. We recommend, for example, that the DFARS state the contracting situations to which each technique applies (*e.g.*, major systems, hardware development, initial production); that techniques such as directed licensing by the contractor/developer be considered before sublicensing rights are obtained by the government; that other less-than-unlimited rights be sought where directed licensing or sublicensing rights or similar lesser rights will suffice for establishing additional sources; that use of alternative proposals (with and without unlimited data rights) in a competitive acquisition require higher level approval; that use of form, fit, and function data and competitive copying be given priority over obtaining additional rights as well as over reverse engineering by the government (or by a contractor for the government); and that expiration dates on limited rights technical data be used to rid the system of stale markings, not to acquire unlimited rights in limited rights data.

ANNEX D

SUMMARY OF ANALYSIS OF THE REGULATIONS

We have reviewed the existing technical data rights policies of the civil agencies, the proposed FAR, and the interim and proposed DFARS, and we agree that the proposed DFARS coverage of this subject, as well as that in the interim DFARS, is too complex, somewhat ambiguous, and—more significantly—missing important policy guidance. The ambiguities, complexities, and omissions have a negative impact on subcontractors, especially small businesses, since the basic technical data rights clause of the DFARS[23] is required to be used in subcontracts, at all tiers, whenever the subcontract calls for the delivery of technical data.

While many industry comments to the Commission supported the treatment accorded to technical data rights in the proposed FAR Subpart 27.4 over the proposed DFARS Subpart 227.4 or the interim DFARS Subpart 227.4, our review indicates that the proposed FAR is deficient in the treatment accorded many of the complex technical data rights and management issues facing DoD. This is partly because it is not directed to many of the problems encountered in acquiring major systems, meeting the logistics needs in support of these systems over their life cycles, and providing adequate coverage for subcontracts. Nevertheless, the proposed FAR *is* satisfactory for simpler R&D activities and is structured in such a manner that it could form a base for further detailed implementation by DoD. Table D-1, following, outlines the implementation of the statutory requirements for technical data in the regulations as currently proposed and comments on deficiencies in meeting statutory requirements.

Deviations

A major concern of industry is that the Services may overreach in acquiring, through a variety of techniques, unlimited rights in limited rights technical data pertaining to privately developed products. The Services, through use of economic leverage as the major or only buyer of a product, have forced contractors and subcontractors to give up what they believe to be their legitimate proprietary interests. In the past, the balance between the government's use of economic leverage and a contractor's protection of legitimate proprietary interests was safeguarded or controlled by strict deviation procedures. Prior to August 1983, any deviations from prescribed provisions and procedures for acquiring technical data rights required special approval. Between August 1983 and December 30, 1985, during which period the requirement to seek approval of deviations was suspended, the Services were free to conceive and implement any technical data rights policy or procedure that would result in obtaining spare parts at reasonable prices. This freedom led to an imbalance.

While the blanket authority for deviation has been rescinded, the Services do not appear to have reverted to the procedure of seeking approval for deviations, but, rather, seem to be relying on two features of the interim DFARS. First, the interim DFARS infers approval of the use of a clause canceling limited rights legends after a fixed period (see the policy set forth in DFARS 227.402-2(c)(3)). Second, the interim DFARS recognizes the use of contract terms requiring a contractor to permit its potential competitors access to the contractor's limited rights technical data without any guidance as to when this procedure is to be used, what findings are to be made before it is used, or what contract technical data rights clauses are prescribed to cover the desired acquisition of rights.[24] A contrasting example of the guidance formerly used to ensure that additional rights in limited rights technical data were acquired only when cost-effective and only in case of an existing clear need can be found in DFARS 227.403-2(f), Specific Acquisition of Unlimited Rights in Technical Data. This paragraph calls

for findings upon a documented record and specifies the technical data rights clause to be used to accomplish the acquisition.

The existing DFARS deviation procedures to accommodate variations in technical data policies and clauses should be reinforced by requiring the Services to get advance approval of any techniques employed to obtain the right to use limited rights data for competitive reprocurements where such techniques and implementing clauses are not contained in the DFARS. The request for deviation approval should explain the extent of the rights sought, the proposed solicitation and contract provisions, the parameters for calculating the compensation to be provided to the owner of the limited rights data, and the cost and benefits of the proposal, along with the impact the proposal may have on the supplier or similar suppliers. Further, as a requirement in seeking approval of a deviation, the Services should specify whether the preferences of DFARS 217.7201, Privately Developed Items, are being followed.

Developed at Private Expense

The Commission also received numerous comments on the proposed DFARS definition of "developed at private expense." It is important for both parties to know what this term means, if it is to describe the basic split between the technical data that can be delivered to the government as limited rights data and the technical data that are to be treated with unlimited rights. Although initially only the term "developed" created controversy, testimony received by the Commission indicates that the scope of the term "private expense" is also in doubt. For instance, does it include all indirect expenses? Only IR&D? B&P? Or overrun costs absorbed by a company?

It is surprising that the phrase, "developed at private expense," so critical to the definition of a contractor's proprietary rights, has remained undefined for three decades and has been the subject of very few reported decisions. The most detailed analysis of this phrase is Judge Lane's ASBCA decision in Bell Helicopter Textron, ASBCA No. 21192, September 23, 1985. Judge Lane, after reviewing all the legal precedent on this phrase, including the Armed Services Procurement Regulation (ASPR) Committee's attempt of over two years at a definition (ASPR Case No. 72-65), found that to be "developed" an item must exist (*i.e.*, a fabricated prototype), and practicability, workability, or functionality must be demonstrated (*i.e.*, the item must be analyzed and/or tested sufficiently to demonstrate to reasonable persons skilled in the applicable art that there is a high probability the item will work as intended). Whether or not testing is required and the degree of testing depend on the nature of the item and the state of the art. Finally, Judge Lane recognized that further development of an item or process may occur after it has reached the point of being developed for data rights purposes.

We accept this definition with one proviso: in our view workability need not actually be demonstrated prior to the contract. If the item or process exists and the item's design or the process parameters are not significantly modified under the contract, then a demonstration of workability under the contract can be used to establish that the item or process (which was available prior to the contract) was developed prior to the contract. Conversely, if significant modifications are required under the contract to achieve workability, this fact establishes that the item or process was not developed prior to the contract. When a decision is needed prior to a contract as to whether or not an item or process has been "developed," the item or process must exist and be sufficiently designed and/or tested so that persons reasonably skilled in the art would conclude that it would work.

Judge Lane defined the term "private expense" as excluding any government reimbursement, as a direct or indirect cost (except for IR&D), of any of the costs of

developing the item or process. We believe a more detailed definition is needed, since development may occur as a required element of an R&D government contract where the contractor's costs are not reimbursed under the contract (*e.g.*, in overrun situations, or in fixed-price contracts whose costs have been underestimated). We recommend the following definition: "at private expense," in the context of development, means that funding for the development work has not been reimbursed by the government, nor was the work required as an element of performance under an R&D government contract or subcontract. However, private expense also includes IR&D and B&P, even if reimbursed.[25]

Subcontracts

The Commission received a number of complaints from subcontract suppliers of major weapon subsystems and components that they were being required to give up their proprietary interest in technical data packages as the price of doing business with DoD. In the past, subcontractors have been concerned that prime contractors, often their competitors in the commercial market, were acquiring rights in the subcontractors' technical data beyond the government's needs. The issue was resolved by DoD with the requirement that DoD's basic clauses dealing with rights in technical data be incorporated, without change, into all subcontracts calling for the delivery of technical data and that prime contractors were not to use their economic leverage in awarding subcontracts in order to acquire rights for themselves. Further, recognizing that prime contractors and their subcontractors may be competitors, the data rights clauses permit the subcontractor to fulfill its requirements to deliver limited rights technical data by delivering the data directly to the government.

These subcontract provisions appear to have protected the legitimate proprietary interest of subcontractors *vis-a-vis* prime contractors, but they are ineffective in protecting the subcontractor from a government requirement in the prime contract calling for technical data packages with unlimited rights or other reprocurement rights. Most often the consequence of a contracting officer's decision to acquire reprocurement rights in proprietary products falls hardest on an innovative supplier. By the time the supplier's product and related technical data are to be acquired, the prime contractor is locked into a requirement for an unlimited rights technical data package, and the supplier is faced with a take-it-or-leave-it requirement.

We recommend elsewhere that specific guidelines be established requiring a determination before a contracting officer acquires additional rights in limited rights technical data for reprocurement purposes and that, in these situations, the government acquire only the minimum additional rights needed. Such guidelines would answer many subcontractor complaints. However, provision for access to the government contracting officer by proposed subcontractors, to question whether a particular acquisition of additional government rights in proprietary technology is proper, may be an improvement that can restore the balance of interests of the parties and may be cost-effective.

Complex and Ambiguous Clauses

Finally, the existing basic DFARS clauses for prime contracts and subcontracts calling for delivery of technical data are overly complex and ambiguous, require unwarranted administrative costs, and place an excessive burden on contractors trying to understand and comply with them—without commensurate benefit for DoD. These clauses are Rights in Technical Data and Computer Software (252.227-7013), Restrictive Markings on Technical Data (252.227-7018), and Validation of Restrictive Markings on Technical Data (252.227-7037).

These clauses do not represent a coherent, successful approach for establishing rights in technical data. We see no reason why they could not be consolidated into one basic technical data clause that would establish the rights of the contracting parties, the requirements for using restrictive markings, and the remedies for mismarking. The validation procedures of 10 U.S.C. 2321 could be adopted for the most part by reference rather than by resorting to a complex 1,500-word clause. The value of the use of the Restrictive Markings on Technical Data clause should be reconsidered in light of the statutory validation procedures. Further, as we recommend with respect to computer software in this paper, the coverage for computer software should be separated from that for technical data, helping to simplify the technical data clause.

In addition, we question DoD's general approach to contractual coverage of this subject, particularly to the structuring of the rights-in-technical-data clause. DoD uses a basic, complex technical data rights clause (actually a set of clauses, as noted above) for all procurements requiring delivery of technical data at the prime contractor or subcontractor level, regardless of the amount and complexity of the data to be acquired or the complexity, amount, type, or purpose of the contract—that is, regardless of whether the contract is for basic research, a study, large-scale production, or ordinary supplies. This approach results in the use of complex technical data clauses in all situations, providing excess contractual coverage in most cases. What is gained is administrative simplicity, at both the prime contract and subcontract level, since the contract drafter does not have to decide which clause to use to fit a particular situation (indeed, no choice exists). At some point, however, this approach becomes too complicated to be generally useful, and the use of simpler, tailored clauses becomes appropriate.

TABLE D-1. IMPLEMENTATION OF STATUTORY REQUIREMENTS FOR TECHNICAL DATA

STATUTORY REQUIREMENTS	PROPOSED FAR[a]	PROPOSED DFARS[b]	COMMENTS
1. Definitions of technical data, major systems, and "item, item of supply, and supplies" for civil agencies. 10 U.S.C. § 2302(4) and (5); 41 U.S.C. § 403(9), (10), and (11).	27.401. Definitions (technical data only). 52.227-14. Rights in Data – General clause, paragraph (a) *Definitions*.	227.471. Definitions (for technical data only). 252.227-7013. Rights in Technical Data and Computer Software clause, paragraph (a) *Definitions*.	Under the proposed FAR, computer software documentation is treated as computer software rather than technical data, as this term is defined in the statute.
2. In production contracts for major systems, consider requiring proposals for (1) the Government's right to use technical data delivered under the contract for competitive reprocurement, along with the cost for such rights, and (2) the qualification or development of multiple sources of supplies. 10 U.S.C.§ 2305(d)(2); 41 U.S.C.§ 253b(f)(2).	Not covered.	Not specifically covered, but note that 227.473-2, Obtaining rights in technical data and computer software, lists various ways of obtaining rights in data, including specific acquisition using clause at 252.227-7015; acquisition of license rights using clause at 252.227-7013 with Alternate IV; direct licensing using clause at 252.227-7036; using expiration dates on limited rights using clause at 252.227-7013 with its Alternate III; and acquiring option of type listed above. (Not limited to major system production contracts.)	Interim DFARS 227.403-2(h)[c] requires alternative proposals that provide DoD the right to use limited rights technical data for reprocurement. Not limited to major system production contracts.
3. Define legitimate interests of parties in technical or other data. 10 U.S.C.§ 2320(a); 41 U.S.C.§ 418a.	Not defined, but limited-unlimited rights, restricted rights, and copyright provisions do it part-way.	Not specifically defined, but limited-unlimited rights, restricted rights, and copyright provisions do it part-way.	
4. Limit acquisition of technical data for commercial items and processes. Section 1202(6) of P.L. 98-525. 41 U.S.C. § 418a(a).	27.406(d)(4). Major system acquisition. Exclusion limited to major systems.	227.472(b). Policy. Limits acquisition of technical data for standard, off-the-shelf commercial items.	Interim DFARS 227.403-2(a)(3)(i) limits acquisition of technical data for products or processes sold to the public but provides for override.
5. Consider public, private, and mixed funding. 10 U.S.C. § 2320 (a); 41 U.S.C.§ 418a(c).	27.408. Recognizes cosponsored research and development as a mixed-funding situation.	227.472-1. Rights in technical data and computer software. Limited-unlimited rights only partially consider this subject. 252.227-7013. Rights in Technical Data and Computer Software clause. Limited-unlimited category only partially recognizes funding.	Mixed funding not specifically addressed in DFARS, but DoD's policy is that a mix of funding in the development process is equivalent to purely public funding of that process. Proposed FAR covers only cosponsored mix of funding case. DoD's mixed-funding situations are not generally based on cost sharing, but on the parties' funding different stages of the development process.
6. Consider 35 U.S.C. § 200, SBIR Program, Small Business Act, and need for competition, in prescribing the regulations defining rights of the parties.10 U.S.C.§ 2320(a), 41 U.S.C.§ 418a(c).	No evidence of consideration of guidelines. For Small Business Innovation Research Program contracts, 27.409(l) requires use of the clause at 52.227-20, Rights in Data – SBIR Program.	No evidence of consideration of guidelines. 272.480. Rights in technical data and software developed under the Small Business Innovation Research Program (SBIR Program). Requires use of clause at 252.227-7025, Rights in Technical Data and Computer Software (SBIR Program), for this program.	Inadequate policy coverage.

[a]50 FR 32870, August 15, 1985.
[b]50 FR 36887, September 10, 1985.
[c]Interim DFARS; Subpart 227.4 as modified by 50 FR 43158, October 24, 1985.

TABLE D-1. IMPLEMENTATION OF STATUTORY REQUIREMENTS FOR TECHNICAL DATA (Continued)

STATUTORY REQUIREMENTS	PROPOSED FAR	PROPOSED DFARS	COMMENTS
7. Provide for unlimited or unrestricted rights in technical data developed with public funds, depending on the need to use such data for competitive reprocurements. 41 U.S.C.§418a(b).	27.406(d)(4). Major system acquisition. Requires the use of 52.227-22, Major Systems – Minimum Rights clause, which gives government unlimited rights in technical data developed during contract performance in major system contracts if the data relate to a major system or supplies and are required to be delivered to the government.	N/A	Concept of statute not adopted by proposed FAR.
8. Define respective rights of United States, contractor, and subcontractor in delivered technical data. 10 U.S.C.§ 2320(b)(1); 41 U.S.C.§ 418a(d)(1).	27.404. Basic Rights in Data clause. 52.227-14. Rights in Data – General clause, paragraph (b) *Allocation of rights* and paragraph (c) *Copyright*. Clause not limited to delivered data and does not specify subcontractor's rights.	227.472-1. Rights in technical data and computer software. Requires use of 252.227-7013, Rights in Technical Data and Computer Software clause. Not limited to delivered data. Alternate II limits government sales of data.	Inadequate coverage. Copyright policy not effectively followed in the Rights in Technical Data and Computer Software clause.
9. Specify technical data to be delivered and delivery schedule. 10 U.S.C.§ 2320(b)(2); 41 U.S.C.§ 418a(d)(2).	27.406(a)(2). Agencies may use own procedures.	227.474. Delivery of technical data. Implemented by 252.227-7031, Data Requirements; 252.227-7026, Deferred Delivery of Technical Data and Computer Software; and 252.227-7027, Deferred Ordering of Technical Data and Computer Software.	
10. Establish or reference procedures for determining acceptability of delivered data. 10 U.S.C.§ 2320(b)(3); 41 U.S.C.§ 418a(d)(3).	27.406(d)(3). Agencies required to review data, no procedures referenced. (Limited to major systems.)	227.473-3(b). Marking of technical data. Implemented by 252.227-7018, Restrictive Markings on Technical Data and Computer Software clause.	Proposed DFARS does not specify procedure but does include an audit clause giving the government the right to review contractor's procedures regarding placing restrictions on technical data.
11. Use separate line item for technical data items. 10 U.S.C.§ 2320(b)(4); 41 U.S.C.§ 418a(d)(4).	27.406(d)(3). Agencies to use own techniques. (Limited to major systems.)	227.474(d), Policy, and 227.494-1(c), Data requirements. Implemented by 252.227-7031, Data Requirements clause.	
12. Determine which items of data are restricted, in advance of delivery. 10 U.S.C.§ 2320(b)(5); 41 U.S.C.§ 418a(d)(5).	27.404(d)(2). The solicitation provision at 52.227-15, Representation of Limited Rights Data and Restricted Computer Software, may be included in the solicitation to determine whether data items to be delivered are restricted in any manner.	227.473-1. Identification of limited rights in technical data and restricted rights in computer software. Implemented by 252.227-7035, Prenotification of Rights in Technical Data and Computer Software, and 252.227-7013 and Alternate I, Notice of Certain Limited or Restricted Rights.	
13. Updated technical data required to be delivered. 10 U.S.C.§ 2320(b)(6); 41 U.S.C.§ 418a(d)(6).	27.406(d)(2). Implemented by clause at 52.227-21, Technical Data Certification, Revision, and Withholding Payment – Major Systems.	227.474-2(c). Deferred ordering. Data Accession List can be used to determine data being generated by contractor.	Proposed DFARS does not specifically meet this requirement. But Interim DFARS at 227.415 requires a listing of technical data reflecting engineering changes on DD Form 1423.
14. Written assurance at time of delivery that data are complete, accurate, and satisfy contract. 10 U.S.C.§ 2320(b)(7); 41 U.S.C.§ 418a(d)(7).	27.406(d)(2) requires use of clause at 52.227-21, Technical Data Certification, Revision, and Withholding Payment – Major Systems.	227.474-3. Technical data certifications. Implemented by 252.227-7028, Certification of Technical Data – Prior Delivery, and 252.227-7037, Certification of Technical Data Conformity.	Clauses require certification at time of contracting that data delivered will be complete, accurate, etc.; not at time of delivery of the data.

TABLE D-1. IMPLEMENTATION OF STATUTORY REQUIREMENTS FOR TECHNICAL DATA (Continued)

STATUTORY REQUIREMENTS	PROPOSED FAR	PROPOSED DFARS	COMMENTS
15. Remedies for submission of incomplete or inadequate data. 10 U.S.C.§ 2320(b)(8); 41 U.S.C.§ 418a(d)(8).	46.708. Warranties of data. Requires appropriate agency implementation. 27.406(d)(2). Implemented by clause at 52.227-21.	227.474-3(b)(2). Technical data certifications. 227.474-7. Warranties of technical data. Requires consideration of factors in 246.708, Warranties of technical data. Implemented by clause at 252.246-7001, Warranty of Data, plus Alternates I and II.	Interim DFARS 227.414 requires the contracting officer to consider appropriate remedies, which would include existing DFARS warranty coverage for technical data at 246.708.
16. Withholding as a remedy. 10 U.S.C.§ 2320(b)(9); 41 U.S.C.§ 418a(d)(9).	27.406(d)(2). Implemented by clause at 52.227-21.	227.474-5. Technical Data - Withholding of payment. *Implemented* by 252.227-7030, *Technical Data* - Withholding of Payment clause.	
17. Provision for removal of legends, if used, may not exceed seven years. 10 U.S.C. 2320(c).	N/A	227.473-2(e). *Expiration of Limited and Restricted Rights.* Implemented by 252.227-7013, Rights in Technical Data and Computer Software clause, with Alternate III.	Testimony by Air Force said standard commercial items are excluded. Proposed DFARS not so limited.
18. Prescription of regulations for sale or loan of replenishment parts for design replication or modification. 10 U.S.C. 2320(d).	N/A	Not covered.	DFARS 227.7201 may be inconsistent.
19. Contract provision prohibiting contractors from unreasonably restricting subcontractor sales directly to government. 10 U.S.C.§ 2402; 41 U.S.C.§ 253g.	3.503.[d] Unreasonable restrictions on subcontractor sales. Implemented by clause at 52.203-6, Restrictions on Subcontractor Sales to the Government. Mandatory for all contracts for supplies or services.	FAR coverage relied on.	FAR gives no guidance on what is unreasonable, such as, are fees permitted to be charged by prime. Interim DFARS 252.227-7017, Rights in Technical Data - Major System and Subsystem Contracts clause, contains similar coverage for major systems.
20. Identification of contractor, manufacturer, or other source of supply, stock numbers, and source of any technical data. 10 U.S.C.§ 2384.	N/A	227.474-4. Identification of technical data. Implemented by 252.227-7029, Identification of Technical Data clause.	DFARS 217.7204, Identification of Sources of Supply, and a clause for use in most supply contracts, DFARS 252.7270, have been adopted to meet this requirement.[e]
21. Contract provision on statutory validation procedure. 10 U.S.C.§ 2321; 41 U.S.C.§ 253d.	Proposed FAR 27.409[f]. Proposed clause at FAR 52.227-24, Validation of Restrictive Markings on Technical Data. Applies to DoD contracts calling for delivery of technical data and such civilian contracts if for major systems. Does not apply to NASA.		Interim DFARS 227.413 essentially adopts proposed FAR coverage.

[d]FAC 84-11; 50 FR 35475, August 30, 1985.

[e]51 FR 19552, May 30, 1986.

[f]50 FR 45442, October 31, 1985.

ANNEX E

ADDITIONAL MATTERS

Commercial Product Data

Both P.L. 98-525 and P.L. 98-577 prohibit the acquisition, as a condition for the procurement of these products, of technical data relating to design, development, or manufacture of products "offered or to be offered for sale to the public," that is, commercial products. Excluded from this prohibition are data necessary for operation, maintenance, and use. The legislative history of both acts indicates that Congress was concerned with protecting proprietary rights in data pertaining not only to commercial products, but also to items developed at private expense. However, as the laws were enacted, only commercial product data were covered.[26] We believe this is an error and have recommended that revised coverage restraining the acquisition of unlimited rights in limited rights technical data apply to all items or processes developed at private expense, not just commercial products.

Proposed DFARS 242.472(b) defines the products referred to in the acts in terms of DoD's definition of commercial off-the-shelf products,[27] that is, "existing products or processes developed at private expense and offered or to be offered for sale, license, or lease in substantial quantities to the public at established catalog or market prices." On the other hand, the interim DFARS implements the prohibition by a policy statement in 227.403-2(a)(3)(i) directed to products offered or to be offered for sale to the public but includes an exemption when the agency head determines that the government's interest in acquiring additional sources is best served by acquiring the prohibited data as a condition of the procurement. These regulations also permit the contracting officer to acquire such technical data, with rights to use and disclose the data, whenever their acquisition would be advantageous to the government.

James Wade's prepared statement to the Commission indicated that DoD was experiencing interpretive problems with this requirement, "as it shifted the normal rules governing the use of technical data from 'rights in the data' to the 'delivery of the data.' " Indeed, the concept of withholding data concerning commercial items is a throwback to DoD's pre-1964 data rights policy, which permitted contractors to withhold all data pertaining to standard commercial items sold to the public. DoD rejected the data-withholding concept in 1964 and instead began requiring delivery of such data with limited rights if the product was developed at private expense and otherwise was qualified for limited rights treatment.

We examined the legislative history of P.L. 98-525 and P.L. 98-577 to further understand the legislative intent of this concept. First, although proposed by the DFARS, there appears to be no basis for limiting to commercial off-the-shelf products the prohibition against ordering certain technical data. Second, while both acts use substantially the same language concerning the acquisition of technical data related to commercial products, the prohibition in P.L. 98-577 is mandatory,[28] whereas in P.L. 98-525 it is listed as one of the factors to be considered in promulgating the implementing regulations.[29] Nevertheless, both acts adopt the policy limiting the acquisition of design, development, or manufacturing technical data (except for operation, maintenance, and use) by the government as a precondition to the procurement of a commercial product.[30] The balance adopted by these acts is that the government would obtain rights in technical data pertaining to products developed at government expense; the implementing regulations would define the rights of the parties to technical data pertaining to products developed at private expense or with a mix of funding; and commercial product technical

data (manufacturing, design, or development) would not generally be acquired as a condition of the acquisition of the product. This does not mean that DoD could not acquire commercial product data and the right to use the data for competitive reprocurement by specifically negotiating for the rights independently from the acquisition of the commercial product. Clearly, the statutory restraints deal only with the acquisition of the data as a precondition of the procurement of the commercial product and not to the independent purchase of the data or rights.

One seemingly inconsistent section in this balance deals with the planning-for-future-competition provisions (10 U.S.C. 2305(d) and 41 U.S.C. 253(b)), which provide for alternative proposals for acquiring rights to use data during the competition for major system *production* contracts. This section has been explained as not intending to require proposers to give up their technical data rights as a cost of doing business with the government but, rather, permitting the consideration of such matters in the price evaluation when the agency believes it appropriate.[31] Therefore, in appropriate situations during competition for major systems production contracts, DoD may obtain cost proposals for acquiring additional rights in technical data that may pertain to commercial products.[32]

The DFARS should provide specific guidance implementing the statutory restraint against acquiring commercial product design, development, or manufacturing data. In this respect, the DFARS should state, as a general policy, that unlimited rights in such data shall not be acquired; however, where an agency still considers it proper to acquire them, the DFARS should detail the determination to be made, at an appropriate agency level, before they are acquired. The determination should include whether the rights being sought are appropriate, considering the needs of the government and the value of the data to the owner. As to major system production contracts, the DFARS should define the situations where it is appropriate to obtain proposals for acquiring commercial product data along with rights sufficient for competitive reprocurement and how such proposals are to be evaluated and used, to ensure that private proprietary rights in the data will be accorded proper treatment.

Software Issues and Definitions

Computer software is a commodity that is alike in some respects but differs in others from technical data. Recognizing this difference about 10 years ago, DoD expanded the coverage in its technical data rights contract clause to cover computer software. Computer software was defined to be in a category of recorded information different from technical data, except that computer software documentation (computer listings and printouts in human-readable form and information concerning the design, specifications, and operating instructions for using the software) was defined as technical data. The separation of computer software documentation from computer software was unfortunate, since it is contrary to commercial practice and has led to a great deal of confusion. The DFARS definition of technical data, which includes computer software documentation but excludes computer software, was essentially adopted by P.L. 98-525 and P.L. 98-577.

Table E-1 describes the definitions related to computer software in the above acts and the government's acquisition regulations (*i.e.*, the proposed FAR, the interim and proposed DFARS, and the Federal Information Resources Management Regulation [FIRMR][33]). Apparent from Table E-1 are the government's conflicting definitions for the same or similar terms and the crying need for uniformity.

At the Commission's hearing on data rights, some industry representatives stated that computer software was sufficiently distinct from technical data to warrant separate

contractual coverage. A recent comprehensive report,[34] prepared by the Software Engineering Institute for DoD, reached the conclusion, for a number of cogent reasons, that software and software documentation should be treated separately from technical data.

Our study of this issue similarly reached the conclusion that computer software and related documentation should be separated from the rights-in-technical-data clause and included in a separate contract clause or set of clauses. The basis for this conclusion is the hybrid nature of computer software, and several other considerations. While both the DFARS and the proposed FAR generally combine the treatment of software with that of technical and other data, in many instances it has been found necessary to provide separate coverage for software. DoD's software acquisition policy, unlike its policy regarding technical data, requires that predetermination be used for all restricted rights software. The DFARS regulatory coverage for technical data is complex enough without even considering software. Finally, separate coverage for software will focus greater attention on the proprietary rights treatment to be accorded software and will permit more attention to be directed to this area of fast-changing technology.

The proposed FAR and DFARS as well as the present DFARS coverage for computer software provide for the acquisition of restricted rights when computer software "developed at private expense" is purchased, leased, or licensed. As is the case with the technical data coverage, the term "developed at private expense" is not defined for computer software. To forestall here the problems that have arisen with respect to technical data, the FAR should define this term as it applies to computer software. However, we recognize that computer software has other facets that must be recognized. For instance, definition of "development" may require a concept for a computer data base different from that for a microcode on a semiconductor chip (firmware).

TABLE E-1. COMPUTER SOFTWARE DEFINITIONS

COVERAGE	P.L. 98-525, P.L. 98-577	PROPOSED FAR[a]	INTERIM DFARS AND PROPOSED DFARS[b]	FIRMR[c]
Data	Term "other data" used but not defined.	Recorded information; includes technical data and computer software.	Recorded information.	
Technical Data	Includes computer software documentation; excludes computer software.	Data (other than computer software) of a scientific or technical nature.	Recorded information of a scientific or technical nature. Term includes computer software documentation; excludes computer software.	
Computer Software	Not covered.	Computer programs, computer data bases, and documentation thereof.	Computer programs and computer data bases; excludes documentation.	Defines term "software" as computer programs, software documentation, and computer data bases.
Firmware	Not covered.	Not defined.	Not defined.	ADP hardware-oriented programming at the basic logic level.
Commercial Computer Software	Not covered.	Term is not defined. But 52.227-19 sets forth a clause entitled Commercial Computer Software – Restricted Rights, and 27.405(b)(2), *Separate Acquisition of Existing Computer Software*, specifies that such software is "privately developed software normally vended commercially under a license or lease agreement restricting its use, disclosure, or reproduction."	Computer software used regularly for other than government purposes, sold or leased in significant quantities to the general public at established market or catalog prices.	Defines term "commercially available software" as software available through lease or purchase in commercial market from a concern having ownership or marketing rights.

[a]50 FR 32870, August 15, 1985.
[b]Interim DFARS, Subpart 227.4 as amended by 50 FR 43158, October 24, 1985; proposed DFARS, 50 FR 36887, September 10, 1985.
[c]Federal Information Resources Management Regulation, 50 FR 4321, January 30, 1985.

TABLE E-1. COMPUTER SOFTWARE DEFINITIONS (Continued)

COVERAGE	P.L. 98-525, P.L. 98-577	PROPOSED FAR	INTERIM DFARS AND PROPOSED DFARS	FIRMR
Restricted Rights (Computer Software)	Not covered.	Applies to computer software developed at private expense that is a trade secret, is commercial or financial and confidential or privileged, or is published copyrighted computer software, including minor modifications of such software.	Applies to computer software developed at private expense and listed or described in a license or agreement made a part of the contract (i.e., predetermined) wherein the parties agreed that the computer software will be furnished with restricted rights.	Not covered.
Restricted Rights (Commercial Computer Software)	Not covered.	Not covered, except for 27.405(b)(2), which provides for the use of the clause at 52.227-19, Commercial Computer Software – Restricted Rights, which overrides the vendor's terms and specifies the minimum rights of the government in such software.	Applies to commercial computer software and related documentation developed at private expense and not in public domain.	Not covered.
Unlimited rights	Not covered.	Applies to computer software first produced in the performance of a contract except to the extent it constitutes minor modifications to restricted rights software; form, fit, and function data except for source codes, algorithms, process formulae, and flow charts of the software; installation, operation, and maintenance manuals except to the extent the data are included with restricted computer software; and all other computer software delivered under the contract except for restricted computer software.	Applies to computer software resulting directly from or generated in performing R&D work as specified by a government contract or if required to be generated as a necessary part of performing a contract; changes to government-furnished software; public domain software; and computer data bases prepared under a government contract consisting of information in which the government has unlimited rights.	Not covered.

NOTES

[1]The Air Force Management Analysis Group (AFMAG), *Spare Parts Acquisition*, Final Report, October 1983, found that competition was prohibited for 8 percent of the spare items examined because the technical data pertaining to them had been delivered with limited rights. Inadequate or nonexisting data prohibited competition for 16 percent of the parts reviewed. The Office of the Secretary of Defense (OSD) Technical Data Rights Study Group Report, *Who Should Own Data Rights: Government or Industry? Seeking a Balance*, June 22, 1984, found that 4 percent of the parts screened had a proprietary data rights problem, whereas 27 percent could not be purchased competitively because the data were insufficient, inaccurate, or illegible.

[2]Title XII of the Department of Defense Authorization Act, 1985.

[3]It has been persuasively argued that P.L. 98-525 is defective because its vagueness has permitted overzealous DoD (DFARS) implementation. This is one way of looking at the matter. However, if implementation has been excessive, the remedy lies in correcting the implementation, not the statute; industry has *not* found the civil agency (FAR) implementation of a very similar statute (P.L. 98-577) oppressive.

[4]10 U.S.C. 2305(d); 41 U.S.C. 253b.

[5]The four papers produced by Samuelson as the Principal Investigator, Software Licensing Project, under auspices of the Software Engineering Institute, Carnegie-Mellon University, Pittsburgh, PA 15213, are CMU:

SEI-86-TRI *Toward a Reform of the Defense Department Software Acquisition Policy, April 1986.*

SEI-86-TM1 *Adequate Planning for Acquiring Sufficient Documentation About and Rights in Software To Permit Organic or Competitive Maintenance, March 1986.*

SEI-86-TM2 *Comments on the Proposed Defense and Federal Acquisition Regulations, March 1986.*

SEI-86-TM3 *Understanding the Implications of Selling Rights in Software to the Defense Department: A Journey Through the Regulatory Maze, March 1986.*

[6]Mask works are defined as a series of related images representing the pattern of conducting, insulating, or semiconductor material to be present or removed from the layers of a semiconductor chip product, where each image has the pattern of the surface of one form of the product (17 U.S.C. 901(a)(2)).

[7]*Who Should Own Data Rights: Government or Industry? Seeking a Balance*, a report prepared for the Under Secretary of Defense (Research and Engineering) by the OSD Technical Data Rights Study Group, June 22, 1984.

[8]50 FR 32870, August 15, 1985.

[9]50 FR 36887, September 10, 1985.

[10]50 FR 45442, October 31, 1985.

[11]50 FR 43158, October 24, 1985.

[12]Conference Report, H.Rep.No. 98-1080, 98th Cong. 2nd Sess., September 26, 1984, 321. This report notes the conferees' intention to expand the data rights coverage to include all items and not just major systems.

[13]Section 21(a) of the Office of Federal Procurement Policy Act of 1984, 41 U.S.C. 418; Section 1202(6) of the Defense Procurement Reform Act of 1984.

[14]Senate Report No. 98-523, Committee on Small Business, 98th Cong. 2nd Sess., June 14, 1984 (to accompany S.2489), p. 48.

[15]International Engineering Co. v. Richardson, 367 F. Supp 640 (D.D.C. 1973), rev'd on other grounds, 512 F.2d 573 (D.C. Cir. 1975), cert. denied, 423 U.S. 1048 (1976).

[16]5 U.S.C. 552(a)(4)(D).

[17]Recommendations I-10 and I-16, Report of the Commission on Government Procurement, Volume 4, 1972.

[18]Prepared for the Under Secretary of Defense (Research and Engineering) by the OSD Technical Data Rights Study Group, June 22, 1984.

[19]It should be noted that the policy referred to was that of the now-superseded Defense Acquisition Regulation, not that of the proposed DFARS.

[20]Nash and Rawicz, *Patents and Technical Data*, The George Washington University, 1983, pp. 445, 446, citing DoD movie script prepared by the authors of DoD technical data policy in 1964.

[21]CMU/SEI-86-TR1, *Toward a Reform of the Defense Department Software Acquisition Policy*, by Pamela Samuelson, Principal Investigator, April 1986.

[22]50 FR 917, January 8, 1985.

[23]252.227-7013, Rights in Technical Data and Computer Software.

[24]Specifically, interim DFARS paragraph 227.403-2(h), Alternative Proposals for Enhancement of Competition, states only that

contracting officers "shall consider use of solicitation provisions to obtain alternate proposals from contractors that provide the United States the right to use limited rights technical data for competitive reprocurement or that otherwise provide for the establishment of alternate sources of supply."

[25]Certain other expenditures reimbursed as indirect costs probably should also be included within the meaning of "private expense," but determining which costs these are will require further analysis.

[26]This prohibition against acquiring certain data was originally considered as a part of the definition of technical data and dealt with products developed at private expense, as well as products developed at private expense and offered for sale to the public; Amendment No. 3203 by Senator Levin to S.2723, Omnibus Defense Authorization, 1985, Congressional Record S7156, June 13, 1984; S.2487, Small Business and Federal Procurement Competition Enhancement Act of 1984, Congressional Record, S9790, August 7, 1984. The definition was subsequently modified to cover acquisition of commercial product data only; Amendment No. 3272 by Senator Grassley to S.2723, Congressional Record S7816, June 16, 1984; Weicker Amendment to S.2487, Congressional Record S9795, August 7, 1984. As enacted, the prohibition language was removed from the definition section and added as a policy consideration. There appeared to be some concern that excluding technical data pertaining to commercial products or products developed at private expense from the definition of technical data would be too limiting on the Department, and it was considered instead that this exclusion should be treated as a policy matter in the implementing regulations; Senator Levin's statement on S.2723, Congressional Record S7818, June 20, 1984. The policy regarding commercial products was incorporated into the bill as passed. The record is unclear as to why similar coverage for products developed at private expense was omitted.

[27]DoD Directive 5000.37, September 29, 1978, Acquisition and Distribution of Commercial Products.

[28]Section 21(a) of the Office of Federal Procurement Policy Act of 1984, 41 U.S.C. 418, states that the regulations implementing the act "shall provide . . . that the United States may not require" such technical data as a condition of procurement of the commercial product.

[29]Section 1202(6) of the Defense Procurement Reform Act of 1984 provides that the Secretary of Defense "should—(6) ensure" that such technical data will not be acquired as a condition of procurement of the commercial product or process. 10 U.S.C. 2320(a), in requiring implementing regulations that do not impair the legitimate proprietary rights of the contracting parties in technical data, requires that the policy in Section 1202(6) be considered in prescribing such regulations. This difference in approach was explained to the House by Congressman Mitchell, the floor manager, during the passage of P.L. 98-577 as follows:

> For both civilian and military agencies the substitute would require that the technical data regulations not impair any right of the United States or any contractor with respect to patents or copyrights or any other right in technical data otherwise established by law. With respect to civilian agencies only, the regulations must contain a prohibition on the Government's requiring technical data as a precondition for its purchase of any commercial item to which that data pertains unless such data is either offered for sale to the Government or is necessary for the Government to maintain or operate the commercial item. For military agencies, this commercial product "exemption" is to be a consideration of the Secretary of Defense in promulgating DoD's technical data regulation as its supplement to the FAR.

Congressional Record, H10839, October 2, 1984.

[30]The legislative history is somewhat confusing as to whether the restriction on acquiring design, development, or manufacturing data prohibits ordering them or merely prohibits ordering them with unlimited rights. Our reading of the restraints and of the overall legislative history is that the prohibition deals with the ordering of the data.

[31]Congressman Mitchell's explanation of H.R. 4209, Congressional Record H10838, October 2, 1984, the Department of Defense Authorization Act, 1985.

[32]Conference Report, H.Rep.No. 98-1080, 98th Cong. 2d Sess. (to accompany H.R. 5167), September 26, 1984, 318 states:

> The conferees agreed to require the Secretary of Defense to ensure that in preparing a solicitation for the award of a contract for a major system, the agency consider requiring the offeror to identify a plan for obtaining items procured in connection with the system on a competitive basis. The plan may include proposals to provide the government unlimited rights to use technical data relating to the items, or any other alternative method to ensure the government is not restricted to one source for future acquisitions. The offeror's proposal would then be considered in the agency's evaluation of the offeror's price.

[33]Federal Information Resources Management Regulation (FIRMR), 50 FR 4321, January 30, 1985. The FIRMR is issued by GSA under the Federal Property and Administrative Services Act and the Brooks Act, P.L. 89-306, and is applicable to all federal agencies including DoD except for specified DoD acquisitions such as for weapon systems (10 U.S.C. 2315).

[34]CMU/SEI-86-TR1, *Toward a Reform of the Defense Department Software Policy*, by Pamela Samuelson, Principal Investigator, April 1986.

APPENDIX J

The Navy Demonstration Project: An Alternative Personnel Management System

THE NAVY DEMONSTRATION PROJECT: AN ALTERNATIVE PERSONNEL MANAGEMENT SYSTEM

Purpose

The Federal Classification and Compensation System of the Civil Service has remained largely unchanged since the passage of the Classification Act of 1923. In intervening years, the size and composition of the federal work force has changed dramatically. Today there is widespread agreement that the Civil Service system frequently inhibits effective recruitment, retention, and management of federal civilian employees. This is especially true of occupations for which there is strong private sector demand, such as scientists, computer specialists, engineers, and contract specialists.

In 1980, the Office of Personnel Management authorized the Department of the Navy to conduct a five-year demonstration of an alternative personnel system, designed to allow management to reward individual performance and compete in the labor market for high quality personnel. Under the authority of the Civil Service Reform Act of 1978, the Navy has conducted this Personnel System Demonstration project at the Naval Weapons Center at China Lake, California, and at the Naval Ocean Systems Center in San Diego. In 1984, the project was extended for a second five-year period.

Features

The project has included full-time personnel in the scientist, engineer, senior professional, administrative, and technical specialist career fields at both Naval facilities. At the San Diego facility, the project also has included clerical personnel, in order to ensure a comprehensive basis for evaluating the alternative system's performance and potential.

In the alternative system, five new general personnel classification levels have replaced the 18-grade General Schedule. The system initially has assigned each employee to a respective classification level on the basis of his attained professional expertise. Thereafter, it has ranked each employee competitively within his respective classification level on the basis of the quality of his performance. Length of service and veterans preference have been secondary considerations. The higher an employee's performance rating, the better his chance of advancement—or retention in the event of personnel cutbacks.

Each classification level is matched to a broad range of compensation. (See Figure J-1.) The broad pay ranges applicable at different levels of expertise have allowed line managers significantly more flexibility to make initial salary offers competitive with local market conditions. Compensation has been linked to performance, rather than time in grade. Thus, it has been possible to reward deserving individuals with higher pay without having to promote them to a higher classification level. Moreover, both Naval facilities have established pools for cash awards in order to provide managers an additional means for recognizing superior performance. End-of-year performance bonuses have provided tangible incentives, and have made it possible to reward especially deserving employees without permanently increasing their pay.

Results of the First Five Years

For its initial five-year period, the demonstration project reported the following salient results:

- Improved ability to attract high quality personnel to entry-level positions.
- Dramatically reduced separation rates for scientists and engineers—from 8.1 percent in 1979 to 4.2 percent in 1983.
- Improved employee morale, through greater potential for advancement and professional growth.
- Reduced personnel management costs and streamlined personnel administration, including the reduction of personnel paperwork by 50 to 80 percent.

FIGURE J-1

CLASSIFICATION/PAY BAND EXAMPLE*

Classification Group: Scientists, Engineers and Senior Staff

Current System	Navy Personnel System Demonstration Project	Pay Range (in thousands)
GS–5 6 7 8	I Entry Level	$14.4 to 25.7
9 10 11	II Advanced Training	21.8 to 34.3
12 13	III Journeyman	31.6 to 48.9
14 15	IV Senior Specialists, Supervisors & Managers	44.4 to 67.9
16 17 18	V Professional Exceptional	61.3 to 72.3 (pay ceiling set by Congress)

*Other classification groups, such as technicians, technical specialists, administrative specialists, and clerical, have similarly designed pay bands.

K

APPENDIX K

Survey of Department of Defense Acquisition Work Force

Prepared by
MARKET OPINION RESEARCH*

June 1986

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission.

TABLE OF CONTENTS

INTRODUCTION

The business judgments, qualifications, ethics, and motivations of today's defense acquisition personnel are major topics of debate for the press, Congress, and top levels of the Executive branch and military hierarchy. The work force itself frequently debates these issues and, through this survey, shares publicly for the first time its collective perceptions of the current acquisition environment.

The President's Blue Ribbon Commission on Defense Management authorized this study to learn how the people who handle the day-to-day details of purchasing military equipment view their ability to perform effectively in today's defense acquisition environment. The more than 6,000 members of the work force who responded to the mail survey also provided valuable information on their qualifications and motivations.

The population base for this study encompasses 134,000 Department of Defense (DoD) acquisition work force members. These include contract specialists, cost/price analysts, program managers, business managers, logistics managers, technical specialists, engineers, and contract auditors. The population includes military and civilian members from every Service and the Defense Logistics Agency (DLA). Their direct contract responsibilities range from under $1,000 to over $100 million on an individual purchase. They represent expertise in every area of defense acquisition, including major weapon systems, research and development, spare parts and supplies, and base-level support and services.

This survey focuses on one segment of the work force—contract specialists. This group is singled out because it includes those directly responsible for ensuring that fairly and reasonably priced products and services are obtained in a timely and efficient manner. A matched sample of other acquisition team members was selected for comparison purposes.

The following summary highlights the key findings and conclusions of the survey. The first section presents work force reaction to current acquisition issues and proposed reforms. The second section analyzes the morale of the work force and addresses key work environment factors that improve or hinder effectiveness. Included are recommendations for further study of the work force. A concluding section briefly describes the survey methodology.

I. WORK FORCE REACTION TO ACQUISITION ISSUES AND PROPOSED REFORMS

The DoD acquisition work force will be directly affected by many of the reforms suggested by the President's Blue Ribbon Commission on Defense Management, among others. This section presents the reactions of contract specialists to several suggested reforms, as well as to other related acquisition issues.

Government-Industry Ethics and Accountability

The acquisition work force believes that, because of the importance of DoD acquisition to the defense of the United States, a higher level of ethics is required than in private industry. Contract specialists are split, however, on whether defense contractors can be trusted to behave ethically. A majority believe that defense contractors should feel an obligation to use higher ethical standards. Only half say that contractors could be trusted to live up to a code of ethics, were such a code to be developed.

The extent to which contractors actually do behave unethically is unclear. Over half of the contract specialists say defense contractors seldom try unethically to influence DoD acquisition personnel, but one-fifth disagree. Almost all say it is not hard to resist the temptation to accept an unethical offer by a defense contractor, but 2 percent say it is (4% are neutral). One in 20 contract specialists (6%) say a defense contractor has tried unethically to influence them within the last year.

Most contract specialists (63%) say they have the time to do something about fraudulent defense contractors, but one in seven (14%) say they are too busy to do anything about fraudulent contractors. Only 3 percent say they used the DoD Inspector General Hot Line to report fraud, waste, and abuse in the last year. "Blowing the whistle" either within or outside DoD is considered a career risk by a significant block of contract specialists. Forty-two percent say blowing the whistle within DoD in a case where fraud actually occurred would probably or definitely hurt their chances of obtaining valued work rewards. Fifty-one percent mark the same response for blowing the whistle outside of DoD. (The questionnaire does not specify whether or not blowing the whistle means taking action after first going through the regular chain of command.)

Almost half of the contract specialists say "revolving door" legislation (preventing them from working for defense contractors in the three-year period following government service) would not improve the credibility of the acquisition process, while one-third—significantly fewer—say it would improve credibility.

Role of Congress

The acquisition work force strongly supports the need to simplify the rules, regulations, and policies under which contract officers work. Contract specialists believe that congressional efforts to guide and direct the process work against efficient defense acquisition. A majority say that Congress "micromanages" DoD acquisition; that the acts, laws, and regulations they work under

prevent them from performing their jobs in a timely manner; that the number and complexity of policies and policy letters cause needless confusion and inefficiency; and that the lack of guidelines on some issues causes inefficiency.

A plurality say the current rules and regulations prevent the exercise of sound business judgment. Contract specialists are split on whether laws affecting DoD acquisition are "positive contributions." Half say they have suggested a change in rules or regulations to streamline the acquisition process in the last year, and 1 in 20 say they have written a letter to a congressman or other public official on acquisition regulations in the last year.

Educational Requirements

Contract specialists strongly support the establishment of an entry-level criterion of business-related college courses and the professionalization of their job classification. A clear majority agree that a minimum number of business-related college courses is necessary to perform their jobs. An even larger majority agree that the contract specialist civil service classification should be designated "professional." Program, business, and logistics managers concur with both these statements.

Contract specialists support the need for more education as well as on-the-job and formal training. While a plurality feel that they personally have received adequate training, a significant minority disagree. Other members of the acquisition team evaluate contract specialists as less qualified, on average, than their private industry counterparts.

The relatively low level of experience among DoD contract specialists also highlights the need for high-quality training and appropriate education. Approximately 40 percent report five years or less of experience in DoD contracting.

The civilian acquisition work force is split on whether it is in the government's best interest to have civilians responsible for all DoD contracting (40% say it is not, 35% say it is, and 25% are neutral). Ninety-four percent of the military, on the other hand, disagree.

Alternative Personnel Systems

Alternative personnel systems, similar to the China Lake project, would be well received by the acquisition work force. Almost a third of the contract specialists do not perceive a direct link between DoD's organizational rewards and activities that are important to the acquisition process. This provides relatively clear support for initiatives that would link rewards more strongly to performance levels. Additionally, the study found clear inadequacies in the levels of rewards available to contract specialists.

Streamlining the Bureaucracy

A strong majority of the acquisition work force agree that the bureaucracy under which defense projects are developed and operated contributes to inefficiency. Headquarters staff receives the lowest marks on providing the support that contract specialists need to do their job.

Military Specifications

A strong majority of the acquisition work force (both contract specialists and other members of the acquisition team) agree that military specifications are too extensive for some of the products that are bought.

Media and Public Perceptions

The media and public are perceived as misunderstanding the acquisition process and focusing attention on the "wrong problems." Almost all of the contract specialists think the American public has an inaccurate understanding of the DoD contracting process. A large majority feel that "horror" stories about spare parts emphasize the wrong problems with the acquisition process, and that the negative media coverage lowers the morale of the work force.

II. WORK FORCE SATISFACTION AND EFFECTIVENESS

The survey data provide additional insight into the work force's perceptions of their morale and their ability to be effective at assigned tasks.

Job satisfaction and perceptions of respect provide measures of work force morale or sense of purpose and well-being. Indications of performance effectiveness can be obtained by analyzing contract specialists' perceptions of four factors: direction and guidance, education and training, motivation and rewards, and resource adequacy. The lack of one of these factors in the work environment does not preclude *adequate* performance. It can, however, significantly decrease *optimum* performance. Management focus on factors that are not meeting work force needs will maximize every effort to build DoD acquisition team excellence.

Job Satisfaction and Respect

A majority of the acquisition work force say they are satisfied with their jobs, although over half say they would leave their jobs for another (elsewhere in DoD, the federal government, or private industry) if given the opportunity. Almost one in five (18%) say they have considered a definite offer of employment in the private sector during the last year.

Despite recent negative publicity, contract specialists believe their jobs command the respect of those they deal with regularly. A majority feel their efforts are respected by those they work with at DoD, by defense contractors, and by friends and families outside DoD.

Direction and Guidance

To be fully effective, contract specialists need to understand both the basic goals of their work and how to accomplish these goals. Contract specialists generally feel (86%) they understand the basic performance goals of their jobs.

The survey examines two key sources of guidance on how to accomplish acquisition job goals. The first is clarity and soundness of contracting rules, regulations, and policies. A significant proportion of contract specialists feel the rules, regulations, and policies that guide them cause needless confusion and inefficiency (78%) and are inconsistent with sound business practices (40%).

The second guidance source is supervision. Contract specialists generally view their supervisors as credible sources for information and guidance. A significant proportion (41%), however, question whether their supervisors have sufficient time to provide the appropriate levels of supervision. An additional 29 percent believe the guidance received from their supervisor conflicts with that received from the rules and regulations. (See Figure K-1 for a summary of these data.)

Training and Education

Two measures of whether contract specialists have the ability to operate effectively are whether they have the necessary education and training for the job. The survey addresses three aspects of this issue. First, contract specialists evaluate the adequacy of the training they receive; secondly, respondents evaluate the educational requirements of the job; and finally, contract specialists describe their educational background.

While over half the contract specialists believe they receive adequate formal (58%) and on-the-job (52%) training, up to a third

Figure K-1

SUMMARY OF DIRECTION AND GUIDANCE
(Contract Specialists)

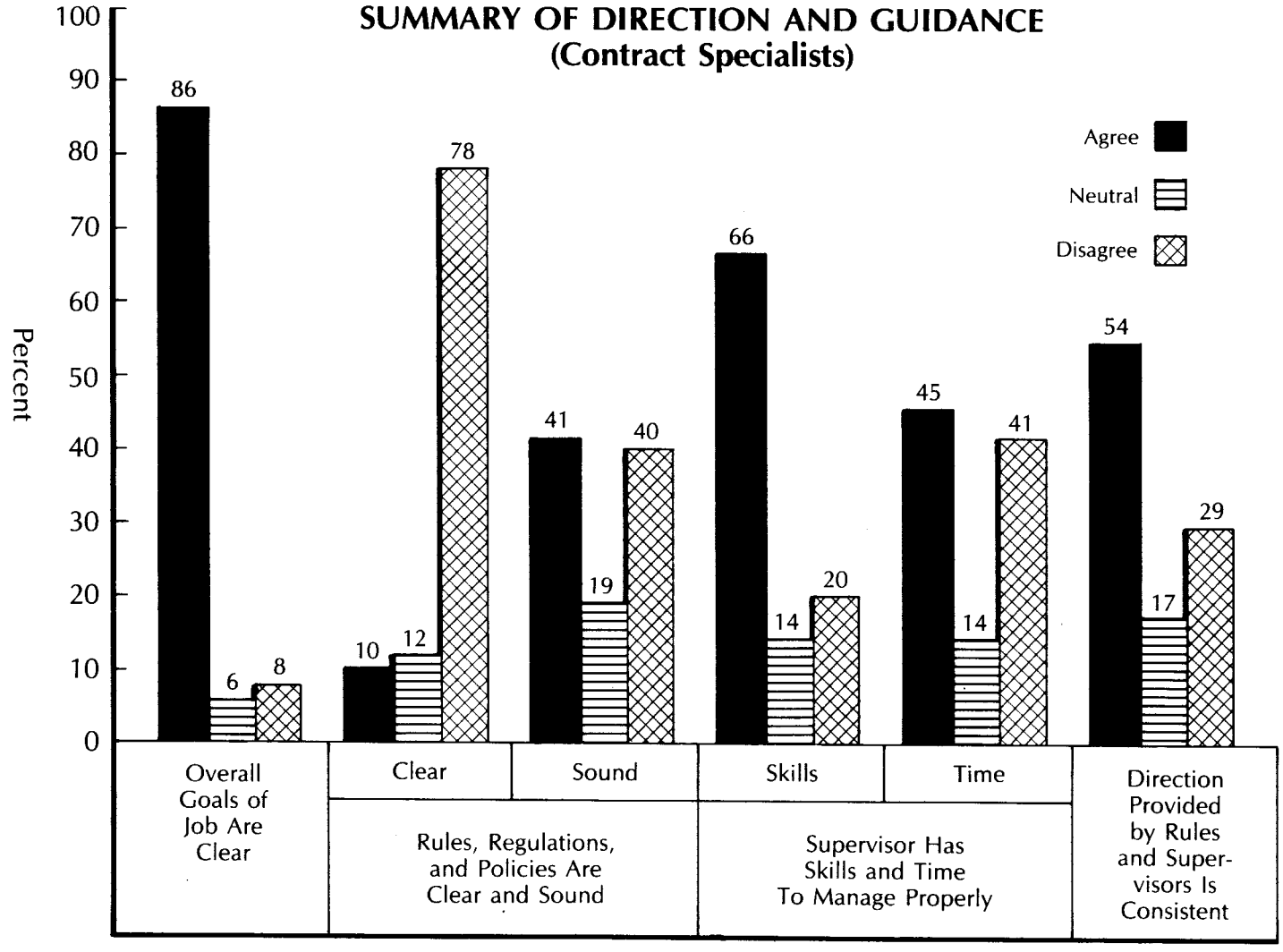
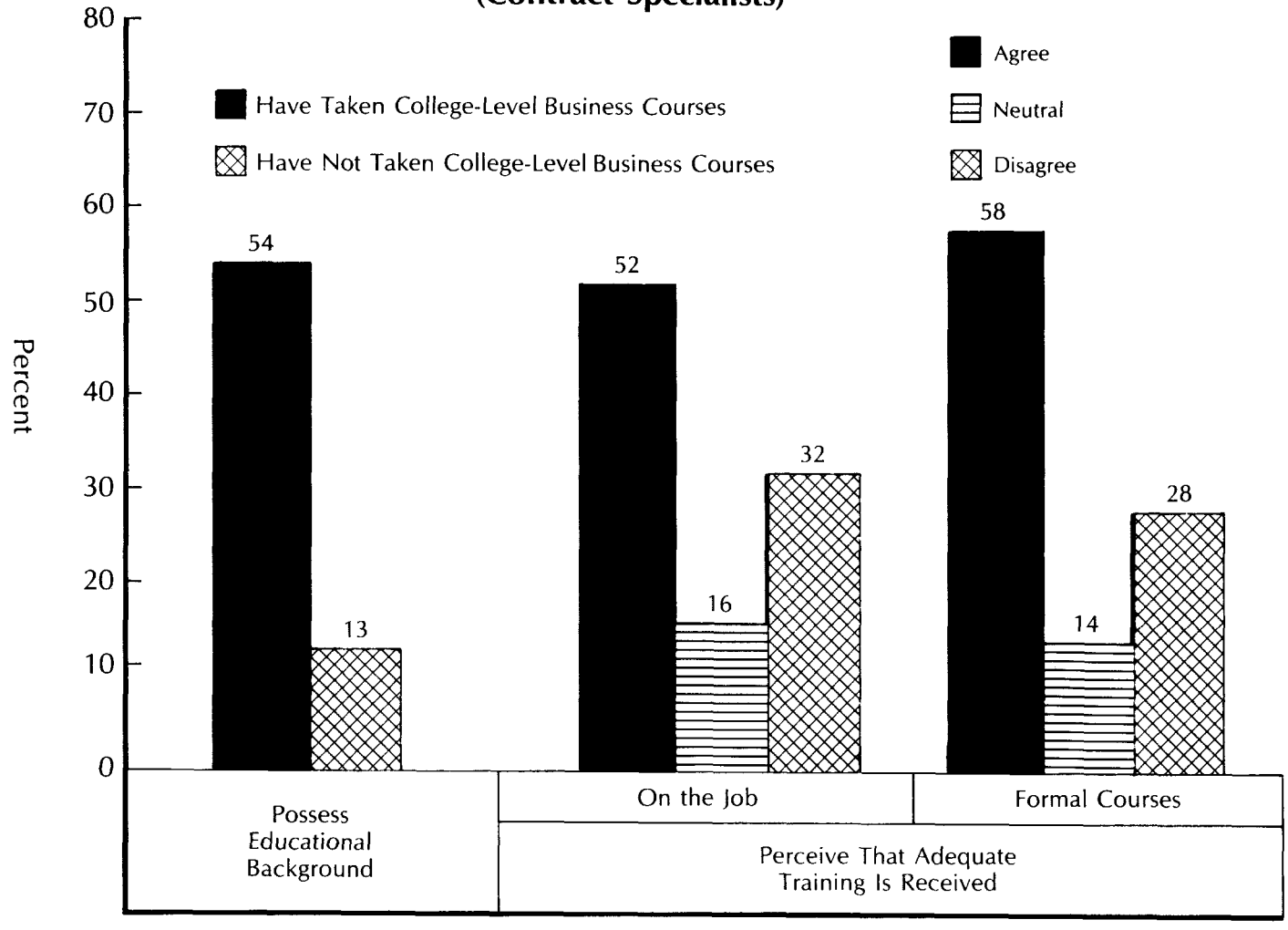


Figure K-2

SUMMARY OF EDUCATION AND TRAINING
(Contract Specialists)



disagree. Less than a majority of other acquisition team members (44%) are satisfied with the amount of formal training they receive. (Figure K-2 summarizes the key training and education data.)

Between one-third and two-thirds of the contract specialists feel they have insufficient time to attend training courses (60%), that travel funds are inadequate (56%), that they are not informed about the classes (37%), or that there is not enough room in the classes (33%). One-fifth say that lack of supervisory approval prevents them from getting the training they need.

The majority of contract specialists (56% of civilians, 74% of military) believe that they need a minimum number of business-related college courses to perform adequately their duties. Other key members of the acquisition team (program, business, and logistics managers) also expressed this belief (by 60% to 16%).

Thirteen percent of the civilian contract specialists responding to this survey have not had a college education and lack post-high school business courses. Another 33 percent have taken college level courses, but identify their major at their highest level of study as something other than business. Statistics obtained from the Defense Manpower Data Center show that only 54 percent of DoD's civilian contract specialists have college degrees. Twenty-eight percent have business degrees.

Military contract specialists surveyed are all commissioned officers. College degrees are prerequisites for commissions. Sixty-four percent of the military officers responding to this survey report business as their major area of study. A majority of the military contract specialists agree that contract specialists need college degrees (57%), but only 36 percent of the civilians agree. Similar proportions agree that contract specialists need business-related college degrees.

Differences of opinion between the (civilian) sexes are most dramatic on the need for college degrees: 47 percent of the males say degrees are necessary, but only 24 percent of the females agree. The differences and magnitudes are similar on the need for business-related degrees; differences are less dramatic on the need for some college-level business courses (62% male, 50% female agreement).

There are no differences between military and civilian or male and female on the professionalization of the contract specialist Civil Service job classification. Three-quarters of all subgroups agree that the classification should be "professional." Changing the job classification from "administrative" to "professional" requires evidence that a proven body of knowledge, manifested by education or experience, is required.

Motivation and Rewards

Almost uniformly, contract specialists say they perform their jobs to the best of their abilities. This is a positive finding, though a survey does not provide the opportunity to verify such statements.

This survey does, however, consider the DoD reward systems and the rewards and factors that acquisition personnel say motivate them. The two key issues involved are:

- whether the levels of rewards offered by DoD are felt to be adequate; and
- whether the rewards offered by DoD are linked to performance levels (rather than being distributed randomly or based on factors only weakly related to performance, *e.g.*, seniority).

The most important organizational rewards (*i.e.*, things DoD directly controls) are promotions, pay increases, and the opportunity to work independently. Also important are good working conditions (for civilians) and the opportunity for "choice" job assignments (for the military). (See Figures K-3 and K-4.) While the level of rewards is generally considered

Figure K-3
IMPORTANCE OF SELECTED ORGANIZATIONAL REWARDS
(Contract Specialists)

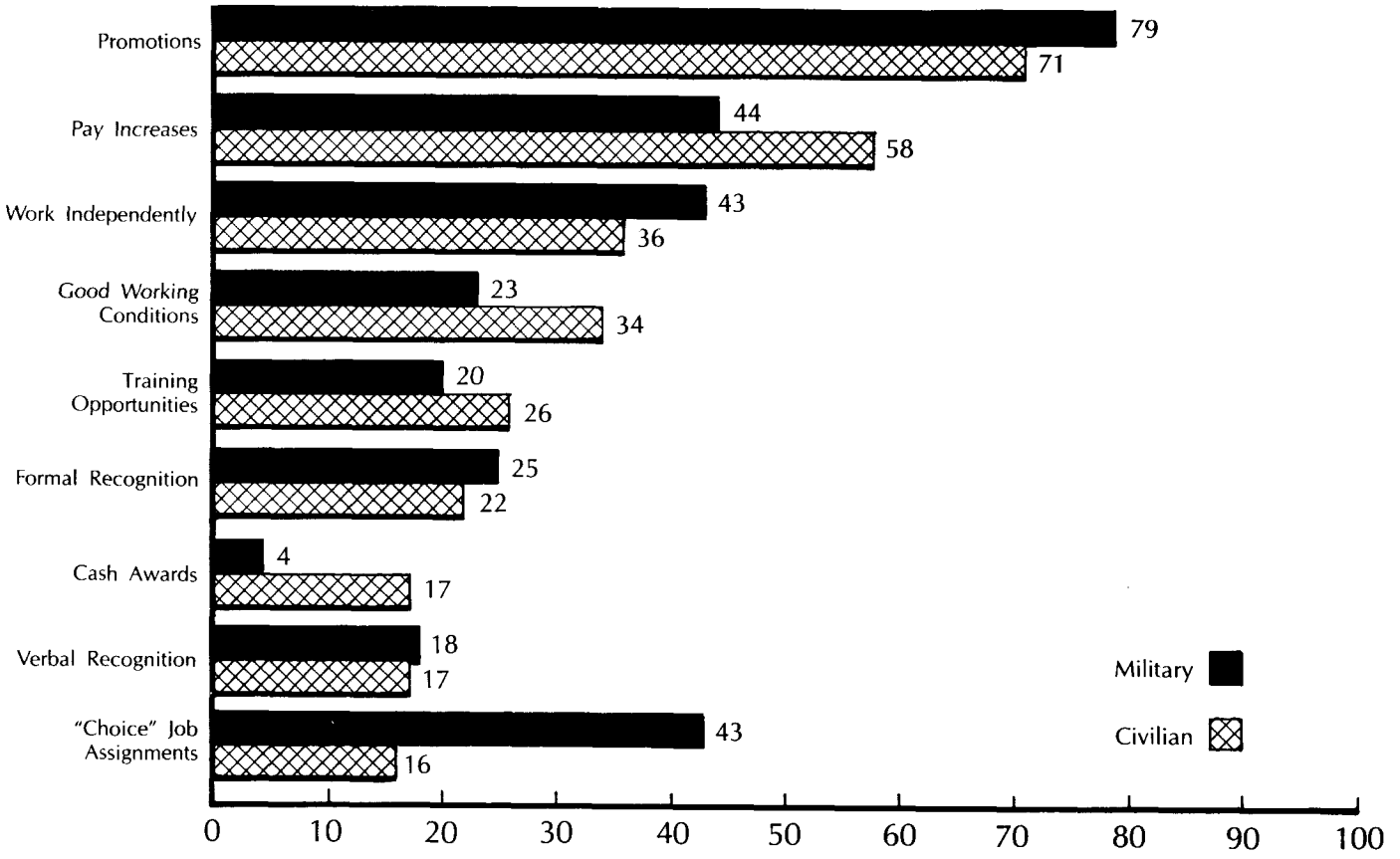
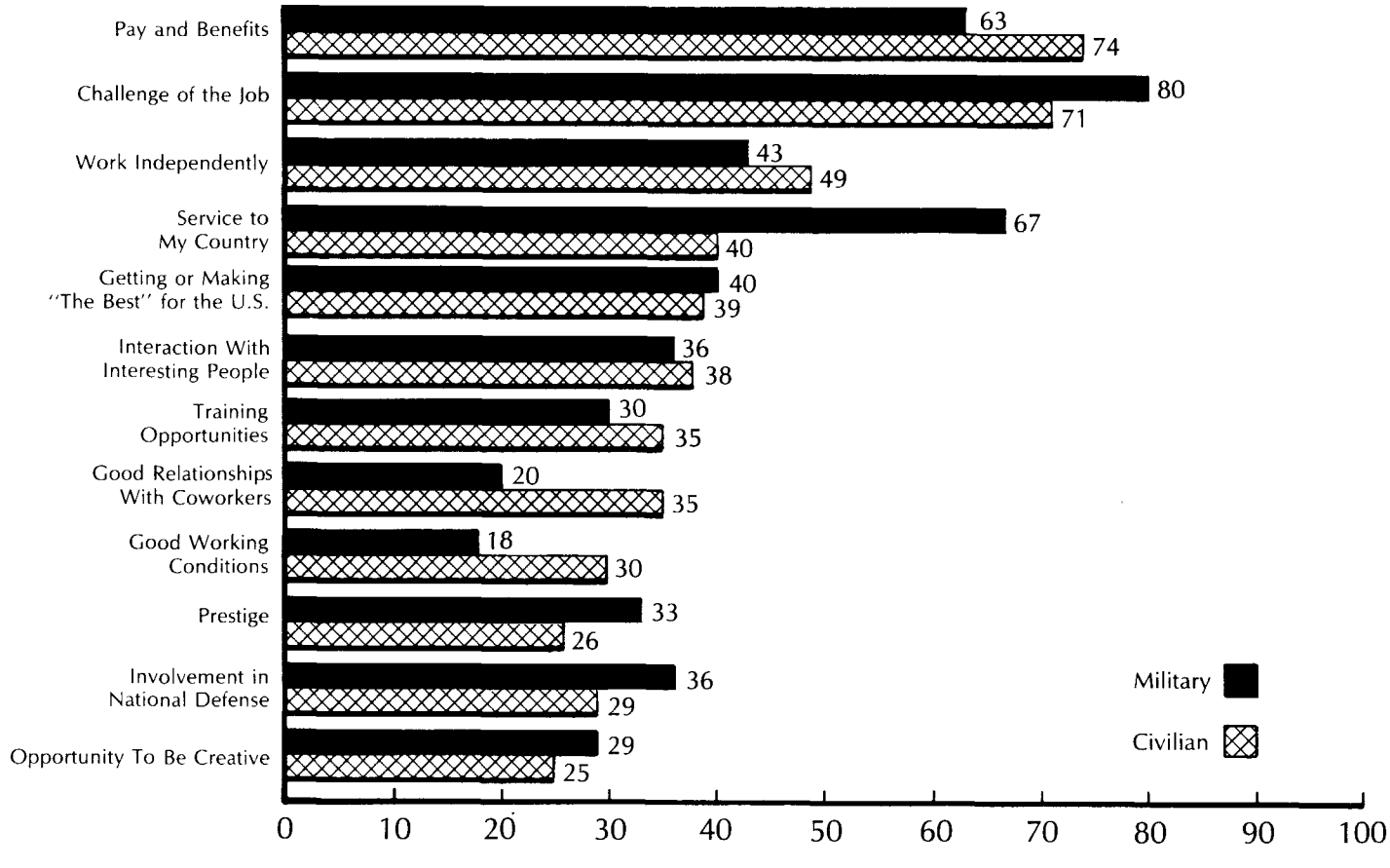


Figure K-4
IMPORTANCE OF SELECTED MOTIVATING FACTORS
(Contract Specialists)



satisfactory, several points of dissatisfaction are clear:

- Pay and benefits are not considered fair, given the level of responsibility;
- Opportunities for advancement are seen by 39 percent as limited and 29 percent say it is unclear what they need to do to be promoted; and
- Twenty-five percent say they lack the authority they need to do their work.

On average, contract specialists feel that rewards are linked to performing well on acquisition-related tasks. A significant minority (25%) of contract specialists, however, feel that engaging in "organizational politics" is more important to receiving rewards than engaging in acquisition-related tasks. Additionally, almost a third of the contract specialists believe the individuals evaluating their performance do not really know what their performance level is.

Resource Adequacy

In general, contract specialists appear satisfied with the information and support they receive from their supervisors and from other members of the acquisition team. (See Figure K-5.) This general conclusion does, however, vary according to the team's specific components. The support received from the headquarters staff is considered least acceptable. Additionally, while 39 percent of contract specialists are satisifed with the information received from top management, 34 percent of the group feel that information from this level is inadequate.

The three key points of resource dissatisfaction are office equipment, clerical support, and availability of time. Over half the respondents feel there is insufficient office space, equipment, and clerical support, which in turn causes reduced efficiency. By an almost 2-to-1 ratio they feel the time they have available is insufficient to allow them to perform even important tasks adequately.

In general, the contract specialists feel they have sufficient authority to handle their positions. (See Figure K-6 for a summary of the resource adequacy factors.)

Conclusions

Potential loss of qualified contracting personnel and a less-than-equal balance between DoD and industry at the negotiating table are two major concerns identified in this survey.

Retention

A significant group (55%) of contract specialists would leave if offered jobs in other federal agencies or in private industry. A profile of personnel most likely to move to other employment was created by correlating positive responses to retention questions with such factors as education, pay, and experience.

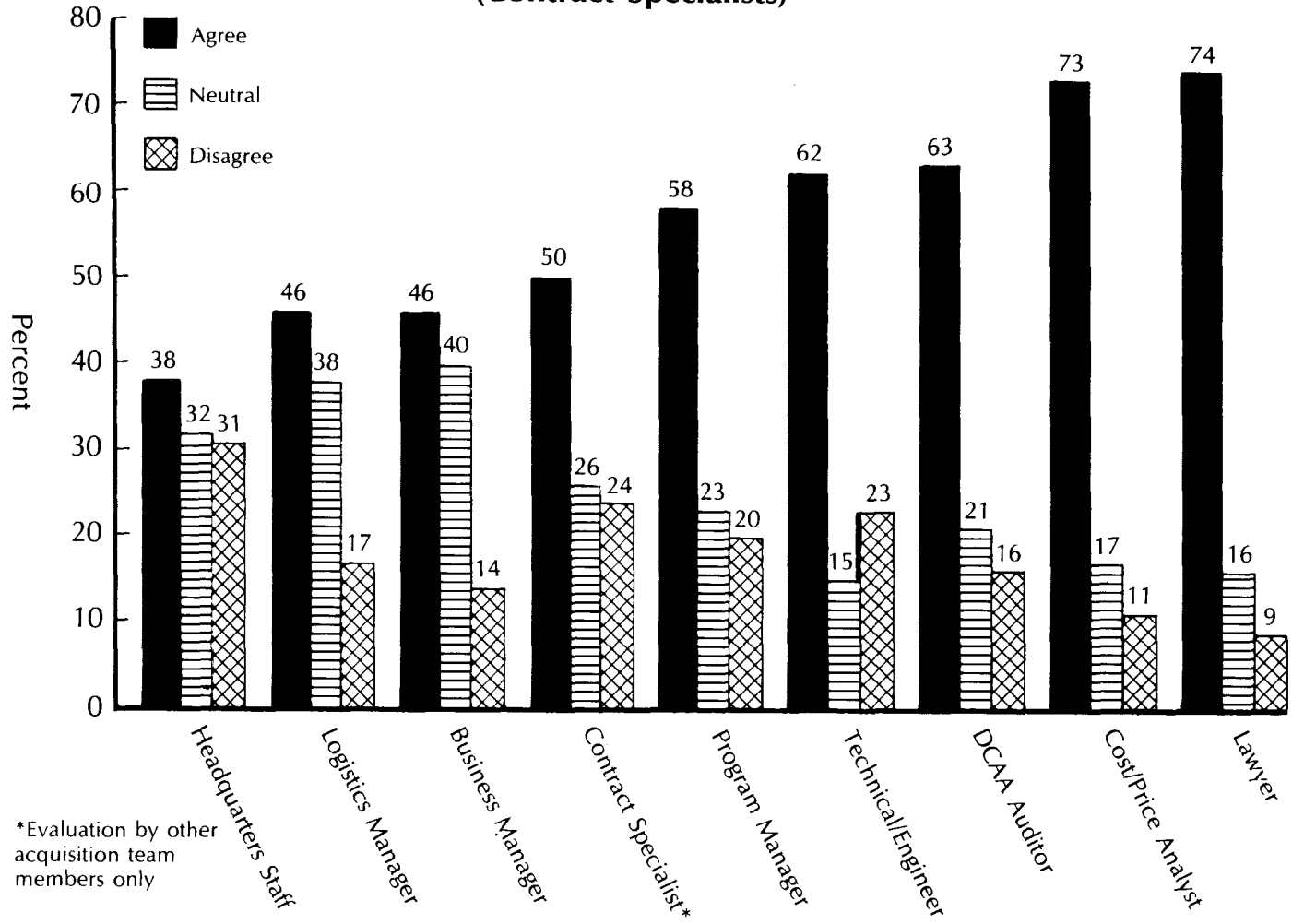
Contract specialists with college-level business courses are more interested in seeking new employment than those without such education. This difference is only slight when the new employment is with another federal agency (42% with college courses; 36% without college). The difference increases significantly when the lure is private enterprise (44% with college courses; 20% without college).

Interest in leaving DoD employment begins fairly early in the careers of contract specialists with gradual decreases thereafter. Those who have worked three, four, or five years are most likely to want to leave for other federal jobs. The peak begins within the first two years for those wishing to leave for private industry. Interest in the private sector is consistent through all civilian grades. Interest in other federal agencies is higher at the GS-5 through GS-8 levels. Military members in the two lowest officer ranks show the greatest interest in private sector employment.

Motivations differ for those interested in private industry as opposed to other federal

Figure K-5

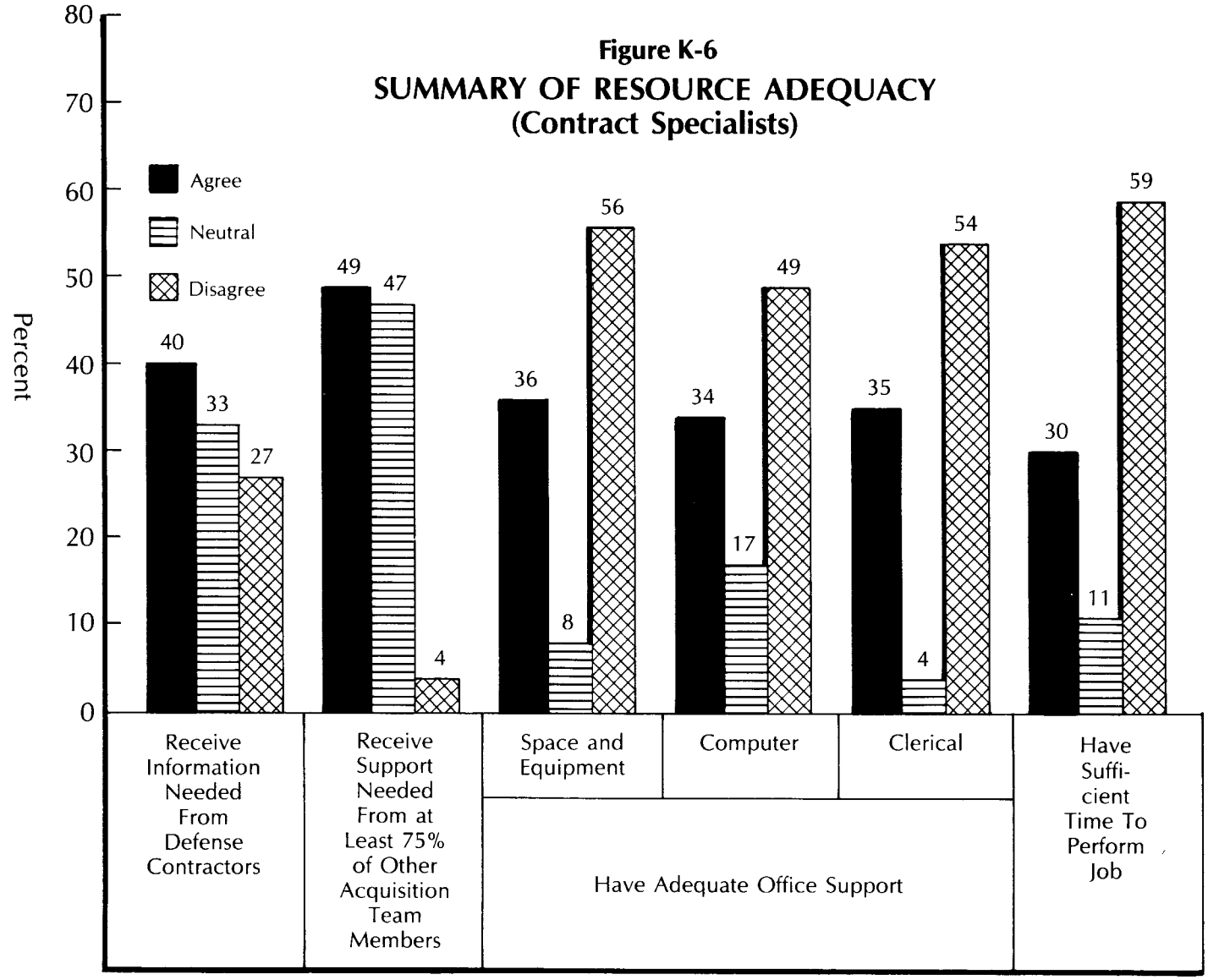
AGREEMENT WITH WHETHER ACQUISITION TEAM MEMBERS PROVIDE SUPPORT (Contract Specialists)



*Evaluation by other acquisition team members only

Figure K-6

SUMMARY OF RESOURCE ADEQUACY
(Contract Specialists)



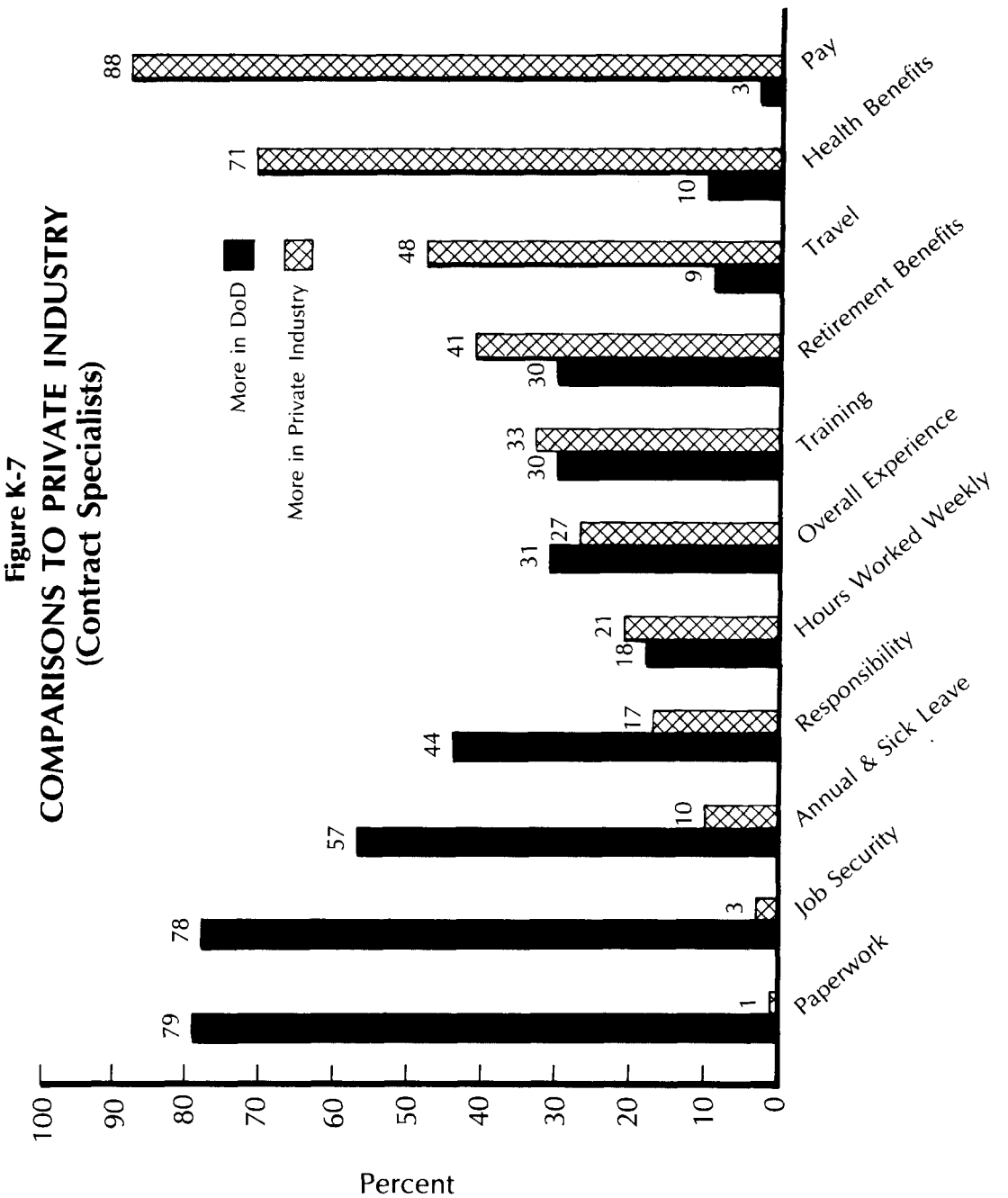
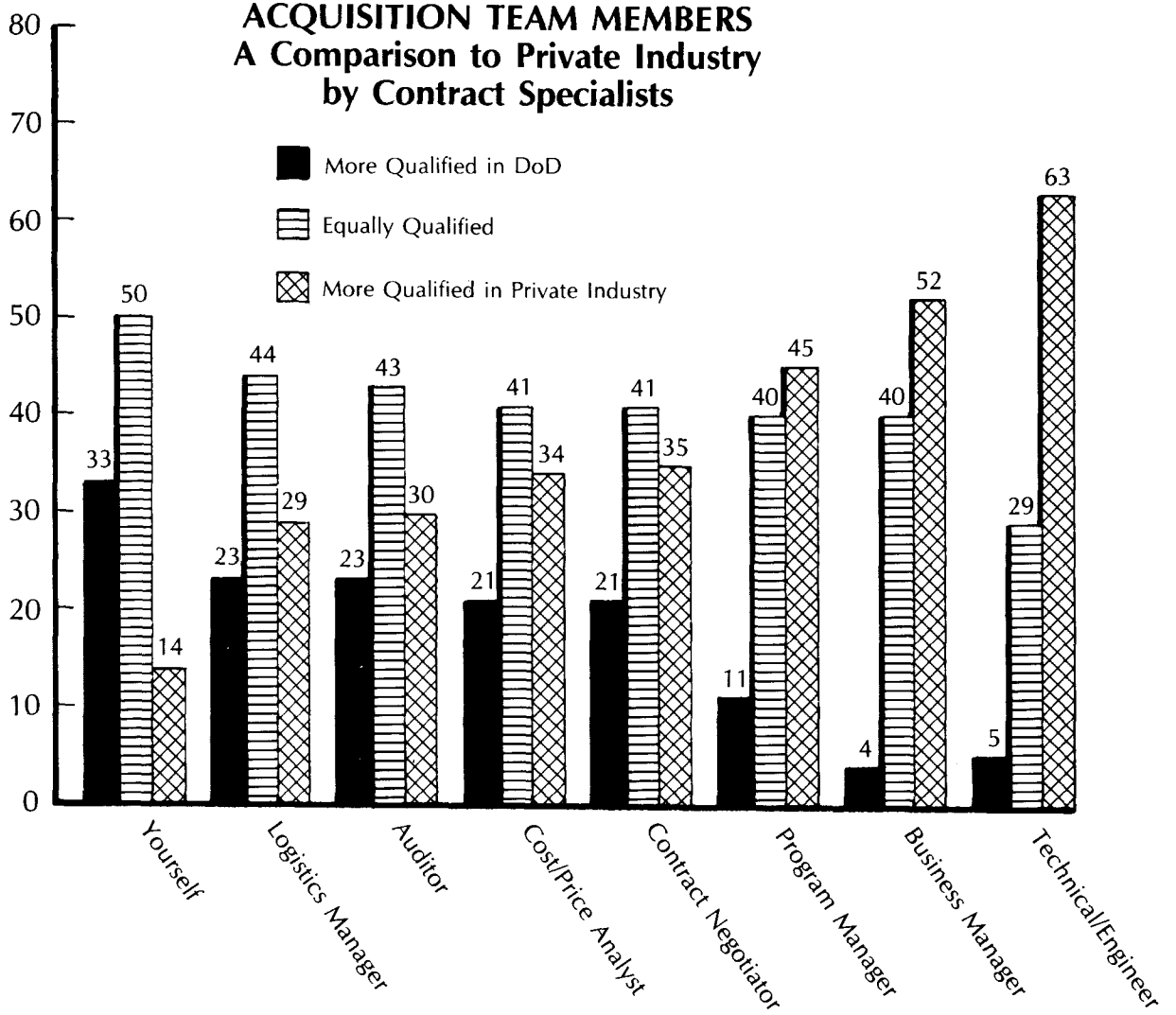


Figure K-7
COMPARISONS TO PRIVATE INDUSTRY
(Contract Specialists)
More in DoD
More in Private Industry
Percent
100
90
80
70
60
50
40
30
20
10
0
Paperwork
Job Security
Annual & Sick Leave
Responsibility
Hours Worked Weekly
Overall Experience
Training
Retirement Benefits
Travel
Health Benefits
Pay
79
1
78
3
57
10
44
17
18
21
31
27
30
33
30
41
9
48
10
71
3
88

Figure K-8

ACQUISITION TEAM MEMBERS
A Comparison to Private Industry
by Contract Specialists



employment. Those interested in private industry tend to respond negatively to questions regarding their pay relative to the pay of private industry counterparts, training opportunities, respect from family and friends, and support from upper management. Those interested in other federal jobs seem to be seeking opportunities for advancement, improved accuracy of performance appraisals, and increased support from upper management.

When asked to compare DoD's work environment with that of private industry (see Figure K-7), the contract specialists indicate that paperwork, job security, annual and sick leave, and responsibility are greater in DoD, while higher pay levels, health and retirement benefits, and travel are perceived to be more available in private industry.

Relative Competence

The contract negotiation table is the arena in which the technical and business skills of DoD personnel are pitted against those of defense industry specialists. The success of each negotiation often depends on the competence of individual team members. When asked to compare the competence of their own team members with those of their defense industry counterparts, the contract specialists generally rate their team as being on a par with industry's. Over half of the contract specialists rate DoD logistics managers, auditors, cost/price analysts, and program managers as being more qualified than or equally qualified as their private industry counterparts. The balance favor private industry when rating business managers and technical/engineering personnel (see Figure K-8). When rating other contract negotiators, slightly over one-third of the contract specialists give private industry higher marks.

When other acquisition team members evaluate the contract negotiators, 42 percent believe private industry employs more qualified personnel. Other acquisition team members also rated DoD contract specialists for support provided. While half agree that contract specialists provide adequate support, about a quarter disagree. Another 25 percent who are neutral on the issue may be indicating some question on the adequacy of contract specialist support. (Acquisition team members who do not require contract specialist support were excluded from this analysis.)

Recommendations

Market Opinion Research analysts have identified additional recommendations aimed at improving the effectiveness of the DoD acquisition work force. In general, the recommendations are oriented toward areas that promise high payoff if studied and defined further.

Recommendation 1: Emphasis should be placed on defining the causes of turnover among successfully performing contract specialists. Programs should be directed to retaining the successful performers.

The attraction, selection, and training of qualified contract specialists is of limited value if DoD is unable to retain the employees. The results of this study indicate that a significant proportion of contract specialists would accept other jobs if offered them; this represents a clear barrier to the enhanced development of an experienced, competent work force.

Efforts should be directed toward:

- examining turnover statistics to determine whether they support the concern identified in this survey;
- identifying the cases of turnover in the past year and determining (perhaps through interviews with supervisors) the competence of those who have left;
- contacting a sample of employees who left and, through structured techniques, defining the key variables involved in their decision to leave; and
- focusing on the variables identified, developing management programs to retain competent personnel.

Recommendation 2: The working conditions and qualifications of contract specialists in private industry in comparison to DoD should be systematically studied.

There is a clear perception that the pay and benefits provided by private industry are greater than those offered by DoD. Other conditions in private industry also are viewed more positively. Additionally, a significant proportion of acquisition team members feel that those working in the private sector are more qualified for their jobs than those working for DoD. Future DoD management actions to improve the quality of the work force must address perceptions such as these. A systematic study of such perceptions, using valid survey techniques, can determine the reality and scope of industry-government differences.

Recommendation 3: Attention should be paid to determining whether the role of supervisors in guiding and directing contract specialist activities can be enhanced. A key to this may be the determination of how to increase the time supervisors allocate to their supervisory activities.

Clarity of direction provided to contract specialists is identified as a key issue in this study. Even if rules, regulations, and policies are not simplified and clarified, increased guidance and direction from supervisors can assist in addressing this problem.

It appears that a relatively high payoff could be gained from studying how supervisors currently allocate their time, and then developing programs (*e.g.*, job redesign, training programs on setting priorities) that can help them to spend more time providing guidance to their subordinates.

Recommendation 4: Selection criteria for contract specialist positions should be studied in detail. Appropriate selection procedures should be designed and implemented.

The business educational qualifications recommended by the Commission were supported in this study. In fact, the opinions of program, business, and logistics managers arguably support requiring a college degree in addition to the business course requirement.

Job analysis techniques should be employed to identify whether more stringent classification standards are required, as well as to verify the appropriateness of the college-level business course requirement. An additional benefit of this type of study could be the identification of alternative selection criteria (*e.g.*, tests and structured interviews focused on specific experience components) that might have a less adverse impact on minority groups than would educational criteria.

Recommendation 5: The adequacy of office space, equipment, clerical support, and a computer availability should receive close attention.

A majority of contract specialists feel they do not have adequate office support to perform their jobs effectively. Often, such evaluations are de-emphasized as the "natural complaining" that occurs in surveys of this type. The strength of the evaluation in this case, coupled with positive evaluations of other aspects of the work environment, however, indicates an issue that may well be inhibiting the ability of contract specialists to perform their jobs. Specifically, the lack of adequate support may be contributing to difficulties contract specialists have finding adequate time to do their jobs.

Random samples of work locations could be selected and evaluated for the adequacy of the support provided, as well as the amount of time contract specialists devote to tasks that could be performed more efficiently by clerical support personnel or computers. Cost-benefit analyses could then be derived for the changes recommended.

Recommendation 6: The performance evaluation process should be examined and a determination made on improvements required.

Almost one-third of contract specialists believe their performance evaluators do not

know their real performance levels. The importance of the performance evaluation process will increase as emphasis is placed on linking rewards to actual levels of performance.

One assumption to be made from these data is that evaluation forms and scales do not provide adequate performance evaluation. This possibility may merit further study. More importantly, management attention should focus on whether or not supervisors effectively engage in activities that allow them to gain sufficient knowledge of their subordinates' activities and supply appropriate evaluations. The performance feedback process should also be emphasized; it is key to providing employees with a clear understanding of how they can effectively accomplish the overall objectives of their jobs.

Recommendation 7: DoD should continue efforts to promote superior ethical standards among its acquisition employees by clearly communicating expectations and by providing supervisors the opportunity regularly to observe adherence to standards on individual performance evaluations.

This survey indicates the majority of contract specialists clearly recognize the need to maintain a high level of ethics in carrying out defense acquisition responsibilities. Providing positive performance evaluation feedback to individuals will further encourage total work force involvement in recognizing and eliminating cases of fraud, waste, abuse, and actual or perceived conflicts of interest.

METHODOLOGY

A questionnaire of 187 questions was mailed to 9,974 members of the DoD acquisition work force between April 10 and April 18, 1986. Of the 9,974, half (4,987) were sent to contract specialists and half were sent to other members of the acquisition team. The contract specialist sample was designed to be representative of the total population of contract specialists. The other acquisition team sample was designed to be comparable to the contract specialist sample in terms of rank and pay grade, rather than being representative of the total population of other acquisition team members. This was done to facilitate comparisons between the two groups. The sample was drawn separately for military and civilian personnel, and for each of the Services (Army, Navy, Air Force) and the Defense Logistics Agency (DLA).

The questionnaire mail-out included a cover letter by Deputy Secretary of Defense William H. Taft, IV. A reminder letter by Assistant Secretary of Defense (Acquisition and Logistics) James P. Wade was sent two weeks after the initial mail-out. Of the 9,974 questionnaires mailed out, 6,175 were returned between April 16 and the field close date of May 21, 1986, for a return rate of 62 percent.

A set of population weights was computed for the groups formed by contract specialists versus other team members, military versus civilian, and the four Services. The population weights were used whenever data was aggregated over two or more subgroups so that the composition of the aggregate would be representative of the population. These weights were computed based on the relative sizes of the subgroups in the total population.

Staff Participation

Study Design and Questionnaire: Louis Erste, John Arnold, Fred Steeper, Robert Teeter.

Analysis Report: John Arnold, Louis Erste, Fred Steeper, Robert Teeter.

L

APPENDIX L

U.S. National Survey: Public Attitudes on Defense Management

Prepared by
MARKET OPINION RESEARCH

TABLE OF CONTENTS

(continued)

FOREWORD

Objectives

The purpose of this study is to provide the President's Blue Ribbon Commission on Defense Management with information about American public opinion on defense management issues. This purpose is incorporated into the following objectives:

To determine how supportive Americans are of the U.S. military in the broadest sense.

To measure the knowledge, beliefs, and preferences of Americans about U.S. defense spending, especially with regard to the amount spent, what is bought, and how much should be spent.

To examine the public's perceptions about how well the military does across a variety of functions, but, in particular, fighting and budget management.

To ascertain public perceptions of the *seriousness* of waste and fraud in defense spending, including how Americans rank waste and fraud compared to other national problems and other measures of military performance; the amount of waste and fraud Americans think there is; and how Americans think waste and fraud in defense spending compares to waste and fraud in non-defense federal spending and private business spending.

To measure perceptions of the *causes* of waste and fraud in defense spending, including the roles of defense contractors, the Defense Department, and Congress.

To assess the public's perceptions of the amount of fraud in defense spending as distinguished from waste, their beliefs about the forms which fraud takes, and their awareness and perceptions of the overpricing "horror stories."

To determine American public support for *solutions* to the problems of waste and fraud in defense spending, including who should have the main responsibility for solutions, where the confidence lies for carrying out solutions, and levels of support for several proposed solutions.

To assess public perceptions of how effective a fighting force the U.S. military is, and awareness of organizational problems and their effect on military effectiveness.

Sample

The survey is based on fifteen hundred (1,500) telephone interviews, conducted between January 18 and February 1, 1986. The interviews were administered to a probability-proportionate-to-size sample of U.S. citizens, 18 years or older, living in the continental United States. (Annex C presents further detail of the sample and field procedures.)

The sample error for a simple random sample (N = 1,500) is 2.5 percent at the 95 percent level of confidence. This means that ninety-five out of one hundred simple random samples will have their estimate within plus or minus 2.5 percent of the population value.

Staff Participation

Study Design and Questionnaire: Fred Steeper, Louis Erste, and Robert Teeter

Analysis Report: Louis Erste, Fred Steeper, and Robert Teeter

EXECUTIVE SUMMARY

1. **Americans think that inefficiency in U.S. defense spending is a big problem.** Whether asked about it relative to other problems or issues facing the nation, how well the military does at it, what the military does poorly, or how much waste there is, *defense budget inefficiency is consistently flagged as a problem of major proportions.*

Americans consider "waste and fraud in federal spending for *national defense*" second in seriousness only to the budget deficit when asked about the seriousness of a selected list of national problems which also included unemployment, inflation, the nuclear arms race, the fairness of the federal income tax system, the effectiveness of the U.S. military as a fighting force, and waste and fraud in federal spending for *domestic* programs. When asked open-ended what they thought the military did *poorly*, Americans gave spending-related answers most often. In the ratings on how well the military handles eight distinct responsibilities (including defense-oriented and spending functions), "spending its money efficiently" received the *lowest* average rating.

Almost all Americans think there is *some* waste in defense spending; close to two-thirds believe that there is *a lot* of waste. On average, Americans believe that *almost half the U.S. defense budget is lost to waste and fraud*—more than was lost to waste and fraud in military spending 10-20 years ago, more than is presently lost to waste and fraud in *non-defense* federal spending, and more than is presently lost to waste and fraud in *private business* spending.

2. **Americans believe that fraud (illegal activities) accounts for as much of a loss in defense dollars as waste (poor budget management).** On average, almost one-quarter of the defense budget is thought to be lost through *illegal activities* and almost one-quarter is thought to be lost because of *poor budget management.*

3. **Defense contractors are seen as especially culpable for waste and fraud in defense spending.** They are always mentioned as causes of waste and fraud in open-ended answers, and if they're included in a closed-end list they immediately predominate. When the public is given four items and asked which causes the greatest and second greatest waste in defense spending, *half* think that fraud and overpricing by defense contractors is the greatest cause (one-quarter think they're the second greatest cause). (The other items on the list were incompetent management by the Defense Department, pork barrel defense projects passed by Congress for their home districts and states, and unnecessary new weapon systems wanted by the military.)

More than three-quarters have heard of "price gouging" by defense contractors both on *inexpensive* items (such as hammers, coffee pots, and the like) and *expensive* items (like fighter planes and submarines), and believe such practices to be *major causes* of waste in defense spending. The most frequently mentioned examples of fraud are things thought to be done by defense contractors (overpricing, overcharging, price increases, kickbacks, payoffs, and bribes)—worthy of note regardless of the fact that charging high prices is not necessarily illegal. Finally, defense contractors are mentioned more as the ones who get the money from waste and fraud.

4. **Congress is perceived to contribute to defense budget inefficiencies to a lesser extent than defense contractors and the Defense**

Department. *Pork barrel defense projects, Congress' annual review and revisions of the defense budget, congressional laws affecting military spending,* and *yearly changes in the amount of money authorized for specific weapons* are not judged by most of the public as major causes of waste.

At the same time, **the American public is often supportive of congressional actions some would consider waste-producing**. Over half believe that defense spending to support *social reforms* should be continued—even though it is said to add unnecessary cost to the defense budget. Of the half who say they have *military bases or naval shipyards* in their area, 60 percent say their congressman should *oppose* the closing of that base or shipyard to save defense dollars. Of the two-fifths who say they have *defense contractors* in their area, 44 percent say their congressman should *oppose* the reduction of contracts to those businesses as a way to reduce defense spending.

5. **Americans are confident that waste and fraud in defense spending can be significantly reduced**—Eighty-nine percent of the public say this problem is solvable. However, the public is divided on who should have the main responsibility for reducing waste and fraud. No government body or office is volunteered by more than one-quarter as most responsible: Congress (26%), the Defense Department (24%), the President (19%), and the Secretary of Defense (6%). The public expresses greatest relative confidence in *President Reagan,* followed in order by a commission of national leaders from outside of government, the Defense Department, and Congress to find ways to reduce waste and fraud in defense spending. Defense contractors are *not* held in confidence to reduce waste and fraud.

6. **Better strategic planning, tougher treatment of defense contractor fraud, and improved training of procurement personnel head the list of specific solutions the American public believes would most help reduce defense waste and fraud.**

7. **Reducing bureaucratic red tape, making "off-the-shelf" purchases, stopping the "revolving door" between the Defense Department and the defense industry, and greater sharing of weapons and equipment across the Services also are solutions with significant public support.** A substantial majority of the public (70%) acknowledge that reducing congressional pork barrel projects would be helpful, although (as mentioned above in No. 4) many want exceptions made for their particular pork.

8. **Biennial budgeting is *opposed* by a 50% to 42% majority.** A majority of the public does not understand that Congress' annual review of the defense budget can increase costs. Instead, they believe that a yearly review is needed because of their lack of trust in DoD to spend its money efficiently.

9. **While the public is split on the efficacy of contractor self-governance, it overwhelmingly believes this solution should be tried.** Eight in ten Americans say defense contractors should feel an obligation to use higher ethical standards when doing business with the Defense Department, and 90 percent want the defense industry to develop a code of ethics and the means to enforce it. A large 42 percent do *not* think contractors would live up to their code, but a surprising 47 percent plurality believe they would.

10. **Americans believe that the U.S. military is a good fighting force and that its effectiveness is in far less need of reform than its acquisition system.** Whether asked about it in relation to other problems or issues facing the nation, how well the military does it, or what the military does well, the fighting or defense performance of the military receives high marks.

When asked about the seriousness of a

selected list of national problems and issues (as listed above in No. 1), Americans considered "the effectiveness of the U.S. military as a fighting force" the least serious problem on the list. When asked to rate how well the military handles eight distinct responsibilities (including defense-oriented and spending functions), the defense-oriented functions received the highest average ratings. "Staying adequately prepared to defend the country" and "organizing our armed forces into an effective fighting force" had the first and second highest ratings. When asked, open-ended, what they thought the military did *well*, Americans mentioned the military function (defending the country) most often, followed by preparedness.

11. Underlying their positive perceptions of the military's fighting ability, however, **Americans are aware that there are problems in the U.S. military organization, and a majority of Americans stop short of a top mark for the U.S. military's effectiveness.** In describing the military as a fighting force, 49 percent select "very effective," but a large 45 percent choose "moderately effective." (Only 4 percent picked "not very effective.")

When read a list of six criticisms that have been made of the U.S. military, one-quarter *strongly* agree and one-third *somewhat* agree with *all* the criticisms; one in ten *don't know*. The criticisms include (in order of strong agreement): communications problems within the chain of command have made our military missions more dangerous than necessary; the U.S. military is top heavy in generals and other high-ranking officers; the U.S. military chain of command is too complex; U.S. Armed Forces have serious problems conducting joint operations involving the Army, Air Force, Navy, and Marines; there is lack of true unity of command in our military; and there is inadequate cooperation among U.S. military Services when called upon to perform joint operations.

The size and intensity of those majorities, however, are considerably less than those supporting the criticisms of the military's acquisition system.

12. **Americans are also aware that organizational problems negatively impact military effectiveness.** When asked about certain recent military experiences, two-thirds each said that the *bombing of the Marine barracks* in Lebanon and the failure of the *hostage rescue mission* in Iran suggested problems in the way the U.S. military is organized, and half each said these experiences suggested *serious* problems. The *invasion of Grenada* is less often perceived as an example of organizational problems although a surprisingly high 45 percent say it does suggest problems.

13. **Americans react favorably to the general idea of increasing the authority of the Unified Commanders.** While the public has only cursory knowledge of the U.S. command structure, a majority (57 percent) believes our military forces are most effective when the four Services are under "one unified command with strong authority." A 33 percent minority believes the four Services operate best under separate commands.

14. **A plurality of Americans are satisfied with the current degree of civilian control of the military, but the remainder of the public more frequently believes there is too much civilian control.** Four in ten Americans say civilian officials make "about the right amount" of decisions for the U.S. military; one-third say civilian officials make "too many" decisions; and half as many say civilian officials "don't make enough" decisions for the military.

15. **Americans can be divided into three important groups based on their overall attitudes toward the military as an institution and toward the defense budget.** A plurality (37%)—**Owls**—have a generally positive attitude toward the military as an institution but a negative or mixed attitude toward the defense

budget. One-third—**Hawks**—have a positive attitude toward both the military as an institution and the defense budget. One-quarter of all Americans—**Doves**—have a negative attitude toward the military as an institution and a negative or mixed attitude toward the defense budget. (A small minority, 7 percent, has a negative attitude toward the military as an institution and a positive attitude toward the defense budget.) The Owls, positive in their general attitude about the U.S. military but critical of the defense budget, are the Americans who have been most affected by the waste and fraud issue.

16. **Americans can also be divided into three groups based on how they rate the performance of the military on spending and on fighting (defending the country).** A plurality (43%) are satisfied with the U.S. military's fighting performance *alone*. One-third (36%) of the American people are satisfied with *neither* the U.S. military's fighting nor spending performance. Only one-sixth are satisfied with *both*. (Hardly anyone, 4 percent, is satisfied with spending performance alone.)

17. **Americans considerably overestimate the amount of money that the U.S. spends on defense in general and on nuclear weapons in particular.** On average, the public believes that 46 percent of the total federal budget goes to military spending. A plurality of the public think that spending on nuclear weapons makes up the largest share of the defense budget.

I. THE U.S. MILITARY

This chapter examines American perceptions of the military function, provides a measure of the confidence Americans have in the U.S. military as an institution in society, and presents a scale of how supportive Americans are of the U.S. military.

The Military Function

Americans generally agree that the United States must take an active role in the international environment to protect U.S. national interests. What latent isolationism that does exist (over one-quarter think it would be better for the U.S. to stay out of world affairs) quickly dissipates when the role of the Armed Forces as a supporter of the core American value of *freedom* is questioned—almost all Americans agree that strong and effective armed forces are necessary to the preservation of freedom. Thus, a strong military is seen as necessary for both the maintenance of territorial integrity and the support of American interests abroad.

Two-thirds (67%) of all Americans agree that *it would be best for the future of this country if we take an active part in world affairs*; one-quarter (28%) say it would be better to *stay out of world affairs*. Those more likely than the average to agree with an active U.S. role are:

Men (73%)
High income (81%)*
Those with current or past military service (75%)

More likely than average to support an isolationist stance are:

Women (33%)
Lower end whites (43%)
Those with no military experience in their immediate family (35%)

Almost all Americans (92%) agree that *strong and effective American armed forces are essential to the preservation of freedom.* Three-quarters (73%) *strongly* agree and one-fifth (19%) *somewhat* agree. There is more *strong* agreement among:

Men (78%)
Those 40 years old or over (80%)
Those who serve or have served in the military (85%)

Do you think it would be best for the future of this country if we take an active part in world affairs or if we stay out of world affairs?

Active part in world affairs	67%
Stay out of world affairs	28
Don't know/refused	5
	100%

Strong and effective American Armed Forces are essential to the preservation of freedom.

Strongly agree	73%
Somewhat agree	19
In between/both (volunteered)	1
Somewhat disagree	4
Strongly disagree	2
Don't know/refused	1
	100%

*See Annex C for definition of income and education status groups.

Strong agreement is *lower* (but still in the majority) among:

Women (68%)
18-24 year olds (61%)
Blacks (60%)
Those with no military experience in their immediate family (64%)
Those who live in the Pacific region (64%)

Confidence in the U.S. Military

Americans have much more confidence in the U.S. military than in several other prominent institutions, including the federal government, major companies, and Congress. This is consistent with the argument that those institutions that are seen as more altruistic in nature, or less potent, generally elicit more confidence than those institutions that are seen as profiting more directly from their actions or wielding more power.

The high frequency of general support for the military is also seen in a tougher question which placed American feelings about the military in the context of an important American tenet—civilian control of the military. Almost half the people (49%) favor giving the military more freedom compared to 43 percent who are closer to the view that the military needs to be under tight civilian control. Subsequent analysis showed this question tapped more a person's general feelings about the military than about the constitutional scheme of civilian control.

Well over half of all Americans (57%) have *a great deal of confidence* in the U.S. military; over one-third (35%) have *only some confidence*; and 7 percent have *hardly any confidence at all* in the military. Those with *a great deal of confidence* in the other measured American institutions are far fewer (by half or more), with 30 percent saying they have a great deal of confidence in the federal government, 22 percent having a great deal of confidence in major companies, and 20 percent having a great deal of confidence in Congress.

Demographic subgroups that are *more* likely than others to have a great deal of confidence in the military are:

The Deep South region (64%)
Middle class (63%) or lower end whites (66%)
Those with present or past military experience (64%)

Subgroups *less* likely than others to have a *great deal of confidence* in the military are:

The Pacific region (46%)
The intelligentsia (45%) and blacks (44%)
Those without military experience in their immediate family (47%)

I'm going to read some institutions in American society and I'd like you to tell me how much confidence you have in each one—a great deal of confidence, only some confidence, or hardly any confidence at all.

	A great deal of confidence	Only some confidence	Hardly any confidence at all	Don't know/ refused
The U.S. military	57%	35	7	2
The federal government	30%	55	14	1
Major companies	22%	54	21	3
Congress	20%	58	20	1

When given a choice almost half (49%) believe that *the U.S. military needs to be given more freedom to deal with the threats to our national security;* the others (43%) believe *the U.S. military needs to be under tight civilian control to keep it from starting a war.*
Subgroups especially likely to favor giving the military more freedom are:

The Mountain region (62%)
18-24 year olds (56%)

Subgroups that favor tight civilian control more frequently than greater freedom for the military are:

The West North Central region (47%)
The Pacific region (51%)
60+ year olds (47%)

Several groups are about evenly divided in their answers:

The New England region
The East North Central region
High income
Intelligentsia
Those without military experience in their immediate family

Which of the following two statements do you think is the most true at the present time?

The U.S. military needs to be under tight civilian control to keep it from starting a war	43%
The U.S. military needs to be given more freedom to deal with the threats to our national security	49
Don't know/refused	8
	100%

Scale of General Attitudes Toward the U.S. Military

A scale which measures how positive Americans are toward the military in U.S. society was constructed using answers to the question about the need for strong and effective armed forces to preserve freedom, to the military confidence rating, and to the civilian control question.* The goal was to assess how supportive and trusting Americans are about the military—do they acknowledge its importance and trust it to do what's best for America?

As indicated in the previous sections, Americans are generally favorable toward the military. Over one-quarter (27%) are positive toward the military on all three scale components (preservation of freedom, confidence, give more leeway). Forty-two percent are positive on two of the three measures, and 30 percent are positive on no more than one question.

Attitudes Toward the Military as an Institution

Very negative	5%
Negative	25
Positive	42
Very positive	27
	100%

Those more likely than the average to be *very* positive toward the military are:

Middle class whites (32%)
Present or former military personnel (33%)
Those in the Deep South (35%)

Those more likely than the average to be negative toward the military are:

Those in the Pacific region (42%)
Women (33%)
Intelligentsia (39%)
Blacks (42%)
Those with no military experience in their immediate family (36%)

*For an explanation of the index construction steps, see Annex A to this appendix.

II. DEFENSE SPENDING

This chapter considers the knowledge, beliefs, and preferences of Americans about U.S. defense spending. How much does America spend, how much should America spend, what is it buying, and is it buying the right things? Several of these questions are combined in a scale that summarizes American attitudes (negative or positive) toward defense spending.

How Much Is Spent?

Americans considerably overestimate the amount of money that the U.S. spends on the military. On average, Americans believe that 46 percent of the total federal budget goes to military spending. Since 1986 outlays include only 26 percent for the military (32% of the total if Social Security is not included), Americans believe *almost twice as much* is spent on the military as actually is. Only 7 percent of all Americans correctly apportion 25 percent to 29 percent of the federal budget to the military. Eleven percent (11%) admit they *don't know* what proportion of the federal budget is spent on the military.

Women think more is spent on the military (49% of the federal budget) than do men (43%). Blacks have the highest average estimate of defense spending (53% of the federal budget), and people in the high income group have the lowest estimate (42%). However, all groups significantly overestimate the proportion spent for defense.

Let's say the total federal budget is $100—how many dollars do you think go to military spending and how many dollars go to non-military spending.

	Average
Military spending	$46
Non-military spending	$54
Don't know/refused	11%

What Is Bought?

Americans think nuclear weapons take up much more of the military budget than they actually do and that too much is spent on nuclear weapons. A nuclear arms control agreement with the Soviet Union would lead many Americans to assume bigger savings in the defense budget than would occur. Most Americans do *not* think we are spending *less* than we need on any of the major areas of the defense budget.

Over one-third (37%) think that spending on nuclear weapons makes up the *largest share* of the defense budget. Those especially likely to agree are:

18-24 year olds (49%)
Women (44%)
Blacks (60%)

Only 14 percent of all Americans correctly identify pensions and retirement pay as taking the largest share of military spending. High income people are the most likely to give a correct response (20%).

Forty-one percent think we are spending *more* than we need to on nuclear weapons. More likely than others to agree are:

Those in the Pacific region (50%)
18-24 year olds (51%)
Blacks (52%)

Less likely to agree than others are:

Those 40 and older (35%)
High income (33%)
Those with past or present military experience (35%)

Almost one-fifth (18%) think that more than necessary is spent on replacement parts and maintenance; 25 percent of the intelligentsia agree. Pensions and retirement pay are seen by 16 percent as taking up too much of the defense budget. Only 25 percent *denied* that we are spending *more* than we need *on anything.*

The defense budget includes spending for six items. After I read them, please tell me which one you think makes up the largest share of the defense budget.

	Largest Share
Nuclear weapons	37%
Day-to-day operations	16
Pensions and retirement pay	14
Armed Forces pay and benefits	14
Replacement parts and maintenance	9
Conventional weapons	6
Don't know/refused	4
	100%

Do you think we are spending *more* than we need on any of these six? Which ones?

	More Than Need
Nuclear weapons	41%
Replacement parts and maintenance	18
Pensions and retirement pay	16
Conventional weapons	9
Day-to-day operations	7
Armed Forces pay and benefits	5
No, none of them	25
Don't know/refused	8
	100%*

*Adds to more than 100 percent because multiple responses are allowed.

Half of all Americans (49%) disagree we are spending *less* than we need *on anything* in the defense budget and an additional 11 percent say they don't know of any such case. Fourteen percent (14%) each say we're not spending enough on pay and benefits or on pensions and retirement pay. Significantly more blacks agree that not enough is spent on pay (25%) or on retirement (31%). Fewer than 10 percent each say we are spending less than we need on conventional weapons, replacement parts and maintenance, nuclear weapons, and day-to-day operations.

Do you think we are spending *less* than we need on any of these six? Which ones?

	Less Than Need
Armed Forces pay and benefits	14%
Pensions and retirement pay	14
Conventional weapons	7
Replacement parts and maintenance	7
Nuclear weapons	5
Day-to-day operations	4
No, none of them	49
Don't know/refused	11
	100%*

*Adds to more than 100 percent because multiple responses are allowed.

How Much Should Be Spent?

Americans generally agree that military defense is one area of the budget that the U.S. should spend *whatever is necessary rather than only what can be afforded.* Moreover, fewer than half agree that we now have more than we need in the way of military capability. Yet, only one-fifth of all Americans favor increasing the defense budget, and less than 10 percent agree that defense spending should increase more

Finally, I'd like to read you some statements that people have made and, for each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with that statement.

	Strongly agree	Somewhat agree	In between/ both (VOL.)	Somewhat disagree	Strongly disagree	Don't know/ refused
Military defense is one area of the budget that we must spend whatever is needed rather than only what we can afford	32%	31	1	20	15	1
We now have a military capability that is much greater than we need to protect U.S. interests in the world	18%	24	1	27	27	3

rapidly than inflation. Thus, while Americans value the military very highly and disagree that we have more capability than necessary, they are not necessarily willing to increase current defense spending.

Almost two-thirds (63%) agree that *military defense is one area of the budget that we must spend whatever is needed rather than only what we can afford;* one-third (32%) *strongly* agree; and one-third (31%) *somewhat* agree. Of the one-third (35%) that disagree, 20 percent *somewhat* disagree and 15 percent *strongly* disagree. More likely than others to agree that we must spend whatever is needed are:

Those in the Deep South (41% strongly agree)
Lower end whites (69% agree)

More likely than others to disagree are the intelligentsia (48%).

Over two-fifths (42%) agree that *we now have a military capability that is much greater* than we need to protect U.S. interests in the world; 18 percent *strongly* agree and 24 percent *somewhat* agree. Over half (54%) disagree, including 27 percent each *strongly* and *somewhat* disagreeing. Those more likely than average to *agree* are:

From the Pacific region (53%)
18-24 year olds (56%)
Intelligentsia (52%)
Blacks (58%)
Those with no military experience in their immediate household (52%)

More likely than the average to *disagree* that we have superfluous military capability are:

Those 60 or over (60%)
Those with past or current military experience (62%)

Over half (52%) of all Americans favor keeping the defense budget the same as it is now. One-quarter (25%) favor decreasing defense spending. One-fifth (21%) favor increasing the military's budget. Those especially likely to favor *decreasing* defense spending are:

From the Pacific region (33%)
Intelligentsia (39%)
Blacks (33%)

Those in the Deep South (28%) are more in favor than the average of *increasing* the military's budget, but that viewpoint is in the minority among all groups.

In general, do you favor increasing or decreasing the present defense budget, or keeping it the same as it is now?

Increasing	21%
Keeping it same as it is now	52
Decreasing	25
Don't know/refused	2
	100%

If the rate of inflation over the coming year is 4 percent, do you think the defense budget should increase by more than 4 percent, 4 percent, 2 percent, zero percent, or should be cut below the current level?

Increase more than 4 percent	8%
4 percent	34
2 percent	17
Zero percent	13
Cut below the current level	25
Don't know/refused	5
	100%

In addition to the standard "increase/stay the same/decrease" question about the defense budget, MOR asks a follow-up question that adds an interpretation of what is meant by increasing, keeping the same, or decreasing defense spending. Those who favor an increase mostly mean (43%) *an increase equal to inflation*. Only 26 percent would increase defense spending *more than inflation*. Those who favor keeping defense spending the same also mostly mean (42%) an increase equal to inflation; 51 percent of the others would have it increase less than inflation or actually cut it. Of those who favor a decrease, 56 percent would actually *cut* defense spending below its current level. An additional 28 percent of those (for a total of 84% of those who favor a decrease) want the defense budget to grow less than inflation—or to decrease in relative terms.

There is a strong positive relationship between the two types of defense budget questions just discussed, but not on a clean one-to-one basis. Most of the "increase" people do not favor a *real* increase, and most of the "same" people do not favor 0 percent growth; pluralities of both groups, instead, favor an increase equal to inflation.

A Scale of Attitudes Toward Defense Spending

A scale which measures how positive Americans are toward defense spending was constructed using answers to both questions about increasing or decreasing the defense budget and agreement with the statement about spending whatever is necessary on defense.*

*See Annex A for an explanation of the scale construction steps.

	Defense Budget—In General		
If Inflation Is 4 Percent	**Decrease**	**Keep the same**	**Increase**
Cut below current level	**56%**	16%	10%
Increase zero percent	**12**	17	3
Increase 2 percent	**16**	18	15
Increase 4 percent	12	**42**	43
Increase more than 4 percent	2	4	**26**
	100%*	100%*	100%*

*Don't know/refused response not shown.

Forty percent (40%) are positive toward the budget—they tend to agree that whatever is necessary should be spent on the military and favor keeping the budget the same or increasing it. Thirty percent (30%) *each* are either mixed or negative toward the defense budget—either disagreeing that whatever is necessary should be spent and/or that the budget should stay the same or go down.

Attitudes Toward the Defense Budget Scale	
Very negative	6%
Negative	24
Mixed	30
Positive	30
Very positive	10
	100%

Those especially likely to be *positive* toward the defense budget are:
- Those in the Deep South (49%)
- Those with past or current military experience (46%)

Especially likely to be *negative* on defense spending are:
- Those in the Pacific region (39%)
- Intelligentsia (47%)
- Blacks (39%)

Interestingly, there is no differentiation between men and women regarding their general attitude toward defense spending. This is one of the few findings in which men are not more favorable toward the military than women.

Doves, Gulls, Owls, and Hawks —An Attitude Typology

The two special scales constructed to measure American attitudes toward the military as an institution and toward the defense budget were combined into an overall attitude typology. The typology's four categories are listed below.

Doves: those with a *negative* attitude toward the military as an institution and a *negative* or *mixed* attitude toward the defense budget.

Gulls: those with a *negative* attitude toward the military as an institution and a *positive* attitude toward the defense budget. (This is an odd combination and only a few people are in this group.)

Owls: those with a *positive* attitude toward the military as an institution but a *negative* or *mixed* attitude toward the defense budget.

Hawks: those with a *positive* attitude both toward the military as an institution and toward the defense budget.

The frequency distribution of Doves, Gulls, Owls, and Hawks shows one-quarter (23%) of the American people are Doves and one-third (33%) are Hawks. Less than one in ten are Gulls (7%), but *a plurality are Owls*—the group that likes the military but doesn't like the defense budget (37%).

Typology of Attitudes About the Military and the Defense Budget	
Doves	23%
Gulls	7
Owls	37
Hawks	33
	100%

More likely than average to be Doves are:
- Those in the Pacific region (37%)
- Intelligentsia (35%)
- Blacks (32%)
- Those with no military experience in their immediate family (30%)

More likely than average to be Hawks are:
- Those in the Deep South (40%)
- Men (36%)
- Those with current or past military service (40%)

Significantly, the Owls are broadly representative of the American public in demographic terms.

(See Annex B for an explanation of the typology construction and a demographic description of the Dove-Gull-Owl-Hawk categories.)

III. THE MILITARY'S PERFORMANCE

This chapter presents the public's perceptions about how well the military does in general, and at several specific functions including fighting, spending, recruitment, and training. It also presents three scales that summarize public attitudes toward the military's performance.

What the Military Does Well

The American public is generally impressed by the job the U.S. military does *protecting the country* and *staying prepared* to defend the country. They believe that the U.S. military is an effective fighting force. Americans also give the U.S. military high ratings on both recruiting qualified people and giving recruits job skills that will help them after they leave the service.

In response to an open-ended question about what the U.S. military *does well*, 41 percent volunteer some aspect of the *military function*, including 28 percent who say *protecting the country*. *Preparedness* mentions are made by 17 percent, including 11 percent who cite *training the men*. One-quarter (25%) respond *don't know*. While there is little difference among demographic subgroups on military function mentions, high income people are more likely to mention preparedness (24%). Those that are more likely than average to say they *don't know* what the U.S. military does well include:

- Those 60 or over (31%)
- Women (31%)
- Lower end whites (33%)
- Those without military experience in their immediate household (32%)

The first three groups (above) generally have above average rates of "no opinion" to survey questions, so only the fourth group is a unique finding.

When asked to rate the U.S. military on how it is handling several of its responsibilities on a zero-to-ten scale (where zero is "very poorly" and ten means "extremely well"), *staying adequately prepared to defend the country* had an average rating of 7.3; *organizing our armed forces into an effective fighting force* averaged 6.9; *giving recruits job skills that will help them after they leave the service* averaged 6.7; and *recruiting qualified people* averaged 5.9.

18-24 year olds were more likely to give high ratings for *staying adequately prepared* (7.6 average), for *organizing our armed forces* (7.2), and for *giving recruits job skills* (7.1).

What do you think the U.S. military does well?

Military Function	**41%**
Protect country/ready to defend	28
Show U.S. strength	4
Keep peace/deter war	4
Fighting/effective fighting force	3
Preparedness	**17**
Training the men/good skills	11
Prepared/always alert	4
Best Air Force	1
Spinoffs (provide jobs/research)	**4**
Education/Job Training	**2**
Nothing	4
Don't know	*25*

Now, I'd like you to rate how well the U.S. military is handling several responsibilities on a zero-to-ten scale where zero means it is handling it very poorly and ten means it is handling it extremely well. You can use any number between zero and ten, the higher the number you use the better you think the U.S. military is handling it.

	Average		
Staying adequately prepared to defend the country	7.3	Don't know/refused	1%
Organizing our armed forces into an effective fighting force	6.9	Don't know/refused	4%
Giving recruits job skills that will help them after they leave the service	6.7	Don't know/refused	4%
Recruiting qualified people	5.9	Don't know/refused	4%
Fighting international terrorism	4.9	Don't know/refused	5%
Finding and prosecuting those involved in fraud in defense contracts	4.5	Don't know/refused	4%
Spending its money efficiently	4.1	Don't know/refused	2%

What the Military Does Poorly

Americans think the U.S. military does a poor job at *spending its money efficiently.* Some Americans, although a much smaller number than for spending, think that the military is not as *prepared* as it could be, possibly a reflection of the frustration many Americans feel with the seeming inability of the U.S. military to respond to terrorism abroad. This is also reflected in the relatively low ratings given the military for *fighting international terrorism.*

One-quarter (24%) of all Americans offer some type of *spending* answer to the open-ended question "what do you think the military does poorly?" This includes 17 percent specifically volunteering that *the military spends money poorly.* Those *more* likely than others to volunteer spending mentions are:

- 25-39 year olds (31%)
- *Men (30%)*
- High income (33%)
- Intelligentsia (35%)
- *Those with past or present military experience (33%)*

Partly because of higher "no opinions" for the last three groups, those *less* likely than others to volunteer spending are:

- 18-24 year olds (15%)
- Women (19%)
- Lower end whites (17%)
- Blacks (16%)

Eleven percent (11%) of the total give *preparedness* answers to the "what do you think the military does poorly" question. Thirty-eight percent (38%) give a *don't know* response. More likely than the total to have nothing to volunteer about what the military does poorly are:

- Those 60 or over (46%)
- Women (44%)
- Lower end whites (46%)
- Those without military experience in their immediate household (45%)

On a zero-to-ten scale (very poorly to extremely well) the U.S. military is given an average rating of 4.1 for *spending its money efficiently.* Those especially likely to think the

military handles spending *poorly* (0-4 on the 0-10 scale)—compared to 53 percent of the total—are:

From the Pacific region (66%)
25-39 year olds (59%)
Men (60%)
High income (63%)
Intelligentsia (71%)
Those with past or present military experience (61%)

Especially likely to think the military handles spending *well* (6-10 on the 0-10 scale)—compared to 25 percent of the total—are:

Those from the Deep South (33%)
Blacks (42%)

The military is given an average rating of 4.5 for *finding and prosecuting those involved in fraud in defense contracts.* Half (50%) give a *poor* rating (0-4 on the 0-10 scale). Just over one-quarter (29%) give a 6-10 rating. Especially likely to give a *poor* rating are:

Those in the Mountain region (65%)
Men (57%)
High income (57%)
Intelligentsia (65%)
Those with current or past military experience (56%)

More likely than average to think the military is handling fraud well are:

18-24 year olds (36%)
Lower end whites (36%)
Blacks (43%)

Fighting international terrorism is given an average rating of 4.9 on the zero-to-ten scale—40 percent say it's handled poorly (0-4), and 37 percent say it's handled well (6-10). Especially likely to think it's handled *poorly* are:

Those in the Pacific region (49%)
Men (48%)
Those with current or past military experience (50%)

Those more likely than others to think the military handles fighting terrorism well are:

Women (43%)
Lower end whites (48%)

What do you think the U.S. military does poorly?

Spending	**24%**
Spends money poorly	17
Tracking down waste	2
Spending too much on weapons	1
Preparedness	**11**
Not well trained	4
Recruiting needs upgrading	2
Don't have good leaders, officers	1
Mistreatment of Personnel/ Poor Benefits	**5**
Don't get paid enough	2
Military Function	**5**
Can't handle terrorists	1
Should be more aggressive	1
Stay Out of Other Countries/Go Where They Shouldn't	**5**
Bureaucracy/Management	**2**
Social Problems (Drugs/alcohol)	**2**
Nothing	6
Don't know	*38*

Military Performance Scales

Three scales that measure Americans' ratings of the U.S. military's performance—at fighting and defense, spending, and overall—were constructed using combinations of the zero-to-ten ratings of how well the military does

handling its responsibilities.* The fighting, or military function, scale uses the ratings for *staying adequately prepared* and for *organizing our armed forces.* The spending scale uses *spending its money efficiently* and *finding and prosecuting fraud* ratings. The overall performance scale uses all four of these ratings plus the ratings of the quality of recruits and of job training.

As is seen in previous sections, Americans think the U.S. military does a better job at fighting than at spending. Only 11 percent give *poor* ratings for fighting while 57 percent give poor (37%) or very poor (20%) ratings for spending. Fifty-nine percent (59%) say the military is good (30%) or excellent (29%) at fighting, while only 20 percent say the military is good at spending. Especially likely to think the military is *excellent* at fighting are:

18-24 year olds (38%)
Lower end whites (41%)
Blacks (44%)

Especially likely to rate the military *poorly* or *very poorly* on spending are:

Those in the Pacific region (67%)
Men (63%, compared to 50% women)
Intelligentsia (76%)

The *overall performance scale* (constructed using the *fighting* and *spending* ratings, and the *recruiting qualified people* and *giving recruits job skills* ratings) ranged in four categories from very negative to very positive. About one-quarter each fell into the very negative (28%), negative (25%), positive (21%), and very positive (27%) groups. More likely than others to be *very negative* on overall military performance are:

Those in the Pacific region (37%)
Intelligentsia (41%)

Those more likely than others to be *very positive* about overall military performance are:

From the Deep South (34%)
60 or over (33%)
Women (31%)
Lower end whites (39%)
Blacks (38%)

Less likely than others to be very positive are:

Those in the Pacific region (20%)
Men (21%)
High income (15%)
Intelligentsia (13%)
Those with present or past military experience (21%)
Those with someone in their household who works for a defense contractor (20%)

The Three Military Performance Scales

Fighting Performance	
Poor	11%
Fair	30
Good	30
Excellent	29
Spending Performance	
Very poor	20%
Poor	37
Fair	23
Good	20
Overall Performance	
Very negative	28%
Negative	25
Positive	21
Very positive	27

A Typology of Attitudes About Military Performance

The two special indices constructed to measure American attitudes toward military fighting and spending performance were

*See Annex A for an explanation of the scale construction steps.

combined into an attitude typology including four categories. The four categories are listed below.

Satisfied With Neither Fighting Nor Spending: those with *poor* or *fair* ratings of both the military mission and spending performance.

Satisfied With Spending: those with *poor* or *fair* ratings of the military mission and *good* ratings of spending performance.

Satisfied With the Military Mission: those with *good* or *excellent* ratings of the performance of the military mission and *poor* or *fair* ratings of spending performance.

Satisfied With Both Fighting and Spending: those with *good* or *excellent* ratings of the performance of the military mission and *good* ratings of spending performance.

The frequency distribution of these categories shows over one-third (36%) of the American people are satisfied with *neither* the military's fighting nor spending performance, hardly anyone (4%) satisfied with spending performance alone, *a plurality (43%) satisfied with military performance alone*, and only 16% satisfied with *both*.

Those especially likely to be satisfied with *neither* fighting nor spending performance are:
From New England (50%)
From the Mountain region (53%)
From the Pacific region (43%)
High income (45%)
Intelligentsia (47%)

Those especially likely to be satisfied with *both* fighting and spending performance are:
Women (19%, compared to 13% of the men)
Lower end whites (25%)
Blacks (26%)

Those satisfied with military performance but not spending performance tend to be proportionately found among all subgroups of Americans. While the difference is not large, it is important to note that *men (47%)* are more likely to have this set of attitudes than are women (40%).

Attitudes Toward Fighting and Spending Performance

Satisfied with	
Neither	36%
Spending only	4
Fighting only	43
Both	16
	100%

IV. THE SERIOUSNESS OF WASTE AND FRAUD IN DEFENSE SPENDING

This chapter explores public perceptions of the seriousness of waste and fraud in defense spending. It presents evidence of how Americans rank waste and fraud vis-a-vis other selected national problems and how Americans see waste and fraud compared to other measures of military performance. Also examined is the amount of fraud and waste Americans think there is, and how they think it compares to waste and fraud in past defense spending and in present non-defense federal spending and private business spending.

How Serious a Problem Is Waste and Fraud in Defense Spending?

Americans think that inefficiency in U.S. defense spending is a big problem. Whether asked about it in terms of problems or issues facing the nation, how well the military does at it, what the military does poorly, or how much waste there is, defense budget inefficiency is consistently flagged as a problem of major proportions.

For each of the following problems and issues, please tell me how serious you think it is using a zero-to-ten scale where ten means it is an extremely serious problem at the present time, and zero means it is not much of a problem now. You can use any of the numbers from zero to ten; the higher the number you use, the more serious you think the problem currently is.

	Average		
The federal budget deficit	8.0	Don't know/refused	1%
Waste and fraud in federal spending for national defense	7.4	Don't know/refused	1%
The nuclear arms race	7.3	Don't know/refused	2%
Waste and fraud in federal spending for domestic programs	7.2	Don't know/refused	2%
Unemployment	6.9	Don't know/refused	*
The fairness of the federal income tax system	6.9	Don't know/refused	1%
Inflation	6.3	Don't know/refused	*
The effectiveness of the U.S. military as a fighting force	5.6	Don't know/refused	2%

*Less than 0.5 percent.

When asked about the seriousness of a selected list of national problems and issues (including unemployment, inflation, the nuclear arms race, the federal budget deficit, the fairness of the federal income tax system, the effectiveness of the U.S. military as a fighting force, and waste and fraud in federal spending for domestic programs), Americans consider "waste and fraud in federal spending for national defense" second in seriousness only to the budget deficit. On a zero-to-ten scale (where zero means "not much of a problem now" and ten means "it is an extremely serious problem"), the *federal budget deficit* has an average rating of 8.0 and *waste and fraud in federal spending for defense* averages 7.4. The *nuclear arms race* rates 7.3 on average. There is no significant variation across demographic subgroups in the proportion who consider defense waste and fraud to be a serious problem; this is something upon which all groups of Americans agree, including those with past or present military experience and those living in defense contractor households. (The least critical group are 18-to-24-year-olds, with a 6.7 average rating.)

When asked to rate how well the military handles eight distinct responsibilities (including defense-oriented and spending functions), "spending its money efficiently" receives the *lowest* average rating (4.1 on the zero-to-ten scale, where zero is "very poorly" and ten is "extremely well"). "Finding and prosecuting those involved in fraud in defense contracts" receives an average rating of 4.5.*

Finally, when asked what they thought the military does *poorly,* Americans give spending-related answers most often (24% mention). Seventeen percent (17%) specifically say *the military spends money poorly.**

How Much Waste and Fraud Is There?

Americans think that there is a lot of waste and fraud in U.S. defense spending. While almost all Americans think there is *some* waste in defense spending, close to two-thirds believe that there is a *lot* of waste. On average, Americans believe that almost half the U.S. defense budget is lost to waste and fraud—more than was lost to waste and fraud in military spending 10-20 years ago, more than is presently lost to waste and fraud in non-defense federal spending, and more than is presently lost to waste and fraud in private business spending.

Fifty-eight percent (58%) of all Americans think there is *a lot* of waste in defense spending. Thirty-two percent (32%) think there is *some* waste, only 9 percent say there is *not very much* waste. Those that are *more* likely than average to think there is a *lot* of waste are:

The Pacific region (69%)
60 years or older (66%)
Men (61%)
Intelligentsia (67%)
Doves (71%)
Those satisfied with neither fighting nor spending performance (66%)

Less likely than average to think there's a lot of waste are:

18-24 year olds (48%)
Women (55%)
Those with children under 18 (52%)
Hawks (45%)
Those satisfied with both fighting and spending performance (37%)

When asked generally how much could be cut from the defense budget without hurting the military's ability to carry out its major purposes, the average answer was 22 percent ($22 out of $100). When asked how many dollars could be saved by simply *eliminating waste and fraud from the defense budget,* and —for purposes of simplicity—the defense budget was $100, Americans give an average answer of $45, *or 45 percent of the defense budget.* Those more likely than others to give a *higher* average amount were:

*See chapter on **The Military's Performance** for these results.

18-24 year olds (48% of the defense budget)
Women (51% of the defense budget)
Lower end whites (53% of the defense budget)
Blacks (54% of the defense budget)

More likely than average to give a *lower* average amount lost to waste and fraud were:
Men (39% of the defense budget)
High income (35% of the defense budget)
Intelligentsia (37% of the defense budget)
Those with present or past military experience (40% of the defense budget)

Significantly, Doves, Hawks, and Owls do not disagree in their estimates of savings from eliminating "waste and fraud." They do disagree with the earlier question on how much the defense budget could be cut "without hurting the military's ability to carry out its major purposes":
Doves (29% of the defense budget)
Owls (22% of the defense budget)
Hawks (16% of the defense budget)
When the words "waste and fraud" are waved before them, the estimates of all three groups jump to over 40 percent.

How much waste do you think there is in defense spending—a lot, some, or not very much?

A lot	58%
Some	32
Not very much	9
Don't know/refused	1
	100%

If defense budget was $100, how many dollars do you think could be cut without hurting the military's ability to carry out its major purposes?

Average	$22
Don't know/refused	14%

Some of the defense budget is lost because of waste, and some is lost because of fraud. "Waste" is money lost due to poor management of the budget. "Fraud" is money lost due to illegal activities.

If the defense budget was $100, how many dollars do you think could be saved by simply eliminating waste and fraud?

Average	$45
Don't know/refused	4%

Waste and Fraud Comparisons

Today vs. 10-20 years ago. Two-thirds of all Americans (65%) think that a *larger proportion* of the defense budget is lost to waste and fraud now than 10-20 years ago. About one-quarter think *about the same* proportion is lost to waste (22%) and fraud (24%), and 6-7% say a *smaller* proportion is lost to waste and fraud than 10-20 years ago.

There is no significant variation across demographic subgroup in those who think waste is either larger or smaller as a proportion of the defense budget now than 10-20 years ago. There is little variation in those who think waste is about the *same* now as in the past; high income people are *more* likely (31%) and blacks are *less* likely (13%) to think waste is about the same.

There is also little variation among those who think *fraud* is a different proportion of the defense budget now than 10-20 years ago. The only significant differences are the high income group and the intelligentsia. Both are *more* likely than others to think fraud is *about the same* proportion now as in the past (33% and 31% respectively).

Defense vs. non-defense federal spending. One-fifth (17-20%) of all Americans think the amount of waste and fraud in defense spending is about equal to waste and fraud in non-defense spending by the federal government. Two-fifths (39-40%) think there's more waste and fraud in *defense* spending, and one-third (34-35%) think there's more waste and fraud in non-defense spending.

More likely than average to think there's more *waste* in defense spending than in non-defense spending are:
18-24 year olds (48%)
Blacks (56%)
Doves (50%)

High income people (33%) and those satisfied with neither fighting nor spending performance (27%) are more likely to think there's an *equal* amount of waste in defense and non-defense spending. Those 25-39 years old (40%), Hawks (48%), and those satisfied only with fighting performance (41%) are more likely to think there's more waste in *non-defense* spending.

Hawks (42%) and 18-24 year olds (46%) are more likely to think *fraud* is greater in non-defense spending; high income (24%), intelligentsia (24%), and those satisfied with neither fighting nor spending performance (23%), are more likely to think there's an *equal* amount of fraud in both. Doves (46%) think there's more fraud in defense spending.

Lower end whites are significantly more likely to give a *don't know* answer on the *fraud* comparison for defense and non-defense spending (18%, compared to 8% of the total).

Defense vs. private business spending. Compared to private business spending, Americans consider defense spending more wasteful than fraudulent. Over half (56%) say there is more *waste* in defense spending than in private business spending, 8 percent say it's equal, and one-third (31%) think there's more waste in *private spending* than in defense spending. Over two-fifths (44%) think there's more *fraud* in defense spending and just under two-fifths (38%) think there's more fraud in *private spending.* Eleven percent say there's an equal amount of fraud in both.

Especially likely to think there's more *waste* in *defense spending* than in private business spending are:
Those in the Pacific region (66%)
Those 60 or older (62%)
Men (63%)
High income (66%)
Intelligentsia (68%)
Those with present or past military experience (67%)
Doves (63%)
Those satisfied with neither fighting nor spending performance (65%)

Those especially likely to think there's more *waste* in *private spending* are:
From the Deep South (39%)
18-24 year olds (48%)
Women (37%)
Lower end whites (41%)
Blacks (46%)
Hawks (38%)
Those satisfied with both fighting and spending performance (54%)

Defense Spending: Today v. 10-20 Years Ago

Do you think there is a larger, a smaller, or about the same proportion of *waste* in the defense budget as 10-20 years ago?

	Waste
Larger	65%
About the same	22
Smaller	7
Don't know/refused	5
	100%

Do you think there is a larger, a smaller, or about the same proportion of *fraud* in the defense budget as 10-20 years ago?

	Fraud
Larger	65%
About the same	24
Smaller	6
Don't know/refused	5
	100%

More likely than average to think *fraud* is greater in *defense* than private business spending are:

Those in the West North Central region (54%)
Men (52%)
Intelligentsia (51%)
Those with present or past military experience (52%)
Those satisfied with neither fighting nor spending performance (49%)

More likely than others to think *fraud* is greater in *private spending* are:

18-24 year olds (51%)
25-39 year olds (44%)
Women (42%)
Blacks (46%)
Hawks (43%)
Those satisfied with both fighting and spending performance (55%)

Defense V. Private Spending

Do you think there is proportionately more *waste* in defense spending or in private business spending?

	Waste
Defense spending	56%
About equal (VOL.)	8
Private spending	31
Don't know/refused	5
	100%

Do you think there is proportionately more *fraud* in defense spending or in private business spending?

	Fraud
Defense spending	44%
About equal (VOL.)	11
Private spending	38
Don't know/refused	7
	100%

Defense V. Non-Defense Spending

Do you think there is proportionately more *waste* in defense spending or in non-defense spending by the federal government?

	Waste
Defense spending	39%
About equal (VOL.)	20
Non-defense spending	35
Don't know/refused	6
	100%

Do you think there is proportionately more *fraud* in defense spending or in non-defense spending by the federal government?

	Fraud
Defense spending	40%
About equal (VOL.)	17
Non-defense spending	34
Don't know/refused	8
	100%

V. THE CAUSES OF WASTE AND FRAUD IN DEFENSE SPENDING

This chapter explores American public perceptions of the major causes of waste and fraud in defense spending. Awareness of the difference between waste and fraud is also examined, along with fraud and overcharges by defense contractors. Congress' role in defense waste is also covered.

The Major Causes of Waste in Defense Spending

Americans think that *defense contractors, incompetent management, and fraud and dishonesty* are the major causes of waste in U.S. defense spending. Defense contractors contribute to waste by overcharging or "price gouging" and outright fraud. The Department of Defense and, to a lesser extent, Congress, are guilty of mismanagement because of bureaucracy and red tape, as well as poor decisions (buying more than necessary and pork barrel defense projects). Anyone involved in defense spending is likely to be guilty of fraud and dishonesty in the eyes of Americans, especially defense contractors and, to some extent, politicians, government officials, and those in the Department of Defense.

When asked the open-ended question, "What do you think are the major causes of waste in defense spending?" over one-quarter (28%) give *system* or *management-related* answers; sixteen percent (16%) say "buying more than we need"; *contractors* are explicitly mentioned by 11 percent; and *overpriced items* are mentioned by 8 percent. Nine percent (9%) mention *fraud and dishonesty*. Twenty percent (20%) say they *don't know*.

Those more likely than others to give *system* or *management-related* mentions are:

Men (33%)
High income (35%)
Intelligentsia (37%)

Those less likely than average to give *system* or *management-related* mentions are:

18-24 year olds (19%)
Hawks (23%)
Those satisfied with both fighting and spending performance (16%)

Those especially likely to mention "buying more than we need" or "arms race" are:

18-24 year olds (19%)
Blacks (25%)
Doves (25%)

Hawks (16%) are more likely than the total to mention *contractors* among the major causes of waste in defense spending.

More likely than average to say they *don't know* the major causes of waste in defense spending are:

18-24 year olds (27%)
Women (27%)
Lower end whites (34%)
Those with no military experience in their immediate family (28%)

When given a list of four general causes of waste to choose from, half (50%) agree that *fraud and overpricing by defense contractors* is the greatest cause of waste on the list (25% say it is the second greatest cause). One-fifth (20%) select *incompetent management by the Defense Department* as the greatest cause (30% as the second greatest cause). Thirteen percent (13%) choose *pork barrel defense projects passed by Congress for their home districts and*

What do you think are the major causes of waste in defense spending?

The System/Management/ Procedures	**28%**
Mismanagement	9
Bureaucracy/red tape	4
Inefficiency	3
Too many people involved	2
Not enough controls	2
Don't shop around	2
Buying More Than Need	**16**
Spend on unnecessary things/more than need	7
Nuclear defense waste	6
Too many weapons	3
Contractors	**11**
Bad contractors/contractors overcharge	8
The contracts	3
Fraud/Dishonesty	**9**
Fraud/corruption	4
Greed/greedy people	3
Kickbacks	1
Overpriced Items	**8**
Spend too much on parts/overpriced items	7
Expensive hammers, toilet seats, etc.	1
People Involved	**6**
People doing the buying/no one trained to make purchases	3
People in charge not caring/apathy	2
Salaries/Benefits	**3**
Politicians/Congress	**1**
None	1
Don't know	*20*

states as the greatest cause (24% as second greatest) and 13 percent pick *unnecessary new weapon systems wanted by the military* as the greatest cause (14% as second greatest). There is no significant variation across demographic subgroups on these four items.

There are differences across attitude typology groups. Hawks (57%) are more likely to mention *fraud and overpricing by defense contractors* as the greatest cause of waste in defense spending. They are also *less* likely (6%) to mention *unnecessary new weapon systems wanted by the military.* Doves, compared to others, are *more* likely to mention unnecessary new weapon systems (22%) and *less* likely to mention fraud and overpricing by defense contractors (41%). Owls respond close to the overall results.

When asked to identify whether they had ever heard or read of any of a long list of potential causes of waste in defense spending, just under half (43%) to almost nine out of ten (87%) claim to have read or heard of each of the items. When asked whether they thought the items were major, minor, or "not at all" causes of waste, from one-fifth (22%) to seven-tenths (70%) say the various items are major causes of defense waste. At the top of the list are *price gouging by defense contractors on inexpensive items such as hammers, coffee pots, and the like* (85% heard/read, 65% consider it a major cause) and *government red tape* (87% heard/read, 70% say major cause). Also near the top are *illegal actions or fraud by the people involved in defense contracts* (78% heard/read, 62% major cause); *buying unnecessary and costly weapon systems* (72% heard/read, 60% major cause); *price gouging by defense contractors on expensive items such as fighter planes and submarines* (70% heard/read, 61% major cause); and *buying weapons that don't work* (69% heard/read, 62% major cause).

Of the following four items, which one do you think causes the greatest waste in defense spending? Which one would you choose next?

	Greatest cause	Second greatest cause	Combined
Fraud and overpricing by defense contractors	50%	25%	75%
Incompetent management by the Defense Department	20	30	50
Pork barrel defense projects passed by Congress for their home districts and states	13	24	36
Unnecessary new weapon systems wanted by the military	13	14	27
None of them	1	—	
No second mention	—	3	
Don't know/refused	4	4	
	100%	100%	

For each of the following, please tell me if you have ever read or heard of it as causing waste in defense spending. Do you think it probably has been a major cause, a minor cause, or has not been a cause of defense waste.[a]

	Heard/Read					
	Yes	No/DK	Major cause	Minor cause	Not a cause	Don't know/ refused
Price gouging by defense contractors on *inexpensive* items such as hammers, coffee pots, and the like.	85%	15	65%	26	4	4
Illegal actions or fraud by the people involved in defense contracts	78%	22	62%	29	2	6
Buying unnecessary and costly weapon systems.	72%	28	60%	25	6	9
Congress' annual review and revisions of the defense budget.	57%	43	27%	43	17	13
The military's changing its specifications on equipment and weapons.	56%	44	35%	41	13	12
Congressional laws affecting military spending.	53%	47	32%	45	10	13
Each Service separately developing its own weapons and equipment.	47%	53	44%	32	14	11
Buying fewer weapons over more years at higher costs per weapon.	45%	55	37%	35	13	15
The layers of government departments and agencies which proposed projects must go through.	45%	55	33%	41	9	17
The "revolving door"—the movement of Defense Department officials to jobs in the defense industry.	44%	56	29%	42	13	16

[a]Half-sampled question.

For each of the following, please tell me if you have ever read or heard of it as causing waste in defense spending. Do you think it probably has been a major cause, a minor cause, or has not been a cause of defense waste.[a]

	Heard/Read					
	Yes	No/DK	Major cause	Minor cause	Not a cause	Don't know/ refused
Government red tape.	87%	13	70%	23	3	5
Price gouging by defense contractors on *expensive* items such as fighter planes and submarines.	70%	30	61%	28	5	7
Buying weapons that don't work.	69%	31	62%	28	6	5
Technological problems in making sophisticated weapons.	57%	43	35%	45	12	8
Stretching-out weapon programs over several years.	56%	44	33%	40	14	14
Pork barrel defense projects in the districts of influential congressmen.	55%	45	41%	41	6	12
The rules and regulations of the Defense Department.	48%	52	27%	46	13	14
Yearly changes in the amount of money authorized for specific weapons.	47%	53	32%	43	11	13
The "revolving door"—the movement of the people in the defense industry to positions in the Defense Department.	44%	56	30%	41	15	15
The military's stringent performance requirements for the weapons it orders.	43%	57	22%	45	17	15

[a]Half-sampled question.

Finally, when asked whether the Department of Defense or the defense contractors were mostly to blame for waste and fraud in military spending, two-fifths (39%) said Department of Defense and two-fifths (39%) said defense contractors. One-fifth (17%) volunteered that "both were equally to blame." More likely than others to blame the Department of Defense are:

25-39 year olds (44%)
Intelligentsia (50%)

Those 60 or over are *less* likely to blame DoD (31%). More likely than average to blame *defense contractors* are:

Lower end whites (48%)
Hawks (45%)

Those satisfied with both fighting and spending performance (53%)

Owls blame DoD (42%) slightly more frequently than they blame contractors (37%).

Who do you think is mostly to blame for waste and fraud in military spending—the Department of Defense or the defense contractors?

Department of Defense	39%
Defense contractors	39
Both equally (volunteered)	17
Neither (volunteered)	1
Don't know/refused	5
	100%

The Difference Between Waste and Fraud

Americans believe that *fraud (illegal activities) accounts for as much of a loss in defense dollars as waste (poor budget management).* On average, almost one-quarter of the defense budget is thought to be lost through *illegal activities* and almost one-quarter is thought to be lost because of *poor budget management.* In general, however, the American public doesn't know the difference between waste and fraud, nor do they know what fraud is.

When asked "what kinds of fraud do you think exist in defense spending," one-quarter (25%) mention *overpricing or overcharging;* ten percent (10%) mention *price increases by contractors.* These answers demonstrate that the American public doesn't have a clear understanding of fraud in the legal, prosecutable sense. Charging excessive prices is *not* a legal violation unless it breaches a contract. Other non-fraudulent mentions include *buying things they don't need (6%), poor management (3%),* and *paying for poor quality (3%).*

Several fraudulent mentions *were* made, including *kickbacks, payoffs, and bribes* (mentioned by a surprisingly low 10%), *giving contracts to friends (3%),* and *improper bidding procedures (3%).*

One-third (30%) admit they *don't know* what kinds of defense spending fraud exist.

There is no significant variation across demographic subgroup on the various mentions to this question. This is especially interesting because just as many of those in defense contractor households as in the total mention overpricing and overcharging as the predominant type of fraud in defense spending (28%, compared to 25% of the total). Only those satisfied with both fighting and spending performances are *less* likely to mention overpricing (16%).

More likely than the total to say *don't know* the kinds of fraud are:

Some of the defense budget is lost because of waste, and some is lost because of fraud. "Waste" is money lost due to poor management of the budget. "Fraud" is money lost due to illegal activities.

If the defense budget was $100, how many dollars do you think could be saved by simply eliminating waste and fraud?

Average:	$45
Don't know/refused	4%

How many of those dollars do you think are lost because of "waste" and how many are lost because of "fraud"?

Waste	Average	$23
Fraud	Average	$21
Don't know/refused		2%

What kinds of fraud do you think exist in defense spending?

Overpricing/overcharging	25%
Price increases by contractors	10
Kickbacks/payoffs/bribes	10
Buying things they don't need	6
Poor management	3
Paying for poor quality/buying inferior goods	3
Giving contracts to friends	3
Improper bidding procedures	3
Selling things that don't show up	1
Transferring costs from one project to another	1
Don't know	30

18-24 year olds (37%)
Women (37%)
Lower end whites (44%)
Gulls (45%)

Those satisfied with both fighting and spending performance (48%)
Those satisfied with spending performance alone (47%)

Less likely than others to say they don't know what types of fraud exist in defense spending are:
Men (23%)
High income (21%)
Intelligentsia (21%)
Those with current or previous military experience (19%)
Those with someone in their household who works for a defense contractor (21%)
Those satisfied with fighting performance alone (25%)

The Role of Defense Contractors in Waste and Fraud

Defense contractors are seen as especially culpable for waste and fraud in defense spending. They are mentioned by 10-20 percent as causes of waste and fraud in any open-ended question. If defense contractors are included in a closed-end list, however, they immediately predominate. When given four items and asked which causes the greatest and second greatest waste in defense spending, half think that *fraud and overpricing by defense contractors* is the greatest cause and one-quarter think defense contractors are the second greatest cause (see above). More than three-quarters have both heard of "price gouging" by defense contractors on *inexpensive* items (such as hammers, coffee pots, and the like) and on *expensive* items (like fighter planes and submarines), and believe such practices to be major causes of waste in defense spending.

While blame for waste and fraud in military spending is placed on defense contractors and the Department of Defense equally, *defense contractors* are mentioned more as the ones who get the money from waste and fraud. The most frequently mentioned kinds of fraud are things done by defense contractors (overpricing, overcharging, price increases, and kickbacks, payoffs, and bribes)—worthy of note regardless of the fact that charging high prices is not necessarily illegal.

Over four-fifths of all Americans (83%) recall "reading or hearing about the military being charged large amounts for a hammer, toilet seat, coffee pot, and the like." Especially likely to recall such occurrences are:
Those in the Mountain region (95%)
Those aged 40 or older (90%)
Men (88%)
High income (92%)
Intelligentsia (92%)
Those with present or past military experience (92%)
Those satisfied with neither fighting nor spending performance (89%)

Less likely than average to recall such "horror stories" are:
Those aged 18-24 (68%)
Women (79%)
Blacks (65%)
Gulls (67%)
Those satisfied with both fighting and spending performance (65%)

Over three-fourths (77%) think such overcharges happen a lot. One-fifth (19%) consider them to be isolated events. The fact that there are *14 to 14.5 million military contract actions over $25,000 occurring per year* means that the public is implying that *millions of charges go undetected.*

Doves are more likely to think that overcharges happen a lot (83%). Only 18-24 year olds are significantly less pessimistic, with 69 percent thinking they happen a lot. More likely than others to consider such overcharges as *isolated* events are:
Those aged 18-24 (26%)
Hawks (28%)

Do you recall reading or hearing news stories about the military being charged large amounts for a hammer, toilet seat, coffee pot and the like?

Yes	83%
No	16
Don't know/refused	4
	100%

(IF YES:) Do you think these overcharges happen a lot, or are they isolated events receiving a lot of publicity?

Happens a lot	77%
Isolated events	19
Don't know/refused	4
	100%

(IF YES:) What do you think causes this?

The System/Management Procedures	**39%**
Mismanagement/bad management	19
Not budgeting/not cost conscious	6
Lack good supervision/not checking anybody	3
Lack of government investigations	2
Bookkeeping/something wrong with their records	2
Not checking contracts	1
Fraud/Dishonesty	**18**
Corruption/too many crooks/ fraud	7
Greed	6
Kickbacks	4
Contractors	**14**
Contractors overcharging/ greedy contractors	14
People Involved	**10**
People aren't qualified/ incompetent/	8
"One doing the buying is a fool"	1
Apathy/people don't care	1
Don't know	*11*

Where do you think the money from waste and fraud in defense spending goes?

Contractors	**34%**
Contractors/private industry/big corporations	25
Individuals of the company/ company executives	10
To whoever is doing the selling	1
Into Someone's Pocket/ Individual's Pockets	**27**
Politicians/Government Officials	**6**
Back Into the Military	**3**
Don't know	*20*

Those satisfied with both fighting and spending performance (31%)

When asked what causes the overpriced coffee pots, ashtrays, and the like, the "system" (39%), fraud and dishonesty (18%), defense contractors (14%), and "the people involved" (10%) take the blame—echoing the public's view of what causes defense waste and fraud in general.

Finally, when asked *where the money from waste and fraud goes*, one-third (34%) say it goes to the defense contractors. Twenty-seven percent (27%) say it goes *into someone's pocket*. Six percent (6%) say it goes to *politicians or government officials*. Especially likely to say it goes to *contractors* are:

High income (42%)
Intelligentsia (51%)
Men (41%)
Those with current or past military experience (40%)
Defense contractors households (41%)
Those satisfied with neither fighting nor spending performance (40%)

The Role of Congress in Defense Spending Waste and Fraud

Congress is recognized—both directly and indirectly—to have a role in defense spending waste and fraud. Its perceived contribution to defense waste and fraud is not as great as DoD and the defense contractors. Only 1 percent mention *politicians or Congress* in their answer to the question "what do you think are the major causes of waste in defense spending," and only 6 percent think the money from defense waste and fraud goes to politicians or government officials. Even so, one-third (36%) of all Americans consider *pork barrel defense projects passed by Congress for their home districts and states* to be either the *greatest* cause (13%) or the *second greatest* cause (24%) of waste in defense spending from a list of three other general causes (see above).

Also, 57 percent of all Americans have read or heard that *Congress' annual review and revisions of the defense budget* causes waste, and 27 percent think this is a major cause (43% say minor cause) of defense waste. Over half (53%) have read or heard that *congressional laws affecting military spending* are a cause of defense waste, and 32 percent think this is a major cause (45% say minor cause) of defense waste. Finally, 47 percent have heard that *yearly changes in the amount of money authorized for specific weapons* is a cause of waste, and 32 percent consider this a major cause (43% say minor cause) of defense waste.

Even though the public recognizes that Congress has a role in defense spending waste, they often support Congress in actions some would consider waste-producing. One example is the 54 percent of all Americans who believe that defense spending to support *social reforms* should be continued—even though some people say it adds unnecessary cost. One-third (37%) think such spending should be stopped. Those especially likely to say such spending should be *continued* are:

18-24 year olds (64%)
Blacks (65%)

Especially likely to say such spending should be *stopped* are:

High income (46%)
Those with past or present military experience (44%)

Another example of public support for congressional actions some would consider waste-producing is that, of the 53 percent who say they have *military bases* or *naval shipyards* in their area, 60 percent say their congressman should *oppose* the closing of that base or shipyard to save defense dollars.

A final example is that, of the 38 percent who say they have *defense contractors* in their area, 44 percent say their congressman should *oppose* the reduction of contracts to those businesses as a way to reduce defense spending.

Some defense spending has been used to support social reforms such as directing spending toward small businesses, minority-owned businesses, and areas with high unemployment. Some people say this use of defense spending should be stopped because it adds unnecessary cost. Others say it's worth the added cost, and it should be continued. Do you think using some defense spending to support social reforms should be continued or stopped?

Continued	54%
Reduce but don't stop (volunteered)	4
Stopped	37
Don't know/refused	5
	100%

Are there any military bases or naval shipyards in your area?

Yes	53%
No	45
Don't know/refused	2
	100%

(IF YES:) How important is it to your local economy—very important, moderately important, or not very important?

Very important	39%
Moderately important	28
Not very important	30
Don't know/refused	2
	100%

(IF YES:) If cuts had to be made in defense spending and it was proposed to close down the base/shipyard in your area as part of those cuts, should your congressman support or oppose the closing of the base/shipyard?

Support	31%
Oppose	60
Don't know/refused	9
	100%

Are there any defense contractors in your area?

Yes	38%
No	46
Don't know	16
	100%

(IF YES:) How important are they to your local economy—very important, moderately important, or not very important?

Very important	54%
Moderately important	34
Not very important	11
Don't know/refused	1
	100%

(IF YES:) If cuts had to be made in defense spending and it was proposed to reduce the contracts with the businesses in your area as part of those cuts, should your congressman support or oppose the contract reductions?

Support	47%
Oppose	44
Don't know/refused	9
	100%

VI. SOLUTIONS TO THE PROBLEMS OF WASTE AND FRAUD IN DEFENSE SPENDING

This chapter considers American public support for solutions to the problems of waste and fraud in defense spending, including who should have the main responsibility for solutions, where the confidence lies for carrying out solutions, and the levels of support and perceived viability of several proposed solutions.

Who Should Solve the Defense Waste and Fraud Problems?

Americans are confident that waste and fraud in defense spending can be significantly reduced. However, the public is divided on who should have the main responsibility for reducing waste and fraud. Greatest confidence is held in *President Reagan* for finding ways to reduce fraud and waste. A commission of national leaders from outside government—such as the Packard Commission—is also held in relatively high confidence, along with the Defense Department and Congress. Defense contractors are generally *not* held in confidence.

Eighty-nine percent (89%) of all Americans think it is possible to significantly reduce waste and fraud in defense spending. Eight percent (8%) do not think it's possible. There is no variation across demographic subgroups.

Congress (26%) and the *Defense Department* (24%) are mentioned most often as having the *main* responsibility for reducing waste and fraud in defense spending. *The President* is mentioned by 19 percent and *the government* is mentioned by 14 percent. *Defense contractors* are mentioned by only 5 percent. Fourteen percent (14%) answer *don't know*. Men (30%) and Doves (32%) are more likely than the total to mention Congress. More likely than the total to mention the *Department of Defense* are:

25-39 year olds (30%)
Men (28%)
Intelligentsia (36%)
Defense contractor households (32%)

More likely than others to mention *the President* are:

Women (22%)
Blacks (29%)
Those satisfied with both fighting and spending performance (28%)

Blacks are also more likely than average to mention *the government* (14%) than the total.

Do you think it is or is not possible to significantly reduce waste and fraud in defense spending?

Is	89%
Is not	8
Don't know/refused	3
	100%

Who do you think should have the main responsibility for reducing waste and fraud in defense spending?

Congress	26%
Defense Department	24
The President	19
The government	14
The military/armed forces	7
Secretary of Defense	6
Contractors	5
People in charge/department heads	5
We the people	5
Civilian review board/watchdog committee/independent auditors	3
The Senate	1
Elected officials	1
Justice Department	1
Don't know	14

In a closed-end question, almost two-fifths of all Americans (38%) say they have a great deal of confidence in *President Reagan's* ability to find ways to reduce waste and fraud in defense spending. Thirty-one percent (31%) have a great deal of confidence in a *non-governmental commission of national leaders.* About one-quarter (24%) have a great deal of confidence in the Department of Defense, and 21 percent have great confidence in Congress. Only 9 percent say they have a great deal of confidence in *defense contractors* to find ways to reduce waste and fraud. While one-quarter each say they have hardly any confidence at all in the first four agents, *over half (54%) say they have hardly any confidence at all in defense contractors.* Especially likely to have a great deal of confidence in *President Reagan* to find ways to reduce waste and fraud in defense spending are:

Men (41%)
Middle class whites (44%)
Lower end whites (47%)
Past or present military personnel (44%)
Hawks (54%)
Those satisfied with both fighting and spending performance (50%)
Those satisfied with fighting performance only (43%)

More likely than others to have a great deal of confidence in a *non-governmental commission* are:

Men (35%)
High income (37%)
Intelligentsia (40%)

More likely than average to have a great deal of confidence in the Defense Department are:

18-24 year olds (31%)
Hawks (35%)
Those satisfied with both fighting and spending performance (43%)

Especially likely to have a great deal of confidence in Congress are:

18-24 year olds (28%)
Those satisfied with both fighting and spending performance (29%)

More likely than others to have "hardly any confidence at all" in defense contractors are:

Men (61%)
High income (44%)
Intelligentsia (47%)
Doves (62%)
Those satisfied with neither fighting nor spending performance (62%)

For each of the following, please tell me how much confidence you would have in their finding ways to reduce waste and fraud in defense spending—a great deal of confidence, only some confidence, or hardly any confidence at all?

	A great deal of confidence	Only some confidence	Hardly any confidence at all	Don't know/ refused
President Reagan	38%	37	23	1
A commission of national leaders from outside of government	31%	38	25	6
The Department of Defense	24%	50	24	2
Congress	21%	55	23	1
Defense contractors	9%	35	54	2

Doves are also more likely than the total to have hardly any confidence in the Department of Defense (38%) or President Reagan (42%).

Solutions to Waste and Fraud in Defense Spending

Solutions suggested by Americans to the problems of defense waste and fraud reflect their beliefs as to what the major causes of defense waste and fraud are—*system reforms* will help solve mismanagement problems, *changes in relations with defense contractors* will help reduce overcharges, and the *elimination of fraud* would provide an incentive for honesty. Efforts at improving the quality of the personnel that are responsible for defense spending are also supported.

System reforms were mentioned by 43 percent as something to correct defense waste and fraud. This includes 10 percent mentioning "more investigation," 10 percent mentioning "a civilian review board," and 8 percent mentioning "more accounting controls." Changes in *defense contractor relations* were mentioned by 11 percent, including 6 percent mentioning "harsh penalties" and 4 percent mentioning "more supervision." The *elimination of fraud* (10%) included the "harsher penalties" mentions above and 3 percent mentioning "hire honest people." More likely than average to suggest *systemic reform* are:

- 25-39 year olds (49%)
- Men (47%)
- High income (49%)
- Intelligentsia (51%)
- Those with past or present military service (53%)

When given a list of proposals to help reduce waste and fraud in defense spending, five proposals receive strong agreement from *two-thirds or more* of all Americans. The proposal strongly agreed to by the highest proportion was to *seek more criminal indictments and convictions for illegal actions by contractors* (83% strongly agree). Three proposals are strongly agreed to by 72 percent of all Americans: *require the defense industry to develop a code of ethics and the means to enforce it; improve the training and education of military buying officials*; and *have the government stop doing business with contractors who have been accused of illegal activities.* Sixty-four percent (64%) strongly agree that the U.S. should *make clear choices between what our military strategy is and what defense spending we need.* There is little variation across demographic groups in strong agreement with each of these proposals.

Four-fifths (80%) of all Americans think that *defense contractors should feel an obligation to use higher ethical standards* than in their normal business practices *when doing business with the Defense Department.* There is no variation across demographic subgroups on this point. If defense contractors announced that they had developed a code of ethics for doing business with the Defense Department, however, *only 47 percent think defense contractors could be expected to live up to it.* Forty-two percent (42%) say they could not be trusted. Especially likely to trust defense contractors are:

- Women (51%)
- Blacks (56%)
- Hawks (53%)
- Those satisfied with both fighting and spending performance (55%)

More likely than average to distrust defense contractors are:

- Intelligentsia (51%)
- Those with past or present military service (50%)
- Doves (52%)
- Those satisfied with neither fighting nor spending performance (48%)

What do you think should be done to correct the problem of waste and fraud in military spending?

System Reforms	**43%**
Investigations/more audits/task force investigation	10
Civilian review board/committee to oversee all defense contracts	10
More accounting/tighter controls	8
Controls on who makes purchases/cut number of people in charge	3
Improve management	3
Read contracts better/auditing of contracts	2
More open bidding	2
Contractor Relations	**11**
Harsh penalties for companies/crack down on contractors	6
More supervision of contractors	4
Drop contracts with cheating contractors	1
Eliminate Fraud	**10**
Higher penalties for fraud (including contractor mentions above)	6
Hire honest people	3
Upgrade Personnel	**4**
Weed out bad guys/clean out the Pentagon	2
Get qualified people	1
More training/educate them	1
Don't know	28

When doing business with the Defense Department, do you think defense contractors should or should not feel an obligation to use higher ethical standards than their normal business practices?

Should	80%
Should not	17
Don't know/refused	3
	100%

If defense contractors announced they had developed a code of ethics for doing business with the Defense Department, do you think the defense contractors could or could not be trusted to live up to it?

Could be trusted	47%
Could not be trusted	42
Don't know/refused	11
	100%

Here are some proposals to help reduce waste and fraud in defense spending. For each one, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree that it is a good way to reduce waste and fraud. If you are not sure, just tell me, and we'll go to the next item.[a]

	Strongly Agree	Somewhat Agree	Neither/ Both (VOL.)	Somewhat Disagree	Strongly Disagree	Not Sure
Seek more criminal indictments and convictions for illegal actions by contractors.	83%	11	*	1	1	3
Require the defense industry to develop a code of ethics and the means to enforce it.	72%	18	1	3	2	5
Pass new rules, regulations, and laws affecting defense spending.	47%	31	1	8	7	6
Reduce the layers of government departments and agencies which military projects must go through.	49%	29	1	7	6	8
Strengthen the President's role in making trade-offs between defense spending and U.S. national security objectives.	28%	31	1	14	12	14
Buy more items already produced by private industry rather than requiring everything to meet special military specifications.	34%	25	1	14	18	8
Prohibit people from moving between jobs with the Defense Department and the defense industry.	22%	25	1	24	14	14
Buy the same number of weapons in a shorter period of time.	13%	30	2	20	12	24
Have Congress review and revise the defense budget every two years rather than every year.	22%	20	1	20	30	7

[a]Half-sampled question.
*Less than 0.5 percent.

Here are some proposals to help reduce waste and fraud in defense spending. For each one, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree that it is a good way to reduce waste and fraud. If you are not sure, just tell me, and we'll go to the next item.[a]

	Strongly Agree	Somewhat Agree	Neither/ Both (VOL.)	Somewhat Disagree	Strongly Disagree	Not Sure
Improve the training and education of military buying officials.	72%	18	*	4	2	4
Make clear choices between what our military strategy is and what defense spending we need.	64%	22	*	4	2	7
Have the government stop doing business with contractors who have been accused of illegal activities.	72%	11	1	7	6	2
Simplify the rules, regulations, and laws affecting defense spending.	42%	33	1	7	7	8
Have the four Services use more of the same weapons and equipment.	43%	31	1	12	7	6
Reduce the number of pork barrel military projects going to the districts and states of influential Congressmen.	41%	29	*	8	7	14
Get the Services—Army, Air Force, Navy, and Marines—out of buying and give that job to civilians.	18%	21	1	21	31	7
Buy more weapons from our allies rather than developing all of our own from the ground up.	7%	21	1	18	48	4

[a]Half-sampled question.
*Less than 0.5 percent.

VII. ORGANIZATIONAL PROBLEMS AND THE EFFECTIVENESS OF THE U.S. MILITARY

This chapter assesses public perceptions of how effective a fighting force the U.S. military is, and how aware Americans are that military organization problems exist—as well as the apparent effects of those problems.

How Good Is the U.S. Military?

Americans believe that the U.S. military is a good fighting force. Whether asked about it in terms of problems or issues facing the nation, how well the military does at it, what the military does well, or how effective they are, the performance of the military receives high marks.

When asked about the seriousness of a selected list of national problems and issues (including unemployment, inflation, the nuclear arms race, the federal budget deficit, the fairness of the federal income tax system, waste and fraud in federal spending for national defense, and waste and fraud in federal spending for domestic programs), Americans considered "the effectiveness of the U.S. military as a fighting force" the *least serious problem* on the list. On a zero-to-ten scale (where zero means "not much of a problem now," and ten means "it is an extremely serious problem now"), the *effectiveness of the military* received an average rating of 5.6. Next highest was *inflation* (average rating of 6.3). The *federal budget deficit* was at the top of the list, with an 8.0 average rating. There is little variation across demographic subgroups on the seriousness of U.S. military effectiveness; only blacks are more likely to consider the problem serious (61% compared to 50% of the total—where "serious" is a 6-10 rating), and the intelligentsia are *less* likely to rate the problem as serious (43%).

When asked to rate how well the military handles eight distinct responsibilities (including defense-oriented and spending functions), the defense-oriented functions received the highest average ratings and "organizing our armed forces into an effective fighting force" had the second-highest rating (6.9 on the 0-10 scale), after "staying adequately prepared to defend the country" with a 7.3 average. Eighteen to twenty-four year olds were more likely to give high ratings for *staying adequately prepared* (7.6 average), and for *organizing our armed forces* (7.2 average).

In response to an open-ended question about what the U.S. military *does well,* forty-one percent (41%) mentioned some aspect of the *military function,* including twenty-eight percent (28%) who said *protecting the country. Preparedness* mentions were made by 17 percent, including 11 percent who cited *training the men.* One-quarter (25%) gave a *don't know* response. While there was little difference between demographic subgroups on military function mentions, high income people are more likely to mention *preparedness* (24%). Those that are more likely than others to say they *don't know* what the U.S. military does well include:

Those 60 or over (31%)
Women (31%)
Lower end whites (33%)
Those without military experience in their immediate household (32%).

Finally, when asked to rate the U.S. military as a fighting force, half (49%) say they are *very* effective and almost half (45%) say they are *moderately* effective. There are few differences

across demographic subgroups. Only lower end whites are especially likely to consider the U.S. military to be a *very* effective fighting force (58%), and the intelligentsia are especially likely to consider it *moderately* effective (53%).

For each of the following problems and issues, please tell me how serious you think it is, using a zero-to-ten scale, where ten means it is an extremely serious problem at the present time and zero means it is not much of a problem now. You can use any of the numbers from zero to ten; the higher the number you use, the more serious you think the problem currently is.

	Average		
The federal budget deficit	8.0	Don't know/refused	1%
Waste and fraud in federal spending for national defense	7.4	Don't know/refused	1%
The nuclear arms race	7.3	Don't know/refused	2%
Waste and fraud in federal spending for domestic programs	7.2	Don't know/refused	2%
Unemployment	6.9	Don't know/refused	*
The fairness of the federal income tax system	6.9	Don't know/refused	1%
Inflation	6.3	Don't know/refused	*
The effectiveness of the U.S. military as a fighting force	**5.6**	**Don't know/refused**	**2%**

*Less than 0.5 percent.

Now, I'd like you to rate how well the U.S. military is handling several responsibilities on a zero-to-ten scale, where zero means it is handling it very poorly and ten means it is handling it extremely well. You can use any number between zero and ten; the higher the number you use the better you think the U.S. military is handling it.

	Average		
Staying adequately prepared to defend the country	**7.3**	**Don't know/refused**	**1%**
Organizing our armed forces into an effective fighting force	**6.9**	**Don't know/refused**	**4%**
Giving recruits job skills that will help them after they leave the service	6.7	Don't know/refused	4%
Recruiting qualified people	5.9	Don't know/refused	4%
Fighting international terrorism	**4.9**	**Don't know/refused**	**5%**
Finding and prosecuting those involved in fraud in defense contracts	4.5	Don't know/refused	4%
Spending its money efficiently	4.1	Don't know/refused	2%

What do you think the U.S. military does well?

Military Function	**41%**
Protect country/ready to defend	28
Show U.S. strength	4
Keep peace/deter war	4
Fighting/effective fighting force	3
Preparedness	**17**
Training the men/good skills	11
Prepared/always alert	4
Best Air Force	1
Spinoffs (provide jobs/research)	**4**
Education/Job Training	**2**
Nothing	4
Don't know	25

If general, how would you rate the U.S. military as a fighting force—very effective, moderately effective, or not very effective?

Very effective	49%
Moderately effective	45
Not very effective	4
Don't know/refused	2
	100%

Awareness of Organizational Problems

Underlying their positive perceptions of military effectiveness, *Americans are aware that there are problems in the U.S. military organization.* When read a list of six criticisms that have been made of the U.S. military, one-quarter *strongly* agree and one-third *somewhat* agree with *all* the criticisms; one in ten *don't know.* The criticisms include (in order of strong agreement): communications problems within the chain of command have made our military missions more dangerous than necessary (30% strongly agree, 35% somewhat agree); the U.S. military is top heavy in generals and other high ranking officers (31% strongly agree, 31% somewhat agree); the U.S. military chain of command is too complex (27% strongly agree, 33% somewhat agree); there is a lack of true unity of command in our military (24% strongly agree; 31% somewhat agree); U.S. armed forces have serious problems conducting joint operations involving the Army, Air Force, Navy, and Marines (19% strongly agree, 36% somewhat agree); and there is inadequate cooperation among U.S. military services when called upon to perform joint operations (18% strongly agree, 34% somewhat agree).

Those more likely than average to agree (strongly or somewhat) that *the armed forces have serious problems conducting joint operations* (compared to 55% of the total) are:

- From the Pacific region (63%)
- Men (58%)
- Intelligentsia (62%)
- Doves (63%)
- Those satisfied with neither fighting nor spending performance (68%)

More likely than others to agree (strongly or somewhat) that there is inadequate cooperation among the U.S. military services when called upon to perform joint operations (compared to 52% of the total) are:

- Men (57%)
- *Past or present military personnel (61%)*

When asked about certain recent military experiences, two-thirds each say that the bombing of the Marine barracks in Lebanon (67%) and the failure of the hostage rescue mission in Iran (66%) *suggest problems in the way the U.S. military is organized,* and half each (54-55%) say these experiences suggest *serious* problems. Fewer (45%) think the invasion of Grenada also suggests problems, and one-third (30%) think Grenada suggests *serious* organizational problems.

Only blacks are significantly *more* likely to think that the bombing of the Marine barracks in Lebanon suggests organizational problems (77%), and that the problems are *serious* (69%). The intelligentsia are significantly *more* likely to think this event *does not* suggest problems (35%), and *less* likely to think that it suggests *serious* problems (45%).

Those in the Pacific region (73%) and 18-24 year olds (75%) are *more* likely, and the intelligentsia (59%) are *less* likely, to think that the failure of the hostage rescue suggests organizational problems. Those in the Pacific region (62%) and blacks (64%) are more likely to consider the failure a symptom of deeper organizational problems; 42 percent of the intelligentsia are *less* likely to agree.

Blacks (62%) and Doves (51%) are *more* likely to think that the Grenada invasion suggests organizational problems (compared to 45% of the total). Men (54%) are more likely to think it *does not* (compared to 47% of the total), as are high income people (54%) and the intelligentsia (57%). Blacks (52%) and Doves (37%) are more likely to consider the invasion symptomatic of serious organizational problems (compared to 30% of the total); the intelligentsia (22%) are *less* likely to agree.

I'm going to read some criticisms sometimes made of the U.S. military and for each one please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

	Strongly agree	Somewhat agree	Neither/ Both (VOL.)	Somewhat disagree	Strongly disagree	Don't know/ refused
Communication problems within the chain of command have made our military missions more dangerous than necessary.	30%	35	*	17	8	9
The U.S. military is top heavy in generals and other high ranking officers.	31%	31	1	17	7	12
The U.S. military chain of command is too complex.	27%	33	*	20	11	9
U.S. armed forces have serious problems conducting joint operations involving the Army, Air Force, Navy, and Marines.	19%	36	1	22	11	11
There is lack of true unity of command in our military.	24%	31	1	21	14	9
There is inadequate cooperation among U.S. military services when called upon to perform joint operations.	18%	34	1	21	13	13

*Less than 0.5 percent.

Here are some recent military experiences and for each one please tell me if you think it does or does not suggest problems in the way the U.S. military is organized. (IF DOES, ASK:) Do you think it suggests serious problems or minor problems in organization?

	Does	Does not	Don't know/ refused	Does and Suggests: Serious problems	Does and Suggests: Minor problems
The bombing of the Marine barracks in Lebanon.	67%	26	7	55%	12
The failure of the hostage rescue mission in Iran.	66%	29	5	54%	12
The invasion of Grenada.	45%	47	8	30%	15

Solutions to Organizational Problems

When asked whether they favored having regional U.S. military forces under a unified command with strong authority or under separate Service commands with strong authority, over half (57%) favored *one command with strong authority.* One-third (33%) favored separate commands with strong authority. More likely to favor strong unified commands are *those with present or past military experience (63%).* Less likely than others to favor unified commands are:

Lower end whites (49%)

Those satisfied with both fighting and spending performance (48%)

Some people say that our military forces are most effective when the Army, Air Force, Navy, and Marines in regions like Europe or the Far East are under one unified military command with strong authority. Others say our military forces are most effective when the separate service commands—Army, Air Force, Navy, and Marines—have strong authority over them. Which opinion do you most agree with?

One command with strong authority	57%
Both (volunteered)	2
Separate commands with strong authority	33
Don't know/refused	6
	100%

ANNEX A

CONSTRUCTION OF THE FIVE SPECIAL SCALES

Construction of the five special scales involved three steps.

Step One included the selection of the appropriate questions from the questionnaire. This was first a *substantive* issue—which questions yield the information necessary to measure the concept?—and then an *empirical* one—of the most obviously appropriate questions, which were statistically related enough to provide a meaningful measure? (Correlation analysis and factor analysis were both used in this step.)

Step Two involved standardizing the categories of all the questions so they ranged from zero to one hundred (0-100), and then adding the individual questions together for each scale and dividing by the number of components.

Step Three was the categorization of each newly scaled index into discrete levels for easier presentation. This process used the empirical break points identified by averaging each scale by the levels of its related scale (the military institution and budget scales were paired, as were the spending and fighting scales). It also relied on the natural break points in the raw frequency distributions of each scale. Each categorized scale had four or five levels.

Subsequent tables show the marginals for each uncategorized scale, along with the final break points for categorization. Frequency distributions of the final scales also follow.

SCALE 1—ATTITUDES TOWARD THE MILITARY AS AN INSTITUTION

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
0	10854	10854	0.724	0.724
8.333333	10310	21164	0.687	1.411
16.66667	13350	34514	0.890	2.301
25	43842	78356	2.923	5.224
33.33333	42884	121240	2.859	8.083
41.66667	84978	206218	5.665	13.748
50	164879	371097	10.992	24.740
58.33333	83605	454702	5.574	30.314
66.66667	294407	749109	19.628	49.942
75	64438	813547	4.296	54.238
83.33333	218781	1032328	14.586	68.823
91.66667	59018	1091346	3.935	72.758
100	408625	1499971	27.242	100.000

SCALE 2—ATTITUDES TOWARD THE DEFENSE BUDGET (SPENDING)

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
0	90157	90157	6.011	6.011
8.333333	62377	152534	4.159	10.169
16.66667	52886	205420	3.526	13.695
25	125008	330428	8.334	22.029
33.33333	122616	453044	8.175	30.204
41.66667	125077	578121	8.339	38.542
50	188920	767041	12.595	51.137
58.33333	136648	903689	9.110	60.247
66.66667	218458	1122147	14.564	74.811
75	147065	1269212	9.805	84.616
83.33333	77047	1346259	5.137	89.752
91.66667	96275	1442534	6.418	96.171
100	57437	1499971	3.829	100.000

SCALE 3—PERFORMANCE OF THE MILITARY FUNCTION (FIGHTING)

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
0	4270	4270	0.285	0.285
5	845	5115	0.056	0.341
10	4450	9565	0.297	0.638
15	3534	13099	0.236	0.873
20	7691	20790	0.513	1.386
25	14572	35362	0.971	2.358
30	22922	58284	1.528	3.886
35	21416	79700	1.428	5.313
40	36304	116004	2.420	7.734
45	48541	164545	3.236	10.970
50	127352	291897	8.490	19.460
55	79722	371619	5.315	24.775
60	110508	482127	7.367	32.142
65	129475	611602	8.632	40.774
70	143466	755068	9.565	50.339
75	154852	909920	10.324	60.663
80	154070	1063990	10.272	70.934
85	132225	1196215	8.815	79.749
90	123780	1319995	8.252	88.001
95	36560	1356555	2.437	90.439
100	143416	1499971	9.561	100.000

SCALE 4—SPENDING PERFORMANCE

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
0	74344	74344	4.956	4.956
5	14803	89147	0.987	5.943
10	63630	152777	4.242	10.185
15	61630	214407	4.109	14.294
20	79166	293573	5.278	19.572
25	113839	407412	7.589	27.161
30	108094	515506	7.206	34.368
35	116399	631905	7.760	42.128
40	121664	753569	8.111	50.239
45	94366	847935	6.291	56.530
50	166940	1014875	11.130	67.660
55	101948	1116823	6.797	74.456
60	77734	1194557	5.182	79.639
65	81134	1275691	5.409	85.048
70	43447	1319138	2.897	87.944
75	65227	1384365	4.349	92.293
80	29805	1414170	1.987	94.280
85	21821	1435991	1.455	95.735
90	24786	1460777	1.652	97.387
95	14950	1475727	0.997	98.384
100	24244	1499971	1.616	100.000

SCALE 5—OVERALL PERFORMANCE

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
0	965	965	0.064	0.064
3.333333	965	1930	0.064	0.129
5	1717	3647	0.114	0.243
8.333333	889	4536	0.059	0.302
10	895	5431	0.060	0.362
13.33333	889	6320	0.059	0.421
16.66667	5848	12168	0.390	0.811
18.33333	6012	18180	0.401	1.212
20	1877	20057	0.125	1.337
21.66667	2788	22845	0.186	1.523
23.33333	3035	25880	0.202	1.725
25	10744	36624	0.716	2.442
26.66667	2765	39389	0.184	2.626
28.33333	9619	49008	0.641	3.267
30	7427	56435	0.495	3.762

SCALE 5—OVERALL PERFORMANCE *continued*

VALUE	FREQUENCY	CUM. FREQ	PERCENT	CUM. PERCENT
31.66667	12896	69331	0.860	4.622
33.33333	22482	91813	1.499	6.121
35	22133	113946	1.476	7.597
36.66667	21619	135565	1.441	9.038
38.33333	16319	151884	1.088	10.126
40	40794	192678	2.720	12.845
41.66667	29954	222632	1.997	14.842
43.33333	44010	266642	2.934	17.776
45	46001	312643	3.067	20.843
46.66667	55197	367840	3.680	24.523
48.33333	44877	412717	2.992	27.515
50	55862	468579	3.724	31.239
51.66667	58198	526777	3.880	35.119
53.33333	60273	587050	4.018	39.137
55	68042	655092	4.536	43.674
56.66667	66877	721969	4.459	48.132
58.33333	69367	791336	4.625	52.757
60	70606	861942	4.707	57.464
61.66667	59254	921196	3.950	61.414
63.33333	56045	977241	3.736	65.151
65	53415	1030656	3.561	68.712
66.66667	36957	1067613	2.464	71.176
68.33333	34153	1101766	2.277	73.452
70	49892	1151658	3.326	76.779
71.66667	44482	1196140	2.966	79.744
73.33333	37778	1233918	2.519	82.263
75	42535	1276453	2.836	85.099
76.66667	28963	1305416	1.931	87.029
78.33333	20749	1326165	1.383	88.413
80	24081	1350246	1.605	90.018
81.66667	24047	1374293	1.603	91.621
83.33333	21132	1395425	1.409	93.030
85	22869	1418294	1.525	94.555
86.66667	12563	1430857	0.838	95.392
88.33333	15741	1446598	1.049	96.442
90	10556	1457154	0.704	97.145
91.66667	12079	1469233	0.805	97.951
93.33333	12497	1481730	0.833	98.784
95	2881	1484611	0.192	98.976
96.66667	2602	1487213	0.173	99.149
98.33333	1887	1489100	0.126	99.275
100	10871	1499971	0.725	100.000

THE FIVE SPECIAL SCALES

SCALE 1 — Attitudes Toward the Military as an Institution

Very negative (0-25)	5%
Negative (26-65)	25
Positive (66-99)	42
Very positive (100)	27

SCALE 2 — Attitudes Toward the Defense Budget

Very negative (0)	6%
Negative (1-40)	24
Mixed (41-65)	30
Positive (66-84)	30
Very positive (85-100)	10

SCALE 3 — Fighting Performance

Poor (0-49)	11%
Fair (50-69)	30
Good (70-84)	30
Excellent (85-100)	29

SCALE 4 — Spending Performance

Very poor (0-24)	20%
Poor (25-49)	37
Fair (50-64)	23
Good (65-100)	20

SCALE 5 — Overall Performance

Poor (0-49)	28%
Fair (50-59)	25
Good (60-69)	21
Excellent (70-100)	27

ANNEX B

CONSTRUCTION OF THE ATTITUDE TYPOLOGIES

The two attitude typologies—one a combination of the scales of attitudes toward the military (Scale 1) and feelings about the defense budget (Scale 2), and one a combination of the fighting ratings (Scale 3) and the spending ratings (Scale 4)—were built by logically pairing the levels of each set of scales from low-low to high-high combinations. The combinations and their labels are shown in the two tables on the following pages. Also presented are demographic descriptions of the typology categories.

Typology of Attitudes About the Military and the Defense Budget

		Scale 2 — Attitudes Toward Defense Budget				
		Very Negative	Negative	Mixed	Positive	Very Positive
		Doves			Gulls	
Scale 1 Attitudes Toward the Military as an Institution	Very Negative	2%	2%	1%	*	*
	Negative	2%	9%	8%	5%	1%
	Positive	1%	10%	13%	14%	4%
	Very Positive	*	3%	9%	10%	5%
		Owls			Hawks	

*Less than 0.5 percent.

Typology of Fighting and Spending Ratings

		Scale 4 — Spending Performance			
		Very Poor	Poor	Fair	Good
		Satisfied with Neither			Satisfied with Spending
Scale 3 Fighting Performance	Poor	4%	4%	1%	2%
	Fair	8%	14%	5%	2%
	Good	4%	13%	10%	4%
	Excellent	4%	6%	7%	12%
		Satisfied with Fighting			Satisfied with Both

Military/Defense Budget Typology by Demographic Subgroups*

	Typology			
	Doves	**Gulls**	**Owls**	**Hawks**
Total	23%	7	37	33
Age				
18-24	25%	6	38	30
25-39	27%	7	34	32
40-59	21%	8	36	36
60+	20%	7	41	32
Sex				
Men	22%	6	37	35
Women	25%	8	37	30
Education				
Some college or less	21%	7	37	35
College graduate	31%	7	37	25
Education By Sex				
Some college or less				
Men	19%	6	37	38
Women	23%	8	37	33
College graduate				
Men	31%	7	34	28
Women	32%	8	39	21
Education By Age				
Some college or less				
18-39	24%	7	35	34
40 and over	17%	7	39	37
College graduate				
18-39	33%	6	39	23
40 and over	30%	9	34	27
Sex By Age				
Men				
18-39	25%	6	33	36
40 and over	19%	6	40	35
Women				
18-39	28%	7	38	27
40 and over	22%	9	36	33

*Table reads horizontally.

(continued)

Military/Defense Budget Typology by Demographic Subgroups *(continued)

	Typology			
	Doves	**Gulls**	**Owls**	**Hawks**
Status Group				
Blacks	32%	11	32	25
Lower end whites	18%	8	39	36
Middle class	20%	5	39	37
Intelligentsia	35%	5	37	23
High income	23%	7	33	38
Region				
Pacific	37%	6	30	27
Mountain	18%	5	42	35
East North Central	27%	4	38	31
West North Central	15%	7	53	25
Deep South	16%	9	35	40
Border	20%	10	37	33
Mid-Atlantic	27%	6	35	32
New England	24%	9	37	30
Military Experience				
Self	19%	5	36	40
Other in family	22%	8	37	33
No one in family	30%	6	37	26
Defense Contractor Household				
Yes	25%	5	37	32
No	23%	7	37	33
Children Under 18				
Yes	22%	7	38	34
No	25%	7	36	32

*Table reads horizontally.

Demographic Profile of Military/Defense Budget Typology*

	Total	Typology			
		Doves	Gulls	Owls	Hawks
Total	100%	100%	100%	100%	100%
Age					
18-24	16%	17%	15%	17%	15%
25-39	36	41	34	33	35
40-59	27	24	30	26	30
60+	21	18	22	24	20
Sex					
Men	48%	45%	42%	48%	52%
Women	52	55	58	52	48
Education					
Some college or less	76%	68%	74%	76%	81%
College graduate	24	32	26	24	18
Education By Sex					
Some college or less					
Men	35%	28%	29%	35%	41%
Women	41	40	45	40	41
College graduate					
Men	13	17	13	12	11
Women	11	15	13	12	7
Education By Age					
Some college or less					
18-39	40%	41%	39%	37%	41%
40 or over	36	27	35	39	41
College graduate					
18-39	12	17	10	13	8
40 and over	12	15	16	11	10
Sex By Age					
Men					
18-39	25%	27%	23%	23%	28%
40 and over	23	18	19	25	25
Women					
18-39	27	31	26	28	22
40 and over	25	24	32	25	26
Status Group					
Blacks	10%	14%	16%	9%	8%
Lower end whites	15	12	17	16	17
Middle class	34	29	25	36	38
Intelligentsia	13	19	9	13	9
High income	18	18	19	16	21

*Table reads vertically.

(continued)

Demographic Profile of Military/Defense Budget Typology *(continued)

	Total	Typology			
		Doves	Gulls	Owls	Hawks
Region					
Pacific	14%	22%	12%	12%	12%
Mountain	5	4	4	6	6
East North Central	18	20	11	18	17
West North Central	7	5	7	11	6
Deep South	26	18	33	25	32
Border	8	7	12	8	8
Mid-Atlantic	16	19	14	16	16
New England	5	5	7	5	5
Military Experience					
Self	24%	19%	19%	23%	29%
Other in family	48	45	56	49	49
No one in family	28	36	25	28	22
Defense Contractor Household					
Yes	14%	15%	11%	14%	14%
No	86	85	89	86	86
Children Under 18					
Yes	38%	35%	39%	39%	39%
No	62	65	61	61	61

*Table reads vertically.

ANNEX C

METHODOLOGY

Sample and Field Information

Fifteen hundred (1500) telephone interviews were conducted between January 18 and February 1, 1986. They were administered to a probability-proportionate-to-size sample of U.S. citizens, 18 years or older, living in the continental United States. The national total is based on eight independently drawn samples (sampling strata) listed opposite:

The interviewing was done by MOR interviewers using the company's central telephone facilities in Farmington, Livonia, and Detroit, Michigan. The interviews were validated, edited, coded, and keypunched and the data run in the home office of Market Opinion Reseach, Detroit, Michigan.

Sampling Frame by Census Region

	PPS Sample	
Census region	Number of areas	Total number of interviews
New England	16	80
Mid-Atlantic	49	245
East North Central	53	265
West North Central	22	110
South Atlantic	51	255
East South Central	19	95
West South Central	32	160
Mountain	16	80
Pacific	42	210
Totals	300	1500

Sample Weights and Sampling Error

The sample was checked against census data and previous survey results. The sample was found to have small discrepancies by age and race within region which received compensating weights. The weights were applied by the program used in the subsequent analysis, i.e., fractional/machine weighing. The weighted N for the sample is fifteen hundred (1500).

The sample error for a simple random sample (N = 1,500) is 2.5 percent at the 95 percent level of confidence. This means that ninety-five out of one hundred simple random samples will have their estimate within plus or minus 2.5 percent of the population value.

Comparison of U.S. Population and Survey Sample

	Population*	Sample	Difference
AGE			
18-24	17%	16%	-1
25-44	42	43	+1
45-64	26	27	+1
65+	16	14	-2
RACE			
Non-black	89.5%	89.8%	+.3
Black	10.5	10.2	-.3
SEX			
Men	48%	48%	0
Women	52	52	0

*Age and sex data as of November 1984 (Census Population Reports, Series P-25, No. 948). Race data as of 1980 Census.

Analysis

Throughout the report, the following mutually exclusive demographic groups are referred to:

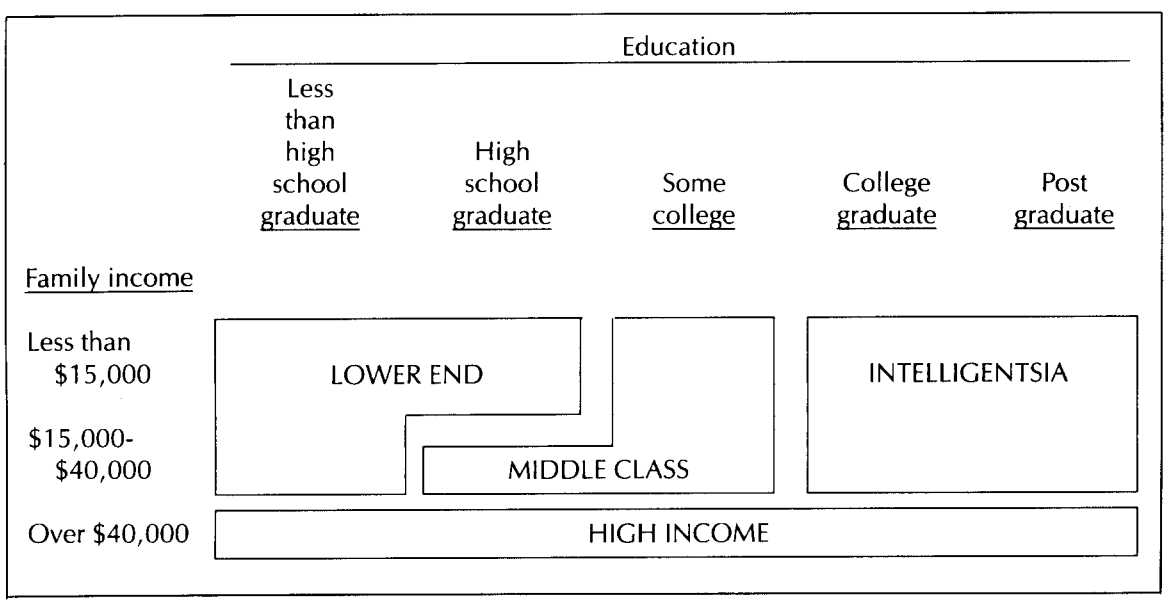
High income are those with incomes over $40,000;

Intelligentsia are those with incomes of $40,000 or less *and* college or postgraduate degrees;

Middle class are those with some college and incomes of $40,000 or less, *or* high school graduates with incomes from $15,000 to $40,000; and

Lower-end are high school graduates with incomes of *less than $15,000 or* those who have less than a high school graduate education, and incomes of $40,000 or less.

These classifications exclude blacks and Hispanics. The latter groups are coded separately in the scale and are shown in the analysis tables if there are enough cases for reliable analysis.



M

APPENDIX M

Defense Industry Initiatives on Business Ethics and Conduct

BUSINESS ETHICS AND CONDUCT

The defense industry companies who sign this document already have, or commit to adopt and 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. Further, they accept the responsibility to create an environment in which compliance with federal procurement laws and free, open, and timely reporting of violations become the felt responsibility of every employee in the defense industry.

In addition to adopting and adhering to this set of six principles of business ethics and conduct, we will take the leadership in making the principles a standard for the entire defense industry.

I. Principles

1. Each company will have and adhere to a written code of business ethics and conduct.
2. The company's code establishes the high values expected of its employees and the standard by which they must judge their own conduct and that of their organization; each company will train its employees concerning their personal responsibilities under the code.
3. Each company will create a free and open atmosphere that allows and encourages employees to report violations of its code to the company without fear of retribution for such reporting.
4. Each company has the obligation to self-govern by monitoring compliance with federal procurement laws and adopting procedures for voluntary disclosure of violations of federal procurement laws and corrective actions taken.
5. Each company has a responsibility to each of the other companies in the industry to live by standards of conduct that preserve the integrity of the defense industry.
6. Each company must have public accountability for its commitment to these principles.

II. Implementation: Supporting Programs

While all companies pledge to abide by the six principles, each company agrees that it has implemented or will implement policies and programs to meet its management needs.

Principle 1: Written Code of Business Ethics and Conduct

A company's code of business ethics and conduct should embody the values that it and its employees hold most important; it is the highest expression of a corporation's culture. For a defense contractor, the code represents the commitment of the company and its employees to work for its customers, shareholders, *and* the nation.

It is important, therefore, that a defense contractor's written code explicitly address that higher commitment. It must also include a statement of the standards that govern the conduct of all employees in their relationships to the company, as well as in their dealings with customers, suppliers, and consultants. The statement also must include an explanation of the consequences of violating those standards, and a clear assignment of responsibility to

operating management and others for monitoring and enforcing the standards throughout the company.

Principle 2: Employees' Ethical Responsibilities

A company's code of business ethics and conduct should embody the basic values and culture of a company and should become a way of life, a form of honor system, for every employee. Only if the code is embodied in some form of honor system does it become more than mere words or abstract ideals. Adherence to the code becomes a responsibility of each employee both to the company and to fellow employees. Failure to live by the code, or to report infractions, erodes the trust essential to personal accountability and an effective corporate business ethics system.

Codes of business ethics and conduct are effective only if they are fully understood by every employee. Communication and training are critical to preparing employees to meet their ethical responsibilities. Companies can use a wide variety of methods to communicate their codes and policies and to educate their employees as to how to fulfill their obligations. Whatever methods are used—broad distribution of written codes, personnel orientation programs, group meetings, videotapes, and articles—it is critical that they ensure total coverage.

Principle 3: Corporate Responsibility to Employees

Every company must ensure that employees have the opportunity to fulfill their responsibility to preserve the integrity of the code and their honor system. Employees should be free to report suspected violations of the code to the company without fear of retribution for such reporting.

To encourage the surfacing of problems, normal management channels should be supplemented by a confidential reporting mechanism.

It is critical that companies create and maintain an environment of openness where disclosures are accepted and expected. Employees must believe that to raise a concern or report misconduct is expected, accepted, and protected behavior, not the exception. This removes any legitimate rationale for employees to delay reporting alleged violations or for former employees to allege past offenses by former employers or associates.

To receive and investigate employee allegations of violations of the corporate code of business ethics and conduct, defense contractors can use a contract review board, an ombudsman, a corporate ethics or compliance office or other similar mechanism.

In general, the companies accept the broadest responsibility to create an environment in which free, open and timely reporting of any suspected violations becomes the felt responsibility of every employee.

Principle 4: Corporate Responsibility to the Government

It is the responsibility of each company to aggressively self-govern and monitor adherence to its code and to federal procurement laws. Procedures will be established by each company for voluntarily reporting to appropriate government authorities violations of federal procurement laws and corrective actions.

In the past, major importance has been placed on whether internal company monitoring has uncovered deficiencies before discovery by governmental audit. The process will be more effective if all monitoring efforts are viewed as mutually reinforcing and the measure of performance is a timely and constructive surfacing of issues.

Corporate and government audit and control mechanisms should be used to identify and correct problems. Government and industry share this responsibility and must work together cooperatively and constructively to ensure compliance with federal procurement laws and to clarify any ambiguities that exist.

Principle 5: Corporate Responsibility to the Defense Industry

Each company must understand that rigorous self-governance is the foundation of these principles of business ethics and conduct and of the public's perception of the integrity of the defense industry.

Since methods of accountability can be improved through shared experience and adaptation, companies will participate in an annual intercompany "Best Practices Forum" that will bring together operating and staff managers from across the industry to discuss ways to implement the industry's principles of accountability.

Each company's compliance with the principles will be reviewed by a Board of Directors committee comprised of outside directors.

Principle 6: Public Accountability

The mechanism for public accountability will require each company to have its independent public accountants or similar independent organization complete and submit annually the attached questionnaire to an external independent body which will report the results for the industry as a whole and release the data simultaneously to the companies and the general public.

This annual review, which will be conducted for the next three years, is a critical element giving force to these principles and adding integrity to this defense industry initiative as a whole. Ethical accountability, as a good-faith process, should not be affirmed behind closed doors. The defense industry is confronted with a problem of public perception —a loss of confidence in its integrity—that must be addressed publicly if the results are to be both real and credible, to the government and public alike. It is in this spirit of public accountability that this initiative has been adopted and these principles have been established.

Questionnaire

1. Does the company have a written code of business ethics and conduct?
2. Is the code distributed to all employees principally involved in defense work?
3. Are new employees provided any orientation to the code?
4. Does the code assign responsibility to operating management and others for compliance with the code?
5. Does the company conduct employee training programs regarding the code?
6. Does the code address standards that govern the conduct of employees in their dealings with suppliers, consultants and customers?
7. Is there a corporate review board, ombudsman, corporate compliance or ethics office or similar mechanism for employees to report suspected violations to someone other than their direct supervisor, if necessary?
8. Does the mechanism employed protect the confidentiality of employee reports?
9. Is there an appropriate mechanism to follow-up on reports of suspected violations to determine what occurred, who was responsible, and recommended corrective and other actions?
10. Is there an appropriate mechanism for letting employees know the result of any follow-up into their reported charges?
11. Is there an ongoing program of communication to employees, spelling out and re-emphasizing their obligations under the code of conduct?
12. What are the specifics of such a program?
    a. Written communication?
    b. One-on-one communication?
    c. Group meetings?
    d. Visual aids?
    e. Others?

13. Does the company have a procedure for voluntarily reporting violations of federal procurement laws to appropriate governmental agencies?
14. Is implementation of the code's provisions one of the standards by which all levels of supervision are expected to be measured in their performance?
15. Is there a program to monitor on a continuing basis adherence to the code of conduct and compliance with federal procurement laws?
16. Does the company participate in the industry's "Best Practices Forum"?
17. Are periodic reports on adherence to the principles made to the company's Board of Directors or to its audit or other appropriate committee?
18. Are the company's independent public accountants or a similar independent organization required to comment to the Board of Directors or a committee thereof on the efficacy of the company's internal procedures for implementing the company's code of conduct?

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APPENDIX N

Final Report and Recommendations on Voluntary Corporate Policies, Practices and Procedures Relating to Ethical Business Conduct

Prepared by
ETHICS RESOURCE CENTER, INC.*

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission.

Ethics Resource Center, Incorporated

1025 Connecticut Avenue, N.W., Washington, D.C. 20036 (202) 223-3411

February 18, 1986

The Hon. David Packard
Chairman
The President's Blue Ribbon Commission
on Defense Management
736 Jackson Place Northwest
Washington, DC 20503

Dear Mr. Packard:

I am pleased to transmit herewith the Ethics Resource Center's Report and Recommendations on Voluntary Corporate Policies, Practices and Procedures Relating to Ethical Business Conduct. Our report is based on the experience of the Center in advising defense contractors and other major corporations on ethics in management and on the Center's resource collection, updated by a survey performed on behalf of the Center by the Opinion Research Corporation for the Commission. Appended to our report is the survey instrument, tabulation of data and analysis by the Opinion Research Corporation.

On behalf of the Directors and staff of the Ethics Resource Center, I wish to express our appreciation for the opportunity to contribute to the work of the Commission. We hope that our report will testify effectively to the importance of self-governance in ensuring the highest level of ethical practices in defense-related business.

Sincerely,

Gary Edwards

GE:LL
Enclosure

INTRODUCTION

At the request of the President's Blue Ribbon Commission on Defense Management, the Ethics Resource Center, Inc. has prepared an analysis of formal efforts by defense contracting firms to ensure ethical conduct by their employees and responsible policies and practices by the companies themselves. Based on that analysis and on the Center's extensive knowledge of and experience with major companies within and outside the defense industry, the Center offers recommendations to the Commission regarding actions that might be taken by defense contractors for the purpose of improving the level of ethical conduct by individuals and organizations involved in providing products and services for national defense.

Present Situation and Need for Change

The falsification of timecards and test results, poor quality controls, defective pricing, waste, fraud, and overall mismanagement of defense contracts have incensed the general public, the Congress, and the Administration. A perception of pervasive misconduct on the part of defense contractors has weakened public support for increased military and Department of Defense expenditures, thereby undercutting the Administration's efforts to strengthen U.S. defense capabilities.

The types of misconduct alleged are not new. They have occurred under administrations led by each party and in times of decreased, as well as increased, spending. They persist in spite of legislative and administrative efforts to eradicate them. Indeed, 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 counterproductivity of an approach that is almost entirely a matter of external policing.

Enhancing Regulatory Effectiveness

To complement its own regulatory activities, the federal government should encourage private industry to develop and implement codes of conduct that exceed the requirements of the law and the present expectations of the public. *Compliance* with laws and regulations and their underlying public policy objectives may be enhanced by effectively communicated and enforced corporate standards of ethical business conduct. Such standards may serve to improve compliance by removing ambiguity or vagueness with respect to acceptable conduct, by clarifying management's expectations and overriding competing performance incentives, and by encouraging employee "whistleblowing."

For instance, marketing is an area where misconduct may arise because of the absence of clear standards of conduct. Management that rewards marketing personnel for gathering

competitors' intelligence, but provides no guidelines for acceptable conduct for obtaining the information, may, in effect, encourage unethical or illegal behavior. Not only may performance incentives thus encourage employees to behave illegally or unethically, but consultants may be similarly influenced indirectly by employees who feel neither obliged nor encouraged to inquire into their activities.

Some misconduct arises, of course, not from the lack of clear standards of conduct but from greed, personal or corporate. To discover and deter such conduct requires specificity in the laws and regulations, vigilant monitoring of compliance, and swift enforcement of penalties that are certain and appropriately severe. The efficiency and effectiveness of federal *monitoring of compliance* may be greatly enhanced where corporate policy and practice require self-policing.

Corporate self-policing will itself be most credible and effective where employees can report misconduct anonymously, outside normal reporting channels, and where the disposition of such reports is overseen by outside directors. In an effort to ensure such self-policing, companies may provide employees access to an ombudsman who is independent from their supervisors or to a toll-free phone line staffed by persons reporting directly to internal audit, corporate counsel, or the chief executive.

Corporate efforts to ensure compliance with laws, regulations, and high standards of ethical business conduct have intensified in recent years.

In 1979, an Ethics Resource Center survey of the 500 largest industrial and the 150 largest nonindustrial corporations revealed that 73 percent of these firms had adopted written codes of ethics or standards of conduct.[1] Half of those documents were adopted for the first time during the previous five years.

More recently, companies have created programs to assist in implementation, compliance monitoring, and enforcement of their standards of conduct. A recent survey of 279 major industrial and service companies by Bentley College indicates the breadth of such undertakings. Company efforts have included creation of ethics committees on boards of directors and at senior management level (14%), establishment of ombudsmen to receive employee allegations of unethical conduct (6%), and some discussion of the company standards and issues of ethics within training and development programs (35%).

In order to inform its recommendations to the President's Commission, the Ethics Resource Center undertook research on the extent to which written standards of conduct, and substantive programs for education and compliance monitoring, have been adopted by defense contractors.

The Research Project

At the request of the President's Blue Ribbon Commission on Defense Management, the Ethics Resource Center surveyed a representative sampling of defense contracting firms regarding:

- the process by which corporate policies and procedures are established for ensuring ethical conduct in dealings with the federal government and with subcontractors, suppliers, and others;
- the form and content of such corporate policies and procedures;
- the means for communicating such policies and procedures to employees, subcontractors, suppliers, and others;
- the internal system for monitoring and enforcing compliance with corporate policies and procedures; and
- the internal system for the adjudication of allegations of misconduct and for the determination of penalties.

Consistent with its proposal to the

[1]The terms "code of ethics" and "standards of conduct" are used interchangeably throughout this document.

President's Commission, the Ethics Resource Center retained the services of Opinion Research Corporation to assist in drafting the survey instrument, in a pretest of it, and in processing the final survey returns.

The pretest instrument was mailed to five defense contracting firms on November 15. All five returned the pretest questionnaire by the 27th. Based on these responses and on suggestions of Commission staff, the instrument was revised. The final version of the questionnaire was sent to 91 defense contractors on December 3. At the suggestion of the Commission staff, these were sent by overnight delivery to chief executives of the defense contracting firms, who received them on December 4, for return to Opinion Research Corporation by December 13. Sixty-one (61) firms (67%) responded in time for inclusion in the study.

In addition to the survey responses, the Center requested from the defense contractors documents setting forth their corporate ethics policies and procedures; information on methods of communicating standards, including materials used internally for training and development; and job descriptions, committee charters, and other materials pertaining to the structure and functioning of compliance monitoring and enforcement activities.

Based on the survey results and on an analysis of accompanying corporate documents, the Ethics Resource Center offers the following report and recommendations to the President's Commission regarding voluntary programs to ensure ethical conduct that have been or might usefully be adopted by defense contractors.

REPORT AND RECOMMENDATIONS FOR VOLUNTARY CORPORATE ACTIONS

I. Corporate Policies and Procedures Relating to Ethical Business Conduct

Research sponsored by the Ethics Resource Center in 1979 determined that among 650 of the largest U.S. corporations, 73 percent had developed written standards of conduct or codes of ethics. Of these, 50 percent had been first adopted during the previous five years. Bentley College reported in 1985 that it had surveyed 279 major corporations and found virtually no change, with 208 firms (74.6%) reporting written codes of conduct.

Although defense contractors matched the general profile of American companies in 1979, this is no longer the case. Our survey for the Commission found that, like American firms generally, 73 percent of respondent defense contractors also had adopted codes by 1979; however, by the end of 1985, the figure for the defense industry had risen to 92 percent.

The widespread adoption of business codes of ethics in the late 1970s appears to have been in response to publicized stories of corporate misconduct, especially in connection with the Watergate scandal, illegal corporate political contributions, and overseas bribery payments. That business interest in codes generally seems to have peaked by 1979 while continuing unabated among defense contractors suggests a greater appreciation among this group of the risks of unethical conduct and the value of explicit standards of conduct. That significant problems of misconduct continue to affect the defense industry suggests that the standards may be flawed or inadequately communicated and enforced. Our research seems to confirm this.

A content analysis of the codes of ethics of respondents to our current survey reveals that many defense contractors have not developed standards of conduct for activities that seem particularly vulnerable to misconduct. For example, the following topics were addressed by the standards of conduct of the parenthetically indicated percentage of defense contractors:

- General conduct (96%)
- Kickbacks (89%)
- Bribery (88%)
- Conflicts of interest (88%)
- Gifts and entertainment for government officials (82%)
- Accuracy of books and records (79%)
- Corporate political contributions (75%)
- Protecting proprietary information (68%)
- Abuse of insider information (61%)
- Disciplinary actions for violations of standards of conduct (61%)
- Antitrust issues (57%)
- Personal expense reports (54%)
- Relations with subcontractors and suppliers (50%)
- Procedures for reporting alleged violations of standards of conduct (50%)
- Accuracy of timecards (46%)
- Employee relations (45%)
- Industry competition (41%)
- Accuracy of information included in proposals (34%)
- Hiring former Department of Defense or military personnel (34%)
- Procedures for adjudicating alleged violations of standards of conduct (32%)
- Cost allocation (30%)
- Quality control (30%)
- Bidding practices (27%)
- Billing practices (27%)
- Defective pricing (27%)
- Materials substitution (27%)

Contract negotiation practices (25%)
Protection of whistleblowers (21%)
Procedures for monitoring contract compliance (20%)
Advertising practices (18%)
Customer service (14%)
Primary contracting (13%)

Analysis and Recommendation

Undoubtedly, many companies provide policies and guidelines for conduct that address these topics in places other than the corporate code of ethics. For other topics, such as defective pricing and accuracy of timecards, the only policy required may be to prohibit or to prescribe the conduct or the result. Even here, detailed procedures and stipulations may be essential to ensure compliance with the policy.

In some areas, where standards and guidelines for ethical business conduct are essential to the integrity of defense contracting, the President's Commission should not assume that what has not been addressed in company codes will have been treated adequately elsewhere in corporate policies. For example, based on the survey results, documents analysis, and interviews and discussions with executives, managers, and employees of several defense firms, we have found that clear standards of ethical business conduct are especially needed with respect to contract negotiating practices and bidding practices, including the related activities involved in gathering competitors' intelligence.

RECOMMENDATION ONE: All companies involved in defense-related business with the federal government should adopt written standards of ethical business conduct, and these standards should specifically address activities most vulnerable to misconduct.

Content analysis of company codes and related policy documents suggests two other areas for concern. Only one-half (50%) of the codes submitted by defense industry companies specify procedures for employees to follow for reporting alleged violations of standards of conduct. Even among firms whose codes provide procedures, many only direct employees to report misconduct to their immediate supervisors. Because there may be situations in which the conduct or complicity of the supervisor is itself in question, alternative means for reporting misconduct must be available and known by all employees.

RECOMMENDATION TWO: All companies involved in defense-related business with the federal government should adopt and effectively communicate to all employees procedures for reporting apparent misconduct directly to senior management, or to appropriate corporate officers and directors, whenever an employee believes that reporting to an immediate supervisor would be inappropriate or ineffective.

Directly related to inadequate procedures for reporting misconduct, and undermining many of the procedures that do exist, is a scarcity of policies (21%) to ensure the protection of "whistleblowers," employees who bring to light unethical practices of the firm or the misconduct of other employees. The success of the defense industry's efforts to restore public trust and confidence in the integrity of its practices will be directly dependent on the seriousness with which management endeavors to identify and eliminate unethical conduct. That seriousness will be properly called into question if "whistleblowers" are punished or left unprotected.

RECOMMENDATION THREE: All companies involved in defense-related business with the federal government should adopt and effectively communicate to all employees a written policy to protect "whistleblowers" from repercussions and to

secure, to the extent possible, their anonymity.

II. Communication of Corporate Ethics Policies and Procedures

Dissemination: Defense contractors report a variety of methods being used to communicate corporate ethics policies to employees. These include (with the percentage of firms utilizing each in parentheses):

- Distribution of written code of ethics/ standards of conduct (93%)
- Informal discussion and guidance from supervisors (90%)
- New personnel orientation (85%)
- Memoranda from senior management (85%)
- Group meetings and briefings (82%)
- Speeches by senior executives (80%)
- Articles in *internally* distributed company periodicals (64%)
- Training and development programs (57%)
- Videotape program (57%)
- Employee handbook (51%)
- Posted notices (41%)
- Articles in *externally* distributed company periodicals (11%)

Analysis and Recommendation

Significantly, although 93 percent of respondent firms indicate that they rely on distribution of a written code of ethics or standards of conduct to communicate to employees "company policies and procedures relating to ethical business conduct," only 50 percent of the companies that have written codes distribute the code to *all* employees. In many firms, code distribution is limited to senior management.

Many employees may never need standards or guidelines concerning gifts and gratuities, conflicts of interest, or some other area of conduct addressed by company codes. In other areas, such as the accuracy of timecards or the protection of proprietary information, employees at any level of the firm may have significant ethical responsibilities that should be communicated to them as such. Moreover, reliance on employees to "blow the whistle" on unethical conduct presupposes that they have been made familiar with standards of ethical business conduct.

RECOMMENDATION FOUR: All companies involved in defense-related business with the federal government should distribute the corporate standards of ethical business conduct to all employees on at least an annual basis and to all new employees at the time they are hired.

Training and Development: During the 1980s companies have, in general, shifted from the development and dissemination of written standards of conduct to the education of managers and employees regarding the application (and limitations) of the standards in dealing with difficult business decisions and ethical dilemmas. Much of this education is going on within companies in their own training and development programs.

A survey of a cross-section of manufacturing and service industries, defense and non-defense together, found that 35 percent of respondent firms provide "training for employees in the area of ethics."[2] By comparison, 49 percent of defense contractors claim to provide such training. Half of the defense industry ethics training programs were developed in the past two years and over three-quarters (77%) of them since 1980.

Analysis and Recommendation

Employees attending ethics training programs in the defense industry are most likely to be drawn from "all departments" of the firm (83%). This suggests, and materials provided by respondent defense firms confirm, that many of these programs are part of new employee norientation. By contrast, only 37 percent of firms with educational

[2]Bentley College Survey, 1985.

programs indicated that contracting and procurement personnel would be specifically selected for such training.

Most firms did not comply with the request to provide materials describing their training program. It is apparent from materials that were received, however, that the scope of subject matter covered and the depth of treatment vary considerably. Some firms provided videotaped messages by their chief executives addressing ethical business conduct generally or the corporate code of ethics in particular. Other firms indicated that external consultants directed training programs narrowly focused on such topics as protecting proprietary information and filling out timecards accurately.

The integration of discussions of ethics codes, issues, and dilemmas into corporate training and development programs can afford employees the opportunity to understand how the code of ethics applies to their own responsibilities, and can encourage employees to anticipate and properly resolve ethics issues and dilemmas on the job.

RECOMMENDATION FIVE: All companies involved in defense-related business with the federal government should make discussion of the corporate standards of ethical business conduct and of ethics issues and dilemmas representative of those facing the company and likely to face the employees a part of all new employees' orientation, of regular performance evaluations, and of internal training and development programs.

III. Monitoring and Enforcing Corporate Ethics Policy

The development and communication of ethics policies by defense contracting firms must be accompanied by a sustained effort to ensure that those policies are understood, that compliance is monitored, and that alleged violations are adjudicated.

Managers in the defense industry are most likely to rely on "informal discussion" (80%) and "group meetings with subordinates" (80%) to ensure that subordinates understand corporate policies and procedures relating to ethical issues. Managers rely less on "individual meetings with subordinates" (75%), "requiring signature on written policy statements" (69%), "performance appraisals" (39%), and "requiring completion of a written questionnaire" (31%).

Monitoring and enforcing compliance in defense firms is usually the responsibility of corporate counsel (85%) and/or internal audit (77%).

Similarly, these offices are the most likely to be responsible for *investigation* of an allegation of unethical conduct (89% and 79% respectively). For such investigations, over half (52%) of respondent firms would also draw upon corporate security.

By contrast, the *adjudication* of allegations of unethical conduct is likely to involve the chief executive officer (49%) and personnel (41%), as well as corporate counsel (64%).

To monitor and enforce compliance, defense contractors rely on a broad array of procedures and practices at the corporate, division, and department levels. Among the most frequently cited were:

- Internal audits
- Annual certification
- Compliance reviews
- Spot checks
- External audits
- Interviews and questionnaires
- Reviews by board of directors ethics committees
- Reviews by corporate ethics offices or contract review boards
- Reports to ombudsmen

Analysis and Recommendation

Internal and external audits are beyond the scope of this report. Annual certification and compliance reviews are usually connected with the audit functions and are not discussed here. Although there is some value to spot checks, neither the frequency nor effectiveness of these

was evaluated in this study.

Board of directors ethics committees, corporate ethics offices and contract review boards (at the corporate, division, and plant facility levels), and ombudsmen all represent attempts to formalize and to improve the effectiveness of the compliance monitoring and enforcement of corporate standards of ethical conduct. The use of these mechanisms by defense firms was examined in the Ethics Resource Center's survey.

Board of Directors Ethics Committee: There is more likely to be a board of directors ethics committee in defense contracting firms (36%) than in U.S. companies generally (14%).[3] Our survey shows this to be a trend that is increasing, with 46 percent of the defense industry committees being established in the last 10 years, 14 percent in 1985 alone.

Ninety-one percent (91%) of the defense firms with ethics committees reported that there were no inside directors on the committee. In many firms the ethics committee has the same membership, and may have the same charter and responsibilities, as the audit committee. Reflecting this is the fact that internal audit is the office most likely (64%) to be required to report to the ethics committee. Corporate counsel (59%) and the chief financial officer (41%) are also likely to be required to report to the ethics committee.

The ethics committees report regularly, with 45 percent reporting on a quarterly basis, 32 percent semiannually and 9 percent annually. Five percent (5%) report monthly. Although all ethics committees report to the full board of directors, 5 percent report also to the shareholders. None provides a report for the general public.

Defense firms tend not to encourage employees to contact the board of directors' ethics committees directly, either for advice or to report questionable business conduct. In those companies with an ethics committee, the most likely means for an employee to contact the committee would be interoffice mail (45%). Other options include "walk-in" contacts (41%), which, since most ethics committee members are outside directors, would require off-site travel by an employee or directing information or inquiries through one's supervisor, which might have a chilling effect on employees' willingness to contact the ethics committee.

Toll-free phone lines (18%) and outside postal box addresses (23%) are made available to employees in a small number of firms.

RECOMMENDATION SIX: All companies involved in defense-related business with the federal government should establish a committee of outside directors to oversee corporate policies, procedures, and practices pertaining to the monitoring and enforcement of compliance with the corporate standards of ethical business conduct. The committee should be required to report its findings to the board of directors at least annually.

Corporate Ethics Office:[4] A corporate ethics office has been established in nearly one-fourth (23%) of the respondent defense contracting firms, with over one-third (36%) of these being created in 1985. The principal functions of the corporate ethics offices include:

- Communication of corporate ethics policies (86%)
- Educating employees about corporate ethics policies (86%)
- Receiving allegations of violations of corporate ethics policies (86%)
- Monitoring compliance with corporate ethics policies (79%)
- Investigating allegations of violations of corporate ethics policies (71%)
- Adjudicating allegations of violations of corporate ethics policies (50%)
- Assessing penalties for violations of corporate

[3]Ibid.

[4]Defined in the survey as "a senior management level group or individual with overall responsibility for developing and/or implementing corporate standards of ethical business conduct."

ethics policies (36%)

Although the corporate ethics office has significant responsibilities with respect to corporate ethics policies, the office is poorly staffed. There is *no full-time professional staff* for 64 percent of the firms with ethics offices. In 21 percent, there is only one full-time professional. The number of professional staff available on a part-time or as-needed basis varies, but 42 percent report that fewer than 10 are available.

Sixty-four percent (64%) of the ethics offices report at least quarterly. Half of the ethics offices are required to report directly to a board of directors' ethics committee.

Employee access to the corporate ethics office is most likely to be through interoffice mail (100%), through the employee's supervisor (86%), and through walk-in contact (86%). Toll-free "hot lines" (64%) and outside postal box numbers (29%) are less likely to be made available.

Contract Review Board: Contract review boards are slightly more prevalent (30%) than corporate ethics offices (23%) as a means for monitoring and enforcing compliance with corporate standards of ethical conduct. Although contract review boards generally operate at the corporate level (89%), there are also boards at the division (28%) and plant facility (67%) levels.

Only 34 percent of the contract review boards report regularly, and only 6 percent report to a board of directors' ethics committee. Thirty-nine percent (39%) of the contract review boards report only "as prompted by events" and are most likely to report to top management at the corporate level. Seventeen percent (17%) report to division management.

Contract review boards tend to be less accessible to employees, with "walk-in contact" (72%) the most likely means, and toll-free "hot-lines" (67%) and outside postal box numbers (11%) the least likely.

Ombudsman: Ombudsmen have been established in 28 percent of defense contracting firms, and most of these are of quite recent origin, 71 percent having come into being since 1980. By contrast, ombudsmen are found in only 6 percent of U.S. businesses generally.

Although ombudsmen function most frequently at the corporate level (71%), over half (53%) operate at the divisional level, and (6%) at the plant facility level as well.

The most common function of the ombudsman is to receive allegations of violations of corporate ethics policies (88%). Additionally, the ombudsman may be involved in:

Communication of corporate ethics policies (47%)
Educating employees about corporate ethics policies (41%)
Monitoring compliance with corporate ethics policies (41%)
Investigating allegations of violations of corporate ethics policies (12%)
Assessing penalties to violators of corporate ethics policies (12%)

Only 18 percent of the defense firms with ombudsmen report that this is a full-time position. In 53 percent of the firms, the ombudsman's function requires less than one-quarter of his/her time.

None of the ombudsmen report to the board of directors ethics committee and only about half (51%) report to senior corporate management.

Employee access to the ombudsman is principally through "walk-in contact" (88%) or interoffice mail (82%). In nearly two-thirds (65%) of the firms surveyed, employees contact the ombudsman through their supervisor. Among defense contractors with ombudsmen, 29 percent provide direct access through a toll-free "hot line" and 18 percent through an outside postal box number.

Analysis and Recommendation

The corporate ethics office, contract review board, and ombudsman represent different means by which defense contractors have tried to monitor compliance with corporate standards of ethical business conduct. They share important common features, as well as having significant differences.

Corporate ethics offices are the most broadly conceived of the three and have additional responsibilities for communicating ethics policies. Contract review boards take the narrower focus that the name suggests. Ombudsmen serve principally as an alternative path for pointing out problems or raising allegations of misconduct.

None of these vehicles seems adequately staffed to monitor compliance with corporate ethics policies, even though that is a major responsibility for each:

- The *corporate ethics offices* and the *ombudsmen* are poorly staffed functions.
- Reports from the *contract review boards* and *ombudsmen* may never be brought to the attention of outside directors or of a board of directors ethics committee.
- *Contract review boards* and *ombudsmen* may be difficult for employees to contact anonymously because of the relatively few toll-free "hot-lines" and outside postal box numbers.

RECOMMENDATION SEVEN: All companies involved in defense-related business with the federal government should maintain and regularly publicize to employees the availability of means for employees to report apparent violations of corporate standards of ethical business conduct directly and anonymously to the board of directors committee that has oversight for corporate policies, procedures, and practices pertaining to the monitoring and enforcement of compliance with those standards.

CONCLUSION

Many defense contracting firms have taken significant action to establish, communicate, monitor, and enforce policies and procedures to ensure a high level of ethical business conduct. In each area, the actions taken can be improved upon.

Corporate codes of ethics and standards of conduct provide the broadest, most comprehensive statements of company policy regarding ethical conduct. As such, they can provide a conceptual framework for management and employees to understand the relationship between corporate and public policy. In addition to prohibiting some forms of conduct and mandating others, company codes can also articulate the principles on the basis of which business decisions should be made in areas where neither corporate procedures nor government regulations yet determine conduct.

Standards of conduct can only be as effective as they are applicable, either as specific rules or as principles, to the conduct of employees. In this respect, all of the codes examined can and should be improved.

The effectiveness of corporate standards of conduct among defense contractors is further constrained by the limited distribution the standards receive. This can and should be remedied immediately by distribution to all present employees and to all new hires in the future.

That codes of ethics, and the issues, ambiguities, and ethical dilemmas they address, are being brought into corporate training and development programs is encouraging. However, the relative novelty of this approach and the wide variety in format and content of the courses make it difficult at present to assess the merits of these educational activities. To the extent that they increase employees' understanding of how corporate ethics policies relate to their own responsibilities, they will serve the interests

of the public as well as those of the company.

Finally, it is important to note that corporate standards of ethical business conduct are not identical with laws and government regulations. Although they may develop out of common concerns and may overlap in their attempts to govern employee and corporate behavior, they have somewhat different objectives. Standards exist not only to constrain behavior but also to inform judgment. Business relies for efficiency and effectiveness on discretionary decision making. Codes of ethics and standards of conduct, in addition to mandating or prohibiting certain conduct, should provide the principles and values on the basis of which such decisions are made.

Also, where laws and regulations are intended to protect the public's interest, company codes and standards are meant to protect a company's interests, especially its reputation for integrity.

These different objectives expand the need for compliance monitoring beyond the reach of most internal or external auditors. They require an environment in which employees monitor the conduct and the decisions of one another and feel free to call attention to bad judgments and to misconduct in order to preserve the integrity and reputation of the firm. Defense contractors, like companies in other industries, are still experimenting with ways to foster and manage such an environment. Corporate ethics offices, contract review boards, and ombudsmen are part of the experimentation. No recommendation can be made at this time with respect to which one or more of these functions will prove most effective, but the objective of an open, self-policing environment is as desirable as it will be difficult to achieve.

ETHICS RESOURCE CENTER,
INCORPORATED
Washington, D.C.
April 16, 1986

The Hon. David Packard
Chairman
President's Blue Ribbon Commission
on Defense Management
Washington, D.C. 20503

Dear Sir:

The Ethics Resource Center was pleased to be able to provide recommendations earlier this year to the President's Blue Ribbon Commission on Defense Management. At that time the Center reviewed current self-governance policies and practices among defense contractors and recommended strengthening of corporate codes of ethics and standards of conduct, as well as improvements in communication, education, and compliance-monitoring activities.

This letter will expand on certain of the recommendations in the Center's February 18 report to the Commission and proffer additional recommendations for the Commission's consideration.

As the Commission recognizes in its Interim Report to the President, public confidence and trust in defense contractors has been severely shaken: "Numerous reports of questionable 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."

The Commission has acknowledged the important role of improved industry self-governance in rebuilding public confidence. Appropriately, the Commission has focused its recommendations on corporate codes of ethics: "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 Ethics Resource Center strongly endorses this recommendation by the Commission. However, based on extensive research on implementation and enforcement of corporate codes of ethics, the Center finds that codes often are either not read or their application is not understood by all employees. The Center therefore strongly reiterates its recommendations of February 18, that:

RECOMMENDATION FOUR: All companies involved in defense-related business with the federal government should distribute the corporate standards of ethical business conduct to all employees on at least an annual basis and to all new employees at the time they are hired;

and that:

RECOMMENDATION FIVE: All companies involved in defense-related business with the federal government should make discussion of the corporate standards of ethical business conduct, and of ethics issues and dilemmas representative of those facing the company and likely to face the employee, a part of all new employees' orientation, of regular performance evaluations, and of internal training and development programs.

Effective self-governance is dependent upon an environment where all employees understand what is expected and permitted and where corporate commitment to the proper standards of business conduct is unambiguous and is constantly, consistently reinforced. Such an environment requires more than a policy document such as a code of ethics. It requires frequent and effective communication regarding the standards and their application, as well as their underlying principles, so that decisions and conduct in areas not explicitly addressed by the code of ethics will, nonetheless, be consistent with those principles.

Integrating discussions of ethics issues and questions into existing company programs of orientation and of training and development affords a relatively low-cost, recurring opportunity for communication about the code and its application. Moreover, this continuing focus on ethical responsibilities can help to create an atmosphere within a company where employees understand that it is acceptable, even expected, that they will raise and participate in the resolution of questions regarding ethical practices.

Difficult ethics issues that confront a given company frequently confront other companies in the same

industry. Because some of these issues concern competitive practices, a company may be unwilling to take corrective action without assurances that others in the industry will as well. An example of such an issue is the gathering of competitors' intelligence. Very few firms in the defense industry (or other industries, for that matter) have promulgated standards of conduct to guide marketing and other personnel in this area.

Because of the absence of clear standards and because of the rewards and incentives to obtain competitors' intelligence, many firms may be at risk that employees will engage in unethical or even illegal practices. Should such practices of defense contractors come to public attention, the confidence and trust of the public and of the government would be further eroded. In order quickly and effectively to address this and other industry-wide issues, the Center offers the following additional recommendation:

RECOMMENDATION EIGHT: Trade associations serving defense contractors should be called upon to take the lead in drafting and implementing industry codes of ethics that would set minimum standards of acceptable conduct and provide guidelines for all their defense contractor members. In order to avoid restraint of trade accusations, industry-wide standards and enforcement mechanisms should be reviewed not only by the Department of Defense, but also by the Antitrust Division of the Department of Justice.

Although there are some inherent difficulties and limitations in industry-wide self-regulation, if self-regulatory activities are carefully circumscribed and monitored by the Department of Defense, they may provide an effective means of ensuring proper conduct by companies within the defense industry. The Securities and Exchange Commission has long recognized this, and it has leveraged its own effectiveness by mandating and monitoring self-regulatory actions by companies in the financial field.

Finally, the Center has encountered widespread concern among defense contractors regarding alleged unethical conduct of government officials and employees with whom the contractors deal. There seems to be considerable skepticism that all military and civilian personnel of the federal government are aware of, or in compliance with, the codes of ethics and standards of conduct that govern their own practices.

Without making a judgment on the validity of these concerns, the Ethics Resource Center urges the Commission to recommend that the Department of Defense, the Armed Services, and the Congress review the adequacy of standards of conduct that cover their own practices, as well as the effectiveness of communication and educational programs to ensure that the standards are understood.

We hope that these observations and recommendations will be useful to the Commission in preparing its final report to the President.

Sincerely,

GARY EDWARDS
Executive Director

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APPENDIX O

Report on Survey of Defense Contractors' Internal Audit Processes

Prepared by
PEAT, MARWICK, MITCHELL & CO.*

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission.

PEAT MARWICK

Peat, Marwick, Mitchell & Co.
1990 K Street, N.W.
Washington, D.C. 20006
202-223-9525

February 17, 1986

President's Blue Ribbon Commission
on Defense Management
736 Jackson Place, Northwest
Washington, D.C. 20006

Gentlemen:

Peat, Marwick, Mitchell & Co. has completed its engagement to conduct a Survey of Defense Contractors' Internal Audit Processes. Phases I, II, and III of the engagement were completed as reported in our status report to you dated December 20, 1985. The enclosed report completes our engagement and presents the results of the survey. The report contains an executive summary, a narrative evaluation of responses to the survey instrument, and a statistical summary of replies received.

Considering the extremely high response rate, and the quality of responses received, this was an extremely successful and meaningful survey. The companies surveyed responded in a timely fashion, and top company executives supported the survey. We were very pleased with the cooperation we received, and with the concern which the companies demonstrated over providing complete and responsive replies in this critical area of contract compliance monitoring.

We would be pleased to meet with Commission representatives to further discuss the survey and its results, or to answer any questions which you may have about the report. Peat Marwick is pleased to have had the opportunity to be of service to the Commission in performing its important assignment.

Very truly yours,

Peat, Marwick, Mitchell & Co.

Enclosure

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Military-industry contractual relationships have undergone a significant change in recent years. In today's climate, optimum compliance with government acquisition statutes and regulations is vital. Contractors' practices must comply, and the internal audit function is a valuable tool in monitoring practices and informing management of any needed corrective actions.

To assess the extent of such internal audit actions, a survey was conducted by soliciting replies from contractors that were substantially engaged in defense contract work. About 85 percent of the 250 business units surveyed responded. These respondents represented about $90 billion of annual government sales, involving more than 1,375,000 employees and reflecting almost 89 percent of the Department of Defense annual outlays for negotiated contracts in fiscal year (FY) 1985.

The survey replies reflected internal audits as being conducted at virtually all sites, with less than 50 respondents reporting a formal audit organization at their operating level. The majority of internal audits were performed by professional staff that were assigned to the corporate or group levels of management. In addition, about 25,000 hours of annual effort were provided by external professionals. There are indicators that more staffing is required and that it may be desirable to place additional internal audit staff at the operating levels. The use of external auditors is usually acceptable, but care needs to be exercised to ensure that the reliance placed on such audits is compatible with the company's objective for contract compliance.

The internal audit staffs appear to be professional and sufficiently objective and independent to perform effectively. There are indications that more formal training is needed in specific government-sensitive areas. Additionally, career paths for advancement are desirable to enhance the professionalism of the staff.

The independence of the audit function appears assured, with a caveat about potential excess audit response to management requests. The audit reports are addressed to sufficiently high levels of management, and follow-up procedures are appropriate to make the reports and the audit recommendations effective. However, responsibility for ensuring timely responses from auditees should be assigned to a high management level, not to the internal audit staffs.

With respect to detected irregularities or suspected violations of law, the replies reflect that these situations are generally handled in a forthcoming manner. However, some 42 respondents did not answer positively about reporting these cases to the government authorities.

The audit reports and working papers are reported as being available internally to all appropriate levels. The reports and working papers are also made available externally, but to a lesser degree with respect to government agencies.

The scope of internal audits has been significantly altered to encompass many government-sensitive areas. This appears to be a relatively recent change and there are indications of further augmentation in FY 1986. Although recognizing this favorable evolution and change of attitude to cover areas sensitive to government contracting, additional and more rapid enhancements are needed on the following matters:

Comparison of wage rates with external sources.

Effectiveness of controls over the authorization of work orders.

Clear definition and delineation of sensitive technical labor classifications.

Frequency of reviews of time-charging practices.

Use of budgets as a control device over the actual charging of costs.

More emphasis on the review of make-or-buy procedures and decisions.

Accountability, safeguarding, and use of government property.

More reviews of the efficacy of the cost-estimating systems.

Greater emphasis on a system approach, to ensure segregation of unallowable costs.

More reviews of data supporting reports and claims submitted to the government.

Enhancement of financial aspects of contract administration.

More evidence of the written documentation supporting communications and training provided to employees.

Need to consider establishing a hot line and an ombudsman reporting procedure.

It is evident from the questionnaire replies that the internal audit function has been expanding to cover government-sensitive areas. Some additional efforts appear warranted, as discussed above. Notwithstanding the very best efforts of defense contractors to fully comply with contract requirements, perfection can never be achieved. Consequently, a set of Criteria for Contract Compliance (CCC) is suggested in Concluding Remarks in Section IV of this report. The concept advanced is both practicable and equitable; it protects the government and the public to an optimum degree, and offers fair treatment to the contractor.

I. BACKGROUND

As one of its major tasks, the President's Blue Ribbon Commission on Defense Management inquired into the role played by defense contractors' internal audit processes as one means to ensure compliance with government acquisition statutes and regulations. The Commission engaged Peat, Marwick, Mitchell & Co. (Peat Marwick) to develop a questionnaire and conduct a survey of a significant number of defense contractors, in order to learn what their past internal audit practices have been and to appraise the extent of changes they plan for the future.

To place the results of this survey in a proper perspective, it is essential to understand the conditions and circumstances that form the background of the seemingly high incidence of contractor noncompliance and much-publicized fraud cases. In tracing Department of Defense (DoD) industry-government contractual relationships over the past many years, there is no intent to justify or pass judgments on either past or current practices. Instead, such history is presented solely to set the background for today's strong emphasis on what is characterized as fraud and white-collar crime in the defense contract environment.

In the late 1930s, military contracts began using the cost of contract performance as a major factor in establishing a fair and reasonable price. During World War II, virtually all Army and Navy weaponry was acquired by means of such cost-based contracts, principally cost-plus-fixed fee and fixed-price redeterminable contracts. This great reliance on the cost of contract performance, which continues up to the present time, made it essential that uniform rules and standards be set to provide the necessary benchmarks for establishing the composition of the "costs" of contract performance.

Beginning in the 1940s with Treasury Decision (TD) 5000, the government issued cost principles to industry. Today, the Federal Acquisition Regulations (FAR) provide criteria for recognizing costs that are allowable and those that are unallowable. The Cost Accounting Standards (CAS), promulgated under P.L. 91-379, provide formal guidance as to the measurement of costs and the assignment of costs to final cost objectives, or the allocation of costs to contracts. In addition, these regulations provide for uniformity and consistency in the manner that contractors estimate, accumulate, and report costs incurred in the performance of government contracts.

Throughout these more than 40 years, contractors' accounting practices were varied. Starting with little or no controls or consistency, external discipline was gradually introduced, primarily as a result of government surveillance and the issuance of regulations. The policies, procedures, and systems of internal controls instituted by contractors during most of this period, however, were usually directed toward the overall financial integrity of the company; that is, the primary concerns of the company dealt with preserving the assets, minimizing liabilities, and earning a net profit for the owners. Relatively little attention was given to the assignment or allocation of costs to projects or contracts. Neither the internal audit function, where one existed, nor the annual financial audit performed by the company's independent CPAs, provided much surveillance over the cost distribution methodology employed within a company's projects and contracts.

Similarly, there was only a modest effort exercised by contractors in ensuring that claims submitted to the government were free of errors and did not include any unallowable costs.

In this kind of environment, government auditors and contracting officers often detected errors in contractors' claims. Costs were disallowed, overhead allocations were challenged, and cost disputes were not uncommon. In a number of instances, the circumstances surrounding some of the contractor claims made it necessary to refer the matter for investigation. All too often, these referrals were not investigated and even more rarely were there any prosecutions. This condition was highlighted in a 1981 GAO report which stated that two-thirds of all fraud cases referred to the Department of Justice (DOJ) for criminal actions were declined. The majority of the cases were declined because DOJ did not have adequate resources to pursue prosecution, not necessarily because there was insufficient evidence to conclude that a fraud may have been committed.

As a result of the somewhat lax controls exercised by contractors and the lack of government prosecution of suspected wrongdoings, government auditors and contracting officers usually resolved the many costing problems through administrative procedures. These administrative procedures usually did not obtain effective remedial actions by contractors. The lack of positive measures, financial or otherwise, did not provide incentives for contractor corrective measures. The attitude seemed to be that "if the auditors find it, they will disallow the cost." This same attitude was reflected in other contractor practices in such sensitive areas as employee time-keeping procedures and the preparation of bids and proposals submitted to the government.

In about 1980, the government began to tighten its surveillance and more actively investigate and prosecute cases where wrongdoing was detected. This government effort was somewhat unexpected and contractors soon found that it was no longer "business as usual." Where contractor management was not exercising due care in charging and claiming costs under government contracts, the instances were no longer settled by negotiated financial restitution. As a result, many cases began to be investigated and prosecuted, and companies were suspended and debarred when, heretofore, the same or similar practices resulted only in financial adjustments.

It is at this time, probably at the peak of a dynamically changing environment, that the survey of Defense Contractors' Internal Audit Processes was conducted. Through this specially designed questionnaire, we intended to assess the role that the internal audit function has performed, and can perform, in ensuring that contractors are in compliance with government statutes and regulations.

II. CONCEPTUAL FRAMEWORK

For purposes of this survey, the internal audit function has been defined to include any regular 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. The examinations may be conducted by fully dedicated employees, by company ad hoc groups, or by specially engaged external professional organizations. The term does not include routine operational activities performed in conjunction with day-to-day functions such as operating and accounting controls, technical inspections, and other normal supervisory efforts; nor does it include the regular annual financial audits performed by a company's independent CPAs.

Fundamental to an effective internal audit function are operational policies and procedures, and an organization with adequate checks and balances among the various activities in order to effectively implement the company's business objectives. The internal audit function performs surveillance over such systems and informs management of system success or failure.

Policies are statements that express management's decisions for attaining a company's business objectives. They include basic decisions promulgated at the highest level of management; are usually supplemented by top managers; and are further implemented and reduced to operational policies at lower management levels.

Procedures implement a company's policies by prescribing directions for performing tasks or functions in terms of what to do; who will do it; how to do it; and when, where, and why it is done. These procedural instructions are generally contained in handbooks, manuals, and procedural memorandums.

A well-managed company provides for systems of internal controls in the organizational alignment of the many tasks and functions that need to be performed to effectively carry out the enunciated policies and procedures. A system of internal controls comprises all coordinated methods and measures adopted to safeguard the company's resources, to ensure the accuracy and reliability of its accounting and cost data, to promote operational efficiency, and to ensure adherence to established management policies and procedures. A satisfactory system of internal controls includes a plan or organization that provides for delegation of authority and segregation of functional responsibilities by departments or individual employees. Additionally, the personnel assigned the various responsibilities must have the necessary qualifications to perform satisfactorily.

A competent internal audit staff that informs management whether company policies are being effectively implemented provides an additional and a very significant internal control. Where such a staff is well-trained in the many and varied requirements of government acquisition rules and regulations, the internal audit function can be most effectively used to ensure that the company's practices, procedures, and policies are in conformance with those government requirements.

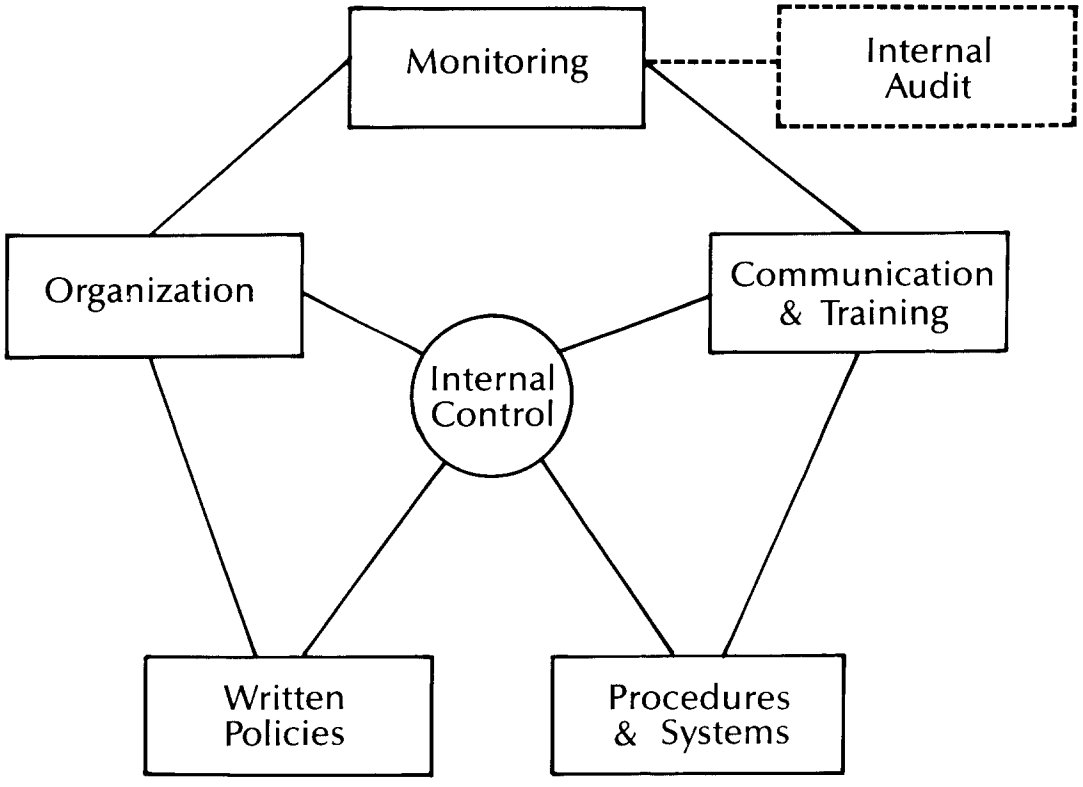
This survey questionnaire was specifically designed to evaluate the extent that the internal audit function actually performed in this somewhat more specialized area of government contract operations. It was anticipated that the replies to the questionnaire would also reflect changes that respondents were planning in

order to make this function a more effective tool for ensuring compliance and avoiding financial and other more drastic sanctions that may be levied where irregularities occur.

The foregoing briefly outlines the entire system and philosophy of management in a well-conceived organization. The extent of compliance with those statutory and regulatory requirements needed in the performance of government contracts depends on the effectiveness and efficiency of the entire system. Internal audit is one means for performing a critical function of the system; namely, that of monitoring. Other surveillance methods are also often utilized: for example, statistical reporting, management reviews and reports, a company hot line, and an ombudsman for referrals.

A system of adequate contract compliance rests on the efficacy of all its component parts, i.e., issuance of needed policies, effective procedures, sound organization, communications to all needed levels, and effective monitoring. Such a system can be portrayed by the following figure:

Contract Compliance Framework



III. CONDUCT OF SURVEY

The survey was conducted exclusively by written questionnaires which were mailed to selected contractor organizations that had performed an appreciable amount of government contract work in recent years. More than one segment was solicited within the same corporate entity, depending on the extent of government contract work performed. In some instances, because of the significant work performed company-wide, the corporate home office may have received a questionnaire independent of, but in addition to, the several business segments of the company.

Each segment solicited was informed that full anonymity of the respondents would be observed. Survey procedures embodied appropriate safeguards so that the replies could not be attributed to the respondents by Peat Marwick, the President's Blue Ribbon Commission, or the law firm of Hogan & Hartson, which controlled the replies to ensure such nonattribution.

The mailing list for the questionnaire was designed to obtain a sample size that could be reasonably evaluated in the constricted time frame available for the survey. At the same time, it was essential to obtain information from those business segments that made up a large and significant portion of the work performed by the private sector under negotiated contracts with the Department of Defense. To achieve both these objectives, a list of government contractors was obtained from the Defense Contract Audit Agency (DCAA). This list contained all major defense contractors, so designated by DCAA, excluding colleges, universities, and government-owned-contractor-operated (GOCO) plants. DCAA designates major contractors as those contractor locations where DCAA maintains a cadre of auditors on a full-time basis. These are called DCAA resident offices or DCAA sub-offices.

These criteria produced a list of 250 contractor sites, and a questionnaire was mailed to each.

A cutoff date of January 27, 1986, was set for survey responses, and we achieved a response of over 85 percent. We estimate that the aggregate annual government contract work load for the responding sites exceeded $90 billion, which is more than 70 percent of the FY 1985 DoD annual negotiated procurement volume. The responses also reflect about 89 percent of the FY 1985 DoD annual outlays for negotiated contract work. Some of the respondents may have included contract work for NASA and other non-defense agencies, but the extent is deemed minimal and does not detract from the high percentage of DoD annual contract expenditures included in this survey.

The questionnaire was designed to achieve several objectives:

- To learn the extent to which the internal audit function has been used in the past at these major defense contractor sites.
- If the internal audit function has been utilized in the past, to determine whether it covered those policies, practices, and procedures that are peculiar, pertinent, and sensitive to the performance of government contracts.
- To the extent that internal audits were performed in the past or are planned for the future, to determine how effective those audits are likely to be, considering that the effectiveness of an internal audit function depends on:
  - management's motivation for its establishment;

the extent of independence from internal and external influences;
the extent of responsibility and delegated authority;
its status in the organization; and
the sufficiency and professional level of personnel resources made available to perform the assigned functions.

In light of the recent great emphasis on disclosures of irregularities by government contractors, to identify the extent to which the internal audit function plans to expand its FY 1986 scope of review in areas that are government contract sensitive.

To learn the extent to which employees and internal auditors have been trained in government statutes and regulations with which their employers are required to comply, such as FAR, CAS, and the Truth in Negotiations Act (P.L. 87-653).

IV. ANALYSIS OF SURVEY REPLIES

In most instances, the responding business segments reported annual government sales that were well over $50 million. Only 4 percent (9 respondents) reported lower annual volume, whereas 37 percent (80 respondents) reported sales in excess of $500 million for the year. Similarly, the segments generally reported that their government sales were more than 50 percent of their total business in over 80 percent of the cases, with almost 29 percent showing that government activities constituted more than 95 percent of their total annual revenue.

The survey results and all observations relate only to businesses that are substantially engaged in DoD contracts. The results are not necessarily equally appropriate to smaller government contractors. With respect to the internal audit function, it is more than likely that the smaller companies have far less such activity and many may have none at all.

The questionnaire and the tabulation of the replies were designed to assess the varying degrees of internal audit performance in a variety of groupings. For example, the replies can reflect the differences, if any, at those contractor sites where the preponderance of government work is performed on a firm fixed-price basis, as contrasted with locations preponderantly engaged in cost-reimbursement contracts. The data can reflect practices where both firm fixed-price and cost-type contracts are performed to a significant degree.

Similarly, analyses can be made of the practices at sites that are predominately involved in government contract work, as contrasted with locations where a substantial amount of commercial work is also performed along with the government work. Another potential analysis would be to compare the responses from different segments of the private sector, e.g., primarily manufacturing operations, construction, research and development, and services.

Although the analyses identified above might yield interesting results, they probably would not really affect the primary purpose of the survey, which is to assess the role that internal audits can play in ensuring contractor compliance with government statutes and regulations as they affect the procurement process. Admittedly, some of these requirements are more rigid, and more surveillance is required for contracts priced on a cost basis than for firm fixed-price contracts. Nonetheless, the pricing of the latter types of contract is equally sensitive in many respects, and disclosures of wrongdoing, prosecution of fraud, implementation of defective pricing adjustments, and overpricing of spare parts are not confined to cost-based contracts.

On the other hand, one might expect that the degree of contractor attention, including the performance of internal audits, might vary according to the annual volume of government work. The questionnaire replies were therefore tabulated to permit an analysis by six strata of annual government volume. However, the first analysis of data was made considering only three strata, i.e., under $200 million, $201 to $500 million, and over $500 million. The observations and conclusions drawn from this analysis did not vary to any significant degree nor in any substantive way from the analysis of the replies from the total sample. Consequently, the tabulated questionnaire results are given at the end of this section, while the section itself addresses the total universe, relative to the following subject matter:

- Extent of Internal Auditing.
- Profile of the Internal Audit Staff.

- Independence and Effectiveness of the Internal Audit Function.
- Level of Performance in Government-Sensitive Areas:
  - Labor Management,
  - Material Management,
  - Estimating,
  - Cost Accounting Standards,
  - Costing and Reporting,
  - Contract Administration, and
  - Employee Training.
- Other:
  - Hot Line,
  - Ombudsman.
- Concluding Remarks.

EXTENT OF INTERNAL AUDITING

Some 155 respondents (72 percent) reported having a formal internal audit function, whereas 60 units reported no such activity at their reporting level. However, with 164 replies showing the function to be at a higher management level (i.e., group or corporate), and approximately 25,000 hours being applied by outside professionals, it may reasonably be concluded that virtually all reporting segments reflect some degree of auditing which is in addition to the annual financial audits performed by outside CPAs. It is noteworthy that less than 50 segments report formal internal audit groups at their operating levels; the remaining respondents are audited by group-level or corporate-level audit staffs.

Organizationally, the internal audit function reports to a sufficiently high level in the management structure to ensure independence and objectivity, with 60 percent reporting to the chief financial officer or higher (board of directors, audit committee, etc.), and an additional 16 percent reporting to the controller level. While the remaining 24 percent report to a variety of other echelons, these, too, generally reflect appropriate levels to ensure integrity of the audit function.

Many respondents (70 percent) stated that they rely on their outside auditors and government auditors for audit coverage, either fully or to supplement their own internal audits. Reliance such as this may be inappropriate because most external CPA audits do not normally incorporate coverage of areas that are so critical to government contract compliance. These audits deal primarily with a company's financial reports, which reflect total operating results, and with the status of assets and liabilities at the financial reporting date. Government audits, on the other hand, are designed to assess the assignment of costs of specific cost objectives. However, too much reliance on government audits for compliance could also place a company in jeopardy. This has become evident from investigations that have been initiated in recent years as a direct result of referrals stemming from government audit findings.

With regard to the size of the internal audit staff, 58 percent of the reporting units have fewer than 10 auditors, and only 40 respondents have more than 25. Although an assessment of the sufficiency of qualified staff is subjective and cannot be made with a high degree of precision, the internal audit staffing levels as reported appear to need enhancement because of the following indicators:

- Fourteen segments with government annual volume of $201 to $400 million reported internal audit staffs of three or fewer professionals.
- Nineteen other segments in the same dollar range reported internal audit staffing of 10 or fewer professionals.
- Eight segments in the $500 million volume category have 10 or fewer internal auditors.
- Almost 65 percent of the units reporting state that their internal audit staffs do not complete a full cycle of all auditable areas within a three-year period.

When considering an overall volume of $90 billion of annual government sales involving more than 1,375,000 employees, the average size of internal audit staffing appears to need augmentation.

As discussed later, the internal audit organizations are now extending the scope of their reviews from traditional financial audits to audits which include management and financial areas that are particularly germane to government contract compliance requirements.

All of these indicators suggest a need for staffing increases, either permanently or for a two-to-three-year period, as necessary, to achieve a greater emphasis in government-sensitive areas and better contract compliance on a system-wide basis. Concomitant with staff increases, there is a need to assess whether internal audit personnel should be assigned locally to the operating segments in instances where all internal audits are now being performed by personnel from the group or corporate headquarters offices.

PROFILE OF THE INTERNAL AUDIT STAFF

The questionnaire replies portray a satisfactory level of professional background for the internal audit staff. For example, 85 percent of the respondents indicated that the internal audit staff had accounting expertise. Knowledge of electronic data processing represented another noteworthy internal audit skill. Additionally, 87 percent of the respondents reported that internal auditors were required to comply with the standards for the professional practice of internal auditing as issued by the Institute of Internal Auditors.

With regard to specialized formal training of the professional staff, there are indicators that areas which are highly critical to compliance with government statutes and regulations are part of recently developed training curriculums, i.e., CAS, FAR, Truth in Negotiations Act, and fraud detection. Although formal training in these areas is apparently under way, the responses did reflect that considerably more emphasis is needed, probably on an expedited basis, if the staffs are to be fully effective in monitoring the pertinent policies and practices. The survey showed that only 52 segments had provided training in all four sensitive areas mentioned above. At the other end of the spectrum, 56 segments reported no such specialized training at all. Of the four areas, a relatively lower incidence of training was reported for the Truth in Negotiations Act, which is directly related to the efficacy and adequacy of a company's system for estimating costs. The need for greater training in this area is manifested by the apparent lack of audit coverage of estimating systems, which is discussed in a later section of this report. A summary observation of training needs is that all four areas—CAS, FAR, Truth in Negotiations Act, and fraud detection—require greater coverage, with particular emphasis on cost-estimating systems.

To round out the professionalism of the internal audit staff, companies should provide attractive career paths for internal auditors. Part of such a program would be a defined tour of duty, with career opportunities in the management structure of the organization. The survey responses suggest that such a career path has generally not been established.

INDEPENDENCE AND EFFECTIVENESS OF THE INTERNAL AUDIT FUNCTION

The basis for designing and establishing audit programs, as reported in response to a series of survey questions, appears good, in that the scope and scheduling of the audits are established by the audit group or by a higher level of management. This procedure provides an optimum degree of independence and

objectivity. Decisions relative to what will be audited, and how and when audits are to be performed, are largely divorced from the functional activities that are subject to audits, with one potential exception. Almost all replies indicated that the scope of audits is responsive to "management requests," and such reaction is both proper and laudable. However, the internal audit group must safeguard against the potential of applying all available internal audit resources to management requests, thus negating the independence and objectivity of the function because of its inability to audit other areas that may have critical need of surveillance.

Internal audits were reported to be management oriented as well as financial, and the audit reports are addressed to sufficiently high levels of management for appropriate action. Additionally, auditees are required to respond in a timely manner to reported findings and recommendations. To further enhance the effectiveness of the audit reports, most survey responses reflected that disagreements with audit reports are resolved at a management level sufficiently high to promote an independent and objective decision on the merits of any dispute.

Follow-up actions on audit reports are also generally prescribed, but, in responding to this question, many units indicated that the internal audit group was assigned follow-up responsibilities. Such assignment is satisfactory for assessing the extent of remedial action taken by functional managers. However, the procedures should also provide for policing the corrective actions. This policy should be implemented by a level of authority above the functional manager, e.g., chief executive officer, chief financial officer, chief operating official. At such levels, the follow-up procedures are likely to be more effective in getting timely action on matters requiring attention.

With regard to detected irregularities and suspected violations of laws, the summary replies indicated that these situations are generally handled in a forthcoming manner, pursued fully and timely, and ultimately reported to appropriate levels of authority for disposition. One significant exception was noted. In 39 responses, where violations were reported to in-house counsel and/or external counsel, there was no indication that the violations were reported to any government authority. These 39 replies did suggest that even after examining internal referrals which proved to be violations, they would not be reported to government authorities. Additionally, we noted three instances where reports were made neither to counsel(s) nor to government authorities. It is conceivable that these responses did not intend to portray a failure to report such instances; however, to the extent that companies do follow such a policy, there is an urgent need for them to reconsider their position.

Regarding the availability of the final internal audit reports and supporting working papers, survey responses reflected appropriate access to all levels within the company. As might be expected, both reports and working papers were generally available to outside CPA firms. A surprising percentage of replies reflected availability to DCAA as well—67 percent for audit reports and 45 percent for working papers. The reports and working papers were also reported as available to other government agencies, but to a much more limited extent.

LEVEL OF PERFORMANCE IN GOVERNMENT-SENSITIVE AREAS

The primary thrust of the survey was to assess the role of the internal audit function as a tool in achieving contractor compliance with government regulations and statutes. A complete and comprehensive set of policies and procedures and an organizational structure that optimizes the checks and balances, thus providing an effective system of internal control, are essential to achieving contract

compliance. The internal audit function represents a monitoring device that informs management how effectively the entire system is functioning. Accordingly, the survey questionnaire was designed to obtain the extent of auditing of specific practices (policies and procedures) that are government contract oriented. Many of these areas usually require more penetrating evaluations, performed more frequently, than those that are essential to determine acceptability of the more traditional audit areas dealing with revenue, expenses, assets, and liabilities. The responses in this regard relate to Section IV of the questionnaire, and cover questions 30 through 136.

As a summary observation, there is evidence that major defense contractors have enhanced the internal audit function to an appreciable extent in providing coverage for government-sensitive areas. The survey responses show that many of these areas have been covered in recent audits, and audit plans clearly evidence a further augmentation for FY 1986. This change of attitude can be reflected best by the following two excerpts from contractors' statements regarding internal audit coverage.

One company reported:

> The focus of most internal audit generally is business systems and functions. As a result of this historical role and the department's limited expertise in areas relating exclusively to government contracting, such as government cost accounting standards or subcontract administration, the Internal Audit Department has performed relatively few audits that are contract specific or otherwise relate specifically to a DoD program.
>
> [The Company] has recognized that in order to respond fully to the management control weaknesses recently identified both from outside and within the Company, it must expand the role and technical expertise of its Internal Audit Department to include greater oversight of contract and program related controls. The Company believes that the new internal audit initiatives detailed below, in conjunction with other initiatives . . . will provide an adequate mechanism to monitor and control compliance with federal statutory, regulatory, and contract requirements.
>
> Nevertheless, [the Company] is committed to developing and institutionalizing an internal audit function for all aspects of contract compliance. This is an audit responsibility far outside the traditional role of a corporate internal audit department, and [the Company] has not yet determined which organization entity should fulfill this function.

Another company stated:

> The reporting unit has a DCAA residency and is under AFPRO administrative cognizance. It has successfully passed Air Force Contract Management Division Contract Operational Review audits. For these reasons, no formal Internal Audit reviews on the matters addressed in this section were considered to be necessary or cost-effective in the past.
>
> During 1985, the Company retained outside legal and public accounting firms to conduct an independent and comprehensive compliance review on the reporting unit and other units engaged in business with the government. This review encompassed the functional areas covered in this section. While no major deficiencies were found, the compliance review report did make several recommendations on improving policies and procedures. A corrective action plan, embracing these recommendations, is under way. The Company Internal Audit Group is planning reviews during 1986 at the reporting unit as indicated in the following pages to assure the recommendations are implemented and all functional areas continue to perform in a satisfactory manner.

Although the total internal audit effort shows signs of appreciable change from the traditional financial audit to one that encompasses the government-sensitive areas, there are indicators that more emphasis may be needed to attain an acceptable level of compliance with government requirements. Observations are provided in each major survey grouping.

LABOR MANAGEMENT

Validity of the Payroll (Questions 30-36)

The responses in this area generally reflected adequate coverage. However, only minor increases are planned in some significant areas such as controls over compensatory time, overtime authorizations, and fringe benefit payments. Particularly noteworthy is the fact that coverage of timekeeping and attendance areas was appreciably higher than that of other areas, and that these areas are expected to receive even greater attention in FY 1986.

Payroll Preparation and Payment (Questions 37-49)

The comments made in the prior section regarding adequacy of coverage are equally appropriate here. There is indicated emphasis, both past and for the future, on sensitive functions dealing with control of time cards, required approvals, appropriateness of charges, etc. With respect to comparing the company's wage scales with external sources, the coverage seems inadequate and there is no planned increase indicated. These comparisons relate to the reasonableness of pay rates, and failure to conduct them periodically may cause problems in light of the recent emphasis placed by the government on conducting formal reviews of contractors' compensation systems.

Labor Cost Distribution (Questions 60-65)

This is a highly sensitive area. It deals with procedures and controls over direct charging of work as well as charging of labor through intermediate cost objective, such as allocations from a variety of overhead account classifications, or from allocations of Independent Research and Development (IR&D) and Bid and Proposal (B&P) projects.

Not surprisingly, the internal audit coverage of labor cost distribution was reported as being significantly higher than that of any other audit area. Moreover, at least a 10 percent increase in audit coverage was reported as planned for 1986. However, to make a value assessment of coverage in the area, the number and quality of audits would need to be known. The need to repeatedly conduct examinations would suggest that a frequency of three times per year would be minimum for effective audit coverage. On such a basis, only 30 to 40 percent of the respondents had performed three or more tests during the last fiscal year. While the planned FY 1986 program showed greater emphasis, it is doubtful that even half of the business segments will achieve three or more scheduled audits during the next year.

Within the overall labor cost distribution function, certain sensitive areas did not seem to receive sufficient audit attention. These areas included, for example, the effectiveness of controls over the authorization of work orders, and the clear definition and delineation of work order authorizations. These have proven to be problem areas in the past, particularly with respect to contract project versus IR&D and B&P projects versus indirect technical labor charged to overhead accounts. With regard to the latter, i.e., indirect labor categories, the guidance and controls to identify the work classified as "downtime," or non-productive work, need considerable attention.

Conversely, there are indications of increased activity in conducting surprise floor checks of time-charging practices and in conducting employee interviews. This increased activity is desirable, and even essential, in light of the government's strong emphasis on the labor cost distribution area.

Labor Cost Controls (Questions 66-69)

The use of various management controls can be very effective to:

- validate incurred labor costs as charged to various account classifications, and

- provide indicators for possible errors or unauthorized practices.

Well-managed companies will periodically check actual labor costs with budgets for both program and cost center charges. Similar checks should be made in other labor-charging areas, e.g., IR&D and B&P costs.

The survey replies suggest a need for more internal audit coverage in these sensitive areas of labor cost controls. Although some respondents indicated increased activity in this area for FY 1986, almost half of the reporting segments did not show *any* planned audit activity of labor cost controls. On the other hand, 88 percent of the replies showed planned audits in FY 1986 that are designed to detect labor cost mischarging, thus reflecting recognition of the importance of the area.

Material Management (Questions 71-84)

Generally speaking, the replies in this area reflected adequate audit coverage, with some modest increases planned for FY 1986. However, we noted that certain sensitive areas need more audit emphasis. The following areas fall into this category:

- Review of make-or-buy practices.
- Accountability, safeguarding, and use of government-furnished property.

Reviews of Estimating Practices (Questions 92, 97-103)

The respondents reflected an appreciable level of audit interest in compliance with the Truth in Negotiations Act (P.L. 87-653), but did not show a comparable level of activity in reviewing the estimating system and practices. This would suggest that audits are being made to identify individual potential defective pricing situations rather than assess the estimating practices that are usually the root cause of defective pricing. Many companies use the internal audit function as a way of providing management with the means to ensure that proposals furnished to the government reflect cost data that are accurate, complete, and current by reviewing the efficacy of the cost-estimating function as a system. This approach can also be used to provide company officials with reasonable assurance for signing the Certificate of Current Cost and Pricing Data required by the Public Law.

Cost Accounting Standards (CAS) (Questions 104-109)

The survey replies indicated an acceptable level of audit in this area. With regard to compliance with CAS 405, which requires an identification of unallowable costs, a higher level of audits has been performed and the plans suggest a further increase during FY 1986. Other recent actions, both statutory and regulatory, have increased the number of cost items that are unallowable. In addition, sanctions and penalties are being added for those instances where unallowable costs are included in contractors' cost representations to the government. Consequently, companies need to modify existing practices to ensure that all unallowable costs are clearly defined and communicated to all appropriate employee levels. The system should also provide for identifying and segregating unallowable costs, as incurred, so that such costs will be excluded from cost representations made to the government. Finally, internal audit staffing should be increased to ensure, on an ongoing basis, that the system is functioning as designed.

Accuracy of Costing and Reporting (Questions 110-122)

Generally, the replies to questions in this category reflected a need for more surveillance. Contractors should consider some enhancement of the audit surveillance over the following sensitive areas:

- Clear definition and delineation of criteria for costing technical labor, e.g.,

contracts, IR&D and B&P projects, and overhead accounts.

- Audit review of the documentation and data supporting reports and related certifications on claims submitted to the government for progress payments, billings on public vouchers, hourly rate billings, and overhead representations.

Contract Administration (*Questions* 123-128)

In the area of contract financial management, the reported level of audit activities also reflected a need for enhancement. Although some audits have been reported for this function in the past, the audit plans for FY 1986 show little or no enhancement. Yet this area of management, if neglected, can be financially harmful to a company.

Employee Training

Adequate surveillance of management's communication to employees is reflected by the responses to questions in this area. However, it appears that insufficient attention is being given to formal documentation of training activities. This, in turn, suggests that the audit evaluation of actual practices may be weakened by deficiencies in the written evidence available. For example, files should be examined to ascertain that employees have provided written acknowledgement of their understanding of such important matters as the code of ethical practices, military security regulations, and timekeeping and labor-charging practices.

Ombudsman and Hot Line

The role of these two activities is closely related to the internal audit function. Where properly maintained by an organization, they provide an objective and independent avenue for information flow and are therefore part of a monitoring system. Like the internal audit function, they can make information available concerning the overall effectiveness of the company's management system and controls. The questionnaire responses in both these areas show very little recognition of the merits of either an ombudsman (20 percent) or a hotline (29 percent).

Both of these activities can enhance the effectiveness of the internal audit function because they provide independent leads that can be examined by auditors. In substance, the internal auditors' scope of review can be enlarged to cover areas that need special coverage, as disclosed by responsible leads stemming from the ombudsman or hotline communication facility.

CONCLUDING REMARKS

The survey portrays an increasing awareness on the part of major defense contractors that compliance with statutory and regulatory requirements needs to be practiced to a much greater extent than was true in the past. Contract compliance is critical and vital for those engaged in government work; to perform the required surveillance over contractors' practices, the internal audit function is playing an ever-increasing role. In fact, internal audit is now regarded by most major government contractors as an essential monitoring device. Consequently, the scope of the internal audit function has been significantly broadened to embrace those areas that are sensitive to government contracting. The survey results also suggest the need for enhancement of the function to more speedily emphasize certain aspects of the current plans and programs.

As described earlier in this report, the internal audit function cannot achieve optimum contract compliance on its own. Its effectiveness is dependent on a sound, comprehensive system of policies, procedures, organization, and communication, all of which

are consistent with government statutory and regulatory requirements.

A typical example and a vital factor in achieving contract compliance is a company statement of ethical practices that are expected of all employees. This company Code of Ethics should be issued as a formal document, clearly stating the company's policies and providing sanctions for violations. The implementation, in the form of procedures, should assign organizational responsibilities for conducting examinations, hearings, etc., for detecting violations, and the methods for imposing sanctions. These formal documents need to be disseminated to all personnel, including the newly employed. Moreover, there is a need for periodic acknowledgements by all personnel of their understanding of the Code of Ethics. The internal auditor would then periodically validate the above process, including the evidence that the practices are in place and in compliance with written policies and procedures.

Notwithstanding all efforts to use internal auditors more extensively and effectively, along with a continuing effort to keep the related policies, procedures, and organizational structure current, "full" or "perfect" compliance can never be achieved. Therefore, the measure of a contractor's compliance should consider appropriate criteria. In short, the following could be deemed acceptable criteria for contract compliance:

- The extent to which top management commitment to contract compliance is articulated and practiced.
- The efficacy of the organization's ongoing efforts as demonstrated by:
  - —written policies that are current, complete, and clear;
  - —procedures that are comprehensive and comprehensible at all need-to-know levels;
  - —policies and procedures that are in compliance with government requirements;
  - —an organization that produces an optimum degree of checks and balances;
  - —a trained cadre of professionals to monitor all the above; and
  - —an ombudsman and/or hotline procedure to augment the internal audit function.
- Prompt remedy of disclosed breaches.
- Prompt examination of all reported problem areas.
- Speedy, comprehensive, and vigorous pursuit, within the company, of suspected violations.
- Sanctions against violators, appropriate to the irregularity.
- Financial restitution and appropriate disclosures, made to the appropriate government officials.

In such an environment, the company will have made an optimum effort to be in compliance with requirements. Although it is recognized that violators of law or regulations cannot be given blanket immunity, it appears that the government's reaction could be along the following lines:

- An examination could be conducted of the actions taken by the contractor to evaluate whether:
  - —they are appropriate to the circumstances;
  - —the financial restitution offered is sufficient;
  - —the sanctions are sufficient;
  - —additional prosecution is appropriate; and
  - —the remedial actions taken are sufficient to minimize further similar exposures, thus safeguarding the government's interests in future operations.
- Based on the above evaluations, the government could conclude that the contractor has performed in an optimum manner to achieve contract compliance

and:

—suspension or debarment actions are not needed to preclude similar actions in the future;

—further investigation by the government is not warranted;

—if warranted, permit the contractor to conduct the investigation and report back to the government;

—disclosures or releases to the media are not appropriate because the actions are those of a prudent contractor; and

—the entire incident can be treated as a normal matter in the conduct of an ongoing business, not warranting any unusual problems, investigations, or disclosures outside the normal channels.

All the above is not to gainsay that where the violations by individuals warrant prosecution by government authorities, an investigation will be conducted and appropriate additional sanctions will be levied by the government.

TABULATED QUESTIONNAIRE RESULTS

The following pages contain the tabulated results of all questionnaires returned. All questions that required the respondents to circle one or more of the listed answers have been tabulated with both an actual response count and percentage of each response. The total counts vary slightly from question to question because some respondents chose not to answer some questions. Questions 27 through 136 each have two response tabulations. The first tabulation describes the level of current audit coverage, and the second tabulation describes the planned audit coverage for FY 1986. The "not applicable" responses for questions 27 through 136 have not been included in the percentage tabulations to provide a more accurate display of how often the companies that are affected in each of these areas perform internal audits.

The results of questions 6, 7, 9, and 13 provide the mean or average response (when a response was provided). The minimum and maximum responses to question 7 are also provided.

All questions have been weighted for the questionnaires being tabulated that represent more than one operating segment involved with DoD acquisitions. For example, if a company returned one questionnaire that represented five operating segments, that questionnaire is tabulated as if five duplicate questionnaires were returned.

Survey of Defense Contractors' Internal Audit Processes

QUESTION 1—*What is the type of business entity of which the reporting unit is a part?*

	Count	%
Corporation	215.0	99.5
Partnership	1.0	0.5
Proprietorship	0.0	0.0
Total	216.0	100.0

QUESTION 2—*What is your predominant type of government sales in the reporting unit?*

	Count	%
Manufacturing	132.0	61.1
Research and Development	35.0	16.2
Construction	6.0	2.8
Services	28.0	13.0
Other	15.0	6.9
Total	216.0	100.0

QUESTION 3—*What are the total annual sales of the reporting unit? (Government and Commercial)*

	Count	%
$11–$25 Million	0.0	0.0
$26–$50 Million	3.0	1.4
$51–$100 Million	11.0	5.1
$101–$200 Million	41.0	19.1
$201–$500 Million	56.0	26.0
Over $500 Million	103.0	47.9
No Sales	1.0	0.5
Total	215.0	100.0

QUESTION 4—*What are the total annual government sales of the reporting unit?*

	Count	%
$11–$25 Million	1.0	0.5
$26–$50 Million	8.0	3.7
$51–$100 Million	18.0	8.4
$101–$200 Million	44.0	20.5
$201–$500 Million	63.0	29.3
Over $500 Million	80.0	37.2
No Sales	1.0	0.5
Total	215.0	100.0

QUESTION 5—*What percentage of total sales of the reporting unit is government sales?*

	Count	%
Less Than 10%	7.0	3.3
10%–50%	33.0	15.4
51%–80%	55.0	25.7
81%–95%	58.0	27.1
Over 95%	61.0	28.5
Total	214.0	100.0

QUESTION 6—*What is the percentage of government sales by contract type?*

	Average %
Cost-Type	36.6
Fixed-Price Incentive	19.6
Firm Fixed Price	40.8
Hourly, Time and Material	2.2
Others	0.8
Total	100.0

QUESTION 7—*What is the approximate number of employees who usually charge?*

	Average	Minimum	Maximum
Direct	5,444	0	55,000
Indirect	2,430	0	29,785

QUESTION 8—*Do you maintain a formal internal audit organization staffed by fully dedicated employees?*

	Count	%
Yes	155.0	72.1
No	60.0	27.9
Total	215.0	100.0

QUESTION 9—*If internal audits are performed by specially engaged outside auditors or consultants, approximately how many hours are they engaged per year?*

Average	Minimum	Maximum	Total
272	0	4,000	25,168

QUESTION 10—*Where a formal organization within the company performs internal audits, at what organizational level are they assigned? (Circle all appropriate values.)*

	Count	%
Corporate	140.0	90.3
Group	24.0	15.5
Division or Segment	45.0	29.0
Other	5.0	3.2
Total Respondents	155.0	100.0
Total Responses	214.0	

QUESTION 11—*To whom does the audit group report?*

	Count	%
Audit Committee	24.0	15.5
Board of Directors	1.0	0.6
Chief Operating Officer	7.0	4.5
Chief Financial Officer	69.0	44.5
Controller	24.0	15.5
Other	30.0	19.4
Total	155.0	100.0

QUESTION 12—*How many professional personnel are there in the internal audit organization at your reporting unit?*

	Count	%
Zero	5.0	3.3
1–3	32.0	21.1
4–10	51.0	33.6
11–24	24.0	15.8
25–50	13.0	8.6
Over 50	27.0	17.8
Total	152.0	100.0

QUESTION 13—*In percentages, what are the primary professional backgrounds of the internal audit staff?*

	Average %
Accounting	81.1
Engineering	4.0
Methods Analysis	0.9
Electronic Data Processing	10.9
Other	3.1
Total	100.0

QUESTION 14—*At your reporting unit, what is the fixed term of duty for internal auditors?*

	Count	%
None	87.0	71.9
Less Than 1 Year	1.0	0.8
1 to 2 Years	2.0	1.7
More Than 2 Years	31.0	26.6
Not Applicable	32.0	—
Total	153.0	100.0

QUESTION 15—*Are internal auditors required to receive formal training (classroom or self-study) on Federal Acquisition Regulation (FAR) and Department of Defense FAR Supplement?*

	Count	%
Yes	78.0	52.0
No	72.0	48.0
Total	150.0	100.0

QUESTION 16—*Are internal auditors required to receive formal training (classroom or self-study) on Cost Accounting Standards?*

	Count	%
Yes	83.0	55.0
No	68.0	45.0
Total	151.0	100.0

QUESTION 17—*Are internal auditors required to receive formal training (classroom or self-study) on P.L. 87-653 "Truth in Negotiations Act"?*

	Count	%
Yes	60.0	40.3
No	89.0	59.7
Total	149.0	100.0

QUESTION 18—*Are internal auditors required to receive formal training (classroom or self-study) on detection of fraud?*

	Count	%
Yes	81.0	53.6
No	70.0	46.4
Total	151.0	100.0

QUESTION 19—*If you do not maintain a formal internal audit organization, what are the most significant reasons for not having such an organization at your reporting unit? (Circle all appropriate responses.)*

	Count	%
Corporate Group Level	58.0	92.1
Outside Auditor	30.0	47.6
Gov't Auditors	15.0	23.8
Business Segment Too Small	4.0	6.3
Other	9.0	14.3
Total Respondents	63.0	100.0
Total Responses	116.0	

QUESTION 20—*Is the internal audit staff required to comply with the standards for the professional practice of internal auditing issued by the Institute of Internal Auditors?*

	Count	%
Yes	162.0	86.6
No	25.0	13.4
Total	187.0	100.0

QUESTION 21—*How are areas of internal audit coverage established? (Circle all appropriate responses.)*

	Count	%
Audit Cycle Criteria	169.0	90.4
Indicate Prob. Areas	183.0	97.9
Coord. W/Outside Aud.	160.0	85.6
Sensitive Areas	168.0	89.9
Management Requests	186.0	99.5
Gov't Audit Focus	133.0	71.1
Pre-est. Mgt. Plan	95.0	50.8
Dollar Materiality	128.0	68.4
Follow-Up Prior Find	172.0	92.0
Pot. Cost Savings	113.0	60.4
Cons. W/Audit Committee	95.0	50.8
Obj. Risk Analysis	112.0	59.9
Other	25.0	13.4
Total Respondents	187.0	100.0
Total Responses	1739.0	

QUESTION 22—*Who finally determines the scope of the audit examinations?*

	Count	%
Internal Audit Group	44.0	23.5
Chief Financial Officer	35.0	18.7
Chief Operating Officer	2.0	1.1
Chief Executive Officer	9.0	4.8
Outside Auditor	0.0	0.0
Corp. Int. Audit Staff	68.0	36.4
Audit Committee	15.0	8.0
Other	14.0	7.5
Total	187.0	100.0

QUESTION 23—*Who finally determines the time schedule for each review?*

	Count	%
Internal Audit Group	76.0	40.6
Chief Financial Officer	14.0	7.5
Chief Operating Officer	2.0	1.1
Chief Executive Officer	2.0	1.1
Outside Auditor	0.0	0.0
Corp. Int. Audit Staff	75.0	40.1
Audit Committee	9.0	4.8
Other	9.0	4.8
Total	187.0	100.0

QUESTION 24—*When is the audit plan time schedule for each review coordinated with interested organizational elements?*

	Count	%
Before the Fiscal Year	22.0	11.8
Prior Specific Audit	156.0	83.9
Not At All	8.0	4.3
Total	186.0	100.0

QUESTION 25—*What cycle does the scope and schedule of review include to completely cover all designated areas?*

	Count	%
A One-Year Cycle	9.0	4.8
A Cycle of 1–3 Years	57.0	30.6
A Cycle of 3–5 Years	64.0	34.4
No Designated Period	56.0	30.1
Total	186.0	100.0

QUESTION 26—*How may the primary coverage of internal audits be generally characterized?*

	Count	%
Financial Audit Only	8.0	4.3
Mgt. Audits Only	1.0	0.5
Both Fin. and Mgt. Audit	177.0	95.2
Total	186.0	100.0

QUESTION 27—*What is the extent of the internal audit coverage in the validation of fixed assets, including the cost of internally manufactured assets and the provisions for depreciation?*

	Count	%
>3 During Last FY	6.0	2.9
1–2 During Last FY	125.0	61.3
0 Lst Yr–>1 Lst 3 FY	44.0	21.6
0 During Last 3 FY	29.0	14.2
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	128.0	64.0
No	72.0	36.0
N/A	3.0	—
Total	203.0	100.0

QUESTION 28—*What is the extent of the internal audit coverage in verifying the treatment of leases capitalized during the year by review and/or confirmation of lease terms?*

	Count	%
>3 During Last FY	6.0	3.3
1–2 During Last FY	99.0	55.0
0 Lst Yr–>1 Lst 3 FY	28.0	15.6
0 During Last 3 FY	47.0	26.1
Not Applicable	27.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	103.0	57.9
No	75.0	42.1
N/A	26.0	—
Total	204.0	100.0

QUESTION 29—*What is the extent of the internal audit coverage in verifying the classification treatment of leases accounted for as operating leases, by review and/or confirmation of lease terms?*

	Count	%
>3 During Last FY	6.0	3.1
1–2 During Last FY	108.0	56.3
0 Lst Yr–>1 Lst 3 FY	30.0	15.6
0 During Last 3 FY	48.0	25.0
Not Applicable	14.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	109.0	56.8
No	83.0	43.2
N/A	12.0	—
Total	204.0	100.0

QUESTION 30—*How often is a review conducted of procedures for determining personnel requirements, including budgeting and manloading schedules and controls?*

	Count	%
>3 During Last FY	16.0	8.9
1–2 During Last FY	55.0	30.6
0 Lst Yr–>1 Lst 3 FY	11.0	6.1
0 During Last 3 FY	98.0	54.4
Not Applicable	26.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	70.0	38.9
No	110.0	61.1
N/A	22.0	—
Total	202.0	100.0

QUESTION 31—*How often are reviews conducted of the policies and procedures for hiring, assigning and dismissing individuals?*

	Count	%
>3 During Last FY	3.0	1.5
1–2 During Last FY	62.0	31.6
0 Lst Yr–>1 Lst 3 FY	40.0	20.4
0 During Last 3 FY	91.0	46.4
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	79.0	40.5
No	116.0	59.5
N/A	9.0	—
Total	204.0	100.0

QUESTION 32—*How often are reviews conducted of the policies and procedures for establishing job categories and pay rates?*

	Count	%
>3 During Last FY	16.0	8.7
1–2 During Last FY	37.0	20.0
0 Lst Yr–>1 Lst 3 FY	34.0	18.4
0 During Last 3 FY	98.0	52.3
Not Applicable	22.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	73.0	39.2
No	112.0	60.2
N/A	19.0	—
Total	204.0	100.0

QUESTION 33—*How often are reviews conducted of the policies and procedures for establishing attendance and timekeeping records?*

	Count	%
>3 During Last FY	58.0	28.4
1–2 During Last FY	91.0	44.6
0 Lst Yr–>1 Lst 3 FY	38.0	18.6
0 During Last 3 FY	17.0	8.3
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	165.0	82.5
No	35.0	17.5
N/A	4.0	—
Total	204.0	100.0

QUESTION 34—*How often are reviews conducted of the policies and procedures for authorizing and controlling overtime and multi-shift operations?*

	Count	%
>3 During Last FY	30.0	14.9
1–2 During Last FY	79.0	39.3
0 Lst Yr–>1 Lst 3 FY	52.0	25.8
0 During Last 3 FY	40.0	19.9
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	141.0	70.9
No	58.0	29.1
N/A	5.0	—
Total	204.0	100.0

QUESTION 35—*How often are reviews conducted of the policies and procedures for authorizing and controlling compensatory time?*

	Count	%
>3 During Last FY	20.0	13.1
1–2 During Last FY	37.0	24.2
0 Lst Yr–> 1 Lst 3 FY	29.0	19.0
0 During Last 3 FY	67.0	43.8
Not Applicable	54.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	71.0	45.8
No	84.0	54.2
N/A	49.0	—
Total	204.0	100.0

QUESTION 36—*How often are reviews conducted of the policies and procedures for payroll allowances—fringe benefits?*

	Count	%
>3 During Last FY	10.0	5.1
1–2 During Last FY	76.0	39.0
0 Lst Yr–> 1 Lst 3 FY	46.0	23.6
0 During Last 3 FY	63.0	32.3
Not Applicable	12.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	101.0	51.8
No	94.0	48.2
N/A	9.0	—
Total	204.0	100.0

QUESTION 37—*How often have reviews been made of the internal controls in the following payroll preparation area—accuracy of basic records?*

	Count	%
>3 During Last FY	49.0	23.7
1–2 During Last FY	104.0	50.2
0 Lst Yr–> 1 Lst 3 FY	39.0	18.8
0 During Last 3 FY	15.0	7.2
Not Applicable	0.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	176.0	86.3
No	28.0	13.7
N/A	0.0	—
Total	204.0	100.0

QUESTION 38—*How often have reviews been made of the internal controls in the following payroll preparation area—reconciliations of attendance records with time tickets?*

	Count	%
>3 During Last FY	45.0	26.5
1–2 During Last FY	81.0	47.7
0 Lst Yr–> 1 Lst 3 FY	22.0	12.9
0 During Last 3 FY	22.0	12.9
Not Applicable	37.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	139.0	83.2
No	28.0	16.7
N/A	35.0	—
Total	202.0	100.0

QUESTION 39—*How often have reviews been made of the internal controls in the following payroll preparation area—acceptable method for adjusting time records?*

	Count	%
>3 During Last FY	53.0	25.7
1–2 During Last FY	103.0	50.0
0 Lst Yr–> 1 Lst 3 FY	39.0	18.9
0 During Last 3 FY	11.0	5.3
Not Applicable	1.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	176.0	86.7
No	27.0	13.3
N/A	1.0	—
Total	204.0	100.0

QUESTION 40—*How often have reviews been made of the internal controls in the following payroll preparation area—supervisory approvals for adjusting time records?*

	Count	%
>3 During Last FY	55.0	26.7
1–2 During Last FY	104.0	50.5
0 Lst Yr–> 1 Lst 3 FY	37.0	18.0
0 During Last 3 FY	10.0	4.9
Not Applicable	1.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	179.0	88.2
No	24.0	11.8
N/A	1.0	—
Total	204.0	100.0

QUESTION 41—*How often have reviews been made of the internal controls in the following payroll preparation area—pay rates supported by written authorization?*

	Count	%
>3 During Last FY	31.0	15.0
1–2 During Last FY	102.0	49.3
0 Lst Yr–> 1 Lst 3 FY	48.0	23.2
0 During Last 3 FY	26.0	12.6
Not Applicable	0.0	0.0
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	160.0	78.4
No	44.0	21.6
N/A	0.0	0.0
Total	204.0	100.0

QUESTION 42—*How often have reviews been made of the internal controls in the following payroll preparation area—testing of pay rates to union agreements where applicable?*

	Count	%
>3 During Last FY	4.0	2.7
1–2 During Last FY	76.0	51.3
0 Lst Yr–> 1 Lst 3 FY	35.0	23.7
0 During Last 3 FY	33.0	22.3
Not Applicable	58.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	98.0	67.1
No	48.0	32.9
N/A	55.0	—
Total	201.0	100.0

QUESTION 43—*How often have reviews been made of the internal controls in the following payroll preparation area—testing of pay rates/salaries to comparable area survey data?*

	Count	%
>3 During Last FY	18.0	10.5
1–2 During Last FY	31.0	18.2
0 Lst Yr–> 1 Lst 3 FY	21.0	12.4
0 During Last 3 FY	100.0	58.9
Not Applicable	37.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	58.0	33.1
No	117.0	66.9
N/A	28.0	—
Total	203.0	100.0

QUESTION 44—*How often have reviews been made of the internal controls in the following payroll preparation area—controls to prevent overpayments?*

	Count	%
>3 During Last FY	27.0	13.0
1–2 During Last FY	104.0	50.2
0 Lst Yr–> 1 Lst 3 FY	54.0	26.1
0 During Last 3 FY	22.0	10.6
Not Applicable	0.0	0.0
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	159.0	77.9
No	45.0	22.1
N/A	0.0	0.0
Total	204.0	100.0

QUESTION 45—*How often have reviews been made of the internal controls in the following payroll preparation area—disposition of unclaimed checks?*

	Count	%
>3 During Last FY	17.0	8.3
1–2 During Last FY	95.0	46.6
0 Lst Yr–> 1 Lst 3 FY	49.0	24.0
0 During Last 3 FY	43.0	21.1
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	149.0	74.1
No	52.0	25.9
N/A	3.0	—
Total	204.0	100.0

QUESTION 46—*How often have reviews been made of the following payroll preparation area —payroll records in agreement with personnel records?*

	Count	%
>3 During Last FY	25.0	12.2
1–2 During Last FY	108.0	52.7
0 Lst Yr–> 1 Lst 3 FY	50.0	24.4
0 During Last 3 FY	22.0	10.7
Not Applicable	2.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	155.0	77.1
No	46.0	22.9
N/A	3.0	—
Total	204.0	100.0

QUESTION 47—*How often have reviews been made in the following payroll preparation area —reconciliation of payroll with labor cost distribution?*

	Count	%
>3 During Last FY	40.0	19.4
1–2 During Last FY	98.0	47.5
0 Lst Yr–> 1 Lst 3 FY	48.0	23.3
0 During Last 3 FY	20.0	9.7
Not Applicable	1.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	165.0	81.3
No	38.0	18.7
N/A	1.0	—
Total	204.0	100.0

QUESTION 48—*How often have reviews been made of the internal controls in the following payroll preparation area—verifying payroll and related accounts accrued based on ultimate amounts paid?*

	Count	%
>3 During Last FY	28.0	13.7
1–2 During Last FY	97.0	47.3
0 Lst Yr–> 1 Lst 3 FY	44.0	21.5
0 During Last 3 FY	36.0	17.6
Not Applicable	2.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	150.0	74.6
No	51.0	25.4
N/A	2.0	—
Total	203.0	100.0

QUESTION 49—*How often have reviews been made of the internal controls in the following payroll preparation area—witnessing payroll payments on a surprise basis?*

	Count	%
>3 During Last FY	16.0	8.2
1–2 During Last FY	57.0	29.1
0 Lst Yr–> 1 Lst 3 FY	52.0	26.5
0 During Last 3 FY	71.0	36.2
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	104.0	54.2
No	88.0	45.8
N/A	11.0	—
Total	203.0	100.0

QUESTION 50—*How often have reviews been made of the internal controls in the labor cost distribution area—the clock/time cards are adequately controlled?*

	Count	%
>3 During Last FY	81.0	39.7
1–2 During Last FY	87.0	42.7
0 Lst Yr–> 1 Lst 3 FY	29.0	14.2
0 During Last 3 FY	7.0	3.4
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	184.0	92.5
No	15.0	7.5
N/A	3.0	—
Total	202.0	100.0

QUESTION 51—*How often have reviews been made of the internal controls in the labor cost distribution area—the clock/time cards are maintained on current basis?*

	Count	%
>3 During Last FY	83.0	40.7
1–2 During Last FY	89.0	43.6
0 Lst Yr–> 1 Lst 3 FY	27.0	13.2
0 During Last 3 FY	5.0	2.5
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	187.0	93.5
No	13.0	6.5
N/A	2.0	—
Total	202.0	100.0

QUESTION 52—*How often have reviews been made of the internal controls in the labor cost distribution area—the clock/time cards are signed by each employee?*

	Count	%
>3 During Last FY	79.0	39.1
1–2 During Last FY	89.0	44.1
0 Lst Yr–> 1 Lst 3 FY	27.0	13.4
0 During Last 3 FY	7.0	3.5
Not Applicable	4.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	186.0	93.9
No	12.0	6.1
N/A	4.0	—
Total	202.0	100.0

QUESTION 53—*How often have reviews been made of the internal controls in the labor cost distribution area—the time cards are prepared only in ink?*

	Count	%
>3 During Last FY	81.0	40.3
1–2 During Last FY	86.0	42.8
0 Lst Yr–> 1 Lst 3 FY	25.0	12.4
0 During Last 3 FY	9.0	4.5
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	189.0	95.9
No	8.0	4.1
N/A	5.0	—
Total	202.0	100.0

QUESTION 54—*How often have reviews been made of the internal controls in the labor cost distribution area—the clock/time cards are approved by the responsible supervisor?*

	Count	%
>3 During Last FY	82.0	39.8
1–2 During Last FY	88.0	42.7
0 Lst Yr–> 1 Lst 3 FY	27.0	13.1
0 During Last 3 FY	9.0	4.4
Not Applicable	1.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	190.0	94.5
No	11.0	5.5
N/A	1.0	—
Total	202.0	100.0

QUESTION 55—*How often have reviews been made of the internal controls in the labor cost distribution area—all changes made have documented reasons for the change (no "white outs")?*

	Count	%
>3 During Last FY	79.0	38.5
1–2 During Last FY	82.0	40.0
0 Lst Yr–> 1 Lst 3 FY	29.0	14.1
0 During Last 3 FY	15.0	7.3
Not Applicable	2.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	187.0	94.0
No	12.0	6.0
N/A	3.0	—
Total	202.0	100.0

QUESTION 56—*How often have reviews been made of the internal controls in the labor cost distribution area—all changes are signed or initialed by employee and by responsible supervisor?*

	Count	%
>3 During Last FY	79.0	38.7
1–2 During Last FY	88.0	43.1
0 Lst Yr–> 1 Lst 3 FY	27.0	13.2
0 During Last 3 FY	10.0	4.9
Not Applicable	2.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	188.0	94.5
No	11.0	5.5
N/A	2.0	—
Total	201.0	100.0

QUESTION 57—*How often have reviews been made of the internal controls in the labor cost distribution area—individuals have advice and knowledge of job or account authorization on which they are working?*

	Count	%
>3 During Last FY	81.0	39.7
1–2 During Last FY	92.0	45.1
0 Lst Yr–> 1 Lst 3 FY	21.0	10.3
0 During Last 3 FY	10.0	4.9
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	182.0	90.5
No	19.0	9.5
N/A	1.0	—
Total	202.0	100.0

QUESTION 58—*How often have reviews been made of the internal controls in the labor cost distribution area—all work orders are issued in writing?*

	Count	%
>3 During Last FY	60.0	31.1
1–2 During Last FY	79.0	40.9
0 Lst Yr–> 1 Lst 3 FY	22.0	11.4
0 During Last 3 FY	32.0	16.6
Not Applicable	14.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	152.0	80.4
No	37.0	19.6
N/A	13.0	—
Total	202.0	100.0

QUESTION 59—*How often have reviews been made of the internal controls in the labor cost distribution area—all work orders are adequately controlled?*

	Count	%
>3 During Last FY	56.0	29.3
1–2 During Last FY	71.0	37.2
0 Lst Yr–> 1 Lst 3 FY	23.0	12.0
0 During Last 3 FY	41.0	21.5
Not Applicable	15.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	140.0	74.9
No	47.0	25.1
N/A	14.0	—
Total	201.0	100.0

QUESTION 60—*How often have reviews been made of the internal controls in the labor cost distribution area—all overhead cost authorizations are clearly defined?*

	Count	%
>3 During Last FY	56.0	28.6
1–2 During Last FY	86.0	43.9
0 Lst Yr–> 1 Lst 3 FY	21.0	10.7
0 During Last 3 FY	33.0	16.8
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	168.0	86.2
No	27.0	13.8
N/A	7.0	—
Total	202.0	100.0

QUESTION 61—*How often have reviews been made of the internal controls in the labor cost distribution area—accounting provision is made for employee "downtime"?*

	Count	%
>3 During Last FY	55.0	29.4
1–2 During Last FY	74.0	39.6
0 Lst Yr–> 1 Lst 3 FY	20.0	10.7
0 During Last 3 FY	38.0	20.3
Not Applicable	20.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	150.0	81.5
No	34.0	18.5
N/A	18.0	—
Total	202.0	100.0

QUESTION 62—*How often have reviews been made of the internal controls in the labor cost distribution area—"downtime" charges are separately identified?*

	Count	%
>3 During Last FY	55.0	29.4
1–2 During Last FY	70.0	37.4
0 Lst Yr–> 1 Lst 3 FY	18.0	9.6
0 During Last 3 FY	44.0	23.5
Not Applicable	20.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	150.0	82.0
No	33.0	18.0
N/A	19.0	—
Total	202.0	100.0

QUESTION 63—*How often have reviews been made of the internal controls in the labor cost distribution area—cost authorizations conform with company policy in regard to direct and indirect labor categories?*

	Count	%
>3 During Last FY	74.0	36.8
1–2 During Last FY	79.0	39.3
0 Lst Yr–> 1 Lst 3 FY	19.0	9.4
0 During Last 3 FY	29.0	14.4
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	178.0	89.9
No	20.0	10.1
N/A	4.0	—
Total	202.0	100.0

QUESTION 64—*How often have reviews been made of the internal controls in the labor cost distribution area—periodic surprise physical floor checks are made of timekeeping and cost assignment practices?*

	Count	%
>3 During Last FY	92.0	45.1
1–2 During Last FY	72.0	35.3
0 Lst Yr–> 1 Lst 3 FY	10.0	4.9
0 During Last 3 FY	30.0	14.7
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	175.0	87.5
No	25.0	12.5
N/A	2.0	—
Total	202.0	100.0

QUESTION 65—*How often have reviews been made of the internal controls in the labor cost distribution area—interviews of selected employees are undertaken?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	80.0	40.6	Yes	176.0	91.2
1–2 During Last FY	78.0	39.6	No	17.0	8.8
0 Lst Yr–> 1 Lst 3 FY	13.0	6.6	N/A	9.0	—
0 During Last 3 FY	26.0	13.2	Total	202.0	100.0
Not Applicable	10.0	—			
Total	207.0	100.0			

QUESTION 66—*How often have reviews of labor costs been made and compared with various controls, such as, actual vs. budgets by cost center?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	43.0	21.4	Yes	122.0	61.6
1–2 During Last FY	59.0	29.4	No	76.0	38.4
0 Lst Yr–> 1 Lst 3 FY	18.0	8.9	N/A	4.0	—
0 During Last 3 FY	81.0	40.3	Total	202.0	100.0
Not Applicable	5.0	—			
Total	206.0	100.0			

QUESTION 67—*How often have reviews of labor costs been made and compared with various controls, such as, individual indirect charges vs. budget amounts?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	40.0	20.4	Yes	115.0	59.3
1–2 During Last FY	54.0	27.6	No	79.0	40.7
0 Lst Yr–> 1 Lst 3 FY	14.0	7.1	N/A	8.0	—
0 During Last 3 FY	88.0	44.9	Total	202.0	100.0
Not Applicable	10.0	—			
Total	206.0	100.0			

QUESTION 68—*How often have reviews of labor costs been made and compared with various controls, such as, Independent Research and Development (IR&D) and Bid and Proposal (B&P) actuals vs. budgets?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	44.0	22.3	Yes	130.0	66.3
1–2 During Last FY	70.0	35.5	No	66.0	33.7
0 Lst Yr–> 1 Lst 3 FY	11.0	5.6	N/A	7.0	—
0 During Last 3 FY	72.0	36.5	Total	203.0	100.0
Not Applicable	10.0	—			
Total	207.0	100.0			

QUESTION 69—*How often have reviews of labor costs been made and compared with various controls, such as, audits designed to detect labor cost mischarging?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	83.0	41.1	Yes	177.0	88.5
1–2 During Last FY	81.0	40.1	No	23.0	11.5
0 Lst Yr–> 1 Lst 3 FY	7.0	3.5	N/A	3.0	—
0 During Last 3 FY	31.0	15.3	Total	203.0	100.0
Not Applicable	4.0	—			
Total	206.0	100.0			

QUESTION 70—*How often have reviews been made of compensation plans requiring actuarial computations, including data submitted to actuaries and assumptions made?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	19.0	13.1	Yes	86.0	61.9
1–2 During Last FY	56.0	38.6	No	53.0	38.1
0 Lst Yr–> 1 Lst 3 FY	7.0	4.8	N/A	64.0	—
0 During Last 3 FY	63.0	43.4	Total	203.0	100.0
Not Applicable	61.0	—			
Total	206.0	100.0			

QUESTION 71—*How often have reviews been made of "make or buy" practices?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	21.0	11.2	Yes	96.0	51.3
1–2 During Last FY	56.0	29.9	No	91.0	48.7
0 Lst Yr–> 1 Lst 3 FY	27.0	14.4	N/A	17.0	—
0 During Last 3 FY	83.0	44.4	Total	204.0	100.0
Not Applicable	20.0	—			
Total	207.0	100.0			

QUESTION 72—*How often have reviews been made of the determination of material requirements?*

	Count	%		PLANNED FOR FISCAL YEAR 1986 Count	%
>3 During Last FY	27.0	14.0	Yes	115.0	60.2
1–2 During Last FY	80.0	41.7	No	75.0	39.3
0 Lst Yr–> 1 Lst 3 FY	27.0	14.0	N/A	14.0	—
0 During Last 3 FY	58.0	30.2	Total	204.0	100.0
Not Applicable	15.0	—			
Total	207.0	100.0			

QUESTION 73—*How often have reviews been made of the requisitioning procedures and authorities?*

	Count	%
>3 During Last FY	33.0	16.1
1–2 During Last FY	123.0	60.0
0 Lst Yr–> 1 Lst 3 FY	30.0	14.6
0 During Last 3 FY	19.0	9.3
Not Applicable	2.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	171.0	85.5
No	29.0	14.5
N/A	4.0	—
Total	204.0	100.0

QUESTION 74—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the current nature and adequacy of bidder's lists?*

	Count	%
>3 During Last FY	24.0	12.1
1–2 During Last FY	107.0	53.8
0 Lst Yr–> Lst 3 FY	33.0	16.6
0 During Last 3 FY	35.0	17.6
Not Applicable	8.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	142.0	72.8
No	53.0	27.2
N/A	8.0	—
Total	203.0	100.0

QUESTION 75—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the adequacy of the number of solicitations?*

	Count	%
>3 During Last FY	31.0	15.3
1–2 During Last FY	112.0	55.2
0 Lst Yr–> Lst 3 FY	39.0	19.2
0 During Last 3 FY	21.0	10.3
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	160.0	80.8
No	38.0	19.2
N/A	5.0	—
Total	203.0	100.0

QUESTION 76—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the evaluation of bids?*

	Count	%
>3 During Last FY	33.0	16.3
1–2 During Last FY	111.0	55.0
0 Lst Yr–> Lst 3 FY	40.0	19.8
0 During Last 3 FY	18.0	8.9
Not Applicable	5.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	162.0	81.8
No	36.0	18.2
N/A	5.0	—
Total	203.0	100.0

QUESTION 77—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the treatment of bids by affiliates or subsidiaries?*

	Count	%
>3 During Last FY	20.0	11.8
1–2 During Last FY	74.0	43.5
0 Lst Yr–> Lst 3 FY	32.0	18.8
0 During Last 3 FY	44.0	25.9
Not Applicable	37.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	115.0	68.9
No	53.0	31.5
N/A	34.0	—
Total	202.0	100.0

QUESTION 78—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the evaluation or audit of subcontracts?*

	Count	%
>3 During Last FY	54.0	27.1
1–2 During Last FY	74.0	37.2
0 Lst Yr–> Lst 3 FY	25.0	12.6
0 During Last 3 FY	46.0	23.1
Not Applicable	7.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	144.0	73.5
No	52.0	26.5
N/A	7.0	—
Total	203.0	100.0

QUESTION 79—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the proper coding of purchase orders to identify the cost objectives to be charged (direct, indirect, inventory, government-owned)?*

	Count	%
>3 During Last FY	37.0	18.4
1–2 During Last FY	108.0	53.7
0 Lst Yr–>1 Lst 3 FY	29.0	14.4
0 During Last 3 FY	27.0	13.4
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	160.0	80.8
No	38.0	19.2
N/A	5.0	—
Total	203.0	100.0

QUESTION 80—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to the compliance with written policies explaining what types of activities are prohibited?*

	Count	%
>3 During Last FY	37.0	18.3
1–2 During Last FY	108.0	53.5
0 Lst Yr–>1 Lst 3 FY	31.0	15.3
0 During Last 3 FY	26.0	12.9
Not Applicable	5.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	161.0	81.3
No	37.0	18.7
N/A	5.0	—
Total	203.0	100.0

QUESTION 81—*How often are reviews made of adequacy of the purchasing policies and procedures with regard to any indications of improprieties in the procurement function, e.g., "bid matching" on awards to subsidiaries and other divisions, lowest bidder always being the same, any evidence of other than arm's length transactions?*

	Count	%
>3 During Last FY	31.0	15.1
1–2 During Last FY	100.0	48.8
0 Lst Yr–>1 Lst 3 FY	38.0	18.5
0 During Last 3 FY	36.0	17.6
Not Applicable	2.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	156.0	78.0
No	44.0	22.0
N/A	3.0	—
Total	203.0	100.0

QUESTION 82—*How frequently are examinations made to determine that there are criteria and procedures for returning or reworking defective materials?*

	Count	%
>3 During Last FY	8.0	4.1
1–2 During Last FY	104.0	53.3
0 Lst Yr–>1 Lst 3 FY	32.0	16.4
0 During Last 3 FY	51.0	26.2
Not Applicable	12.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	129.0	67.2
No	63.0	32.8
N/A	10.0	—
Total	202.0	100.0

QUESTION 83—*How frequently are examinations made to determine that all government-owned materials are separately stored, physically safeguarded, and independently accounted for?*

	Count	%
>3 During Last FY	27.0	13.8
1–2 During Last FY	94.0	48.2
0 Lst Yr–>1 Lst 3 FY	25.0	12.8
0 During Last 3 FY	49.0	25.1
Not Applicable	12.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	129.0	67.9
No	61.0	32.1
N/A	11.0	—
Total	201.0	100.0

QUESTION 84—*How frequently are examinations made to determine that materials are properly priced consistent with the company's inventory pricing policies?*

	Count	%
>3 During Last FY	23.0	12.7
1–2 During Last FY	92.0	50.8
0 Lst Yr–>1 Lst 3 FY	20.0	11.0
0 During Last 3 FY	46.0	25.4
Not Applicable	26.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	132.0	74.2
No	46.0	25.8
N/A	23.0	—
Total	201.0	100.0

QUESTION 85—*How frequently are examinations made to determine that transfers between cost objectives (e.g., contracts, projects, indirect expense accounts) are properly controlled and priced?*

	Count	%
>3 During Last FY	28.0	14.3
1–2 During Last FY	95.0	48.5
0 Lst Yr–>1 Lst 3 FY	23.0	11.7
0 During Last 3 FY	50.0	25.5
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	151.0	78.6
No	41.0	21.4
N/A	9.0	—
Total	201.0	100.0

QUESTION 86—*How frequently are examinations made to determine that procedures for scrap, spoilage, and obsolescence are adequate and actually practiced?*

	Count	%
>3 During Last FY	20.0	10.7
1–2 During Last FY	95.0	50.8
0 Lst Yr–>1 Lst 3 FY	42.0	22.5
0 During Last 3 FY	30.0	16.0
Not Applicable	20.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	125.0	68.3
No	58.0	31.7
N/A	18.0	—
Total	201.0	100.0

QUESTION 87—*How frequently are examinations made to determine that the policies and procedures for costing intracompany transfers are consistent with government regulations?*

	Count	%
>3 During Last FY	21.0	11.1
1–2 During Last FY	71.0	37.6
0 Lst Yr–>1 Lst 3 FY	23.0	12.2
0 During Last 3 FY	74.0	39.1
Not Applicable	18.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	123.0	67.2
No	60.0	32.8
N/A	18.0	—
Total	201.0	100.0

QUESTION 88—*How frequently are examinations made to determine that where standard costs are used, variances are recorded properly and periodically adjusted in conformance with Cost Accounting Standard (CAS) 407 (use of standard cost for direct material and direct labor)?*

	Count	%
>3 During Last FY	9.0	10.8
1–2 During Last FY	27.0	32.5
0 Lst Yr–>1 Lst 3 FY	10.0	12.0
0 During Last 3 FY	37.0	44.6
Not Applicable	120.0	—
Total	203.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	53.0	60.9
No	34.0	39.1
N/A	116.0	—
Total	203.0	100.0

QUESTION 89—*How frequently are examinations made to determine that where catalog pricing is used for government contract work, the pertinent Federal Acquisition Regulation criteria are met?*

	Count	%
>3 During Last FY	29.0	23.6
1–2 During Last FY	35.0	28.5
0 Lst Yr–>1 Lst 3 FY	8.0	6.4
0 During Last 3 FY	51.0	41.5
Not Applicable	81.0	—
Total	204.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	65.0	50.9
No	55.0	41.1
N/A	82.0	—
Total	202.0	100.0

QUESTION 90—*How frequently are examinations made to determine that all government-related contract clauses are "flowed down" to subcontracts when appropriate?*

	Count	%
>3 During Last FY	49.0	25.0
1–2 During Last FY	49.0	25.0
0 Lst Yr–>1 Lst 3 FY	30.0	15.3
0 During Last 3 FY	68.0	34.7
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	116.0	60.1
No	77.0	39.9
N/A	11.0	—
Total	204.0	100.0

QUESTION 91—*How frequently are examinations made to determine that audits of subcontractors are made, or arranged to be made, when required?*

	Count	%
>3 During Last FY	51.0	26.0
1–2 During Last FY	72.0	36.7
0 Lst Yr–>1 Lst 3 FY	9.0	4.6
0 During Last 3 FY	64.0	32.7
Not Applicable	11.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	134.0	69.1
No	60.0	30.9
N/A	9.0	—
Total	203.0	100.0

QUESTION 92—*How often are reviews made for compliance with public law 87-653 as amended (the Truth in Negotiations Act, 10 U.S.C. Section 2306 (F))?*

	Count	%
>3 During Last FY	51.0	26.2
1–2 During Last FY	51.0	26.2
0 Lst Yr–>1 Lst 3 FY	25.0	12.7
0 During Last 3 FY	68.0	34.9
Not Applicable	12.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	140.0	72.9
No	52.0	27.1
N/A	11.0	—
Total	203.0	100.0

QUESTION 93—*How often have reviews been made of the various levels of controls to assure that materials comply with all specifications on incoming material inspections?*

	Count	%
>3 During Last FY	30.0	15.6
1–2 During Last FY	77.0	40.1
0 Lst Yr–>1 Lst 3 FY	34.0	17.7
0 During Last 3 FY	51.0	26.6
Not Applicable	15.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	126.0	66.7
No	63.0	33.3
N/A	14.0	—
Total	203.0	100.0

QUESTION 94—*How often have reviews been made of the various levels of controls to assure that materials comply with all specifications on production line inspections?*

	Count	%
>3 During Last FY	27.0	15.5
1–2 During Last FY	60.0	34.5
0 Lst Yr–>1 Lst 3 FY	8.0	4.6
0 During Last 3 FY	79.0	45.4
Not Applicable	33.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	96.0	56.1
No	75.0	43.9
N/A	32.0	—
Total	203.0	100.0

QUESTION 95—*How often have reviews been made of the various levels of controls to assure that materials comply with all specifications on final shipments to assure that contract specifications have been met and that there are no material substitutions?*

	Count	%
>3 During Last FY	25.0	14.1
1–2 During Last FY	51.0	28.8
0 Lst Yr–>1 Lst 3 FY	4.0	2.3
0 During Last 3 FY	97.0	54.8
Not Applicable	30.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	85.0	48.8
No	89.0	51.2
N/A	29.0	—
Total	203.0	100.0

QUESTION 96—*How often have reviews been made of the various levels of controls to assure that materials comply with all specifications on products made by subcontractors?*

	Count	%
>3 During Last FY	23.0	12.3
1–2 During Last FY	55.0	29.4
0 Lst Yr–>1 Lst 3 FY	16.0	8.6
0 During Last 3 FY	93.0	49.7
Not Applicable	19.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	99.0	53.2
No	87.0	46.8
N/A	17.0	—
Total	203.0	100.0

QUESTION 97—*How often have reviews been made of the effectiveness of the estimating manual or other volume of instructions that establishes policies and procedures for developing and submitting cost and pricing data for government contracts?*

	Count	%
>3 During Last FY	25.0	12.5
1–2 During Last FY	72.0	36.2
0 Lst Yr–>1 Lst 3 FY	20.0	10.1
0 During Last 3 FY	82.0	41.2
Not Applicable	8.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	118.0	59.9
No	79.0	40.1
N/A	8.0	—
Total	205.0	100.0

QUESTION 98—*How often have reviews been made to determine that all essential skill mixes of the company's organization are contributing to the bid proposals?*

	Count	%
>3 During Last FY	24.0	12.2
1–2 During Last FY	57.0	28.9
0 Lst Yr–>1 Lst 3 FY	14.0	7.1
0 During Last 3 FY	102.0	51.8
Not Applicable	10.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	107.0	54.9
No	88.0	45.1
N/A	9.0	—
Total	204.0	100.0

QUESTION 99—*How often are reviews made to determine that the respective independent roles and responsibilities of individuals on the proposal team are clearly defined?*

	Count	%
>3 During Last FY	25.0	12.6
1–2 During Last FY	55.0	27.8
0 Lst Yr–>1 Lst 3 FY	12.0	6.1
0 During Last 3 FY	106.0	53.5
Not Applicable	9.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	101.0	52.1
No	93.0	47.9
N/A	10.0	—
Total	204.0	100.0

QUESTION 100—*How often are reviews made to determine that the contribution of each component member is supervised and reviewed by a responsible individual in the respective functional organizations, i.e., engineering, accounting?*

	Count	%
>3 During Last FY	29.0	14.6
1–2 During Last FY	41.0	20.6
0 Lst Yr–>1 Lst 3 FY	16.0	8.0
0 During Last 3 FY	113.0	56.8
Not Applicable	8.0	
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	98.0	49.7
No	99.0	50.3
N/A	7.0	—
Total	204.0	100.0

QUESTION 101—*How often are reviews made to determine that there are controls to assure that all factual data reasonably available are used in the proposal with regard to the data's currency, accuracy, and completeness?*

	Count	%
>3 During Last FY	36.0	17.9
1–2 During Last FY	51.0	25.4
0 Lst Yr–>1 Lst 3 FY	15.0	7.5
0 During Last 3 FY	99.0	49.2
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	112.0	56.3
No	87.0	43.7
N/A	5.0	—
Total	204.0	100.0

QUESTION 102—*How often are reviews made to determine that there are adequate procedures and clearly defined responsibilities for the various component organizations to update all data at the time of agreement of contract price with the government?*

	Count	%
>3 During Last FY	25.0	12.4
1–2 During Last FY	60.0	29.9
0 Lst Yr–>1 Lst 3 FY	23.0	11.4
0 During Last 3 FY	93.0	46.3
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	117.0	58.8
No	82.0	41.2
N/A	5.0	—
Total	204.0	100.0

QUESTION 103—*How often are reviews made to determine that there is adequate written evidence of negotiation results leading to the pricing of each negotiated government contract?*

	Count	%
>3 During Last FY	28.0	14.4
1–2 During Last FY	54.0	27.7
0 Lst Yr–>1 Lst 3 FY	15.0	7.7
0 During Last 3 FY	98.0	50.3
Not Applicable	12.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	113.0	58.5
No	80.0	41.5
N/A	11.0	—
Total	204.0	100.0

QUESTION 104—*How often have reviews been made of the accumulation of indirect costs to assure conformance with pertinent Cost Accounting Standards?*

	Count	%
>3 During Last FY	33.0	16.3
1–2 During Last FY	95.0	47.0
0 Lst Yr–>1 Lst 3 FY	22.0	10.9
0 During Last 3 FY	52.0	25.7
Not Applicable	5.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	158.0	78.2
No	44.0	21.8
N/A	3.0	—
Total	205.0	100.0

QUESTION 105—*How often have the allocation bases been reviewed for conformance with Cost Accounting Standards?*

	Count	%
>3 During Last FY	27.0	13.4
1–2 During Last FY	86.0	42.8
0 Lst Yr–>1 Lst 3 FY	20.0	10.0
0 During Last 3 FY	68.0	33.8
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	153.0	76.9
No	46.0	23.1
N/A	5.0	—
Total	204.0	100.0

QUESTION 106—*How often have reviews been made of the procedures in effect to assure that unallowable indirect costs under Federal Acquisition Regulation (FAR) Part 31 are separately maintained and not included in any representations to the government, in accordance with Cost Accounting Standard 405 (accounting for unallowable costs)?*

	Count	%
>3 During Last FY	42.0	20.6
1–2 During Last FY	107.0	52.5
0 Lst Yr–>1 Lst 3 FY	11.0	5.4
0 During Last 3 FY	44.0	21.6
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	170.0	84.2
No	32.0	15.8
N/A	2.0	—
Total	204.0	100.0

QUESTION 107—*How often are reviews made of the latest Cost Accounting Standard disclosure statement to test adequacy and compliance?*

	Count	%
>3 During Last FY	26.0	13.1
1–2 During Last FY	86.0	43.4
0 Lst Yr–>1 Lst 3 FY	24.0	12.1
0 During Last 3 FY	62.0	31.3
Not Applicable	9.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	147.0	75.0
No	49.0	25.0
N/A	8.0	—
Total	204.0	100.0

QUESTION 108—*With regard to the "imputed cost of money invested in facilities," how often have examinations been made of the company's informal records and representations to the government to assure conformance with Cost Accounting Standard 414 (cost of money as an element of the cost of facilities capital)?*

	Count	%
>3 During Last FY	15.0	8.0
1–2 During Last FY	71.0	38.0
0 Lst Yr–>1 Lst 3 FY	16.0	8.6
0 During Last 3 FY	85.0	45.5
Not Applicable	20.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	98.0	52.7
No	88.0	47.3
N/A	18.0	—
Total	204.0	100.0

QUESTION 109—*With regard to the "imputed cost of money invested in facilities," how often have examinations been made of the company's informal records and representations to the government to assure conformance with Cost Accounting Standard 417 (cost of money as an element of the cost of capital under construction)?*

	Count	%
>3 During Last FY	11.0	6.5
1–2 During Last FY	60.0	35.7
0 Lst Yr–>1 Lst 3 FY	9.0	5.4
0 During Last 3 FY	88.0	52.4
Not Applicable	39.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	81.0	48.2
No	87.0	51.8
N/A	36.0	—
Total	204.0	100.0

QUESTION 110—*How often have reviews been made to establish that clearly defined instructions delineate the charges appropriate to the following classes of technical labor—cost objectives (contracts)?*

	Count	%
>3 During Last FY	43.0	21.3
1–2 During Last FY	93.0	46.0
0 Lst Yr–>1 Lst 3 FY	20.0	9.9
0 During Last 3 FY	46.0	22.8
Not Applicable	5.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	165.0	82.1
No	36.0	17.9
N/A	3.0	—
Total	204.0	100.0

QUESTION 111—*How often have reviews been made to establish that clearly defined instructions delineate the charges appropriate to the following classes of technical labor—Independent Research and Development (IR&D) and Bid and Proposal (B&P)?*

	Count	%
>3 During Last FY	36.0	18.2
1–2 During Last FY	89.0	44.9
0 Lst Yr–>1 Lst 3 FY	19.0	9.6
0 During Last 3 FY	54.0	27.3
Not Applicable	9.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	162.0	82.2
No	35.0	17.8
N/A	7.0	—
Total	204.0	100.0

QUESTION 112—*How often have reviews been made to establish that clearly defined instructions delineate the charges appropriate to the following classes of technical labor—indirect (overhead or G&A) accounts?*

	Count	%
>3 During Last FY	44.0	21.9
1–2 During Last FY	96.0	47.8
0 Lst Yr–>1 Lst 3 FY	24.0	11.9
0 During Last 3 FY	37.0	18.4
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	175.0	87.9
No	24.0	12.1
N/A	4.0	—
Total	203.0	100.0

QUESTION 113—*How often have reviews been made to determine compliance with instructions on charging of technical labor?*

	Count	%
>3 During Last FY	54.0	26.9
1–2 During Last FY	89.0	44.3
0 Lst Yr–>1 Lst 3 FY	20.0	9.9
0 During Last 3 FY	38.0	18.9
Not Applicable	5.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	170.0	85.0
No	30.0	15.0
N/A	2.0	—
Total	202.0	100.0

QUESTION 114—*How often have reviews been made to assure that adjustments or cost transfers between final cost objectives are clearly explained, documented, and approved by a responsible company official?*

	Count	%
>3 During Last FY	44.0	21.7
1–2 During Last FY	91.0	44.8
0 Lst Yr–>1 Lst 3 FY	31.0	15.3
0 During Last 3 FY	37.0	18.2
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	164.0	81.2
No	38.0	18.8
N/A	2.0	—
Total	204.0	100.0

QUESTION 115—*How often have reviews been made to test estimates of progress or of ultimate contract costs used in the determination of percentage complete?*

	Count	%
>3 During Last FY	35.0	18.3
1–2 During Last FY	81.0	42.4
0 Lst Yr–>1 Lst 3 FY	30.0	15.7
0 During Last 3 FY	45.0	23.6
Not Applicable	16.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	136.0	71.6
No	54.0	28.4
N/A	14.0	—
Total	204.0	100.0

QUESTION 116—*How often have tests been made of the support for cost estimates and revisions to cost estimates?*

	Count	%
>3 During Last FY	39.0	19.2
1–2 During Last FY	87.0	42.9
0 Lst Yr–>1 Lst 3 FY	22.0	10.8
0 During Last 3 FY	55.0	27.1
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	142.0	70.6
No	59.0	29.4
N/A	3.0	—
Total	204.0	100.0

QUESTION 117—*How often are examinations made to determine the integrity of automated cost and financial application systems?*

	Count	%
>3 During Last FY	37.0	18.3
1–2 During Last FY	105.0	52.0
0 Lst Yr–>1 Lst 3 FY	23.0	11.4
0 During Last 3 FY	37.0	18.3
Not Applicable	5.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	164.0	82.0
No	36.0	18.0
N/A	4.0	—
Total	204.0	100.0

QUESTION 118—*If the percentage of completion method is used for recognizing revenue under government contracts, how often are reviews made of criteria necessary for applying this method?*

	Count	%
>3 During Last FY	21.0	13.5
1–2 During Last FY	50.0	32.0
0 Lst Yr–>1 Lst 3 FY	19.0	12.2
0 During Last 3 FY	66.0	42.3
Not Applicable	50.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	92.0	59.0
No	64.0	41.0
N/A	48.0	—
Total	204.0	100.0

QUESTION 119—*How often are tests made to assure validity of progress payment requests submitted to the government?*

	Count	%
>3 During Last FY	39.0	19.5
1–2 During Last FY	63.0	31.5
0 Lst Yr–>1 Lst 3 FY	39.0	19.5
0 During Last 3 FY	59.0	29.5
Not Applicable	7.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	129.0	65.5
No	68.0	34.5
N/A	6.0	—
Total	203.0	100.0

QUESTION 120—*How often are tests made to assure validity of public vouchers for reimbursements under government cost-type contracts?*

	Count	%
>3 During Last FY	38.0	19.5
1–2 During Last FY	62.0	31.8
0 Lst Yr–>1 Lst 3 FY	31.0	15.9
0 During Last 3 FY	64.0	32.8
Not Applicable	10.0	—
Total	205.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	116.0	60.4
No	76.0	39.6
N/A	12.0	—
Total	204.0	100.0

QUESTION 121—*How often are tests made to assure validity of the certificate required for various representations to the government (e.g., overhead, catalog pricing, cost and pricing data)?*

	Count	%
>3 During Last FY	30.0	14.8
1–2 During Last FY	66.0	32.5
0 Lst Yr–>1 Lst 3 FY	17.0	8.4
0 During Last 3 FY	90.0	44.3
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	109.0	54.8
No	90.0	45.2
N/A	3.0	—
Total	202.0	100.0

QUESTION 122—*How often are tests made to assure validity of billings of employee rates on hourly rate and time and material contracts are in conformance with contract classifications?*

	Count	%
>3 During Last FY	24.0	13.4
1–2 During Last FY	49.0	27.4
0 Lst Yr–>1 Lst 3 FY	26.0	14.5
0 During Last 3 FY	80.0	44.7
Not Applicable	26.0	—
Total	205.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	95.0	53.7
No	82.0	46.3
N/A	25.0	—
Total	202.0	100.0

QUESTION 123—*How often are reviews made to assure adequate financial management control with regard to Limitations of Cost (LOC) clause in cost-type contracts?*

	Count	%
>3 During Last FY	28.0	14.9
1–2 During Last FY	51.0	27.1
0 Lst Yr–>1 Lst 3 FY	19.0	10.1
0 During Last 3 FY	90.0	47.9
Not Applicable	17.0	—
Total	205.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	97.0	51.1
No	93.0	48.9
N/A	14.0	—
Total	204.0	100.0

QUESTION 124—*How often are reviews made to assure adequate financial management control with regard to the non-incurrence of costs before official contract authorization is received?*

	Count	%
>3 During Last FY	53.0	26.6
1–2 During Last FY	56.0	28.1
0 Lst Yr–>1 Lst 3 FY	24.0	12.1
0 During Last 3 FY	66.0	33.2
Not Applicable	8.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	125.0	63.1
No	73.0	36.9
N/A	6.0	—
Total	204.0	100.0

QUESTION 125—*How often are reviews made to assure adequate financial management control with regard to contractual ceilings on overhead recovery?*

	Count	%
>3 During Last FY	31.0	17.0
1–2 During Last FY	55.0	30.2
0 Lst Yr–>1 Lst 3 FY	13.0	7.1
0 During Last 3 FY	83.0	45.6
Not Applicable	24.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	102.0	56.7
No	78.0	43.3
N/A	23.0	—
Total	203.0	100.0

QUESTION 126—*How often are reviews made to assure adequate financial management control with regard to advance agreements which limit recoveries for specified costs such as travel, Independent Research and Development (IR&D), and Bid and Proposal (B&P)?*

	Count	%
>3 During Last FY	34.0	17.9
1–2 During Last FY	64.0	33.7
0 Lst Yr–>1 Lst 3 FY	8.0	4.2
0 During Last 3 FY	84.0	44.2
Not Applicable	17.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	116.0	61.1
No	74.0	38.9
N/A	13.0	—
Total	203.0	100.0

QUESTION 127—*How often are reviews made to assure adequate financial management control with regard to ceiling prices on contracts?*

	Count	%
>3 During Last FY	41.0	21.1
1–2 During Last FY	68.0	35.1
0 Lst Yr–>1 Lst 3 FY	20.0	10.3
0 During Last 3 FY	65.0	33.5
Not Applicable	11.0	—
Total	205.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	117.0	60.6
No	76.0	39.4
N/A	9.0	—
Total	202.0	100.0

QUESTION 128—*How often are reviews made to assure adequate financial management control with regard to the triggering of an Economic Price Adjustment (EPA) clause?*

	Count	%
>3 During Last FY	26.0	14.9
1–2 During Last FY	41.0	23.6
0 Lst Yr–>1 Lst 3 FY	17.0	19.8
0 During Last 3 FY	90.0	51.7
Not Applicable	33.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	81.0	46.6
No	93.0	53.4
N/A	29.0	—
Total	203.0	100.0

QUESTION 129—*How often have reviews been made to determine that company employees are informed of their responsibilities with respect to accuracy of time cards?*

	Count	%
>3 During Last FY	80.0	39.4
1–2 During Last FY	75.0	36.9
0 Lst Yr–>1 Lst 3 FY	14.0	6.9
0 During Last 3 FY	34.0	16.7
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	170.0	85.0
No	30.0	15.0
N/A	4.0	—
Total	204.0	100.0

QUESTION 130—*How often have reviews been made to determine that company employees are informed of their responsibilities with respect to ethical practices required in the conduct of their functions?*

	Count	%
>3 During Last FY	46.0	22.5
1–2 During Last FY	99.0	48.5
0 Lst Yr–>1 Lst 3 FY	15.0	7.4
0 During Last 3 FY	44.0	21.6
Not Applicable	3.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	169.0	83.7
No	33.0	16.3
N/A	2.0	—
Total	204.0	100.0

QUESTION 131—*How often have reviews been made to determine that company employees are informed of their responsibilities with respect to laws and regulations relating to their duties, e.g., anti-kickback, price fixing, bribery?*

	Count	%
>3 During Last FY	47.0	23.2
1–2 During Last FY	89.0	43.8
0 Lst Yr–>1 Lst 3 FY	18.0	8.9
0 During Last 3 FY	49.0	24.1
Not Applicable	2.0	—
Total	205.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	163.0	80.7
No	39.0	19.3
N/A	2.0	—
Total	204.0	100.0

QUESTION 132—*How often have reviews been made to determine that company employees are informed of their responsibilities with respect to certifications required in representations made to the government?*

	Count	%
>3 During Last FY	52.0	25.6
1–2 During Last FY	62.0	30.5
0 Lst Yr–>1 Lst 3 FY	10.0	4.9
0 During Last 3 FY	79.0	38.9
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	139.0	69.2
No	62.0	30.8
N/A	3.0	—
Total	204.0	100.0

QUESTION 133—*How often have reviews been made to determine that company employees are informed of their responsibilities with respect to the need for complying with military security regulations?*

	Count	%
>3 During Last FY	26.0	13.6
1–2 During Last FY	75.0	39.3
0 Lst Yr–>1 Lst 3 FY	12.0	6.3
0 During Last 3 FY	78.0	40.8
Not Applicable	16.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	122.0	62.9
No	72.0	37.1
N/A	10.0	—
Total	204.0	100.0

QUESTION 134—*How often have tests been made to determine that training sessions are held to maintain the appropriate level of employee awareness of the sensitive items mentioned in questions 129 through 133?*

	Count	%
>3 During Last FY	24.0	11.9
1–2 During Last FY	82.0	40.8
0 Lst Yr–>1 Lst 3 FY	10.0	5.0
0 During Last 3 FY	85.0	42.3
Not Applicable	6.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	130.0	67.7
No	62.0	32.3
N/A	11.0	—
Total	203.0	100.0

QUESTION 135—*How often have tests been made to determine that new employees are indoctrinated in these areas?*

	Count	%
>3 During Last FY	28.0	13.8
1–2 During Last FY	81.0	39.9
0 Lst Yr–>1 Lst 3 FY	12.0	5.9
0 During Last 3 FY	82.0	40.4
Not Applicable	4.0	—
Total	207.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	142.0	71.0
No	58.0	29.0
N/A	4.0	—
Total	204.0	100.0

QUESTION 136—*How often have tests been made to determine that written evidence is available to reflect such training?*

	Count	%
>3 During Last FY	18.0	9.5
1–2 During Last FY	52.0	27.5
0 Lst Yr–>1 Lst 3 FY	13.0	6.9
0 During Last 3 FY	106.0	56.1
Not Applicable	17.0	—
Total	206.0	100.0

PLANNED FOR FISCAL YEAR 1986

	Count	%
Yes	125.0	66.8
No	62.0	33.2
N/A	17.0	—
Total	204.0	100.0

QUESTION 137—*To what organizational level(s) are regular audit reports directed? (Circle all that apply.)*

	Count	%
Chief Executive Officer	74.0	36.1
Chief Financial Officer	152.0	74.1
Chief Operating Officer	100.0	48.8
All Levels Req'ng Act.	162.0	79.0
Other	63.0	30.7
Total Respondents	205.0	100.0
Total Responses	551.0	

QUESTION 138—*Are auditees permitted to respond to internal audit findings and recommendations?*

	Count	%
Yes	195.0	94.7
No	0.0	0.0
Other	11.0	5.3
Total	206.0	100.0

QUESTION 139—*Are time limits and follow-up procedures established for responses to audit findings and recommendations?*

	Count	%
Yes	199.0	96.6
No	4.0	1.9
Other	3.0	1.5
Total	206.0	100.0

QUESTION 140—*Who has the responsibility for follow-up on replies to internal audit reports?*

	Count	%
The Audit Group	157.0	76.6
Chief Financial Officer	15.0	7.3
Chief Executive Officer	4.0	2.0
Other	29.0	14.1
None	0.0	0.0
Total	205.0	100.0

QUESTION 141—*Who acts as mediator and decision maker if disagreement occurs between the audit report and the responsible entity?*

	Count	%
Above Ch. Exec. Officer	31.0	15.3
Chief Executive Officer	42.0	20.7
Chief Financial Officer	67.0	33.0
None	5.0	2.5
Other	58.0	28.6
Total	203.0	100.0

QUESTION 142—*To whom are the audit reports and supporting working papers and documents made available internally? (Circle all that are appropriate.)*

	Count	%
Audit Committee	94.0	46.1
All Levels of Management	63.0	30.9
All Super. Levels & Up	25.0	12.3
In-house Counsel	119.0	58.3
Corp. Int. Audit Staff	146.0	71.6
Other	74.0	36.3
Total Respondents	204.0	100.0
Total Responses	521.0	

QUESTION 143—*To which of the following external groups are audit reports available when requested? (Circle all that are appropriate.)*

	Count	%
Co.'s Outside CPAs	194.0	94.6
DCAA	137.0	66.8
IRS	42.0	20.5
SEC	14.0	6.8
Others	38.0	18.5
None	2.0	1.0
Total Respondents	205.0	100.0
Total Responses	427.0	

QUESTION 144—*External to the company, to whom are working papers and other documentary support made available when requested? (Circle all that are appropriate.)*

	Count	%
Co.'s Outside CPAs	184.0	89.8
DCAA	93.0	45.4
IRS	29.0	14.1
SEC	11.0	5.4
Others	35.0	17.1
None	10.0	4.9
Total Respondents	205.0	100.0
Total Responses	362.0	

QUESTION 145—*If an irregularity is detected by internal auditors, to whom is the finding disclosed? (Circle all that are appropriate.)*

	Count	%
Employees	39.0	19.0
The Resp. Supervisor	105.0	51.2
Higher Level Mgt.	164.0	80.0
In-house Counsel	136.0	66.3
Ext. Investigation	29.0	14.1
Audit Committee	76.0	37.1
Other	64.0	31.2
Total Respondents	205.0	100.0
Total Responses	613.0	

QUESTION 146—*To whom is the responsiblity for investigating suspected irregularities or violations of law normally assigned?*

	Count	%
Internal Audit Staff	15.0	7.4
Corp. Investigators & Auditors	84.0	41.2
Corp. Internal Auditors	24.0	11.8
In-house Counsel	50.0	24.5
External Counsel	0.0	0.0
Other	31.0	15.2
Total	204.0	100.0

QUESTION 147—*After examining the facts of a violation, whom does the company advise? (Circle all that are appropriate.)*

	Count	%
In-house Counsel	164.0	80.0
External Counsel	59.0	28.8
Government Agency	138.0	67.3
Other Authorities	54.0	26.3
Other	70.0	34.1
None of the Above	3.0	1.5
Total Respondents	205.0	100.0
Total Responses	488.0	

QUESTION 148—*Does the company have an officially appointed ombudsman?*

	Count	%
Yes	41.0	20.1
No	163.0	79.9
Total	204.0	100.0

QUESTION 149—*Does the company have a hot line for use by employees in reporting suspected improprieties?*

	Count	%
Yes	58.0	28.6
No	145.0	71.4
Total	203.0	100.0

QUESTION 150—*If the answer to question 149 is yes, are the allegations received over the hot line explored and investigated by any of the following? (Circle all that are appropriate.)*

	Count	%
Internal Audit	50.0	79.4
Ad Hoc Committee	19.0	30.2
In-house Counsel	51.0	81.0
Ombudsman	21.0	33.3
Other	35.0	55.6
Total Respondents	63.0	100.0
Total Responses	176.0	

P

APPENDIX P

Study of Government Audit and Other Oversight Activities Relating to Defense Contractors

Prepared by
ARTHUR ANDERSEN & CO.*

*This appendix was prepared for the President's Blue Ribbon Commission on Defense Management. The analysis and recommendations it contains do not necessarily represent the views of the Commission.

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February 25, 1986

To The President's Blue Ribbon Commission
On Defense Management

We have completed our study of Government auditing and other oversight of defense contractors. Pursuant to our agreement dated December 16, 1985, the study consisted principally of field visits to 15 major defense contractors throughout the United States and interviews with several Government representatives. Each of the contractor and Government representatives with whom we met was helpful and we are appreciative of their cooperation and the courtesies extended to us.

The accompanying report sets forth our findings and recommendations. During the course of our work, we talked with many knowledgeable individuals and reviewed supporting documentation they made available to us. The recommendations contained in this report represent largely a composite of the principal recommendations and observations offered by the individual contractors and Government representatives with whom we visited. We evaluated all recommendations received, together with the related supporting data, and have included only those recommendations we consider to be reasonable and likely, if properly implemented, to improve the overall efficiency and effectiveness of the Government's auditing and other oversight of defense contractors.

We appreciate this opportunity to be of assistance to the President's Blue Ribbon Commission on Defense Management and would be pleased to meet with the Commission or its staff to further discuss our findings and recommendations.

Very truly yours,

Arthur Andersen & Co.

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

INTRODUCTION

This report presents the results of a study of government auditing and other oversight of defense contractors. The study is based principally on information obtained during field visits to 15 major defense contractors and interviews with several government representatives.

The results of the study indicate that duplication in the oversight process is extensive. Changes are clearly required to enhance efficiency and reduce costs to both contractors and the government. While the contractors expressed concern about this, each acknowledged the need for a reasonable level of auditing and other oversight in the procurement process and accepts that as a condition of doing business with the government.

RESULTS OF CONTRACTOR FIELD VISITS

The major causes of duplicative, overlapping, or inefficient government auditing and other oversight noted during our study are:

1. Lack of Coordinated Government Approach to Oversight

The most serious issue we noted is an apparent lack of coordination and communication among, and occasionally within, responsible government agencies or organizations. This problem is so pervasive that it underlies, and may be a principal cause of, the other auditing and oversight problems identified by this study. The following appear to be the principal reasons for this lack of coordination:

- An apparent reluctance by individual audit or oversight organizations to place reliance upon each other's work;
- An apparent unwillingness of organizations to share information;
- Lack of centralized oversight coordination;
- Inadequate advance planning by the agencies or organizations involved;
- Inconsistencies between agencies and organizations with respect to interpretations of contractual or other requirements and results of audits and reviews; and
- Lack of a clear definition of each agency's or organization's audit or oversight responsibilities.

2. Deterioration of the Contracting Officer's Authority

Deterioration of the contracting officer's authority as the government's team leader together with an apparent increase in the Defense Contract Audit Agency's (DCAA's) authority appears to be a principal cause of the duplication and inefficiency in the audit and oversight process. The contractors attribute much of this problem to Department of Defense (DoD) Directive 7640.2, which limits the contracting officer's authority to independently resolve DCAA audit recommendations and requires that deviations from those recommendations be justified by the contracting officer. Contractors see administrative contracting officers (ACOs) as reluctant to take a position contrary to DCAA because of concern about being subjected to

criticism. The net effect of this situation is a procurement environment fraught with indecision, delays, and unnecessary and costly disputes.

3. The "Blanket" Approach to Audits and Oversight

The government appears unwilling in many cases to give adequate consideration to: (1) a contractor's past performance; (2) favorable results of prior and ongoing reviews of the contractor's operations and systems; and (3) cost/benefit analyses in determining the nature, timing, and extent of its audit or other oversight activities. In effect, the government seems to use very standardized or "blanket" approaches to many audit or oversight functions. The same procedures, tests, and reviews are performed year after year at each contractor location apparently without regard to the internal controls that are in place or the magnitude of the potential costs and benefits involved. It seems that the same work is performed irrespective of risk or the results of prior reviews.

4. Multiple Proposals and Other Delays in the Negotiation Process

The often lengthy time period that elapses between submission of a proposal and final agreement on price appears to be a significant factor contributing to duplicative or inefficient auditing and other oversight. In many cases, months may go by, during which time the government may change quantities or specifications, quotes may go "stale," labor rates may change, etc. These changes generally require that the contractor submit an updated proposal, and each updated proposal starts a new audit cycle in which the unchanged as well as the revised data are audited. The contractors surveyed indicated that the average proposal is updated three times. One contractor cited a proposal that was updated 15 times and another cited a recent procurement that spanned a two year period from the date the proposal was submitted to negotiation of the final price. Situations such as these also create problems for contractors in their dealings with vendors and subcontractors and expose contractors to a greater risk of inadvertent defective pricing.

5. Expanding Scope of DCAA Activities

DCAA's increasing involvement in nonfinancial areas such as operational auditing and compensation and insurance reviews appears to be contributing to overlap and duplication in the oversight process. The contractors noted that inefficiencies and increased costs resulting from this duplication of effort are compounded by what they perceive to be a lack of technical competence as well as a poor definition of objectives by DCAA personnel when performing work in nonfinancial areas. On the other hand, a DCAA representative indicated that as long as DCAA is responsible for evaluating the "reasonableness" of costs charged to the government, it is justified in reviewing and evaluating those aspects of a contractor's operations that may have a bearing on the reasonableness of its costs. In so doing, DCAA will seek the technical advice and assistance of other members of the procurement team as it deems appropriate. He noted, however, that there is a difference of opinion within DCAA as to its appropriate level of involvement in operational auditing.

6. Post-award Audits

Several contractors noted that the number and intensity of post-award audits conducted by the government has increased over the last two years and they see no relief in sight. Since the principal objective of these audits is to identify instances of defective pricing, contractors are compelled to devote significant resources to supporting the organizations performing these reviews to minimize misunderstandings and

erroneous conclusions which may lead to serious, though unwarranted, problems including suspension, debarment, and possibly criminal prosecution. In short, post-award audits are a time-consuming and costly exercise for most contractors and these problems are compounded by the introduction of duplication and inefficiency into the process.

PRINCIPAL LAWS AND REGULATIONS

The principal laws and regulations governing the audit and oversight process overlap in some respects as they relate to the designated functions and responsibilities of the primary agencies and organizations involved in the process; however, those laws and regulations do not appear to be a primary cause of duplication and inefficiency. In fact, the Federal Acquisition Regulation (FAR) and the DoD FAR supplement (DFARS) prescribe policies and procedures for coordinating and controlling DoD's activities in connection with field pricing support and monitoring contractors' costs, both of which are particularly relevant to the subject of this study. The problem appears to be that DoD is not following its own regulations, or at least these regulations are not operating effectively.

RECOMMENDATIONS AND COMMENTS

In view of our findings as summarized above, the following recommendations and comments are offered for the Commission's consideration:

1. The contracting officer's position as leader of the government's team in all dealings with the contractor should be reaffirmed. Strong leadership at the ACO and corporate administrative contracting officer (CACO) level is essential. Accordingly, the contracting officer should be responsible for, among other things, the determination of final overhead rates for all contractors (responsibility for which was recently given to DCAA) and for coordination of all auditing and other oversight activities at contractor locations. Further study is required to determine how best to implement this recommendation and the following should be among the points considered:

- The Inspector General (IG) and the military investigative services have certain oversight responsibilities that clearly require their independence from the contracting officer. While this independence should not be compromised, these organizations should be required to coordinate their activities with respect to individual contractors to the maximum extent possible. Consideration should therefore be given to establishing a formal mechanism within DoD for facilitating this coordination.
- DCAA's role in relation to the contracting officer should be more clearly defined. Irrespective of existing regulations that provide for DCAA to serve the contracting officer in an advisory capacity, our study indicates that DCAA has, in practice, assumed a role which has contributed to a diminution of the contracting officer's authority and his or her willingness to make independent decisions contrary to the recommendations of DCAA. In this connection, the appropriateness of DoD Directive 7640.2 should be reevaluated.
- Although we believe the principal laws and regulations mandating the activities of the major oversight organizations are not a primary cause of duplication and inefficiency, they may be a contributing factor. For example, DCAA's charter to review a contractor's "general business practices and procedures" as provided for in DoD Directive 5105.36 creates ample opportunity for DCAA's activities to overlap those of the Defense Contract Administration Services (DCAS), or one of the other oversight agencies. On the other hand, DCAS' responsibility for determining

"allowability of costs" appears to overlap DCAA's assigned responsibilities. DoD should consider clarifying the responsibilities of DCAA and the various contract administration organizations, particularly with respect to matters such as operational auditing and compensation and insurance reviews, which were frequently noted areas of concern to contractors. In this regard, FAR 42.302 specifically cites reviews of contractors' compensation structures and insurance plans as contract administration functions; however, DCAA perceives the need to delve into these areas to determine the reasonableness of compensation and insurance costs. This apparent conflict needs to be resolved. One solution may be to assign sole responsibility for all matters related to compensation and insurance, including reasonableness of the related costs, to a single DoD organization.

- Closely related to and perhaps inseparable from the need to clarify individual agency auditing and oversight responsibilities is the need to evaluate the day-to-day working relationships between auditing and other oversight organizations with particular emphasis on (1) the degree of reliance each places, or should place, on the work of the others; and (2) the extent to which the agencies share information. Several contractors cited the need for greater cooperation between government agencies in these respects as being essential to reducing duplication and inefficiency in the oversight process. Problems in these areas could be at least partially alleviated by requiring the establishment of a formal data base of contractor information under the control of either the local ACO or the CACO who, in connection with his or her responsibilities for coordinating all auditing and other oversight activities with respect to a contractor, would control the maintenance and distribution of all contractor related information and its distribution to the respective audit or other oversight agencies. The mechanics of this proposed process require further study.

2. Based on the results of this study, it appears that the requirements of DFARS Subparts 15.8 and 42.70 with respect to the conduct and coordination of DoD activities related to field pricing support and monitoring contractors' costs are not being followed, or at least they are not operating effectively. These requirements do, however, address many of the concerns expressed by the contractors surveyed. For example, they require DoD to give appropriate consideration to (a) the contractor's past performance; (b) effectiveness of the contractor's existing system of internal administrative and accounting controls; and (c) cost/benefit analyses in determining the nature, timing, and extent of audit or other review activities. DoD should assess the adequacy of its compliance with the provisions of DFARS Subparts 15.8 and 42.70 and take corrective action as necessary.

The policies, procedures, and practices of all auditing and other oversight agencies with respect to planning, organizing, and controlling their activities should be reevaluated. This reevaluation must give due consideration to the individual goals and charters of each of the agencies as well as the usefulness of their prescribed auditing and other oversight procedures. For example, the IG and the General Accounting Office (GAO) have different missions than do DCAA and DCAS. The principal purpose of this reevaluation would be to identify ways of improving the effectiveness of these organizations in achieving their objectives while minimizing the cost to the government and disruption to the contractor's operations. The latter problem, while of obvious concern to contractors, represents a substantial hidden cost to the government inasmuch as contractors have reportedly increased their staffs and incurred substantial amounts of other expenses in response to intensified oversight activities. These higher costs, in part, have been or will be

passed on to the government through higher contract prices. Further, duplicative and inefficient auditing and other oversight activity adds little, if anything, to the quality of the products being procured by the government, and may actually divert contractor attention from such critical matters.

3. DoD should reevaluate the negotiation process to identify ways of reducing the elapsed time between submission of contractors' proposals and final agreement on contract price. Delays in this process contribute to duplicative and inefficient auditing and other oversight because contractors are required to update their proposals on multiple occasions and each update starts a new audit cycle in which the unchanged as well as the changed data are audited. The following are some suggestions to expedite contract negotiations:

- The government should better define contract requirements before issuing a request for proposal. This is particularly true with respect to quantities which, if not well defined, may change several times and necessitate multiple subcontractor quotes which have to be obtained by the contractor and then audited or reviewed by the government.
- Government audits and reviews of updated proposals should be limited solely to the revised data submitted by contractors. Reauditing unchanged data is duplicative, inefficient, and generally unnecessary.
- Responsibility for the price analysis of a contractor's proposal should be centralized in one organization or agency. The individual(s) performing the analysis should be part of the government negotiation team so that his or her insight can be brought directly to bear during the negotiation process.
- The government's audits and reviews of both initial and updated proposals should be properly planned and coordinated to avoid duplication of effort between agencies. Greater reliance should be placed by the government on contractors' internal control systems where past history and other factors indicate such reliance is warranted.

4. DoD should reevaluate policies and practices with respect to postaward audits to ensure that (a) duplication between agencies and organizations in the performance of these audits is eliminated or minimized; (b) appropriate consideration is given to cost/benefit analyses in determining the nature, timing, and extent of such reviews; (c) appropriate consideration is given to the contractor's past performance and results of prior and ongoing audits and reviews; and (d) postaward reviews are completed on a timely basis, say within one year after contract award.

5. The general relationship between contractors and the government needs to be improved for the benefit of the procurement process. While this situation will be difficult to resolve, the following general recommendations may prove helpful:

- Individual contractor and government personnel should strive for a relationship characterized by a "healthy skepticism" rather than animosity and antagonism.
- Every effort should be made by both contractors and the government to improve their communication and reduce the level of "gamesmanship" in their dealings with each other.
- The government must be careful not to foster the perspective among contractors that it believes every contractor intentionally engages in cost mischarging, defective pricing, and other such practices.
- The government needs to closely monitor the scope of its audits and other oversight activities to ensure that the work is properly planned, its personnel are technically competent for their assigned tasks, and duplication and inefficiency are minimized.

6. There should be a moratorium on the issuance of new procurement laws and

regulations affecting defense contractors for a period of perhaps two years until the prudence and effectiveness of present and proposed rules and regulations can be fully evaluated.

7. The basic framework of the entire auditing and oversight process should be reevaluated with a view toward establishing a system by which contractors are classified according to specified and measurable criteria for the purpose of determining the extent to which they will be subject to government oversight. Under this system, the government would adjust the scope of its oversight activities for individual contractors to respond to the level of risk identified. While conceptually this recommendation is reminiscent of the now defunct Contractor Weighted Average Share in Cost Risk (CWAS) concept, we are not suggesting that the proposed system be an exact replica of that concept. Instead, we recommend that DoD, or preferably a joint task force comprised of DoD and industry personnel, take a "fresh look" at possible methods of categorizing or "qualifying" contractors.

We recognize this recommendation will be difficult to implement. Major challenges to implementation will relate to the definition, application, and monitoring of compliance with the qualification criteria. The initial classification of contractors will be particularly difficult. Moreover, many of the matters discussed elsewhere in this report will impact on the feasibility of the recommendation. However, given the extensive overlap, duplication, and inefficiency present in the auditing and oversight process today, this fundamental change is worthy of consideration.

II. OBJECTIVE AND CONDUCT OF THE STUDY

STUDY OBJECTIVE

The objective of this study was to assist the President's Blue Ribbon Commission on Defense Management in determining whether and to what extent government auditing and other oversight of defense contractors is operating effectively or is duplicative or inefficient. In particular, the Commission requested our conclusions concerning the appropriateness of the overall design of current government auditing and other oversight efforts, and the prudence, utility, and necessity of any duplication identified.

CONDUCT OF THE STUDY

Overview

The study was divided into two basic projects which were performed concurrently. The principal project consisted of (1) evaluating information obtained during field visits to a limited number of defense contractors located throughout the United States, and (2) interviews with Department of Defense (DoD) personnel representing the contract administration function, including the Defense Contract Administration Services (DCAS), the Defense Contract Audit Agency (DCAA), and the Inspector General (IG). The second project consisted of a review of the principal laws and regulations mandating government auditing and oversight processes to identify areas, if any, of potential duplication or overlap.

Contractor Field Visits

Sixteen contractors were invited to participate in the study, one of which declined. The contractors were selected judgmentally and represent companies performing substantial work for the Army, Navy, Air Force, Marines, and Defense Logistics Agency. The chairman or president of the parent company of each contractor received a letter from the chairman of the Commission soliciting the contractor's participation in the study. Upon the contractor's agreement to participate, designated contractor personnel were contacted by a representative of Arthur Andersen & Co., the purpose of the study was further explained, and a field visit was scheduled. We requested that each contractor be prepared to discuss the nature and extent of their government auditing and other oversight activities during at least the prior 18 months and their recommendations for improving the oversight process.

As a condition precedent to contractor participation in the survey, and pursuant to our agreement with the Commission, individual contractor responses will be kept confidential. Accordingly, neither the Commission nor its staff have been informed of those individual responses and this report is written so as to preserve that confidentiality.

III. FINDINGS AND RECOMMENDATIONS

INTRODUCTION

This section describes in more detail the findings and recommendations summarized in Section I. Because the principal objective of the study was to determine whether and to what extent current government auditing and other oversight processes are operating efficiently, the results of our contractor field visits are presented first and are followed by a discussion of the principal laws and regulations governing those processes. Finally, the recommendations resulting from the study are presented for the Commission's consideration.

RESULTS OF CONTRACTOR FIELD VISITS

Overview

Our study indicates that all of the 15 contractors surveyed have been subject to duplicative, overlapping, and inefficient government auditing and oversight activities. The amount of duplication and overlap varies from contractor to contractor. While most matters of concern relate to DCAA, DCAS, and the procuring agencies, several instances were noted of apparent duplication and inefficiency involving the IG and the General Accounting Office (GAO). Changes are clearly required to enhance efficiency and reduce costs to both contractors and the government.

Each contractor surveyed acknowledged the need for a reasonable level of auditing and oversight in the procurement process and accepts that as a condition of doing business with the government. However, the overwhelming consensus of the contractors was that the conduct of the process must be improved for the sake of both contractors and the government. They feel the current auditing and oversight activities add little value to the procurement process and, in fact, unnecessarily add to the cost of procurement. The principal problem areas we noted are described below, together with some specific examples of duplication, overlap, and inefficiency cited by the contractors participating in the study.

Lack of a Coordinated Government Approach to Oversight

The most serious issue we noted is the apparent lack of coordination and communication among, and occasionally within, responsible government agencies or organizations. This problem appears to be so pervasive that it underlies, and may be a principal cause of, many of the other auditing and oversight problems cited by the contractors and discussed later in this report. The following are some of the examples cited by contractors as indicative of poor coordination and communication in the government's conduct of its audit and oversight activities.

> DCAS and DCAA periodically review the contractor's data processing systems. The reviews are performed separately and appear to the contractor not to be coordinated. Further, the contractor has noted what appears to be outright animosity between the two agencies. The contractor estimates that 70 to 80 percent of the information requested during these reviews is duplicative. Representatives of both agencies request copies of the same data and the contractor believes the volume of information it is required to provide is usually more than could ever be assimilated by the auditor.

The contractor also noted that separate

cost reviews were recently performed by both DCAA and a "should-cost team" from one of the procuring agencies and that the same records were reviewed by both groups. The contractor perceives these reviews as indicative of poor communication and lack of coordination among agencies, particularly since the procuring organization is presumably the ultimate user of the information.

The Defense Logistics Agency (DLA) requires the contractor's spare parts proposals to be evaluated on a "line-item" basis to ensure "unit price integrity." DCAA has taken exception to the use of this technique. Consequently, the contractor had to alter its estimating techniques and is now required to prepare and support its spare parts proposals in two different ways solely to satisfy the conflicting requirements of these two agencies.

The contractor noted that even though the administrative contracting officer (ACO) reviews its purchasing system on a quarterly basis, DCAA recently performed a comprehensive review of the contractor's purchasing system. During the seven month period DCAA required to complete its review, the quarterly reviews by the ACO continued. Just prior to our field visit, the contractor was notified that still another agency will review its purchasing system. The contractor believes this latter review was requested by the ACO but DCAA's review was done independently without coordination through the ACO and, consequently, was at least partially duplicative and inefficient.

The contractor has received government requests for data related to over 1300 spare parts since the beginning of 1985. The requests have come from several agencies or organizations and many of the requests have been duplicative. The contractor estimates that the cost of responding to all of these requests has exceeded $1,000,000. In the process, the contractor's staff assigned to respond to spare parts investigations grew from 24 people in January 1985 to 43 people in October 1985.

The contractor also identified 11 separate reviews of its personnel and administration functions over a two year period by at least nine different agencies or organizations. The timing of these reviews was largely overlapping and the organizations performing the reviews frequently requested the same data.

Both the Defense Investigative Service (DIS) and the National Security Agency (NSA) perform security audits at the contractor's plants. If DIS begins its audit shortly after NSA has completed its work, DIS accepts the results of the NSA review. In contrast, NSA refuses to rely on the work of DIS and reaudits the contractor, even if DIS has just recently completed its work.

Further, the contractor noted that the Defense Contract Administrative Services Management Area and the Small Business Administration both perform a "Small Business/Minority Business Compliance Review" every year at every plant even though the procedures at each plant are the same. The contractor considers these reviews to be inefficient from both its own and the government's perspective, as well as at least partially duplicative of the work performed by the Defense Contract Administrative Services Region (DCASR) during its annual review of the contractor's procurement system.

One of the military services performed a "should-cost review" that covered several aspects of the contractor's operations, including compensation, data processing, and plant rearrangement. With respect to

compensation, the review duplicated a compensation review performed less than a year earlier by DCASR. In the data processing area, the review duplicated work performed in other DCASR reviews, including several studies of equipment cost and utilization.

One contractor has been visited by more than 20 fact finding and "should-cost review" teams in connection with one program during an 18 month period. In total, these reviews involved over 200 visitors to the contractor's plant for an average of five days at a time. In total, during this same 18 month period, government personnel involved in auditing and other oversight activity, excluding the 200 resident government audit personnel, spent over 70,000 man-days at the contractor's plant.

The buying organization and a prime contractor conducted a joint contractor operations review (COR) at the contractor's plant. The COR duplicated a "pre-COR" previously conducted independently by the prime contractor, as well as product control center reviews conducted on an ongoing basis by the plant ACO. The contractor observed that neither the buying organization nor the prime contractor was interested in the results of the ACO's reviews. Further, it appeared to the contractor that the ACO was really the subject of the review, yet the contractor was required to provide substantial personnel support which was very disruptive to its operations.

These examples summarize representative problems attributed by contractors to the lack of coordination between government agencies and organizations involved in the audit and oversight process. The principal reasons for this lack of coordination appear to be:

An apparent reluctance by individual audit or oversight organizations to place reliance upon each other's work;

An apparent unwillingness of organizations to share information;

Lack of centralized oversight coordination (see comments below regarding the role of the contracting officer);

Inadequate advance planning by the agencies or organizations involved;

Inconsistencies between agencies and organizations with respect to interpretations of contractual or other requirements and results of audits and reviews; and

Lack of a clear definition of each agency's or organization's audit or oversight responsibilities.

Deterioration of the Contracting Officer's Authority

Deterioration of the contracting officer's authority as the government's team leader together with an apparent increase in DCAA's authority appears to be a principal cause of the duplication and inefficiency in the audit and oversight process. There is a perception among contractors that DCAA is marching to its own drummer, who may or may not be playing the same tune as the rest of the government. The contractors believe that the principal cause of this problem is DoD Directive 7640.2, dated December 29, 1982, which limits the contracting officer's authority to independently resolve DCAA audit recommendations and requires that deviations from those recommendations be justified by the contracting officer. Contractors believe that the practical, though perhaps not intended, result of Directive 7640.2, has been a change in the role of DCAA auditor from adviser to decision maker and negotiator. In this latter role, contractors see DCAA as generally inflexible and ACOs as reluctant to take a position contrary to DCAA because of concern about being subjected to criticism. The net effect of this situation is a procurement environment fraught with indecision, delays, and unnecessary and costly disputes.

A DCAS representative also saw the changing role of the contracting officer vis-a-vis DCAA as a problem. He noted that, at times, contracting officers simply find it easier to "go along" with DCAA than to challenge the auditor's position. This is precisely the perception that many contractors have of the contracting officer in today's environment.

This same individual noted that DCAA is a vital member of the contracting officer's team; however, DCAA's changing role is eroding the effectiveness of that team. He cited as an example DCAA's recently acquired authority to determine final overhead rates for all contractors. He considers this change to be counterproductive because it takes authority away from the team, which he believes can do a more effective job than DCAA can do alone.

In contrast, while acknowledging that the contracting officer's authority has indeed deteriorated over the past few years, a DCAA representative noted that the shift in power was principally from the ACO at the plant level to higher level management in the government procurement organization and not to DCAA. He stated that ACOs are now more accountable to the management of their own organization and, accordingly, they have to do a better job than they did in the past of justifying their decisions. Thus, in his view, it is now more difficult for the ACO to simply accept the contractor's position on a particular matter just because it is the easiest thing to do.

This same individual stated that DCAA should be under no constraint as to what it can say or challenge. He noted that DCAA's purpose is not to support the ACO's procurement objectives, but rather to protect the taxpayers' dollars. Accordingly, he sees DCAA as having to be "independent" from both contractors and contracting officers. If the two opposing government views presented above are truly representative of the philosophies of DCAA and the government's procurement organizations, it is not difficult to see how internal disagreements, "turf battles," and lack of communication can occur, and how this can lead to the lack of coordination and efficiency in the audit and oversight process experienced by the contractors we surveyed.

The "Blanket" Approach to Audits and Oversight

The government appears unwilling in many cases to give adequate consideration to: (1) a contractor's past performance; (2) results of prior and ongoing reviews of the contractor's operations and systems; and (3) cost/benefit analyses in determining the nature, timing, and extent of its audit or other oversight activities. In effect, the government seems to use very standardized or "blanket" approaches to many audit or oversight functions. The same procedures, tests, and reviews are performed year after year at each contractor location, apparently without regard to the internal controls that are in place or the magnitude of the potential costs and benefits involved. It seems that the same work is performed irrespective of risk or the results of prior reviews. Some contractors believe that once issues such as spare parts pricing or quality control are identified as problems at one or a few contractors, the government tends to overreact and other contractors are subjected to intensified and repetitive reviews that are unwarranted in their circumstances. The following are some of the examples cited by the contractors we surveyed:

> With respect to major program proposals, each year's program "buy" is looked at as if it were a new program. The government audits or reviews each of the contractor's proposals from "ground zero" rather than focusing solely on program changes between years. The contractor considers this process to be duplicative and inefficient because its estimating and procurement systems are under constant review by the government throughout the year and comparable historical data are readily available.

Both DCAS and DCAA perform complete audits of the contractor's quality control, government property, and cost schedule control systems each year. The contractor feels the government is unwilling to adjust its audit scopes in consideration of prior favorable audit results and, consequently, the government audits systems that have been operating effectively for several years in the same manner and with the same intensity that it audits new systems. The contractor perceives this as costly and inefficient to the government and clearly disruptive to its own operations.

During an 18 month period, the contractor estimates that it spent approximately 9,600 man-hours responding to 120 DCAA audit reports which, when settled, had no cost impact. The contractor considers this indicative of the DCAA's failure to give adequate attention to cost/benefit considerations in planning and performing its work.

The contractor noted that when spare parts pricing became a "hot topic," the DCAA, GAO, and IG each conducted separate reviews of its basic ordering agreement for spares. The contractor considers the reviews to be clearly duplicative and questions why they were performed since it had no history of spare parts overpricing.

A government task force reviewing spare parts pricing required the contractor to call a three hour meeting with approximately 20 government and contractor personnel present to discuss potential questions involving less than $30,000. The contractor considered this disruptive, a waste of its own and the government's time, and a matter that could easily have been handled by letter or telephone, particularly in light of the amounts involved.

Multiple Proposals and Other Delays in the Negotiation Process

The often lengthy time period that elapses between submission of a proposal and final agreement on price appears to be a significant factor contributing to duplicative or inefficient auditing and oversight. In many cases, months may go by during which time the government may change quantities or specifications, quotes may go "stale," labor rates may change, etc. These changes generally require that the contractor submit an updated proposal and each updated proposal seems to start a new audit cycle in which the unchanged as well as the revised data are audited. The contractors surveyed indicated that the average proposal is updated three times. One contractor cited a proposal that was updated 15 times and another cited a recent procurement that spanned a two year period from the date the proposal was submitted to negotiation of the final price.

Revising, resubmitting, and auditing the same basic proposal three, four, or more times is inefficient and costly to the government and the contractor. It also creates problems for the contractor in its dealings with vendors and subcontractors and exposes the contractor to a greater risk of inadvertent defective pricing. One contractor commented that it had, in effect, been told by subcontractors asked to submit proposals, "When you and the government get serious, we'll get serious."

Contractors believe the number of required changes to proposals could be minimized, and the lag time between proposal submission and agreement on price reduced, if the government better defined the product or service in the original specifications and contract documents. In addition, other inefficiencies and problems exist which contribute to costly and disruptive delays in the negotiation process. The following are two examples:

The contractor does business with many subcontractors. Approximately 20 of

these subcontractors are also competitors of the contractor and thus do not permit the prime contractor to audit their proposals (i.e., they consider their cost and pricing data to be proprietary). Although the ACO is well aware of this situation, the contractor is continually required to go through a series of time-consuming steps before the ACO requests DCAA to perform the audits.

The contractor's proposals are reviewed by a DCAS pricing analyst who provides an analysis to the procuring agency for use in negotiation. The procuring agency's pricing analyst must then "get up to speed" on the details of the proposal and, even after supposedly doing so, is generally unable to make independent negotiation decisions without extensive telephone consultations with the DCAS pricing analyst who reviewed the proposal initially. The contractor perceives this review process as duplicative and costly and believes that either DCAS or the procuring agency, but not both, should be responsible for price analysis of proposals.

Expanding Scope of DCAA Activities

DCAA's increasing involvement in nonfinancial areas such as operational auditing and compensation and insurance reviews appears to be contributing to overlap and duplication in the oversight process. The contractors noted that inefficiencies and increased costs resulting from this duplication of effort are compounded by what they perceive to be a lack of technical competence as well as a poor definition of objectives by DCAA personnel when performing work in nonfinancial areas. On the other hand, a DCAA representative indicated that as long as DCAA is responsible for evaluating the "reasonableness" of costs charged to the government, it is justified in reviewing and evaluating those aspects of a contractor's operations that may have a bearing on the reasonableness of its costs. In so doing, DCAA will seek the technical advice and assistance of other members of the procurement team as it deems appropriate. However, he noted that there is a difference of opinion within DCAA as to its appropriate level of involvement in operational auditing. In this regard, he described a proposed approach under which DCAA would conduct "probe" reviews to identify areas where a full-scale operational audit would be cost beneficial. The contractor would then be responsible for completing the audit and submitting the results to DCAA and the ACO as a condition for receiving future contracts. The following are examples of situations in which the apparent expansion of DCAA's activities into nonfinancial areas has contributed to duplication and inefficiency:

DCAS and DCAA both evaluate items such as production rates, yield factors, and learning curve assumptions supporting the contractor's pricing proposals. The contractor believes that DCAS has demonstrated greater expertise in these judgmental and operational areas and that DCAA's review of these items is of no value to the contractor or the government. This same contractor noted that it had recently installed "state of the art" computer systems in certain nonfinancial areas of its operations. Nevertheless, shortly thereafter, DCAA performed reviews of those systems to see if potential cost savings were available. No meaningful suggestions or benefits were derived from the review and, given the advanced technology of the systems, the contractor considered the entire process a waste of its time as well as the government's.

DCAA has started performing audits of the contractor's procedures related to maintenance and calibration of test equipment and the repair, rework, and

replacement of "nonperforming" material. Aside from questioning the DCAA's technical competence in this area, the contractor considers the entire process duplicative and a waste of time because there are approximately 50 resident DCAS personnel at the contractor's plant who review and monitor the same systems and procedures on virtually a daily basis.

DCAS and DCAA both performed audits of the contractor's insurance and retirement plans. The contractor observed that DCAS personnel were generally more knowledgeable in these areas than the typical DCAA auditor. This duplication of effort reduced the efficiency of the entire process because the contractor was required to reconcile differences between the costs questioned by the two agencies.

Post-award Audits

Several contractors noted that the number and intensity of post-award audits conducted by the government has increased over the last two years and they see no relief in sight. Since the principal objective of these audits is to identify instances of defective pricing, contractors are compelled to devote significant resources to supporting the organizations performing these reviews to minimize misunderstandings and erroneous conclusions that may lead to serious, though unwarranted, problems including suspension, debarment, and possibly criminal prosecution. In short, post-award audits are a time consuming and costly exercise for most contractors to go through, and these problems are compounded by the introduction of duplication and inefficiency into the process. The following are three examples cited by the contractors we surveyed:

The contractor received 283 multi-item requests for data in connection with post-award audits conducted by DCAA during a recent 18 month period. During that time DCAA conducted post-award audits on 36 different contracts. This represents a significant increase in activity over the previous 18 month period and the contractor attributes the increase in large measure to allegations by the IG and others that insufficient post-award audits had been performed in the past. The contractor believes that there is little relationship between DCAA's findings and the extensive effort expended by both the contractor and the government.

During the past five years, the contractor has undergone between 20 and 25 post-award audits each year. Since 1978 only one defective pricing issue of relatively minor amount has been identified. Despite the favorable results, the contractor has been advised that the number of post-award audits to be performed in 1986 will nearly double.

The contractor considers post-award audits to be extremely time consuming and disruptive. The government typically reviews contracts one or two years after completion. The audits require the contractor to locate and produce a variety of old records, many of which are in storage and not easily accessible. Five out of 10 post-award reviews currently in process relate to contracts that are five years old or older. The contractor has had no defective pricing problems in recent years and it feels the level of government activity is unreasonable and unwarranted in view of its past performance.

PRINCIPAL LAWS AND REGULATIONS MANDATING THE GOVERNMENT AUDIT AND OVERSIGHT PROCESS

Overview

The laws and regulations governing federal contracting are extensive and complex. This

study is not intended to include a comprehensive analysis of the legislative and regulatory history of the contracting process. Instead, our objective is to highlight the principal laws and regulations which significantly and directly affect the government's auditing and other oversight of defense contractors on a day-to-day basis, and to identify areas in which those laws and regulations may contribute to overlap and duplication. We approach this task first from the perspective of the functions and responsibilities of the primary agencies and organizations involved in the audit and oversight process. We then focus on several key provisions of the Federal Acquisition Regulation (FAR) that seem particularly relevant to the issues addressed in this study. Finally we offer some observations on the relationship of those laws and regulations to the overlap and duplication in the process as described by the contractors we surveyed.

Government Auditing and Other Oversight Agencies

The principal organizations responsible for DoD auditing and oversight activities include DCAA, DCAS, DoD–IG, and GAO. Each of these organizations was established at a different time and assigned certain responsibilities and functions. The following is a brief discussion of those functions.

Defense Contract Audit Agency

DCAA is a separate agency of DoD under the direction, authority, and control of the Assistant Secretary of Defense (Comptroller). It was established by DoD Directive 5105.36, dated June 9, 1965. That Directive was replaced on June 8, 1978, by a new Directive, also identified as 5105.36, which describes the DCAA's mission as follows:

> 1. Perform all necessary contract audit for the Department of Defense and provide accounting and financial advisory services regarding contracts and subcontracts to all Department of Defense components responsible for procurement and contract administration. These services will be provided in connection with negotiation, administration, and settlement of contracts and subcontracts.
> 2. Provide contract audit services to other Government agencies as appropriate.

Directive 5105.36 also describes DCAA's responsibilities and functions and provides, in part, that the Director of DCAA shall:

> 1. Organize, direct, and manage the DCAA and all resources assigned to the DCAA.
> 2. Assist in achieving the objective of prudent contracting by providing DoD officials responsible for procurement and contract administration with financial information and advice on proposed or existing contracts and contractors, as appropriate.
> 3. Audit, examine and/or review contractors' and subcontractors' accounts, records, documents, and other evidence; systems of internal control; accounting, costing, and general business practices and procedures; to the extent and in whatever manner is considered necessary to permit proper performance of the other functions described in 4 through 12 below.
> 4. Examine reimbursement vouchers received directly from contractors . . .
> 5. Provide advice and recommendations to procurement and contract administration personnel on:
>
> a. Acceptability of costs incurred under redeterminable, incentive, and similar type contracts.
>
> b. Acceptability of incurred costs and estimates of cost to be incurred as represented by contractors . . .
>
> c. Adequacy of financial or accounting aspects of contract provisions.
>
> d. Adequacy of contractors' accounting and financial management systems, adequacy of contractors' estimating procedures, and adequacy of property controls.

6. Assist responsible procurement or contract administration activities in their surveys of the purchasing-procurement systems of major contractors.
7. Direct audit reports to the Government management level having authority and responsibility to take action on the audit findings and recommendations.
8. Cooperate with other appropriate Department of Defense components on reviews, audits, analyses, or inquiries involving contractors' financial position or financial and accounting policies, procedures, or practices.
9. Establish and maintain liaison auditors as appropriate at major procuring and contract administration offices.
10. Review General Accounting Office reports and proposed responses thereto which involve significant contract or contractor activities for the purpose of assuring the validity of appropriate pertinent facts contained therein.
11. In an advisory capacity, attend and participate, as appropriate, in contract negotiation and other meetings [in] which contract cost matters, audit reports, or related financial matters are under consideration.
12. Provide assistance, as requested, in the development of procurement policies and regulations.
13. Perform such other functions as the Assistant Secretary of Defense (Comptroller) may from time to time prescribe.

With respect to DCAA's relationship to other components of DoD, Directive 5105.36 provides that:

1. In the performance of his functions, the Director, DCAA shall:
a. Maintain appropriate liaison with other components of the DoD, other agencies of the Executive Branch, and the General Accounting Office for the exchange of information and programs in the field of assigned responsibilities.
b. Make full use of established facilities. . .
c. The military departments and other DoD components shall provide support, within their respective fields of responsibility, to the Director, DCAA to assist in carrying out the assigned responsibilities and functions of the Agency. . .
2. Procurement and contract administration activities of the DoD components shall utilize audit services of the DCAA to the extent appropriate in connection with the negotiation, administration, and settlement of contract payments and prices which are based on cost (incurred or estimated), or on cost analysis.

Defense Contract Administration Services

DCAS is part of the Defense Logistics Agency (DLA), which was established by DoD Directive 5105.22 dated January 5, 1977. That Directive was replaced on June 8, 1978, by a new Directive also identified as 5105.22. This Directive, with attachments, is 21 pages long and describes numerous functions to be performed by the Director, DLA. DCAS is not specifically mentioned in the Directive but information provided to us by a DCAS representative during the course of this study summarizes DCAS' mission as follows:

To assure contractor compliance with cost, delivery, technical, quality, and other terms of the contract;
To accept products on behalf of the government; and
To pay the contractor.

As indicated by the first of the above points, contract administration is a major responsibility of DCAS. DCAS, together with its plant representative offices (DCASPRO), is responsible for administering contracts at all but approximately 40 defense contractor locations where that function is performed principally by the military services, for example, Air Force Plant Representative Offices (AFPRO); Navy Plant Representative Offices (NAVPRO); and

Army Plant Representative Offices (ARPRO). These organizations are referred to collectively in this report as ACOs.

Directive 5105.22 describes contract administration as including:

> . . . plant clearance, utilization and disposal of contract inventories, administration of government furnished property, financial analysis, review of contractor management systems, price and cost analysis (excluding examination of contractor's financial records), convenience termination settlements, small business and economic utilization, negotiation of contract changes pursuant to the changes clause, determination of allowability of cost, and such other functions as are delegated.

Contract administration duties are also enumerated in Subpart 42.3 of the FAR. In total, the FAR and the DoD FAR Supplement (DFARS) describe more than 70 functions that are the responsibility of the cognizant contract administration office (CAO) or that may be performed by the CAO if authorized by the procuring organization.

Inspector General

Public Law 95-452, "Inspector General Act of 1978" (the Act) established Offices of Inspector General (OIG) within 12 federal civilian agencies. For reasons beyond the scope of this study, an OIG for DoD was initially not established. The purpose of the OIG as stated in the Act is as follows:

> 1. To conduct and supervise audits and investigations relating to programs and operations of the Department of Agriculture, the Department of Commerce, the Department of Housing and Urban Development, the Department of Interior, the Department of Labor, the Department of Transportation, the Community Services Administration, the Environmental Protection Agency, the General Services Administration, the National Aeronautics and Space Administration, the Small Business Administration, and the Veterans' Administration;
> 2. To provide leadership and coordination and recommend policies for activities designed (a) to promote economy, efficiency, and effectiveness in the administration of, and (b) to prevent and detect fraud and abuse in, such programs and operations; and
> 3. To provide a means for keeping the head of the establishment and the Congress fully and currently informed about problems and deficiencies relating to the administration of such programs and operations and the necessity for and progress of corrective action.

The 1983 Defense Authorization Act (Public Law 97-252) provided for establishment of the DoD-IG. By design, the DoD-IG is independent from the agency it monitors. In addition to those duties and responsibilities included in the Act, the DoD-IG is empowered under Public Law 97-252 Title XI of the United States Code, Section 1117(c) to:

> 1. Be the principal adviser to the Secretary of Defense for matters relating to the prevention and detection of fraud, waste and abuse in the programs and operations of the department;
> 2. Initiate, conduct, and supervise such audits and investigations in the Department of Defense (including military departments) that the Inspector General considers appropriate;
> 3. Provide policy direction for audits and investigations relating to fraud, waste and abuse, and program effectiveness;
> 4. Investigate fraud, waste and abuse uncovered as a result of other contract and internal audits, as the Inspector General considers appropriate;
> 5. Develop policy, monitor and evaluate program performance, and provide guidance with respect to all department activities relating to criminal investigation programs;

6. Monitor and evaluate the adherence of department auditors to internal audit, contract audit, and internal review principles, policies and procedures;
7. Develop policy, evaluate program performance, and monitor actions taken by all components of the department in response to contract audits, internal audits, internal review reports, and audits conducted by the Comptroller General of the United States;
8. Request assistance as needed from other audit, inspection, and investigative units of the Department of Defense (including military departments); and
9. Give particular regard to the activities of the internal audit inspection and investigative units of the military department with a view toward avoiding duplication and ensuring effective coordination and cooperation.

General Accounting Office

The GAO was created by the Budget & Accounting Act of 1921. It is under the control of the Comptroller General, a constitutional appointment made by the President, and serves as an agent of Congress. The GAO is an independent organization.

Title 31 of the United States Code, Section 712, describes the Comptroller General's responsibilities with respect to investigating the use of public money as follows:

1. Investigate all matters related to the receipt, disbursement, and use of public money;
2. Estimate the cost to the United States Government of complying with each restriction on expenditures of a specific appropriation in a general appropriation law and report each estimate to Congress with recommendations the Comptroller General considers desirable;
3. Analyze expenditures of each executive agency the Comptroller General believes will help Congress decide whether public money has been used and expended economically and efficiently;
4. Make an investigation and report ordered by either House of Congress or a committee of Congress having jurisdiction over revenue, appropriations, or expenditures; and
5. Give a committee of Congress having jurisdiction over revenue, appropriations, or expenditures the help and information the committee requests.

Federal Acquisition Regulation

The two procedural statutes underlying federal contracting activity are the Armed Services Procurement Act of 1947 and the Federal Property and Administrative Services Act of 1949. The statutes contain detailed requirements for awarding of contracts but provide little guidance regarding contract administration.

The principal source of guidance with respect to contract administration is the FAR. The FAR, together with agency supplemental regulations, replaced the Federal Procurement Regulation System, the Defense Acquisition Regulation, and the NASA Procurement Regulation for all solicitations issued after April 1, 1984. It is the primary regulation for use by all federal executive agencies in their acquisition of supplies and services with appropriated funds.

The following paragraphs highlight several key provisions of the FAR that are particularly relevant to the matters encompassed by our study. The thrust of the discussion is upon contract administration as described in FAR Part 42. However, we note that FAR Part 15, which deals with contracting by negotiation, contains guidance with respect to proposal analysis; FAR Part 31 addresses cost allowability; and FAR 52.214-26, 52.215-1 and 52.215-2 contain the clauses granting the government the right to audit or examine contractors' records. While questions regarding cost allowability and government access to records may impair the efficiency of the oversight process, DFARS 15.805-5 is particularly pertinent to this study, as it deals with coordination of the

government's field pricing support activities.

DFARS 15.805-5(c)(1)(70)(A) states, in part, that, "The Plant Rep/ACO is the team manager for all PCO requests for field pricing support." DFARS 15.805-5(d) and (e) acknowledge the importance of coordination and the need for contract auditors to consider their past experiences with a contractor, as well as the effectiveness of the contractor's procedures and controls, in determining the scopes of their audits. Specifically, they provide as follows:

> (d) The efforts of all field pricing support team members are complementary, advisory and also offer an excellent check and balance of the various analyses imperative to the PCO's final pricing decision. Therefore, it is essential that there be close understanding, cooperation and communication to ensure the exchange of information of mutual interest during the period of analysis. While they shall review the data concurrently when possible, each shall render his services within his own area of responsibility. For example, on quantitative factors (such as labor hours), the auditor may find it necessary to compare proposed hours with hours actually expended on the same or similar products in the past as reflected on the cost records of the contractor. From this information he can often project trend data. The technical specialist may also analyze the proposed hours on the basis of his knowledge of such things as shop practices, industrial engineering, time and motion factors, and the contractor's plant organization and capabilities. The interchange of this information will not only prevent duplication but will assure adequate and complementary analysis.
>
> (e) The terms "audit review" and "audit" refer to examinations by contract auditors of contractors' statements of actual or estimated costs to the extent deemed appropriate by the auditors in the light of their experience with contractors and relying upon their appraisals of the effectiveness of contractors' policies, procedures, controls, and practices. Such audit reviews or audits may consist of desk reviews, test checks of a limited number of transactions, or examinations in depth, at the discretion of the auditor. The contract auditor is responsible for submission of information and advice, based on his analysis of the contractor's books and accounting records or other related data, as to the acceptability of the contractor's incurred and estimated costs.

Turning now to contract administration, FAR Part 42 prescribes general policies and procedures for performing contract administration functions and related audit services. As noted above in connection with our discussion of DCAS' responsibilities, Subpart 42.3 of the FAR and DFARS identifies more than 70 functions comprising contract administration. Also described elsewhere in Part 42 are general policies and procedures for performing those contract administration functions and related audit services. FAR 42.1 deals with interagency contract administration and audit services. FAR 42.100 describes the scope of that subpart as follows:

> This subpart prescribes policies and procedures for obtaining and providing interagency contract administration and audit services in order to (a) provide specialized assistance through field offices located at or near contractors' establishments, (b) avoid or eliminate overlapping and duplication of government effort, and (c) provide more consistent treatment of contractors.

In connection with the providing of interagency services, FAR 42.101(b) prescribes the following policy:

> Multiple reviews, inspections, and examinations of a contractor or subcontractor by several agencies

involving the same practices, operations, or functions shall be eliminated to the maximum practicable extent through the use of cross-servicing arrangements.

With respect to procedures for implementing this policy, FAR 42.102(d) and (e) provide as follows:

(d) Contract administration and audit services will be performed using the procedures of the servicing agency unless formal agreements between agencies provide otherwise.

(e) Both the requesting and servicing activities are responsible for prudent use of the services provided under either formal or informal interagency cross-servicing arrangements. When it is appropriate, servicing activities shall counsel requesting agencies or contracting offices concerning the desirability and practicality of relaxing or waiving controls and surveillance that may not be necessary to ensure satisfactory contract performance.

Thus, the FAR requires the government to plan and conduct its contract administration and related audit activities in a manner that will avoid or at least minimize overlap, duplication, and inefficiency. The DFARS gives further recognition to the importance of coordination and efficiency in the contract administration function. DFARS Subpart 42.70 deals with the government's monitoring of contractors' costs, a subject that is particularly relevant to the issues addressed in this study. DFARS 42.7000 describes the scope of that subpart as follows:

This subpart sets forth guidelines for monitoring the policies, procedures, and practices used by contractors to control direct and indirect costs related to government business. These procedures are intended to eliminate duplication in monitoring contractors' costs.

DFARS 42.7002 goes on to provide that:

A formal program of government monitoring of contractor policies, procedures, and practices to control costs should be conducted at:

(a) All major contractor locations where—

(1) Sales to the government are expected to exceed $50 million during the contractor's next fiscal year on other than firm-fixed price and fixed-price-with-escalation contracts;

(2) The government's share of indirect costs for such sales is at least 50 percent of the total of such indirect costs; and

(3) A contract administration office has been established at the location.

(b) Other critical locations with significant government business where specifically directed by the HCA. . .

DFARS 42.7003 provides for a member of the contract administration office (CAO) cognizant of a contractor location meeting the above requirements to be designated as the Cost Monitoring Coordinator (CMC). The CMC may be the ACO or any other staff member whose normal function entails evaluation of contractor performance.

DFARS 42.7004 describes the responsibilities of the CMC. For the sake of brevity, each of those responsibilities is not specifically cited here. However, subparagraphs (b)(1), (b)(3), and (c) are of particular interest to this study. These subparagraphs provide as follows:

(b) The CMC shall be responsible for:

(1) Preparing and maintaining an annual consolidated written plan and schedule for reviewing contractor operations from coordinated long-range plans established by each team member including the DCAA auditor. This composite plan and schedule

will assure cost monitoring responsibilities are being fully implemented and that the technical and professional expertise of various organizational units of the CAO are used without duplication of effort or skills; . . .

(3) Coordinating the cost monitoring efforts of the CAO with those of the DCAA auditor; . . .

(c) The plan required by (b)(1) above must be tailored to the contractor, taking into account the extent of competition in awarded contracts, the contractor's operating methods, the nature of work being done, procurement cycle stage, business and industry practices, types of contracts involved, degree of technical and financial risk, ratio of Government/commercial work, and extent that performance efficiencies have been previously demonstrated. The plan should stress the importance of anticipating potential problems and provide a means of calling them to the attention of the contractor at an early stage so that preventive action can be taken. Reviews required by this supplement and the contracting officer must be included in the plan.

DCAA's responsibilities in connection with the contract administration process are described as follows in DFARS 42.7005:

> DCAA audit offices are responsible for performing all necessary contract audit for DoD and providing accounting financial advisory service regarding contracts and subcontracts to all DoD components responsible for procurement and contract administration. The auditor is responsible for submitting information and advice based on his analysis of the contractor's financial and accounting records or other related data as to the acceptability of the contractor's incurred and estimated costs, as well as for reviewing the financial and accounting aspects of the contractor's cost control systems. The auditor is also responsible for performing that part of reviews and such analysis which requires access to the contractor's financial and accounting records supporting proposed costs or pricing data. This does not preclude the Program Manager, PCO, Plant Rep/ACO, or their technical representatives from requesting any data from, or reviewing records of, the contractor (such as CSCS/C data, lists of labor operations, process sheets, etc.) necessary to the discharge of their responsibilities. The CAO will utilize the auditor's services whenever such expertise is needed, particularly regarding the contractor's financial management reports, books, and records.

DFARS 42.7006(a) sets forth procedures for selecting contractor operations for review and provides, in pertinent part, as follows:

> It is not possible to review all elements of a contractor's entire operation each year. Therefore, the CMC, together with the auditor, is to select for review those operations that have the greatest potential for charging government contracts with significant amounts of unacceptable costs. To select these cost-risk areas on a sound and orderly basis, an overview must first be obtained of the contractor's entire operation. Before the beginning of each government fiscal year, the CMC should arrange for a joint meeting between CAO, DCAA, and other directly interested government representatives to coordinate selection of the areas to be reviewed during the coming year.

DFARS 42.7006(a)(1) through (9) lists some of the data to be used by the government in selecting the contractor operations to be reviewed. Subparagraph (a)(5) is of particular relevance as it relates to the concern expressed by many of the contractors surveyed that the government does not give adequate consideration to the favorable results of prior audits or reviews in determining the scope of its auditing and other oversight activities. That

subparagraph requires the following data to be used in the selection process:

> A complete list of recent reviews and audits performed by CAO, the DCAA, and other government representatives that would affect the selection of areas to be reviewed in the current year. This listing should show outstanding weaknesses and deficiencies in the contractor's operations (CAO responsibility).

DFARS 42.7006(b), (c), and (d) set forth the procedures for planning contractor reviews, joint CAO-DCAA reviews, and reporting the results of reviews. With respect to planning, subparagraph (b) provides as follows:

> The primary purpose of the joint meeting described above is to develop a mutually acceptable annual plan for reviewing the contractor's operation. The plan should provide coverage for each significant operational area of the contractor over a period of two to three years and should be modified to reflect any changed conditions during subsequent meetings. The schedule and resource limitations of participating organizations will be considered in preparing the annual plan. The plan will identify the organizations having the primary responsibility for performing the reviews:
>
> (1) The CAO will review the technical aspects of contractor operations requiring minimal or no access to contractors' financial and accounting records and will sign reports on these reviews;
>
> (2) DCAA will review the financial and accounting aspects of contractor operations requiring minimal or no technical considerations and will sign reports on these reviews;
>
> (3) The CAO and DCAA will jointly perform reviews requiring significant CAO and DCAA expertise. Reports resulting from these reviews will be signed by the heads of the respective local organizations.
>
> Some operations reviews such as the purchasing (CAO) and estimating system reviews (DCAA) are assigned to the responsible reviewing organization. These assignments will continue to be recognized. All others will be performed according to the above criteria. The annual plan will be formally approved by heads of the local CAO and the DCAA resident offices.

DFARS 42.7006(c) discusses joint CAO-DCAA reviews and describes the objectives of such reviews as being:

> (i) To optimize the utilization of DCAA-CAO personnel in performing selected operations reviews; and
>
> (ii) To generate joint reports of the reviews that contain findings, conclusions, and recommendations mutually agreed upon by the DCAA auditor and the CAO to improve the effectiveness and economy of contractor operations.

Finally, subparagraph (d) discusses the disposition of reports that result from the above-described government reviews as follows:

> All reports prepared separately or jointly by DCAA or CAS personnel will be forwarded through the ACO to the contractor. While these review reports are advisory to the ACO, the ACO has responsibility to assure that (i) appropriate recognition is given to the results of such reviews in any contract negotiations and (ii) the contractor implements appropriate corrective actions. In event of any dispute with the contractor, the ACO has the ultimate responsibility and authority to effect final settlement [DAC 48-6, 6/15/84].

This last provision of DFARS Subpart 42.70 regarding the ACO's role in effecting final settlements relates to one of the principal concerns expressed by contractors—namely, the apparent erosion of the ACO's authority in

that respect. At the heart of this concern is DoD Directive 7640.2, which imposes certain requirements on contracting officers in connection with the resolution of DCAA audit recommendations. That Directive provides, in pertinent part, as follows:

> ***Resolution of Contract Audit Report Recommendations***
>
> a. From the time of audit report receipt to the time of final disposition of the audit report, there shall be continuous communication between the auditor and the contracting officer. When the contracting officer's proposed disposition of contract audit report recommendations differs from the contract auditor's report recommendations, and the criteria set forth below are met, the contracting officer's proposed disposition shall be brought promptly to the attention of a designated independent senior acquisition official or board (DISAO) for review. Each DoD acquisition component shall designate a DISAO at each appropriate organizational level who shall review the referred proposed disposition on the following:
>
> (1) All audit reports covering estimating system surveys, accounting system reviews, internal control reviews, defective pricing reviews, cost accounting standards noncompliance reviews, and operations audits.
>
> (2) Audit reports covering incurred costs, settlement of indirect cost rates, final pricings, terminations, equitable adjustment claims, hardship claims, and escalation claims if total costs questioned equal $50,000 or more and differences between the contracting officer and auditor total at least 5 percent of questioned costs.
>
> (3) Prenegotiation objectives for forward pricing actions when questioned costs total at least $500,000 and unresolved differences between the auditor and contracting officer total at least 5 percent of the total questioned costs.
>
> b. Existing acquisition review boards or panels, at appropriate organizational levels, may be designated to perform these functions provided they possess enough independence to conduct an impartial review. The DISAO will receive for review, along with other technical materials, the contract auditor's report. The DISAO shall give careful consideration to recommendations of the auditors, as well as the recommendations rendered by the other members of the contracting officer's team, in reviewing the position of the contracting officer. The DISAO shall provide the contracting officer, with a copy to the contract auditor, a clear, written recommendation concerning all matters subject to review.

Observations

The laws and regulations discussed above are duplicative and overlapping in some respects as they relate to the designated functions and responsibilities of the primary agencies and organizations involved in the oversight process. However, the significance of this must be evaluated from at least two perspectives.

First, the GAO and IG are principally overseers of the government's internal organization and operations. The GAO is an agent of Congress with a broad mandate to audit or investigate expenditures of the Executive Branch and its agencies, including the DoD. The DoD-IG is also empowered to audit or investigate programs and operations of the DoD. Both organizations may audit or review contractors' records. The significance of the GAO/IG relationship to the matters considered by this study relates not so much to their designated responsibilities as to how those responsibilities are discharged. For example, the contractors surveyed generally acknowledged the validity of the functions assigned to the GAO and IG by law; however, several of them expressed concern about unnecessary disruptions to their operations

when they perceived that the principal objective of a GAO or IG review was to evaluate the internal operating effectiveness and performance of DoD organizations such as the DCASPRO or DCAA. Further, the contractors felt that even when they were the focus of a GAO or IG review, those organizations should have coordinated these activities more closely with DCAA and the ACO to avoid duplication and inefficiencies in the process.

Second, although the responsibilities assigned to the contract administration function and DCAA as outlined in DoD Directives 5105.22 and 5105.36, respectively, appear to be duplicative or overlapping in certain respects (e.g., DCAA's responsibility to examine or review contractors' and subcontractors' "general business practices and procedures" and DCAS' responsibility for "review of contractor management systems"), the FAR prescribes policies and procedures that require communication and coordination between the DCAA and the ACO, or his or her designee, for the purpose of avoiding duplication and inefficiency that might occur. Thus, when considered together, the regulations governing the relationship between the contract audit and administration functions are not a primary cause of the overlap and duplication cited by the contractors we surveyed. Instead, the problem appears to be largely due to the government's failure to coordinate and conduct its audit and oversight activities in accordance with its own regulations.

RECOMMENDATIONS AND COMMENTS

It is clear from the contractors surveyed that they are greatly concerned about the escalating and intensifying level of government auditing and other oversight activities. They foresee the duplication and inefficiency as continuing or escalating unless some fundamental changes and improvements are made to the system. We agree. On the other hand, in evaluating the nature and extent of those changes, contractors need to assess their own practices to ensure that they are making every reasonable effort to facilitate the required improvements. For example, one government representative noted that contractors' concerns regarding duplicative and inefficient auditing and other oversight are often due to poor communication and misunderstandings within the contractors' own organizations. He noted that requests for documents and other information by individuals representing two or more agencies may be construed by contractors as being duplicative or otherwise inappropriate when, in reality, the questions and objectives of the individuals concerned are truly different. He noted that the entrance conferences should be utilized by contractors to clarify objectives and resolve potential problems, and that the matters covered in those conferences should be better communicated to the appropriate elements of the contractor's organization to minimize misunderstandings.

The problem is a difficult one to resolve and human nature will be a critical factor. Long-standing habits, rivalries, and feelings of mistrust between government personnel and between the government and contractors, will have to be overcome. Ultimately, any concrete improvement in the system will be a function of the individuals, both contractor and government personnel, who are involved in the procurement process. It is with this perspective that the potential benefits of our recommendations must be evaluated.

The following recommendations and comments are offered for the Commission's consideration:

1. The contracting officer's position as leader of the government's team in all dealings with the contractor should be reaffirmed. Strong leadership at the ACO and corporate administrative contracting officer (CACO) level is essential. Accordingly, the contracting

officer should be responsible for, among other things, the determination of final overhead rates for all contractors (responsibility for which was recently given to DCAA) and for coordination of all auditing and other oversight activities at contractor locations. This recommendation is easier to make in theory than it will be to implement in practice. However, our study clearly indicates that lack of coordination between responsible agencies and organizations is one of the principal causes of duplicative and inefficient auditing and other oversight by the government. Further study is required to determine how best to implement this recommendation and the following should be among the points considered:

- The IG and the military investigative services have certain oversight responsibilities that clearly require their independence from the contracting officer. While this independence should not be compromised, these organizations should be required to coordinate their activities with respect to individual contractors to the maximum extent possible. Consideration should therefore be given to establishing a formal mechanism within DoD for facilitating this coordination.

- DCAA's role in relation to the contracting officer should be more clearly defined. Irrespective of existing regulations that provide for DCAA to serve the contracting officer in an advisory capacity, our study indicates that DCAA has, in practice, assumed a role that has contributed to a diminution of the contracting officer's authority and his or her willingness to make independent decisions in some matters.

  In this connection, the appropriateness of DoD Directive 7640.2 should be reevaluated. While contracting officers must be held accountable for their actions, their primary concern should be to ensure that the government's procurement objective is achieved on time and at a fair and reasonable price. This requires the contracting officer to evaluate data obtained from a number of sources, not just DCAA. By requiring the contracting officer to justify proposed deviations from DCAA's recommendations, Directive 7640.2 has clearly increased the influence of DCAA in relation to the other members of the procurement team and appears to have placed contracting officers on the defensive. This defensive posture is inconsistent and irreconcilable with the contracting officer's position as leader of the government's team.

- Although we believe that the principal laws and regulations mandating the activities of the major oversight organizations are not a primary cause of duplication and inefficiency, they may be a contributing factor. For example, DCAA's charter to review a contractor's "general business practices and procedures " as provided for in DoD Directive 5105.36 creates ample opportunity for DCAA's activities to overlap those of DCAS or one of the other oversight agencies. On the other hand, DCAS' responsibility for determining "allowability of costs" appears to overlap DCAA's assigned responsibilities. DoD should consider clarifying the responsibilities of DCAA and the various contract administration organizations, particularly with respect to matters such as operational auditing and compensation and insurance reviews which were frequently noted areas of concern to contractors. In this regard, FAR 42.302 specifically cites reviews of contractors' compensation structures and insurance plans as contract administration functions; however, DCAA perceives the need to delve into these areas to determine the reasonableness of compensation and insurance costs. This apparent conflict

needs to be resolved. One solution may be to assign sole responsibility for all matters related to compensation and insurance, including reasonableness of the related costs, to a single DoD organization.

- Closely related to and perhaps inseparable from the need to clarify individual agency auditing and oversight responsibilities is the need to evaluate the day-to-day working relationships between auditing and other oversight organizations with particular emphasis on (1) the degree of reliance each places, or should place, on the work of the others; and (2) the extent to which the agencies share information. Several contractors cited the need for greater cooperation between government agencies in these respects as being essential to reducing duplication and inefficiency in the oversight process. This is a troublesome area to evaluate because it is difficult for contractors to truly know how much "behind the scenes" communication and reliance occurs between agencies.

  With respect to the sharing of information between agencies, the problem appears to be at least twofold. First, in some instances there is simply a blatant refusal by one group to share data with another. For example, one contractor stated that DCAS is not willing to share its compensation data base with other agencies. This example is probably indicative of the ongoing "turf battle" between DCAA and DCAS as described above with respect to which agency is responsible for compensation reviews.

  Second, the problem may, as was suggested by one contractor, simply be due to a poor or inefficient government system of filing and controlling data provided by the contractor, which results in government personnel finding it more convenient to require the contractor to produce the same data two, three, or more times (generally at different dates), than to rummage through masses of poorly or inappropriately organized data already in its possession. Whatever the reason, the problem could be at least partially alleviated by requiring the establishment of a formal data base of contractor information under the control of either the local ACO or the CACO who, in connection with his or her responsibilities for coordinating all auditing and other oversight activities with respect to the contractor, would control the maintenance and distribution of all contractor-related information and its distribution to the respective audit or other oversight agencies. The mechanics of this proposed process require further study.

2. Based on the results of this study, it appears that the requirements of DFARS Subparts 15.8 and 42.70 with respect to the conduct and coordination of DoD activities related to field pricing support and monitoring contractors' costs are not being followed, or at least they are not operating effectively. These requirements do, however, address many of the concerns expressed by the contractors surveyed. For example, they require DoD to give appropriate consideration to (a) the contractor's past performance; (b) effectiveness of the contractor's existing system of internal administrative and accounting controls; and (c) cost/benefit analyses in determining the nature, timing, and extent of audit or other review activities. DoD should assess the adequacy of its compliance with the provisions of DFARS Subparts 15.8 and 42.70 and take corrective action as necessary.

The policies, procedures, and practices of all auditing and other oversight agencies with respect to planning, organizing, and controlling their activities should be reevaluated. This reevaluation must give due consideration to the individual goals and charters of each of the agencies as well as the usefulness of their prescribed auditing and other oversight

procedures. For example, the IG and GAO have different missions than do DCAA and DCAS. The principal purpose of this reevaluation would be to identify ways of improving the effectiveness of these organizations in achieving their objectives while minimizing the cost to the government and disruption to the contractor's operations. The latter problem, while of obvious concern to contractors, represents a substantial hidden cost to the government inasmuch as contractors have reportedly increased their staffs and incurred substantial amounts of other expenses in response to intensified oversight activities. These higher costs, in part, have been or will be passed on to the government through higher contract prices. Further, duplicative and inefficient auditing and other oversight activity adds little, if anything, to the quality of the products being procured by the government, and may actually divert contractor attention from such critical matters.

3. DoD should reevaluate the negotiation process to identify ways of reducing the elapsed time between submission of contractors' proposal and final agreement on contract price. Delays in this process contribute to duplicative and inefficient auditing and other oversight because contractors are required to update their proposals on multiple occasions and each update starts a new audit cycle in which the unchanged as well as the changed data are audited. The following are some suggestions to expedite contract negotiations.

- The government should better define contract requirements before issuing a request for proposal. This is particularly true with respect to quantities which, if not well defined, may change several times and necessitate multiple subcontractor quotes which have to be obtained by the contractor and then audited or reviewed by the government.

- Government audits and reviews of updated proposals should be limited solely to the revised data submitted by contractors. Reauditing of unchanged data is duplicative, inefficient, and generally unnecessary.

  Responsibility for the price analysis of a contractor's proposal should be centralized in one organization or agency. The individual(s) performing the analysis should be part of the government negotiation team so that their insight can be brought directly to bear during the negotiation process.

- The government's audits and reviews of both initial and updated proposals should be properly planned and coordinated to avoid duplication of effort between agencies. Greater reliance should be placed by the government on contractors' internal control systems where past history and other factors indicate such reliance is warranted.

4. DoD should reevaluate policies and practices with respect to post-award audits to ensure that (a) duplication between agencies and organizations in the performance of these audits is eliminated or minimized; (b) appropriate consideration is given to cost/benefit analyses in determining the nature, timing, and extent of such reviews; (c) appropriate consideration is given to the contractor's past performance and results of prior and ongoing audits and reviews; and (d) post-award reviews are completed on a timely basis.

We believe that duplication and inefficiency in the conduct of post-award reviews could be reduced if the government performed them within perhaps one year after contract award. Almost all information required for the government to complete a post-award audit is available at the time of contract award. Consequently, it is less disruptive to the contractor for the government to perform post-award audits shortly after contract award, rather

than wait until several years "down the road" when relevant data are less likely to be as readily available. Further, the sooner post-award audits are performed, the less likely it is that changes in the contractor's accounting system that might complicate the audit process will have occurred. Also details of the negotiation process will be fresh in the minds of government and contractor personnel who participated in the process, and those individuals are more likely to be available during the postaward audit to resolve questions as they arise. The result would be a cost savings for both the contractor and government.

5. The general relationship between contractors and the government's representatives needs to be improved for the benefit of the procurement process. Several contractors expressed concern over the seemingly adversarial posture DCAA takes toward contractors and fear that the adversarial relationship will increase as DCAA is granted new rights and powers, (e.g., subpoena power and sole responsibility for determination of final indirect cost rates). While there may be some merit in these concerns, it must be recognized that given the nature of its role (i.e., auditor, watchdog, etc.) DCAA's perspective will always be perceived as adversarial to some degree.

While this situation will be difficult to resolve, the following general recommendations may prove helpful:

- Individual contractor and government personnel should strive for a relationship characterized by a "healthy skepticism" rather than animosity and antagonism.

- Every effort should be made by both contractors and the government to improve their communication and reduce the level of "gamesmanship" in their dealings with each other.

- The government must be careful not to foster the perspective among contractors that it believes every contractor intentionally engages in cost mischarging, defective pricing, and other such practices.

- The government needs to closely monitor the scope of its audits and other oversight activities to ensure that the work is properly planned, its personnel are technically competent for their assigned tasks, and duplication and inefficiency is minimized.

6. There should be a moratorium on the issuance of new procurement laws and regulations affecting defense contractors for a period of perhaps two years, until the prudence and effectiveness of present and proposed rules and regulations can be fully evaluated. Contractors are overburdened by a maze of regulations that are costly to comply with and that add little or no value to the products they produce for the government. Further, contractors generally feel that the government is engaging in "micromanagement" of their operations and that the resulting overemphasis on compliance with detailed rules and regulations has contributed to duplication and inefficiency and detracted from the achievement of what should be the government's principal objective—namely, the procurement of the highest quality products at fair and reasonable prices.

7. The basic framework of the entire auditing and oversight process should be reevaluated with a view toward establishing a system by which contractors are classified according to specified and measurable criteria for the purpose of determining the extent to which they will be subject to government oversight. Under this system, the government would adjust the scope of its oversight activities for individual contractors to respond to the level of risk identified. While conceptually this recommendation is reminiscent of the now defunct Contractor Weighted Average Share in Cost Risk (CWAS) concept, we are not

suggesting that the proposed system be an exact replica of that concept. Instead, we recommend that DoD, or preferably a joint task force comprised of DoD and industry personnel, take a "fresh look" at possible methods of categorizing or "qualifying" contractors on the basis of a variety of factors including, but not necessarily limited to, past performance, quality of systems and internal controls, as well as types of contracts, volume of commercial business, etc.

We recognize this recommendation will be difficult to implement. Major challenges to implementation will relate to the definition, application, and monitoring of compliance with the qualification criteria. The initial classification of contractors will be particularly difficult. Moreover, many of the matters discussed elsewhere in this report will impact the feasibility of the recommendation. However, given the extensive overlap, duplication, and inefficiency present in the auditing and oversight process today, this fundamental change is worthy of consideration.

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