Outside ARPA Reactions. The ARPA program has been well received by OSD, OMB, and the Congress. Presentation of "thrusts" has been easily understood and the potential significance of the breakthroughs readily appreciated. Whereas prior to FY 1976, the total ARPA budget remained essentially static at around $200M, this year's budget will be A great deal of enthusiasm has been generated for the program in the Services, Joint Chiefs of Staff, the DDR&H, and the Secretary of Defense.

Management Issues: ARPA's unique position in DoD and its determination to remain a small, hard-hitting research organization presents a set of management issues which must be dealt with successfully to maintain the organization's vigor. Some of these follow:

- **Staffing and Personnel Policies** -- There must be continuing management sensitivity to the need for professional staff turnover. This is essential to the difficult process of creating new programs, keeping Program Managers who are current in rapidly changing technologies, and maintaining aggressive and vital programs.

- **Program Transfer** -- Extraordinary and aggressive efforts are required to develop positive mechanisms to transition results of ARPA research to the Military Services. There are no automatic or built-in processes or policies which assure that this happens—the initiative is with ARPA. It is essential that close and continuing contact be maintained with Service Chiefs of Staff, Assistant Secretaries for R&D, and Commanding Officers of Materiel Acquisition Commands (AFSC, NAVM, DARCOM) by deliberately scheduled regular briefings and meetings.

- **The ARPA Image** -- Care and selectivity must be exercised to avoid involvement in research programs promoted by Service R&D organizations solely to secure ARPA funding support. ARPA should recognize and remain insensitive to Service R&D and ODDR&E Staff members who perceive of ARPA as an "interferor" with institutional biases & objectives. They would prefer to see ARPA outside of the mainstream issues. The vitality of the organization is largely derived from its mission of being the adversary, the risk-taker, the innovator, the outspoken critic.
Visibility of Demonstration Programs — for the first time, ARPA has established in FY 1976 a program element making visible major new technology demonstration efforts and the relatively large resources they may require. Preliminary Congressional and OSD Staff reaction has been positive, but critics may still raise the question, "Why ARPA?". These technology demonstration programs will materially aid the transfer of technologies to the Services who must ultimately develop the material or techniques for Service application. Meaningful (as near full scale as possible) demonstrations have the effect of more clearly suggesting the potential of new technology and help to accelerate the otherwise long, drawn-out material development cycles of Service programs. The alternative of simply reporting research findings and speculating on their potential more often than not means promising results go unnoticed and are never considered or may be subsequently duplicated by the Services or are subjected to long and frequent sub-critical exploitation attempts.

Technology Assessments — The Technology Assessments Office was established at the end of FY 1976. Those efforts underway which were relatable to the other technical offices were transferred to those offices. In the future, technology assessments will be undertaken as part of the technical office function to examine and compare the U.S. and foreign technology base and create new initiatives for the Office. Those technology assessment efforts which are of broad ARPA or DoD scope will continue under direct management of the Director, ARPA.
The Office of the Joint Chiefs of Staff did not prepare issue papers for the Ford-Carter Transition Team.
ISSUES

The Office of the Director of Net Assessment has no specifically defined responsibility for preparation or presentation of particular budget issues or Congressional testimony as part of the annual appropriations process. During the FY 1977 budget cycle, OSD/NA provided direct support for Secretary Rumsfeld and Deputy Secretary Ellsworth in preparation of a variety of materials to support budget testimony and other Congressional appearances by the Secretary. To this point in the budget cycle for FY 1978, the office has been involved in preparation of Volume I of the Annual Report of the Secretary of Defense, and in the development of a program for the Department to respond to Congressional requests for comparative weapon system presentations.
The attached documents represent the "issue papers" prepared by DDR&E for the Transition Team in connection with the transition from the Ford to the Carter Administration. Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report letter of December 14, 1976, they are believed to be broadly within the intent of that definition.

Seventeen papers recommended for release in their entirety are listed in Enclosure 1. Some parts of some of these papers qualify for withholding under exemption 5.a.(1), in that they contain advice, opinions, and suggestions. However, it is determined that withholding would not serve a significant and legitimate governmental purpose.

Partial denial is made on the 16 papers listed in Enclosure 2 under exemption 1 in that they contain classified security information. The material has been reviewed and it has been determined that the denied information is properly classified under E.O. 11652 and its disclosure could reasonably be expected to cause damage to the national security.

Partial denial is being made on the 22 papers listed in Enclosure 3 under exemption 5. The particular parts of each paper have been indicated by brackets and categorized as falling either under exemption 5.a.(1); i.e., papers containing advice, opinions, and suggestions, or as falling under 5.a.(2); i.e., information generated preliminary to decision, the release of which might interfere with orderly execution of plans.

With respect to the denied portions of the 22 papers listed in Enclosure 3, the "significant and legitimate governmental purpose" is the protection of the ability of the government to receive candid advice, opinions, and recommendations from its employees without having the rendering of such inhibited and biased through the possibility of public controversy on them prior to their consideration. Similarly, orderly government would suffer if proposed governmental positions were prematurely exposed to those who might benefit or seek to influence them as the result of such premature disclosure.

The Initial Denial Authority in this instance is Mr. S. E. Clements, Executive Assistant, Office of the Director, Defense Research and Engineering.
Enclosure 1.

PAPERS TO BE RELEASED

Note: Some portions of these papers qualify for withholding under Exemption 5, but use of the Exemption is waived.

Defense R&D Laboratories
Federal Contract Research Centers (FCRCs)
DOD R&D Testing Using Human Volunteers
Joint Service Development/Test Programs
Systems Acquisition Management
Prototyping
Travel Funds
DOD Medical Research Charter
Reduction of Outyear Operating and Support (O&S) Costs
Visibility and Management of Operating and Support Costs
Life Cycle Cost (LCC) Reduction
Design to Cost
Specifications and Standards
Reliability and Maintainability
Soviet Technological Doctrine and Practice
Competition in Defense Procurement
Expeditious JOT&E of IIR MAVERICK
DEFENSE R&D LABORATORIES

1. **Subject of Interest:** ODDE is directing various changes which will increase innovation in the Defense Research and Exploratory Development and some advanced technology demonstration programs.

2. **Background:** The DoD Technology Base comprises approximately 74 in-house Research and Development facilities and 56,000 civilian workers, including about 24,000 professionals. These laboratories monitor the expenditure of some $3B per year, about one-half of which is spent internally. Several major changes are underway which are directed toward increasing the innovation and productivity in the laboratories.

- The laboratories' roles in Technology Base planning and supervision is being increased. To initiate this, block funding of the laboratories has been increased and lead laboratory concepts for technology areas have been implemented.

- We are increasing the use of investment strategies as a technique for apportioning the resources across the various technology areas in the Technology Base.

- The laboratories are being assigned prime technology area responsibilities. The size of the laboratories is being reduced by manpower drawdowns in redundant and lesser productive areas.

- The percentage of the Technology Base work which is performed by universities and industry is being increased to take advantage of their unique contributions to the program.

- The roles of the laboratories in support of systems acquisition is being increased. To expedite this a change to DoD 5000.2 was implemented which requires a Technology Assessment Annex to Decision Concept Papers for systems which are meeting Defense Systems Acquisition Review Council Milestones I and II.

ODD(R&AT)
1 Dec 76
3. **DoD Position:** As in-house laboratories play a key role in military R&D, the actions enumerated above have been accepted and are being implemented.

4. **Current Status:** Funding allocation increases in the Technology Base are being applied selectively across the technology areas based on a careful evaluation of various investment strategies. The Air Force and Army have implemented the block funding technique; the Navy is moving in that direction. Ceilings have been placed on the amount of Technology Base program which will be performed in-house with the ultimate goal of achieving a maximum of 30% in-house. The manpower drawdown in the Air Force has been completed and is approximately on schedule for the Army and Navy. The drawdown amounts to approximately 6,900 authorizations to be completed by the end of FY 78.
UNCLASSIFIED

FEDERAL CONTRACT RESEARCH CENTERS
(FCRCs)

1. Issue: Will the revised policies and procedures for managing DoD-Federal Contract Research Centers (FCRCs) be acceptable to Congress?

2. Background: Federal Contract Research Centers (FCRCs) are DoD sponsored non-profit corporations dating from WWII. The number of FCRCs has been reduced from 21 to 8 since 1964. Each FCRC is distinctive and generally performs different functions. Other government agencies have similar organizations.

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>System Engineering/ Tech Direction (SE/TD) (FY76)</th>
<th>Studies &amp; Analyses (S&amp;A) (FY76)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT Lincoln</td>
<td>MITRE Corp $45M</td>
<td>RAND $17M</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>Aerospace Corp $82M</td>
<td>CNA $10M</td>
</tr>
<tr>
<td>Penn State</td>
<td>$8M</td>
<td>ANSER $2M</td>
</tr>
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</table>

Laboratory FCRCs perform difficult technical projects embracing both research and new prototype systems concepts. (SE/TD) FCRCs provide technical support in defining, developing, producing and fielding space, communications and command and control (C^3) systems. (S&A) FCRCs provide sound and unbiased professional analyses and recommendations for force planners, logistics managers, R&D managers, high officials on DoD staffs, etc.

A high degree of control is maintained over FCRCs. The Senate Armed Services Committee provides an overall fiscal ceiling. Four major problems exist with using FCRCs:

- Several years ago, Congress expressed concern regarding salaries, number, size of operation, etc. These concerns resulted in the imposition of a Congressional fiscal ceiling. However, this ceiling has not kept pace with inflation.

- Congressional concern has been expressed more recently regarding how we use FCRCs, i.e., as "extension of headquarters staffs," especially the S&A FCRCs.
Part of the for-profit industry sector is opposed to both the non-profit and sponsored aspects of FCRCs, especially as pertains to the success of some FCRCs in diversification.

The fiscal ceiling has especially been a hindrance in accomplishing space and C³ SE/TD work.

3. **DoD Position**: An extensive review was conducted of FCRCs in 1976 in response to Congressional desires. Principal actions are as follows:

- **Analytical Services (ANSER)** will no longer be an FCRC.

- **The Applied Physics Laboratory (Johns Hopkins) and Applied Research Laboratory (Penn State)** will not be considered FCRCs beginning in FY 1978.

- **MIT Lincoln Laboratory, Center for Naval Analyses (CNA), Project Air Force (formerly-Project Rand) and the Institute for Defense Analyses (IDA)** will not be allowed to exceed their present manpower levels. The non-Project Air Force aspects of RAND Corporation will not be considered an FCRC.

- **MITRE-Bedford** will be separated from MITRE-Washington. All DoD C³ work will be done at Mitre-Bedford. MITRE-Washington will not be considered a DoD FCRC. Mitre-Bedford will not do non-DoD work unless of direct benefit to DoD. Level of DoD effort at Mitre-Bedford will be governed by DoD C³ workload.

- **Aerospace Corp** will be restricted to DoD space program endeavors except on programs of direct benefit to DoD (i.e. joint DoD-NASA). Level of DoD effort at Aerospace will be governed by DoD space system workload.

4. **Current Status**: A report was provided to the four concerned Congressional Committees. Informal approval received. DoD will be implementing above actions in the FY 78 budget process. Congressional Committees reactions in their reports on the budget will provide basis for future management of FCRCs.
Subject of Issue: Continuing concern by many groups that humans are being used as guinea pigs needlessly and under circumstances of unacceptable hazard.

Background: The DoD, as one of many Federal agencies who perform tests using human test subjects, has been drawn into the overall public and Congressional dialogue on the subject. In 1975, Congressional committees held hearings that discussed tests, primarily related to chemical agent and hallucinogenic drug testing, that were conducted in the 1950, 60s and early 1970s. This discussion resulted in a report that highlighted abuse and an inadequate follow-up of the test subjects. These practices had been stopped and the control of such experimentation had already been markedly improved in the 1970s by DoD because of its own concern and the national revision of standards for use of human volunteer subjects, although this point was carefully avoided or ignored in the hearings.

DoD Position: DoD must conduct tests that use human test volunteers in several of its human related RDT&E program. Each Service has formal and effective approval procedures to insure that the proposed tests are needed and worth the investment and risk, properly planned, safely and competently conducted, and that proper follow-up is assured. As new guidelines or laws are passed related to this on a national level, they are included in the DoD process of approval, review, conduct, and critique of our R&D. In all cases, only fully informed and volunteer subjects will be used.
1. **Problem:** Proliferation of hardware and programs aimed at meeting the same basic operational requirements.

2. **Background:** Unnecessary proliferation of systems and subsystems intended for similar operational requirements can dilute the effectiveness of R&D resources, deters competitive procurement and ultimately consumes excessive operations and support resources. With severe budget constraints in the R&D area, this problem cannot be overemphasized. Operational requirements must be carefully examined and coordinated to eliminate the costly consequences of duplication, strive for subsystem and system interchangeability, and achieve interoperability and flexibility of mixed forces. Commonality of hardware is sought to reduce the costs of training, maintenance, and support. DDR&E places heavy emphasis on structuring joint RDT&E programs through memoranda of agreements, lead Service assignments, and close coordination with other OSD offices such as DTACCS and ASD(I&L) in working groups.

   Certain technology areas have been identified as prime candidates for special attention in DDR&E because rapid movement in the state of the art encourages proliferation. As an example, electronics technology can be found as a major cost element of almost every weapon system. Since one-third of the DoD budget in some way or other is tied to electronic related expenditures, it is an area that has been highlighted as worthy of special attention. This is particularly important in electronic subsystems in view of the fact that annual support costs for these military equipments are equal to the annual procurement costs and are increasing due to the relatively high labor content. Therefore, Joint Service programs in the electronics area are highly leveraged and provide a basis for significant cost reductions.

3. **DoD Position:** Joint Service programs are an effective approach to stemming proliferation of programs aimed at meeting similar operational requirements. Our policies to achieve this objective are stated in DoD Directives; identified and restructured as necessary in the planning, programming, and budgeting cycles; and when necessary, by fiat. A special policy for Single Service Management of Selected Electronic Equipments has received tri-Service Secretarial endorsement and is expected to be finalized in March 1977.

4. **Status:** We have established commonality between Services that is intended to satisfy sister Service requirements in virtually all DSARC reviews. Working groups and special committees have been formed to more closely examine the areas where high payoff potential exists. The Directive on electronic equipment will utilize the requirements process and other existing means to identify those items which are candidates for Single Service management. The assignment of the "lead"
Service on a case-by-case basis will be made by the appropriate OSD offices.

At the present time, there are 78 joint Service R&D programs; and similarly, there are 14 joint operational test programs. For example, the NAVSTAR (Global Positioning System) is a tri-Service development to reduce net DoD navigation costs by a significant percentage while enhancing the performance of weapons and simplifying their design. During the past year, the Air Force has been assigned as Executive Agent for the development of the new beyond visual range air-to-air missile, which is a replacement for Sparrow. The new missile will be based on previous DARPA research and designed to satisfy a JSOR. Similarly, the ultimate Sidewinder replacement will be based on a continuing evaluation of seekers and development of operational requirements.
SYSTEMS ACQUISITION MANAGEMENT

1. Issue: In order to maintain national security in times of highly constrained defense budgets it is imperative that we manage the acquisition of defense systems in a highly efficient manner.

2. Background: The basic policies for the management of defense systems acquisition were established in mid-1971 with the publication of DoD Directive 5000.1, "Acquisition of Major Defense Systems." Since that time the results of several study efforts for improving the defense systems acquisition process have been published, i.e., the Commission on Government Procurement, the Army Material Acquisition Review Committee, the Navy/Marine Corps Acquisition Review Committee and most recently the Acquisition Advisory Group.

3. DoD Position: While many of the recommended improvements to the defense systems acquisition process have already been implemented we are continuing to evaluate and adopt other promising changes.

4. Current Status: In many areas we have made major strides in improving the management of DoD systems acquisition. Some of these management initiatives are:

a) Fly-before-buy (hardware demonstration)
b) Achievement milestones vs calendar milestones
c) Competition, especially during system validation
d) Design to Cost
e) Hi-Lo force mix
f) Creation of viable options
g) Maintaining strong technical base
h) Improved program management

Other areas of promising efforts underway but still evolving are:

a) "Front-end" planning—mission needs and affordability
b) Life Cycle Costing

Sound management of defense systems acquisition impacts on the defense posture of the U.S. It is probably the single most important task of DoD as it impacts directly on force readiness, the yearly defense budget and also the outyear expenditures for operating and maintaining our weapon systems. We will continue to evaluate all facets of the acquisition process seeking improvements in national defense and more efficient development, production, operation and support of our defense system.
PROTOTYPING

1. **Issue:** To improve the basis for management decisions during the development and acquisition of defense systems and equipment.

2. **Background:** Prototyping stresses the use of hardware demonstration, rather than paper studies, as the basis for key program decisions. It has been referred to as the "fly before buy" or "test before buy" approach to system acquisition. In practice, it calls for investment in a few demonstration models (prototypes) and evaluation of test results prior to making a major commitment of funds or resources. It was promulgated as management policy by former Deputy Secretary of Defense David Packard, has been emphasized as a management tool by his successor, DepSecDef Clements, and has become an important aid to defense decision-making. Congress has debated the merits of prototyping and endorsed its application in defense programs.

3. **DoD Position:** Prototyping is an aid to management that reflects a basic principle of sound decision-making: systematic reduction of risk. It must always be viewed in the decision-making context. It is not, and must not become, an end or objective in itself. We emphasize prototyping where it is needed to support and strengthen our basis for decisions, not as "the thing to do" in order to get programs approved.

4. **Current Status:** We have gained considerable experience in prototyping over the past several years; however, there is still some misunderstanding of the difference between its two fundamental applications.

Prototyping is used during the acquisition cycle to reduce the risks associated with applying advanced technology to meet defined operational requirements. These are the "full-scale engineering development" prototypes. (Examples: Mechanized Infantry Combat Vehicle; Utility Tactical Transport Aircraft; Advanced Attack Helicopter; Submarine Launched Cruise Missile.) Where it is impractical to prototype an entire weapon system, the concept is applied to subsystems and components. (Examples: AHACS Radar; Airborne TACAN; Navy Modular Electronic Warfare Suite.)

Prototyping is also used to explore and advance new technology prior to the definition of specific requirements. These are "technology base" or "exploratory development" prototypes. Their purpose is to provide viable options for future decisions. Exploratory prototyping creates technological alternatives, exploits technical opportunities, stimulates competition and innovation, retains key industry design teams, and improves our ability to make performance/cost tradeoffs. (Examples: Air Combat Fighter; Advanced Medium STOL; Electronically Agile Radar.)

DDREE
30 Nov 76
Budget Related Issue

TRAVEL FUNDS

Issue: ODD(R&AT) has insufficient travel funds to adequately perform its assigned tasks for FY77.

History: ODD(R&AT) is allocated travel funds from DDR&E. These funds are used to pay for transportation and per diem in performing our program monitoring tasks, to satisfy U.S. responsibilities in international travel for the Defense Research Group and for The Technical Cooperation Program, to maintain staff specialists professional proficiency through attendance at technical symposia and meetings and to publicize the technical thrusts and management changes which we are implementing in the Technology Base program. The travel funds allocated in FY76 was $42.3K. Our request for FY77, in view of the total inadequacy of FY76 funds, was $76K. Our allocation for the first 6 months of FY77 is $14.7K. We have reduced the $14.7K by the amount required to meet international obligations for the first 6 months of FY77 plus a $1K contingency fund, and allocated the remainder on a prorata basis to the AD Offices and the Front Office Staff. We anticipate that the funding to be allocated for the second half of FY77 will be approximately $14.7K.

Position: DDR&E is aware that the FY77 allocation is inadequate. Travel, other than that supported by others, is by and large restricted to program monitoring plus the international commitments.

ODD(R&AT)
30Nov76
Budget Related Issue

DOD MEDICAL RESEARCH CHARTER
(vis-a-vis other Federal Agencies)

Subject of Issue: Congressional actions on DoD budget requests are being denied in cases where any other agency is conducting research in the area.

History: Congressional actions during FY 76 and FY 77 budget cycle denied DoD requests for money for research in drug and alcohol abuse, and a series of infectious and dental diseases. The basis for denial has been that the Department, Health, Education, and Welfare (DHEW) is doing work in these fields and the DoD, therefore, should not require any effort in the area. This has been cited especially in cases where the DoD level of effort is much smaller than the DHEW commitment. A GAO review of infectious disease research was completed in FY 76, overseas laboratory reviews are underway now which could cause further areas to be so identified in FY 78 and beyond.

Budgetary Impact: Previous reductions were not made until late in the fiscal year. As a result, money had been committed to new and continuing efforts under the authority of the Continuing Resolution. Thus, when all funds programmed for the effort were withdrawn, additional funds were also lost due to the fact that the earlier commitments to contracts had been made and could not be recouped.

DoD Position: DoD does carefully coordinate and draw from the civil and other Federal agency research. It conducts research only on the unique problems of the Military Services or those aspects of the problem that the civil sector cannot or will not address. Thus, rather than duplicate, the smaller DoD investment represents a complimentary effort that provides specialized results of interest to DoD.
REDUCTION OF OUTYEAR OPERATING AND SUPPORT (O&S) COSTS

1. **Issue:** To reduce the fraction of the outyear DoD budget allocated to system operating and support costs, while at the same time maintaining operational readiness.

2. **Background:** Continued growth in the fraction of the DoD budget allocated to operate and support current systems has impaired force modernization. Greater emphasis is needed on reducing the future O&S costs of systems now being developed, so as to reverse this trend as new systems enter the inventory.

   Better visibility on the specific O&S costs of current systems is a necessary step in defining and reducing the O&S cost of future systems. The next step is to employ the results of that improved visibility.

3. **DoD Position:** We are confident that we can achieve the ability to identify and track the O&S costs of individual types of defense systems. We must also control the future O&S costs of systems now in development, so as to achieve a net reduction in the O&S portion of the DoD budget.

4. **Current Status:** The DepSecDef memorandum on Reduction of Outyear Operating and Support Costs, 28 February 1976, directed the Military Departments to establish O&S cost targets for each major system now in development, and to propose methods to assess the net O&S cost impact on future Department budgets of all DSARC decisions.

   The Services have forwarded their planned approaches to the establishment of O&S cost goals for all major programs now in the DSARC process and proposed methodology for annual assessment of the net O&S cost impact of DSARC decisions during the preceding year. Refinements required by ASD(I&L) review are now in progress.
UNCLASSIFIED

VISIBILITY AND MANAGEMENT OF OPERATING AND SUPPORT COSTS

1. Issue: To develop methods for determining the operating and support costs attributable to particular Defense systems.

2. Background: SecDef and DDR&E posture statements for FY 1976 mentioned the need to improve visibility on the operating and support (O&S) costs of current systems, as a necessary step in reducing the life cycle cost (LCC) of future weapon systems.

During SecDef's testimony, Senator Culver asked for LCC estimates on the 10 most expensive systems then in development. DDR&E responded with current estimates for 8 of the 10 systems.

Thereafter, Senator Culver proposed an amendment to the Authorization Bill that required DoD to include LCC estimates for all major systems in its budget, beginning with the FY 1977 submission. This amendment was deleted in conference when DoD stated it was unable to provide such estimates for all major systems. However, DoD did indicate it might be possible to submit LCC estimates for aircraft systems with the FY 1978 budget.

3. DoD Position: We can estimate system acquisition costs fairly well, and are improving that capability, but DoD accounting systems were not set up to identify all operating and support costs by individual weapon systems. We are working to improve visibility on operating and support costs.

4. Current Status: ASD(I&L) has been tasked to define the management information system needed to account for O&S costs by weapon system type. The Services have presented their proposed management information systems for ASD(I&L) review. Refinements in response to ASD(I&L) review are now in progress.

ASD (Comptroller) has been tasked to modify the DoD accounting systems as necessary to accommodate the information system defined by ASD(I&L).

OSD and the Services are working to improve cost comparability among the Services.

The Air Force demonstrated a prototype O&S cost management information system for aircraft during FY 1977 and is now evaluating its effectiveness prior to scheduling its expansion to other types of weapon systems. The Army and Navy are working on similar projects, and the Navy has also developed plans for an O&S cost Management Information System for ships.
LIFE CYCLE COST (LCC) REDUCTION

1. Issue: To define and reduce the total cost of acquiring, operating, maintaining and supporting defense systems, while at the same time maintaining force modernization, readiness and operational effectiveness.

2. Background: LCC reduction is a major objective of the DoD. There is also considerable Congressional interest in this subject. Present appropriation accounting makes it relatively easy to identify development, procurement and military construction costs of specific weapon systems. However, operating and support (O&S) cost appropriations are related to type of organization and function, rather than to type of weapon system.

3. DoD Position: We can estimate system acquisition costs fairly well, and we are improving that capability. We can and are holding acquisition programs to predetermined unit cost thresholds as a necessary but not sufficient part of LCC reduction. Additional steps are necessary to define and reduce the O&S cost of current and future weapon systems. Those steps are now underway.

4. Current Status (more detail in attached backup papers):

Design to Cost - DoD Directive 5000.28, May 1975, directed the Military Departments to design systems to predetermined unit production costs, and to trade off performance, schedule and quantity as necessary to meet cost goals. Most major systems not yet in production either have established DTC goals or have made cost an "equal partner" with "cost drivers" in early design studies. DTC is an issue at DSARC reviews and corrective action is directed for breach of DTC thresholds.

Visibility and Management of Operating and Support Costs - A DepSecDef memorandum dated 16 October 1975 directed ASD(I&L) to define the management information system needed to account for the O&S costs of current systems by system type. ASD (Comptroller) was directed to modify DoD accounting systems as necessary. The Military Departments have presented their proposals for such an information system and refinements are in progress.

Reduction of Outyear Operating and Support Costs - A DepSecDef memorandum dated 28 February 1976 directed the Military Departments to establish O&S cost goals for each major system development program and to propose methods for an annual assessment of the net impact of all DSARC decisions on the O&S portion of their outyear budgets. The overall objective is a real annual reduction in that fraction of the DoD budget allocated to O&S costs.

Reliability and Maintainability - Reliability and maintainability (R&M) are system parameters that link system design characteristics to O&S cost, readiness and operational effectiveness. Quantitative R&M requirements are now included in almost all DCPs; however, DoD policy on R&M needs to be clarified and extended to subsystems and less-than-major systems, in order to facilitate LCC reduction. DDR&E and ASD(I&L) are preparing a DoD Directive on this subject and supervising the revision of appropriate Military Standards.
UNCLASSIFIED

DESIGN TO COST

1. Issue: To specify and constrain the cost of each new system so DoD can afford to buy the quantities of systems it needs to meet national security objectives within current and foreseen budget constraints.

2. Background: Design to Cost (DTC) is a management policy similar to cost control techniques used in the commercial sector. DTC established unit cost as a parameter equal in importance with system performance, program schedule and other factors that can drive program cost, such as produceability, logistic support concept, data requirements, safety/survivability, etc. It requires planners to set cost goals the DoD can afford to pay, and to trade off system design parameters against those goals. It further requires that cost be emphasized in trade-off decisions throughout the acquisition process, and that cost estimates be verified as within pre-set goals prior to award of the production contract.

3. DoD Position: Design to Cost is necessary to counter the escalating costs of defense systems. We plan to continue applying it to new development programs (both systems and subsystems).

4. Current Status: Design to Cost policy was formalized in DoD Directive 5000.28, issued in May 1975. Each Program Manager receives comprehensive instruction on Design to Cost policy and implementation experience as he goes through the Defense Systems Management College. Design to Cost objectives have been routinely established on all recent major development programs. Examples include the A-10, F-16 and Advanced Medium STOL aircraft, the F-18, Patrol Frigate, Submarine Launched Cruise Missile, UTTAS helicopter, Advanced Attack Helicopter, and XM-1 tank. Such objectives are being defined for more recent programs on a routine basis. While initial emphasis was on designing to a unit production cost, primarily because DoD's ability to estimate and measure unit cost is better than its ability to estimate and measure Life Cycle Cost, DoD is now increasing emphasis on making design tradeoffs to control life cycle cost drivers.
SPECIFICATIONS AND STANDARDS

1. **Problem:** With increasing costs of defense systems, equipment and material, there were concerns that military specifications were the "cost drivers".

2. **Issue:** Military specifications and standards have occasionally contained unrealistic, obsolete or marginal requirements which resulted in excessive costs.

3. **DoD Position:** DoD is attacking the problem on three fronts:

   a) ASD(I&L) and DDR&E co-sponsor the Defense Material Specifications and Standards Board to review on a continuing basis the total specifications and standardization program management to recommend necessary changes in policy to the SecDef.

   b) At the request of DspSecDef, the Services have established RFP (Request for Proposal) Review Boards to review and "scrub" RFPs, prior to their formal release to bidders, of any excessive requirements and unwarranted cost-driving requirements, including specification requirements.

   c) ASD(I&L) and DNR&E jointly established a Defense Science Board Task Force to recommend appropriate specifications and standards policy.

4. **Status:**

   **A. DMSSB:**

   1) Now have five Technical Panels (i.e., Materials, Electronics, Metrology, Clothing and Textiles, Audio Visual). The Metrology Panel, for example, prepared an interim policy on the use of the metric system of measurement in the DoD which was signed by DspSecDef.

   2) A task group revised the DoD Standardization Manual covering specification preparation, coordination and management.

**DDR&E**
30 Nov 76
B. **RFP Review Boards:**

All three Services have established these review boards and are actually scrubbing new major system RFPs. On several procurements, draft RFPs were submitted to industry prior to formal release to bidders soliciting comments on the identification of cost-driving elements and suggestions on how to meet the intent of the need at lower cost.

C. **Defense Science Board Task Force:**

Found that while needing continual attention for improvement, specifications and standards were adequate and not the fundamental problem. The problem was really the over-application (or blanket application) of these documents, which in many cases resulted in unwarranted costs. Among the Task Force recommendations are: 1) "tailoring" or selective application of the specification requirements to each program, 2) establish an environment to provide incentives or contractors/bidders for proposing tailored specifications and for recommending cost effective waivers to reduce costs, and 3) education of Program Managers on specification applications to avoid excessive costs. The Services are currently initiating actions to implement these recommendations.
UNCLASSIFIED

RELIABILITY AND MAINTAINABILITY

1. Issue: To reduce the operating and support cost of defense systems while maintaining or increasing their readiness and operational effectiveness.

2. Background: Reliability and Maintainability (R&M) are measurable performance parameters that link system design characteristics to readiness, effectiveness, operating and support cost. Improved R&M simultaneously increases readiness and percentage of successful missions, while decreasing maintenance, supply and manpower requirements. In the past, field reliability has often been only a fraction of that "demonstrated" by the contractor in REL DEMO done to a MIL STD. This occurred because REL DEMO test criteria did not realistically approximate actual field conditions and definitions of a "failure" were not relevant to actual field experience. OSD has major initiatives underway to improve this situation.

3. DoD Position: Increased emphasis must be placed on improving the R&M of systems during RDTE, rather than trying to fix systems already in production.

4. Current Status: Quantitative R&M thresholds are now included in virtually all DCPS and attainment of these thresholds has become an issue at DSARC reviews. The Deputy Director (Test and Evaluation) has placed a high priority on R&M in his reviews of test programs and test results, as reflected in his reports to the Deputy Secretary of Defense and the DSARC Chairman at all critical milestone decisions.

ODTGE and OASD(I&L) are preparing a DoD Directive on R&M to ensure these parameters are addressed as an integral part of the acquisition process for both major and less-than-major system and subsystem programs.

The Military Departments are revising Military Standards pertaining to reliability, especially the reliability of electronics equipment. These revisions will translate DoD policy to the Defense industries. They include increased realism of tests conducted in laboratory test chambers. The cost of more realistic test facilities is to be paid for by shorter total test time and greater correlation of laboratory and field reliability values.

The Services have recently included in their budgets funds to improve readiness and reduce operating costs for equipment in the field. This is accomplished primarily through the upgrading of equipment reliability and maintainability identified by organizations specifically charged with this responsibility such as the Air Force Productivity, Reliability, Availability and Maintainability (PRAM) Program Office.

Government and industrial technology base activities are exploring the feasibility of using highly reliable electronic modules as basic building blocks for widespread application to electronics equipment. High design reliability and tight quality control are to be paid for by savings achieved through volume production and standardization.

Contractual approaches are being developed which will incentivize contractors to design equipment for high reliability and low repair costs. Approaches successfully used include contract award fees and reliability warranties.
SOVIET TECHNOLOGICAL DOCTRINE AND PRACTICE

1. **Subject:** The relationships between Soviet science and technology doctrine and practice and their military technological status.

2. **Background:** Soviet doctrine was enunciated by Lenin—"One must either master the highest technology or be crushed", and has been continually reaffirmed—"The development of Soviet science has special significance today when the scientific-technological revolution has become the most important area in the competition of the two opposed world systems" (Communist Party Central Committee Resolution, December 1973). Soviet policy is set by the Politburo, and is specifically oriented toward establishing credible military scientific-technical superiority over the U.S. R&D management is highly centralized; the Politburo's executive agent is the Council of Ministers, 75 percent of whom have technical backgrounds. The USSR has deliberately emphasized the greatest possible rate of advance in military technology at the expense of improvements in the civilian sector. Soviet policy is to exploit innovations achieved in civil R&D for military purposes, but because of the weakness of Soviet civil R&D, we have not seen any instances in which it has contributed significantly to their military technology. There is no Soviet counterpart to the cross-fertilization process in U.S. industry and commerce which advances military and civilian technology together in many areas that are militarily important to the U.S. Within the military sector, past Soviet practice emphasized continuity of effort and incremental improvements. Today there are many indications of willingness to take the risks of applying and exploiting advanced technology.

3. **DoD Position:** Soviet doctrinal emphasis on science and technology has led to a commitment of resources for military R&D which must be regarded as a serious threat to the military balance between the U.S. and USSR. The U.S. can meet this challenge only through a sustained and vigorous program of RDT&E to advance and exploit its strong technologies. Such a program is feasible at affordable cost, because of the inherent weakness in the Soviet system of separating military and civil R&D. The rate of advance of Soviet military technology—overall—will be inhibited as long as their civilian sector is excluded from supporting such advances, although with special emphasis they have been able to surpass the U.S. in some fields of technology. The U.S. can retain the technological initiative and preserve the military balance if it has the will to do so.

ODDR&E
2 December 1976
4. **Current Status:** Soviet military R&D increasingly is producing a variety of quality military equipments. Also, there are strong indications, in the form of a number of Soviet military R&D activities and new systems being deployed (e.g., air cushion vehicles, radar satellites), that the Soviets have broken away from their long-standing policy of technological conservatism. Several of the Soviet military R&D activities are not well understood, but are a matter of concern because they appear to be related to key missions of U.S. forces (e.g., new approaches to ballistic missile defense and anti-submarine warfare). Avoidance of technological surprise requires a coherent R&D effort to generate new technological options in mission areas where U.S. vulnerability may be uncertain and where the risk of surprise is great.
COMPEITION IN DEFENSE PROCUREMENT

1. Issue: To utilize competition to the maximum extent feasible during the acquisition of defense systems and equipment.

2. Background: Competition between system concepts, present and proposed systems, contractors, subcontractors, and even between the Military Departments is the paramount motivating factor during both development and production of defense hardware. Winning the development and/or production contract is a far greater incentive than the profit rate or any "incentive clause" after competition is reduced to a sole source.

3. DoD Position: Competition is to be used wherever economically feasible throughout the acquisition cycle, to include competitive development, production and alternate sourcing.

4. Current Status: Most of our recent major programs include a competitive prototype phase during advanced development, with comparison of test results ("fly-off", "shoot-off") as a key factor in the decision to advance the program into full-scale engineering development. Examples include the A-X prototype competition which resulted in selection of the A-10 Close Support Aircraft, the Air Combat Fighter (F-15), Advanced Attack Helicopter, XM-1 tank, and Submarine-Launched Cruise Missile.

On high volume production programs, second source competitions are also held. Examples include the Army's TCV and Shillelagh antitank missiles, the Sparrow and Sidewinder air-to-air missiles, and the Mk-48 torpedo.

When competition is not economically feasible at the weapon system level, subsystem and component competition is often implemented.

DIDRe

30 Nov 1976
EXPEDITIOUS JOT&E OF IIR MAVERICK

1. ISSUE: As a result of DSARC II of IIR MAVERICK in September 1976, operational uncertainties were surfaced which affected the potential operational utility of the system.

2. BACKGROUND: Even though a comprehensive advanced development test program had been successfully accomplished by the developing agency, there remained some doubts about the operational utility of IIR MAVERICK in particular combat scenarios. To resolve these uncertainties, DepSecDef directed that a Joint Operational Test and Evaluation be initiated and conducted in a compressed timeframe. Test planning is in progress with the USAF as the executive Service. A partial report will be provided in March 1977 and a final report by August 1, 1977. An independent contractor has been chosen to assist in test planning, monitor test conduct and provide an independent analysis at the completion of the joint tests.

3. RECOMMENDED POSITION: DD(T&E) support and provide advice and direction as appropriate, to the Joint Test Director.
Enclosure 2

Papers to be Partially Denied on Exemption 1 - (Classified)

Notes:  1. Some portions of these also qualify for Exemption 5 and such papers are also listed on Enclosure 3 for those portions.

2. Some of these papers are unintelligible due to deletions as indicated.

Chemical Warfare Readiness Improvement (also on Enclosure 3)

M-X

SLBM/TRIDENT II (unintelligible w/deletions)

Briefing Paper (also on Enclosure 3)

Special Nuclear Materials (unintelligible w/deletions)

Space Defense (unintelligible w/deletions)

High Energy Lasers (unintelligible w/deletions)

NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 3)

NET Technical Assessment--U.S. vs. USSR RDT&E

Chair Heritage (also on Enclosure 3)

Cannon Launched Guided Projectile Copperhead (CLGP) (also on Enclosure 3)

Impact of Procurement Changes on the F-18 (also on Enclosure 3)
(unintelligible w/deletions)

Air to Air Missile Inventory (also on Enclosure 3)

Conventional Airfield Attack Missile (also on Enclosure 3)

General Support Rocket System (GSRS) (also on Enclosure 3)

Infrared Imaging Seeker (also on Enclosure 3)
CHEMICAL WARFARE READINESS IMPROVEMENT

1. (U) **Subject of Issue:** DoD efforts to improve chemical warfare (CW) posture, both protective and retaliatory.

2. **Background:**

   - USSR poses serious threat in CW.
   - US has ratified Geneva Protocol with reservation which essentially bans first use of CW.

3. (U) **DoD Position:** Supports efforts to modernize chemical warfare capability and to improve protective posture to allow continuing operations in a CW environment.

4. **Current Status:**

   **Defensive Programs:**
   - FY 1977 budget contained $37.4M for defensive RDT&E, FY 1978 budget contains $37.4M.
   - FY 1977 Army budget contained $95.8M for procurement, O&M, and war reserve funds; FY 1978 budget contains $95.8M all for improvement of defensive and protective posture.
   - FY 1977 Air Force budget contained $17.2M for protective items; FY 1978 contains $17.2M.
   - Training is being improved in both Army and Air Force, about personnel will be added to training and disaster preparedness teams by FY 1978.
Retaliatory Programs:

- Binary chemical munition RDT&E is continuing as programmed by FY 1978.

- No production decision on binary munitions has been made, nor has any modernization program been undertaken pending further review of national policy in this area. Various studies are in progress to better develop the DoD position.

*Conference of the Committee on Disarmament (UN)*
Issue: What should be the M-X development pace?

1. Subject

The M-X is envisioned as a large, highly accurate, MIRVed missile (approximately 170,000 lbs) capable of being moved from aimpoint to aimpoint in a manner which will conceal its location such that all aimpoints, whether they be visible above-ground shelters or invisible subterranean trenches, are credible to the offense. If attacking weapons are added by the offense, additional aimpoints can be proliferated at relatively low cost. The M-X thus achieves a very high prelaunch survivability. It will also retain the rapid response characteristics and positive command and control features inherent in a land based ICBM.

2. Background

Four new-generation Soviet ICBMs and variants have been developed since the Vladivostok Accord. This evolving Soviet ICBM force with its improvements in accuracy, throwweight, targeting flexibility, and prelaunch survivability is a formidable threat to our land based missile force, as well as our cities. Additionally, vigorous Soviet missile R&D effort beyond the current deployment activities indicates a Soviet trend towards improvement of their counterforce capability and a broadening by its potential base for rapid quantity and quality improvements. Survivability of U. S. land based ICBMs in the 1980s, as well as a partial redress of the growing throwweight imbalance, can be achieved by making the ICBM transportable and hard to an optimal degree. By providing credible aimpoints which are cheaper than the weapons required to destroy them, an arms race can be avoided.

3. DoD Position

The DoD believes in the TRIAD as an absolute necessity for strategic deterrence because the diversity of three entirely different systems will preclude a potential disaster by one technology breakthrough. ICBMs offer a unique capability not present in the other two legs of the TRIAD, namely, capability across the entire target spectrum; a time urgent, hard target kill capability; facility for positive command and control; and an excellent inherent capacity for redressing throwweight imbalances. As the ICBM is vital to the TRIAD, its survivability should therefore be insured.
4. Current Status

M-X technology has proceeded in the advanced development stage for several years, particularly in the areas of guidance and propulsion. Basing mode studies have been accomplished, indicating that the shelter and trench concepts as the most promising.

5. Funding (Millions)

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SLBM/TRIDENT II

Issue: Why do we need TRIDENT II missile for a new SLBM?

1. Subject

2. Background

In our strategic TRIAD the SLBM force at sea is the least targetable by opposing strategic systems.

TRIDENT II represents another timely step in the effort of expanding the "haystack".

3. DoD Position

By virtue of the relative invulnerability and increased capacity of the TRIDENT submarine, an orderly development of the TRIDENT II to fully utilize the new submarine capability is considered highly desirable.

4. Current Status

5. Funding (Millions)

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Originator: DDR5E
Date: 30 November 1976
Purpose: To describe weapons systems under development which might be:

- Conceived as having a first strike capability
- Subjects of concern in arms control negotiations because of:
  - Possible verification problems.
  - Possible threats to Soviet strategic war-making capabilities.

I. Possible First Strike Weapons

The only conceivable reason for our attempting a first strike would be to disarm the Soviets, i.e., to deliver a surprise initial attack of such magnitude as to reduce to a relatively negligible level the Soviet capacity for retaliation. Otherwise, we invite their retaliation. They have an assured second strike capability -- achieved through a TRIAD similar to our own -- of which we cannot obliterate by any present or proposed capability, or even by capabilities which are still in the realm of speculation. At least twice in the last thirty years the Soviets did not have an assured retaliatory capability; they were engaged in provoking us; and yet, it was not in our nature to attempt even limited military action against them.

The ability to execute a disarming first strike requires three essentials:

- Accurate location of all Soviet strategic weapons.
- Sufficient weapons to attack effectively all Soviet strategic weapons.
- Surprise.

We do not possess either of the first two military capabilities and our open society forecloses the third essential. Still, there are some who believe that the development of certain weapons systems poses a potential first strike capability. In this context, a hard target kill (HTK) capability is most often cited as a first strike capability. An HTK capability would be necessary but not sufficient, without satisfying the above criteria, for a first strike. U.S. HTK capabilities and goals derive from a desire for effectiveness and efficiency in a retaliatory role, and -- for those weapons targeted against his strategic nuclear forces -- to destroy his residual or reserve force to preclude coercion or further war-making capacity after the onset of hostilities.
Not only do we not seek a first strike capability, we seek to reduce incentives for an opponent to strike first in a crisis situation by providing our forces with such characteristics that an aggressor would not significantly change the outcome by striking first in a crisis. This is the essence of strategic stability.

Those systems most frequently criticized as having a first strike capability are:

a. M-X, which will be deceptively based among a large number of hardened aim points. It will satisfy requirements for, (1) multiple aim point basing to redress the increasing vulnerability of silo based ICBM's; (2) greater payload to somewhat offset the existing Soviet throw-weight advantage in new ICBM's and SLBM's; and, (3) the capability to attack effectively an expanded and harder set of targets.

Through M-X development we seek the ability to maintain a credible second strike which is in fact that which deters a Soviet first strike. However, the ultimate foundation of the credible second strike is in numbers of deployed weapons and not in the weapon system development. They are separable considerations.

M-X multiple aim point basing is criticized by some on the grounds that it is difficult to verify numbers of missiles. We note that while this may be true in the general case, deployment constraints can be devised which permit high confidence counting even without on-site inspection, and that on-site counting is quite reliable, in any event. Banning mobile missiles is tantamount to giving up on ICBM's, since it is only a matter of time before the survivability of U.S. silo-based ICBM's will be unacceptably low. Further, mobile ICBM's, because of their high survivability, do not invite a first strike (there is no premium for striking first) and hence represent a stabilizing influence.

b. Improved Yield and Accuracy for MINUTEMAN.

MINUTEMAN III is being improved, and these are interim improvements to redress throw-weight asymmetries and maintain
essential equivalence pending the availability of M-X. Numbers of MINUTEMAN III are inadequate, even with improved accuracy and higher yield, to represent a first strike threat.

c. MaRV (Maneuvering Reentry Vehicle).

MaRV's are potentially applicable to any ballistic missile. They have two applications. One is for evading defensive missiles, the other is for improving overall missile system accuracy.

As with other weapons systems or components, this development does not threaten any adversary. Further, deployed quantities can satisfy, potentially, only one of the three essential criteria for a first strike.

d. Bombers and Cruise Missiles.

These represent no conceivable first strike potential because of the long flight times involved.

2. Subjects of Concern - Verification

a. M-X: Discussed above under first strike.

b. Cruise Missiles: Two cruise missiles are currently in advanced development: the air launched cruise missile (ALCM) and the TOMAHAWK sea launched cruise missile. The ALCM, deployed on B-52s, could significantly enhance bomber force effectiveness by diluting Soviet air defenses, supplementing penetration range, and providing increased overall targeting flexibility. There are two versions of the TOMAHAWK. The conventionally armed anti-ship TOMAHAWK will provide the Navy a much needed capability to insure that our ships and submarines will not be out-ranged by potential adversaries. The nuclear armed Land Attack TOMAHAWK could be deployed on submarines, surface ships, aircraft, and mobile land launchers for tactical or strategic attack.

Both ALCM and TOMAHAWK are highly accurate, flexible, inexpensive weapons. They are small, aerodynamic vehicles that fly at high subsonic speeds at very low altitude making them very difficult to detect and destroy. They use common TERCOM terrain matching guidance, system turbine engine, and nuclear warhead.
It is expected that a decision will be made in the next few months on whether to enter engineering development with either ALCM or TOMAHAWK or both.

If cruise missiles are covered in future SAL agreements, there could be two aspects of compliance verification to be addressed. The first aspect could be verification of the total number of cruise missiles deployed or in storage and the second could involve limits on range of the missiles.

There is no known adequate technical basis for verifiably constraining cruise missile range. For example, some current Soviet missiles, with substantially less range than the potential U.S. cruise missiles, are physically much larger than the U.S. cruise missiles would be. An overriding consideration bearing on the problem of limiting cruise missile range is the fact that the geographical distribution of Soviet targets requires a long range for U.S. cruise missiles whereas heavy coastal population and industrial concentration in the United States permits attack by short range Soviet cruise missiles. There is no realistic way to differentiate between tactical and strategic cruise missiles.

3. Subject of Concern - Threats to Soviet Strategic War-Making Capabilities


b. ABM: We have no deployed ABM capability. We have a program (~$200M) in advanced component and systems technology. No weapons system is under development. ABM R&D has the following objectives which represent no threat to any Soviet strategic war-making capability:

- Maintain a capability to develop and deploy an ABM system should one be required for defense of ICBM forces, C3 systems, or other high value targets.
Maintain the U.S. lead in ABM technology through investigation of advanced components, technologies, and systems concepts that could yield a technological breakthrough.

C. Space Defense:
SPECIAL NUCLEAR MATERIALS

Issue: Does U.S. run short of special nuclear materials for its weapons?

1. Subject

The term special nuclear materials (SNM), consists of enriched uranium, plutonium, and tritium.

2. Background

There are two alternatives which may be considered:
ERDA has "mothballed" capacity

3. DoD Position (U)
   N/A

4. Current Status

5. Funding (U)
   N/A
1. **Subject**

2. **Background**

3. **DoD Position**

4. **Current Status**

5. **Funding (Millions)**

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1. Subject of Interest

2. Background

- The program is essentially in the exploratory and early advanced development stage.

- We have made a concerted effort to focus on technology and avoid directing major portions of our efforts toward specific near term applications.

- All three Services and DARPA are involved and DDR&E has a stronger than usual coordination role.

3. DoD Position

DDR&E
30 Nov 76
Current Status

4.
NATO AIRBORNE EARLY WARNING (AEW) AIRCRAFT

I. PROBLEM: NATO has a need for an airborne early warning aircraft to provide the key element in establishing control of the air environment wherever NATO forces are engaged.

Tri-Major NATO Commanders' requirement has been stated for a force of these aircraft. A decision on this matter will have to be made during the Feb-May 1977 timeframe.

II. BACKGROUND

Since 1973 the US has proposed that NATO accept the USAF E-3A AWACS (or a derivation thereof) as the candidate aircraft to satisfy the Tri-Major NATO Commanders' requirement for a force of NATO Airborne Early Warning aircraft. Several different NATO committees, study groups, and steering committees have been formed to provide recommendations on aircraft type, configuration, force size, ground interface modifications with NADGE, Strida II, UKADGE, and 407L/412L.

Other NATO nations such as Norway and Netherlands have expressed strong support, but

The most recent expression of NATO on this matter was at the 6 December 1976 NATO Defense Planning Committee meeting. At that meeting the NATO Defense Ministers reaffirmed the importance of a NATO AEW force and agreed to a meeting of high level experts in early January 1977 to examine financial aspects to be followed shortly thereafter by a meeting of Defense Ministers to decide whether or not to proceed.

III. DoD POSITION:

IV. Status: DoD representatives are preparing for participation in the meeting of the NATO high level experts to be held in January 1977.
NET TECHNICAL ASSESSMENT—U.S. vs. USSR RDT&E

1. Subject of Interest: The relative capabilities of the U.S. and USSR for performing military RDT&E.

2. Background:

   These analyses show the USSR outspending the U.S. in military RDT&E for at least the last six years.

   More substantive comparisons take into account differences in RDT&E style (e.g., willingness to innovate), market base for technology advances, and relevance to system mission capability. A judgmental assessment has been made taking these factors into account, and indicates a comprehensive pattern of improvement in the quality of Soviet military RDT&E. Although U.S. technological quality generally continues to surpass that of the USSR, the combination of Soviet quantitative advantage and quality improvements is of serious concern to future U.S. national security.

3. DoD Position: The U.S. leads overall in military technology, and needs to retain the lead to maintain—a military balance with the USSR, so as to deter global conflict and deter or win limited wars. The U.S. has an inherent advantage, in that advances in several militarily important technologies are jointly supported by the military and commercial markets (e.g., aircraft gas turbines, semi-conductor and integrated-circuit industries, and computers). There is no counterpart to this joint market support in the Soviet Union. Soviet RDT&E effort in the past has generally emphasized continuity of effort and incrementalism, but in recent years they have shown that they can pull ahead of the U.S. if there is no U.S. commercial base and DoD does not support technology advances (e.g., chemical warfare). Today, Soviet military RDT&E exhibits increasing willingness to invest in high-risk technologies with potentially great payoff in military applications. The U.S. can beat the Soviets without commercial support if DoD chooses to do so (e.g., air-to-air avionics and military space systems), despite the advantages to Soviet intelligence from the U.S. open society.

4. Current Status: The U.S. has shown the Soviets that superior technology can offset numerical advantages in materiel and personnel. Declared Soviet science/technology policy is to surpass the U.S., but they have signalled key deficiencies by aggressive attempts to transfer technology from the U.S.

ODDR&E
2 December 1976
However, there are gaps in our understanding of some Soviet military RDT&E activities, which appear to be related to vital mission areas of U.S. forces. Three steps need to be taken to avoid technological surprise: (1) Continue to monitor and assess Soviet RDT&E activities and their potential relationships to the military balance. (2) Maintain a vigorous R&D effort to generate technological options in areas where our vulnerability is uncertain and risk of surprise is great. (3) Maintain a persistent and coherent program of RDT&E for advancing and exploiting militarily important technology areas where U.S. is strong. In addition, the U.S. must develop new strengths for application in selected mission areas where Soviet efforts are creating an imbalance.
Budget Related Issue

CHAIR HERITAGE

Issue: (U) The Navy has been prevented by Congressional action from continuing the Chair Heritage Program at funding levels.

History: The Fiscal 1977 request for authorization contained an Exploratory Development and an Advanced Development project in support of Chair Heritage. The Advanced Development program, budgeted at $3.4M, was to initiate the development of an Advanced Test Accelerator (ATA). These funds were deleted by the Joint Committee on Armed Services pending recommendations from a review of the Chair Heritage program by the JASON Committee.*

(U) The JASON Committee completed its study and reported favorable regarding program continuation. The results of the JASON review and the proposed program were presented to the Congressional staffs and a request for approval to proceed was sent to the HASC. However, HASC concurrence has not been received. All FY 77 funds are deferred pending resolution of this issue.

Position: (U) HASC - Current position is not known. Impending meeting with HASC staff may clarify situation.

Impact: (U) Delaying this program for more than a year will break up the leading team in Lawrence Livermore Laboratory and delay the answers needed to establish the feasibility of the use of this machine as a viable weapons system.

*A DARPA Advisory Committee

OAD(E&PS)
1 Dec 76
CANNON LAUNCHED GUIDED PROJECTILE COPPERHEAD (CLCP)

1. **Problem:** The Army has been in Engineering Development since 1975 on a 155mm Cannon Launched Guided Projectile with terminal homing capability, and has the program on contract to Martin-Marietta. The Navy has also been doing similar in-house work on a 5" projectile for shipboard use and more recently has done work on an 8" guided projectile. DoD has continually stressed commonality of the Navy 5" and the Army 155mm rounds.

On the other hand, the House Armed Services Committee has continued to reduce Army funding for COPPERHEAD thus delaying the program, while directing that more commonality studies be conducted.

2. **Background:** Martin Marietta Aerospace and Texas Instruments Incorporated were selected in February 1972 for participation in Advanced Development. During this phase the major subsystems of the COPPERHEAD (CLGP) were gun-fired to determine survivability. The two contractors, with different design concepts, were authorized to enter into the Validation Phase of Advanced Development in September 1973.

DSASC II was held on 19 June 1975, resulting in authorization to enter Full Scale Engineering Development. Martin-Marietta was awarded an Engineering Development Contract on 25 July 1975. The contract modification for the restructured contract, necessitated by Congressional reduction in FY 76/77 was signed 25 Jun 76 and increased the program by $5M. A task force chaired by DRSE with Army, Navy, and Marine Corps members, conducted a guided projectile commonality study during May thru Sep 76. This study was completed and forwarded to Congressional Armed Service Committees on 27 Sep 76. The task force recommended that both 5" and 155mm guided projectile development should be continued. In view of the above, the Army was authorized to initiate Productivity Engineering Planning (PEP) on 15 October 1976. The HASC subsequently held up PEP and approval to initiate it was given to the Army on 3 December 1976 with liability limited to $850,000 and efforts to stop at end of February 1977.

3. **DoD Position:**
IMPACT OF PROCUREMENT CHANGES ON THE FIS

1. Problem: The FIS program

2. Background:

3. DoD Position:

4. Current Status: The PBD's reflect these changes.
AIR TO AIR MISSILE INVENTORY

1. **Problem:** USN and USAF fighter aircraft are

2. **Background:** A number of factors have caused a shortage of air-to-air guided missiles. The War in Vietnam caused expenditures to be high both for combat and training, the increasing cost of new missiles results in reduced quantity buys, and the low missile kill probability translates into a requirement for more missiles to meet substantially the same threat. In addition, development programs for new missiles (AIM-7F and AIM-9L) both ran into problems which resulted in delays and further exacerbated the inventory problem.

3. **DoD Position:**

For the immediate future, we must strive to develop a new generation of missiles which (a) are more affordable by virtue of lower cost of acquisition and ownership, (b) have a higher kill probability so that we need to procure them in fewer numbers, and (c) can be developed on schedule.

4. **Current Status:**

These missiles will be joint (USN/USAF) developments.
1. Problem: Do we need a Conventional Airfield Attack Missile (CAAM)?

2. Background: The combination of the Warsaw Pact Air Force numbers disparity coupled with their opportunity to initiate an attack against NATO air bases continues to be a difficult problem. Our effort to counter the Red advantage has in the past included sheltering of our aircraft, deployment of ground and air defenses and providing a conventional strike second capability utilizing attack aircraft. The interdiction of Pact Main operating air bases (MOBs) is difficult because of the combination of defenses and weather.

3. DoD Position:

4. Current Status: The PBOs reflect the DoD position with initial funding established in FY78.
2. Background: The GSRS concept has been existent in its current form since 1973. Army Joint Working Group (JWG) was established in February 1974 to assess the need for a GSRS with a counterfire (counter-battery, air defense suppression) mission. The JWG conducted a preliminary technical and cost assessment of a multiple launch rocket system based on a threat provided by the USA Field Artillery School (FAS). In mid-1974, DA directed a study of the Artillery System (Task Force BATTLEKING) which considered two GSRS concepts.

The JWG prepared a Letter of Agreement (LOA) which was approved by DA in September 1975. A Special Study Group (SSG) was subsequently formed to conduct an in-depth investigation of GSRS concepts, and arrive at a recommended approach to fulfill the system need. The threat was the impetus behind the requirement, and was a major factor in determining the required physical and performance characteristics of the GSRS. Using a representative target list, a request for Proposal was released to industry in December 1975 to assist in determining the best technical approach (BTA). Five contractors were chosen to assist in development of system concepts and to propose in-depth technical and cost tradeoffs and program cost and schedule data. In addition, a survey of foreign rocket system technology was conducted for application. The SSG then proceeded with a Cost and Operational Effectiveness Analysis comparing the BTA to foreign, existing U.S. and parametric systems.
4. Status: The Army is preparing for a DSARC I on 11 January 1977, and if the program is approved, contractual effort will likely begin in March-April 1977.

GAD(LN)
LTC Cass
3 Dec 76
1. **Problem:** The Air Force has received DOD approval to enter Engineering Development with the MAVERICK missile with an Infrared Imaging Seeker (IIR). The Navy now agrees to utilize MAVERICK IIR, while the Army is not presently fully supporting development of an imaging seeker for HELLFIRE.

2. **Background:** Efforts have been on-going at the Army Missile Command since 1972 to develop an imaging seeker suitable for heliborne use on a small diameter missile. Contractors involved in this Exploratory Development have been Hughes and Texas Instruments. During the same timeframe the Air Force has more energetically funded an Advanced Development program with Hughes for a MAVERICK seeker. They are now ready for Engineering Development to commence in April 1977. The Navy, while earlier supporting BULLDOG and a non-imaging seeker, is now supporting MAVERICK imaging.

3. **DoD Position:**

4. **Status:** Air Force starts ED in April 1977 on MAVERICK IIR for AF/Navy use. The Army is working a very low level 6.2 effort in FY 77, while planning a nominal 6.3 start in FY 78 for a HELLFIRE imaging seeker. Joint operational tests are being conducted.
Enclosure 3

Papers to be Partially Denied on Exemption 5

Technology Base Funding Increase
Control of Size of In-House Technology Base Program
DOD Use of Animals in Research
Chemical Warfare-Biological Defense
Chemical Warfare Policy
Chemical Warfare Readiness Improvement (also on Enclosure 2)
Weather Modernization
Computer Software
Bombers
Briefing Paper (also on Enclosure 2)
Ballistic Missile Defense
High/Low MIX
XM1 Tank Program
FRG/UK/US Tank Gun Firing Trials
NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 2)
Test and Evaluation Efficiency
Major Range and Test Facility Base
TRIDENT I Flight Test Program at the Eastern Test Range (unintelligible w/deletions)
Independent Research and Development
Export of Technology
Standardization and Interoperability within NATO
Human Resources & Manpower R&D

Atch 3
TECHNOLOGY BASE FUNDING INCREASE

1. Subject of Interest: The term Technology Base refers to the Defense Research (6.1) and Exploratory Development (6.2) categories of the RDT&E budget, and part of the Advanced Development (6.3) category.

2. Background: The Technology Base constitutes approximately 20% of the DoD RDT&E budget. It is the foundation for the RDT&E program and provides the technology options for new techniques, new systems and better manpower use leading toward improved military capability. The Technology Base contributes to the economic health of the nation through commercialization of R&D by-products. The Technology Base is performed in the in-house laboratories as well as through contractual efforts with universities, and industry.

   The Technology Base effort decreased about 4.0% in terms of constant dollars beginning in FY 64. This trend was reversed through increased financial support to the Technology Base beginning in FY 76. This increase has been supported by DoD and the Armed Services Committees and the Appropriations Committees.

3. DoD Position: The Technology Base is our foundation for the future security of the nation. It has given us some notable firsts in military capabilities, including initiatives in laser systems, improved jet engines, improved aerodynamics, advanced simulators for undergraduate pilot training, improved materials, night vision devices, communications technology and reduced mortality for the combat injured.

4. Current Status: The PPGM specifies an increase in Research (6.1) of a minimum of 10% per year in constant dollars through FY 80 and, further, that Exploratory Development (6.2) shall not be decreased below the FY 78 budget request in constant dollars in FY 79-83. It goes on to specify that the percentage of 6.1 achieved in FY 80 to the total RDT&E budget and the percentage of 6.2 achieved in FY 78 to the total RDT&E budget will be maintained as the minimum guidance level in subsequent years.

   This increase will continue the trend toward reinvigorating our Technology Base program and will serve as tangible evidence of a renewed commitment to technological superiority on the part of the DoD and Congress.

CDD(R&AT)
1 Dec 76
Budget Related Issue

CONTROL OF SIZE OF IN-HOUSE TECHNOLOGY BASE PROGRAM

Issue: We are restructuring the Technology Base program by decreasing the amount of work done in-house and increasing the amount done in industry and universities.

History: The DoD Technology Base has three major participants (the in-house laboratories, industry and universities), each performing a unique part of the overall program. Over the past ten years there has been a decrease of approximately 40% in the level of effort in the DoD Technology Base program. This decrease has been taken primarily in the university and industry programs while the in-house effort has remained essentially level. The in-house portion had increased from approximately 23% of the total Technology Base program in FY 68 to approximately 43% in FY 74. We are restoring the level of effort as well as the balance between participants by increasing the funding in the program, directing that the increase go primarily to the university and industry programs and by a manpower drawdown of approximately 10% in the in-house RDT&E program. Our goal is to reduce the in-house portion of the DoD Technology Base program to approximately 30%.

Position: In FY76 the Air Force program was approximately 43% in-house, the Navy 41%, the Army 60%, and, with DARPA and DNA essentially all contract, the overall DoD level is 38%. We are continuing to control the in-house program by establishing a maximum level of effort for the Army, Navy, and Air Force in FY 77.

ODD(R&AT)
30 Nov 76
Subject of Issue: Periodically, adverse public and Congressional interest to DoD using animals in research, especially beagles, occurs.

History: Annually in the Spring, several animal protective associations and Congressional members reopen a letter campaign which questions the need for, the proper care of, and the use of animals in research. A favorite tactic has been to associate this complaint with a DoD program that is also judged unpopular or inhumane by other groups, such as chemical warfare agent development, and to use this as a basis for getting restrictions on animal use placed into DoD budget and authorization legislation. The constraints, however, are written in a manner making them applicable to more than DoD and more than the unpopular program to which they are attached (i.e., all Federally supported research).

DoD Position: Testing using animals is essential for the conduct of DoD research in the medical and life sciences area. Substitutes for animals are used to the maximum possible.

We comply with all laws and guidelines regarding the proper use of animals. This has been published in DoD Instruction 3216.1, Policy on Animals in DoD RDT&E, Clinical Investigations and Instructional Programs. Without use of animals in testing, the R&D programs to establish standards for human exposure to toxic substances, combat trauma and blood substitute care, procedures and materials and new drugs and vaccines could not be qualified for human use.
Chemical Warfare-Biological Defense

1. **Subject of Issue:** Chemical warfare and chemical/biological (CW/B) defense programs.

2. **Background**
   - **Program Objectives:** In support of current national policy, these programs are designed to maintain a deterrent to possible use of CW/B against U.S. or Allied forces and to provide a retaliatory capability if deterrence fails. The emphasis of the program is to provide the necessary defensive equipment and procedures to warn of, withstand, and recover from an attack. The effort includes an assessment of the threat and the vulnerability of U.S. forces.
   - The USSR has the world's greatest capability to operate in a CW environment.
   - The US retaliatory stockpile requires modernization to be credible; major improvements in the defensive posture are required.
   - Strong Congressional opposition exists to the development of binary munitions (a new, safe packaging configuration where non-lethal components form the same toxic chemicals as the present stockpile when fired) as a means of modernization; good Congressional support exists for an improved defensive capability.
   - RDT&E is generally adequate; however, procurement of defensive equipment and troop training needs improvement and emphasis.

3. **DoD Position**
   - Supports effort to improve US forces capability to operate in a chemical/biological environment; encourages Allies to follow similar course.
   - Supports limited effort to modernize retaliatory capability.

4. **Current Status**
   - OSD guidance in PPGM* and DPPG** emphasizes defensive programs, both in RDT&E and procurement, while maintaining through selected segments of general purpose forces the capability of limited retaliation.

*Planning Programming Guidance Memorandum  ODDR&E (E&LS)
**Defense Policy and Planning Guidance  29 November 1976
The Department of the Army has completed one study, "Chemical Warfare Policy, 1980-1990," prepared by the Strategic Studies Institute. A similar study is in progress by Stanford Research Institute, using the same threat analysis and terms of reference, funded jointly by the Army and the ASD(ISA). The JCS is developing, under contract with IDA, a system for estimating chemical munition requirements utilizing a two-sided wargame scenario based on an analysis of targets. The Army has a similar effort in progress at the Concepts Analysis Agency. The Director (PE) has completed a contract study with SPC Corp. analyzing chemical warfare program issues. NSSM 192 which discusses current national policy alternatives is still outstanding.

Procurement of defensive equipment and training is being emphasized in both Departments of Army and Air Force; Department of Navy contract study in progress to define scope and specific needs.
Budget Related Issue

CHEMICAL WARFARE POLICY

1. Subject of Issue: Long-standing Chemical Warfare (CW) policy is: no-first use of CW, maintain a chemical warfare capability to deter the use of CW against the US or its Allies and to be able to retaliate in kind should deterrence fail, and be able to protect the US forces against CW attacks.

2. Background: The above policy has been stated many times, most recently in 1969 when the US relinquished any biological warfare capability. In January 1975, the US ratified both the Geneva Protocol and the Biological Weapons Convention (BWC). The Geneva Protocol bans first use of CW only since all major powers retain the right to retaliate in-kind. The BWC binds all parties to continue negotiations on an agreement banning chemical weapons. A number of studies by the Department of the Army, ASD(EA), Director (P&E), the JCS, and the Navy are in various stages of completion. The Congress has requested the GAO to review the total CW policy and posture.

3. DoD Position: Supports extensive efforts to improved protective posture through R&D and procurement and encourages Allies to follow similar course; supports limited efforts to maintain a retaliatory capability.

4. Current Status:

OAD(E&LS)
29 November 1976
WEATHER MODIFICATION

1. Issues:

a. Advertant Modification. Senator Pell opposes DoD involvement in weather modification, and has been instrumental in involving the U.S. in a treaty to prohibit military weather modification.

b. Inadvertant Modification.

2. Background:

There is public concern, and in some cases fear, that man's weather modification activities may cause unacceptable damage and human suffering.

DoD has been criticized for its precipitation enhancement operations over Vietnam. Senator Pell has pressed to restrain DoD from all research or operations in weather modification.

The U.S. is negotiating a convention, "The Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques."

The Congress has asked the Executive Agencies to conduct research into stratospheric pollution. NASA and NOAA are tasked to conduct a research and monitoring program. DoD operates majority of facilities that can sample in stratosphere, but such routine sampling beyond DoD mission.

3. DoD Position:

a. DoD presently is not engaged in any classified research or operations in weather modification. All DoD activities are reported to and published by the National Oceanic and Atmospheric Administration.
COMPUTER SOFTWARE

1. Subject of Issue: DoD spends approximately $3 billion annually in software development and test in new weapon systems, three times the computer hardware costs. Basic technology is mostly missing to improve the efficiency and standardization of software utilization. Congress has repeatedly cut the software technology budgets, and the Services have been reluctant to properly fund the programs.

2. Background: This problem is now receiving a concerted OSD-wide effort, including ODDR&E, OASD(C), OASD(I&L), and DARPA. Appropriate committees have been formed, a management plan drafted, and a DoD Directive 5000.29 was issued on the Management of Computer Resources in Major Defense Systems establishing policy. Reviews and meetings have been held with key people in the Services and Congress to provide an understanding of our programs and to receive their support. A major effort in establishing a standard higher order language (HOL) has been initiated.

3. DoD Position:

4. Current Status: Work in this area is slowly gaining momentum. The HOL standardization is proceeding fairly well on schedule, but must be closely watched. Coordination among elements of OSD is quite effective. However, much work remains to initiate the appropriate technology work in each of the Services.

OAD(E&PS)
1 Dec 76
**BOMBERS**

**Issue:** In the Missile Age, why do we need bombers?

1. **Subject**
   Bombers remain the one leg of the TRIAD where U. S. still retains significant numerical advantage over its Soviet counterpart. This advantage is in both hard and soft target kill capability. Bombers can be launched on warning and dispersed. The bomber is recallable after launch; it can be rerouted enroute; it can be used in different levels of conflict. The bomber can demonstrate U. S. resolve by adjustment of alert rate without actually entering into combat. Its long time to reach intercontinental targets precludes it as a first-strike force. The bomber force is thus a stabilizing force.

2. **Background**
   Continued improvement of Soviet air defenses make the strategic bomber's job increasingly difficult. Since the 1950s, the B-52 has been the backbone of the bomber force. Improved avionics and addition of air launched missiles (SRAM) has permitted growth capability but the aircraft's basic technology is that of the 1950s. Large radar cross section, softness to blast effects and its bombing and navigation system limit the continued potential of the B-52.

   The B-1 is scheduled to enter the inventory in the early 1980s. The B-1 will allow the continue of the most-flexible leg of our TRIAD, the bomber, to maintain superiority over the Soviets with its improved penetration capability, low radar cross section, superior avionics, and larger and more flexible weapon mix.

3. **Bell Position**

4. **Current Status**
   Some B-52 avionics improvements are continuing where practical and necessary to maintain its effectiveness. The development of the B-1 is nearing completion. The great wealth of test data show that the B-1 is ready for production.

5. **Funding (Millions)**

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**Originator: DDR&SE**

**Date:** 30 November 1976
BALLISTIC MISSILE DEFENSE

1. Subject

The Ballistic Missile Defense (BMD) program is comprised of two complementary efforts — The Advanced Technology program and the Systems Technology program.

2. Background

Our BMD efforts are directed at maintaining a technology lead over the Soviets and supporting U.S. strategic offensive forces and Intelligence Agencies by maintaining an in-depth understanding of BMD technology. These are sustained, broad-based efforts to investigate and develop new technologies and concepts and to provide a systems technology base for application to various types of future BMD systems. With the deactivation of the SAFEGUARD system we no longer have a deployed BMD system and with the reorientation of the Site Defense program we are not developing an operational system.

The principal focus of the Systems Technology effort through 1978 will be directed toward terminal defense issues. Modest efforts are also being initiated on a non-nuclear intercept capability that could complement a terminal system, and on a very low altitude concept applicable to the defense of a mobile ICBM force. These two new tasks will form the basis for the future efforts and the level of funding for them requires consideration.

The BMD efforts are the Army's only strategic programs.

3. DoD Position

4. Current Status

- Funding level is inadequate in FY 78 to properly support new tasks.
- The BMD programs are the responsibility of the Army.

5. Funding (millions)  

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</table>
1. **Problem:** Is the High/Low Mix a viable concept for modernizing our forces.

2. **Background:** The Warsaw PACT presently has a quantitative advantage in weapon systems over the US and are increasing the quality of new systems as they enter their inventory. At the same time, the US is faced with the problem of increasing weapon system costs. The High/Low Mix is a force structure planning concept which attempts to offset these problems by procuring a small fleet of high-performance systems ("High") to counter the superior threat, and a larger fleet of lower-performance systems ("Low") to counter the average threat. The concept has been implemented by either developing large numbers of "low" systems where we have a qualitative advantage, or to develop small numbers of expensive "high" systems for missions in which we have near parity of numbers. The latter approach has worked fairly well except that it forces a relatively fixed composition because the "low" systems are generally out of production.

In May 1974, the Secretary of Defense told the SASC that he would approve expansion of the Air Force tactical structure from 21 to 26 wings if the Air Force could develop and field large numbers of missionized versions of the YF-16 Lightweight Fighters such that the total cost of the 26 Wing force would not be significantly greater than the previous 21 Wing "high" force.

3. **DoD Postion:**

4. **Current Status:** The High/Low Mix concept is included in mission area planning and Extended Planning Annexes which provide force structure estimates out to 15 years. Some examples of high/low mixes in which we are developing low systems are the F-15/F-16, F-14/F-18, A-10, and FFQ-7 Patrol Frigate. High system mixes being developed are the UTTAS/UH-1, XM-1/M-60, AAI/Cobra, and MICV/M-113.
XML TANK PROGRAM

1. ISSUE: XM1 Tank/Leopard 2(AV) Tank Comparative Evaluation.

2. BACKGROUND:

a. The US Army and the FRG's Federal Ministry of Defense entered into a
   December 1974 agreement to make all reasonable efforts to achieve
   standardization on the XM1 and Leopard 2 tanks. As part of this
   agreement, the US Army confirmed its intention to test the Leopard 2,
   modified to meet US requirements, to the same ground rules and
   constraints established for the XM1 and include it in a comparative
   test and evaluation.

b. The competitive test of the US Chrysler and General Motors XM1
   prototypes was conducted during the period February-April 1976. The
   comparative test of the FRG's Leopard 2 (American Version)(AV) was
   conducted during the period September-December 1976.

c. In July 1976 an Addendum to the 1974 agreement was approved which
   concerned the procedures to be followed in attempting to identify and
   simplify areas of potential standardization in the XM1 and Leopard 2 tank
   programs. Major areas to be considered were the main gun and
   ammunition, engine, track, transmission, and fire control.

d. Following a four-month delay in the XM1 program to permit the contractors
   to resubmit additional proposals based on the standardization addendum, Chrysler
   was awarded the full-scale engineering development contract on November 12, 1976.

e. Access to XM1 test results were closely controlled within the Army and
   OSD to protect the highly competitive nature of program. DD(T&E) evaluation
   of test results was performed by the assigned military staff assistant. DD(T&E)
   assessment of test results, released prior to selection of winning contractor,
   was written in a generic sense.

f. The US is scheduled to select by March 31, 1977, either the Chrysler
   proposal or the FRG's Leopard 2(AV) proposal for continued full-scale engineering
   development.

g. Charges of lack of OSD and Army objectivity during test and subsequent
   evaluation of Leopard 2(AV) have been raised in the press and by DGA Int'l
   representatives. These charges have been manifested in press articles to the effect
   that OSD has predetermined the US tank to be superior to the Leopard 2(AV); DGA
   International representatives have discussed their apprehensions concerning objective
   T&E analysis with various Departments of State and Defense officials.

3. RECOMMENDED POSITION:
1. **ISSUE**: Relative effectiveness of US 105mm M68 gun with improved ammunition, FRG 120mm smoothbore gun and developmental ammunition, and UK 120mm rifled gun with current and developmental ammunition.

2. **BACKGROUND**:

   a. A FRG/UK/US joint evaluation of main armament systems for main battle tanks was conducted between November 1973 and August 1975. The overall objective of this Trilateral Main Armament Evaluation was to seek a decision on a common solution for the main armament of the FRG Leopard 2, the US XM1, and the UK/FRG Future Main Battle Tank (FMBT). The candidate systems studied in the evaluation were the FRG 120mm smoothbore system, the UK 110mm rifled bore system, and the US 105mm rifled bore system.

   b. The Trilateral Group recommended that production of the XM1 be initiated using the improved 105mm system but consideration be given to a later date for possible incorporation of a 120mm armament system of the Leopard 2 be produced with the 105mm system but that the Leopard 2's turret design optimized for a 120mm system and that an optimal main armament system, giving consideration to both smooth and rifled bore designs, be developed as expeditiously as possible for the XM1 and possible product improvement of the XM1.

   c. In January 1976, the Secretary of Defense approved the Army's recommendations to initiate production of the XM1 with the improved 105mm gun system and plans for a cooperative development program for an optimal tank main armament system for the long term future. The Secretary also requested the Army to ensure that the production XM1 design could accommodate a 120mm gun with essentially no change in the tank design other than the turret.

   d. A FRG/US July 1976 addendum to original 1974 XM1 specified XM1 would strive for maximum standardization in tank programs to include eventual use by both countries of 120mm gun. A January 23, 1977, decision date was established for selection of the 120mm gun system design. In July 1976, the XM1 tank program was delayed four months to permit US contractors an opportunity to present proposals based on the standardization agreement.

   e. Congress (HASC) objected to delay in XM1 program and passed a resolution to effect that XM1 should be fielded with US 105mm M68 gun. Further, the resolution stated the gun was not to be replaced until threat dictates need for larger gun, and the 120mm gun proven, through tests, superior to the 105mm gun.

   f. FRG/UK/US conducted additional tank firing trials, November-December 1975 to include UK 120mm rifled bore designs, to supplement 1975 Trilateral data and attempt to resolve FRG issues and relative merits of 120mm smooth and rifled bore systems.
Test and Evaluation Efficiency

1. Issue: Are DD(T&E) policies under DoD Directive 5000.3 resulting in undue program delays, excessive costs, or both, due to test requirements?

2. Background: In carrying out the directives which implement the efforts to correct the deficiencies highlighted by the Blue Ribbon Defense Panel, testing beyond that required under earlier practices is often included in the R&D phases of system acquisition programs. The testing itself, and the correction of deficiencies uncovered in testing are significant elements in the cost of the RDT&E phases of the program and its duration.

Thus, observations and corrective actions which, under earlier procurement methods, would have taken place after field introduction, are specifically identified as part of the development and initial operational testing efforts, and made a part of the budgetary reckoning.

The present T&E procedures lead to the acquisition of systems which are more nearly ready for operational use, and less susceptible to the need for extensive backfit or "get well" programs to correct previously undetected deficiencies.

3. DSB Assessment: A task force of the Defense Science Board, under the Chairmanship of Dr. Eugene Fubini, was created in May 1976, and charged with assessing the effectiveness of current T&E policies and procedures. The final report of this task force will be available in February 1977.

4. Recommended Position:
MAJOR RANGE AND TEST FACILITY BASE

1. Components. The Major Range and Test Facility Base (MRTF) is comprised of 26 DoD ranges and test facilities which are managed by the Military Departments and monitored for OSD by the DD(T& E).

2. Intended Mission. The MRTF is a costly national asset (annual TOA about $1.7 billion including $752 million RDT&E) spanning the entire spectrum of physical and simulation environments critically needed for effective testing and training. Containing tropical, arctic, coastal and high desert land areas, the facilities also include associated airspace and water areas required for the wide variety of programs supported. The vast amount of instrumentation, facilities and personnel involved in this program constitutes a large investment that must be continuously upgraded and modified to meet new test program demands. Some of the facilities are extensively used by non-DoD organizations, e.g., NASA, DOT, RTWA, NOAA, non-Government.

3. Basis for FY 1978 Request. FY 1978 budgets were prepared by the military departments based on estimated future workload. An extensive OSD review, with OMB participation, insures that the budget reflects the minimum dollars and personnel needed to support user requirements.


5. Current Program Status. The facilities are funded to provide all mandatory operating, maintenance and improvement dollars. Improvement programs include efforts necessary to meet new requirements, increase efficiency or replace antiquated equipment. Assets are continuously reviewed for need and removed from inventory when no longer cost effective.
TRIDENT I FLIGHT TEST PROGRAM AT THE EASTERN TEST RANGE

1. ISSUE: Tests associated with the effect on the TRIDENT I (C-4) missile upon activation of the missile Flight Termination System (FTS) will be completed in March 1977.

2. BACKGROUND: In preparation for TRIDENT I (C-4) missile flight test initiation on the Eastern Test Range, the Navy conducted a static firing test of the first booster stage and activated the FTS of the TRIDENT I (C-4) missile in June 1976. When the FTS was activated, detonation resulted.

The DORRE decision did not specify actions to be taken if the demonstration tests resulted in detonation.

3. RECOMMENDED POSITION:
INDEPENDENT RESEARCH AND DEVELOPMENT

1. Issue: To develop a means of satisfying the objectives of IR&D and B&P which can be supported by the Executive Branch, the Congress and the Industry.

2. Background: Industrial firms, particularly those in the higher technology product areas must engage in technical effort whose objectives include developing and maintaining a competitive posture in chosen product areas by advancing the technology and exploiting innovative concepts in these chosen product areas. Part of the effort may be funded by direct customer technology contracts particularly in the defense environment. The balance must be considered as a necessary cost of doing business and these costs must either be expended in the current accounting period or capitalized for recovery in later accounting periods. DoD has permitted defense contractors to expense such costs as overhead charges on defense contracts since 1959. The rationale and the groundrules for such allowance have been the subject of considerable review and analysis both within DoD and within the Executive Branch. Certain elements of Congress have repeatedly criticized both the rationale and the administration of the IR&D/B&P efforts and in recent years has imposed constraints regarding relevancy of the effort via amendment to the appropriation acts (see Section 203 of the Defense Appropriation Act for FY 72, Public Law 91-444). A further constraint on total dollars to be allowed for recovery in DoD contracts has been threatened (Prisma).

3. Position: DoD maintains that IR&D/B&P are normal costs of any business and therefore are allocable charges to a contractor's overhead subject to certain restrictions concerning relevancy and amount of dollars allowed. The ASCR outlines the contractual groundrules for IR&D/B&P allowance while DoD Instruction 5100.66 establishes the policy and procedures for technical evaluation of relevancy and technical quality.

4. Current Status: The subject of IR&D/B&P has not arisen in the Congress since the submission by DoD of the results of a study regarding funding of IR&D/B&P by line items of the budget. This report forwarded to the McIntyre and Proxmire Subcommittees in April 1976 resulted from Joint Subcommittee hearings in September 1975 called to discuss the results of a comprehensive, GAO study of IR&D over the preceding two years. The concept of Line Item Budgeting and Contract Allocation of IR&D/B&P funds to major contractors was one of the recommendations in the GAO report.

The Office of Federal Procurement Policy is developing an Executive Branch policy on IR&D for release as an OMB Circular.
EXPORT OF TECHNOLOGY

1. Issue: High technology transfer to the Bloc countries, either directly or via our Allies, is of deep concern to DoD. Past technology transfers and the expiration of the Export Administration Act during the last Congress resulted from strong differences of opinion on the value of present export controls. This was coupled with the criticism of DoD for inadequate allocation of resources to this problem. Arms Export Control Act of 1976 (Public Law 94-329) will require clear definition of "defense articles" and "defense services" that will be subject to the provision of the Act. Also to be considered is the erosion of our competitive economic base resulting from unrestricted exports of high technology.

2. History: The transfer of high U.S. technology to the Soviet and Chinese Bloc is creating increased concern in the DoD and among certain segments of the Congress. During this past two years, various committees have been set up by the Congress, the President, Commerce, Defense, State and the GAO to highlight the various views.

The Defense Science Board completed a study in Feb 1976 recommending a streamlining of the export control list to emphasize control of technology rather than control of products as is now the case. DepSec Clements assigned DDR&E the responsibility to implement the recommendations and the AD (International Programs) has this effort underway. This is now a broad interagency effort. Primary focus is on the identification of critical strategic technologies and mechanisms of technology transfer. Some of the required improvements of the administration of export controls within DoD have also been identified pertaining to the allocation of additional resources to the export control problem.
3. Impact: The Congress failed to extend the Export Administration Act due to lack of time and many unresolved issues.

The accomplishment of these aims in timely manner as requested by Congress and industry will demand high level DoD management attention and allocation of requisite resources.
STANDARDIZATION AND INTEROPERABILITY
WITHIN NATO

1. Problem: NATO's combat capability, military efficiency and
deterrence could be significantly improved through greater standard-
dization and interoperability of weapon systems in the Alliance.
Greater standardization should also result in appreciable long term
efficiencies in development, production, logistics, training, and
maintenance.

2. Background: The obstacles to achieving standardization of equipment
in NATO are many. Most national procurement decisions are suf-
ficiently large that considerations go beyond purely military aspects
and cover such other vital national-level considerations as industrial
production base, employment, technology base and balance of trade.
However, we are finding ways to deal with these problems.

Generally, the most satisfactory approach to contending with domestic
problems associated with standardization is through licensed pro-
duction of standard equipment in both North America and Europe--
examples are the ROLAND II Short Range Air Defense System and
the F-16 programs.

Many of the benefits of standardization can be realized through
ensuring interoperability of equipment--for example, being able
to service aircraft on each other's airfields; being able to com-
 municate with each other, and being able to use common fuels
and ammunition.

3. DoD Position: The DoD strongly supports NATO standardization
and interoperability efforts. We have strengthened the DoD Weapon
System Acquisition process to ensure that adequate consideration is
given to foreign solutions, that U.S. systems are designed to be
interoperable with those of our NATO Allies to the greatest degree
possible and practical. We seek methods by which our NATO Allies
will be encouraged to agree to U.S. solutions (e.g., through co-
production opportunities) when appropriate.

4. Current Status:
HUMAN RESOURCES & MANPOWER R&D

1. Issue: The House Appropriations Committee reduced the FY 76 program request in this technical area by $20M. The Senate Appropriations Committee restored $10M.

2. Background: This technical area includes work in training; training devices and simulators; personnel, manpower, and contemporary issues (equal opportunity, race relations); and human factors in weapon systems development and operations. In reducing funding, the House Appropriations Committee questioned both the utility and priority of the R&D. The Senate restoration was to enable the highest priority training and simulation projects to be continued.

The FY 77 funding request for the five Program Elements reduced by Congress in FY 76 was held to the FY 76 budget request level, a substantial reduction from the growth planned for this area. The area of Human Resources R&D was separated into three categories of work: (1) the technologies for training, simulation, training equipment and human engineering, (2) a smaller effort in the personnel and manpower area, and (3) a separate effort in the social science contemporary issues area. The purpose was to clearly delineate these three sub-areas of work so that they can be independently structured and appraised.

This action was successful since no across the board reduction was made by Congress in FY 1977.

3. DoD Position:

The technology area has been retitled to Training and Personnel Technology to emphasize program reorientation.

4. Current Status: Congress has requested and the GAO has conducted a major survey of the area. The GAO report is expected to be released in January 1977 to the House Appropriations Committee.

OAD(E&LS) 29
29 November 1976
1. **Issue:** Remotely Piloted Vehicles (RPV's)

2. **Background:** DoD has considered that RPV's offer significant capabilities for high risk missions in the area of battlefield surveillance. DARPA's 5-year initiating thrust in RPV's for military missions will conclude in FY 77. The three Services are each funding the types of RPV's pertinent to their individual needs, with a Tri-Service coordinating group and DDR&E guarding against redundancy and duplication. The Army (Aquila Program) is concentrating on a mini-RPV (under 200 lbs) for reconnaissance and artillery correction and designation with the objective to provide to TRADOC an interim RPV system for development of the ROC** for the full militarized system. The Navy is also pursuing a mini-RPV (under 300 lbs) to provide an over-the-horizon targeting capability for Harpoon equipped ships. Since many of these ships are small and non-aviation rated, the RPV size is constrained to under 300 lbs for logistics reasons. The Air Force has a long operational history with midi (300 to 3000 lbs) RPV's such as the BGM-34C for photo-reconnaissance and electronic warfare jamming and deception. A large portion of their program is to increase the utility of these systems with engineering improvements. The Air Force expendable drone program, involving a midi-sized decoy and a mini-sized harassment weapon, was cut from $7M to $2M by Congress to keep these programs from going to full scale engineering development. (believed to be premature by Congress). The only maxi-RPV (over 3000 lbs) is the Air Force Compass Cope long-endurance, high-altitude, surveillance platform intended to carry all weather systems such as Sidilook Airborne Radar (SLAR) to provide tactical battlefield surveillance. Congress withheld $3M of the $6M FY 77 appropriation for Compass Cope until the Air Force committed to a specific payload. In general, Congress has paid particular attention to the RPV programs.

3. **DoD Position:**

*Training and Doctrine Command

**Required Operational Capability

OAD(E&FS)

1 Dec 76
4. **Current Status:** Twenty Aquila airframes and two ground control stations will be delivered to TRADOC in the Spring of '77 for a six month evaluation leading to a ROC for the engineering development. A Navy RFQ** for its mini-RPV will be released this month and contractor selection will be made in the Spring of 1977. The Air Force study on the RPV control system will begin in late FY 77.

*Joint Tactical Integrated Data System
**Request for Quotation*
**Budget Related Issue**

**ELECTRON DEVICES**

**Issue:** The funding for development of electronic devices has decreased over the past ten years in terms of real dollars and as a percentage of investment in electronic systems. Since these devices are key to the performance, reliability, cost, size and weight of future systems, PDM guidance was established two years ago increasing the electron device budget.

**History:** The current PDM directs an increase in electron device funding of 10% per year with FY 1975 as the base. In addition, the Services were directed to establish device Advanced Development Programs. The Air Force, Navy programs are in accord with the guidance. The Army has decreased device funding and the House Armed Services Committee (HASC) refused to approve their proposed Advanced Development Program start in FY 77. A Navy Advanced Development Program with a similar sounding title was also cancelled by the HASC but the real device program survived.

**Impact:**

*Program Decision Memorandum*

OAD(E&PS)

30 Nov 76
Budget Related Issue

REMOtELY PILOTED VEHICLES (RPVs)

Issue:

Problems have been encountered in schedule slippages and cost overruns. RPV's have drawn considerable Congressional attention.

History: The Air Force has a long operational history with mid-sized (300 to 3000 lb) RPV's for photo-reconnaissance and electronic warfare. They have not needed to develop small radars and infrared imagers for the 200 to 300 lb class of mini-RPV's the Army and Navy intend to use.

Position:

The Air Force under PE 63739F is formulating the concept of an RPV mission control system that is intended to be JTIDS compatible.

Request for Quotation

Joint Tactical Integrated Data System

OAD(E&PS)

1 Dec 76
Budget-Related Issue

IRRADIATED FOOD PROGRAM

Subject of Issue: Congress has charged the DoD to conduct the national RDT&E program for the use of ionizing radiation as a means of sterilizing meat products.

History: DoD initiated R&D to study this approach for preserving meat products over a decade ago. After an initial period, it was decided to terminate the work. The civil sector and other Federal agencies also terminated like efforts. However, Congress rejected the DoD proposal for cancellation and requested that it continue the work even though it had no requirements for the products of the work. In 1974 DoD had brought the technology to a state where four meat products (beef, ham, other pork products, chicken) were ready to undergo testing to demonstrate acceptability for human use, per FDA standards. Beef testing was started. In 1975 the Secretary of the Army accelerated the test program by adding the other meats in simultaneous efforts rather than the sequential tests earlier planned. Congress was advised of the acceleration of the program.

Budgetary Impact:

Funding for all Service food technology R&D is an Army responsibility since they serve as the DoD Executive Service for this effort.

DoD Position:

OAD(E&LS)

29 November 1976
Budget Related Issue

MANPOWER, PERSONNEL AND CONTEMPORARY ISSUES

1. **Issue**: R&AT raised serious concerns with regard to both the level of R&D effort allocated to Manpower, Personnel and Contemporary Issues and

2. **History**: Concern over this technical area by the House Appropriations Committee staff resulted in a 25% reduction in the Human Resources program in FY 76. Continued concern by the Congress with regard to utility of R&D in this area is expected.

3. **Current Position**: The Services have been requested to brief ODD(R&AT) on their proposed FY 78 Tech Base programs in this area. The objectives are an assessment of the utility of the R&D, whether the level of investment and the expected return justify an annual investment of over $20M, whether the planned program is correctly focused, and whether the program (or portions thereof) should more appropriately be funded from a non-RDT&E account.

4. **Impact**:

OAD(E&LS)
30 Nov 76
Budget Related Issue

FACILITY FOR PRODUCTION OF BINARY CHEMICAL WARFARE MUNITIONS

1. Issue: The Department of the Army has proposed a loading, assembly, and packaging (LAP) facility for the new binary artillery projectiles to be constructed at Pine Bluff Arsenal, Arkansas.

2. Background: This facility was included in the FY 1975 procurement and Military Construction Authorization (MCA) request in the amount of $5.5M. It was authorized by both houses of Congress but was deleted on a floor amendment during the appropriations process. It was included again in the FY 1976 budget request for $8.8M. After extensive hearings it was deleted pending further discussions at the UNGA Conference of the Committee on Disarmament (CCD). Because of this decision, no request was made in the FY 1977 budget in accordance with Congressional wishes to delay one year to allow further negotiations. No substantial progress in disarmament discussions has been evident during the one year delay.

3. DoD Position:

4. Current Status: The funding for this facility has been made the subject of an ASD(C) PBD issue and is being raised as a funding issue at OMB level.

OAD/E&LS
29 Nov 76
Budget Related Issue

SIMULATORS - FLIGHT AND NON-FLIGHT

1. **Issue:** The entire spectrum of training and simulation technology has been marked by DD(R&AT) as an area for concentrated growth. Programmed increases for this area of technology have begun.

2. **History:** OSD initiated an effort in FY 75 to increase the use of flight simulators to improve training, reduce costs and reduce use of fuel. Congress has in general supported the program. High level interest item due to high leverage in terms of cost reduction/performance effectiveness.

3. **Current Position:**

   The FY 1978 budget request includes

4. **Impact:**

OAD(E&LS)
30 Nov 76
ARMY RDT&E DRAWDOWN

Issue: The Army has agreed to a manpower drawdown to reduce its in-house Technology Base work and to increase its program with universities and industry.

History: The Laboratory Utilization Study which was completed in 1975 concluded that the Army in-house program in several areas including materials and electronics was too large. An agreement was made with the Army to reduce its RDT&E in-house strength by 2900 authorizations using end strength FY74 as the basis and completing the drawdown by FY78. These reductions by fiscal year are as follows: FY75 - 905, FY76 - 829, FY77 - 733, and FY78 - 433. The Army has met its commitments as of FY76, however.

We have encouraged the Army to take these reductions through hiring freezes, attrition, and transfer of the manpower to work and funding in other areas.

Position: ODD(R&AT) is insisting that the manpower drawdown be completed as scheduled.

ODD(R&AT)
30 Nov 76
NAVY BLOCK FUNDING

Issue: We are encouraging the Navy to provide most of their Technology Base funds directly to their laboratories in large "blocks" without distribution through the Systems Commands.

History: The Navy Technology Base funding to the Chief of Naval Material Laboratories is distributed to the laboratories in two ways. Some of the funds are given directly to the laboratory by the Chief of Naval Material for work which has been previously agreed upon. A major portion of the laboratories' Technology Base funds, however, are provided through the Systems Commands for work which is primarily supportive of the particular Systems Command.

We have encouraged the Navy to block fund most of the Technology Base funds directly to the laboratories once the laboratories technical program has been agreed upon by the laboratory, the Systems Command, and the Chief of Naval Material.

Position: The Navy has proposed to "block program" funding to the laboratories.

ODD(R&AT)
1 Dec 76
ELECTRONIC COUNTER COUNTER MEASURES (ECCM)

History: The lessons learned in the Yom Kippur Israeli war indicated the need for a major thrust in ECCM. There are several aspects to a good ECCM posture.

Positions: DoD Directive C-4600.3, Electronic Counter Counter Measures Policy defines the tasks and responsible agencies with regard to threat definition and evaluation of impact upon system performance. The implementation of this policy is still being formulated. To create an ECCM awareness in the service laboratories, DDR&E has sponsored symposia on ECCM topics and has induced the Air Force to create Program Element 63750F-CCM Advanced Development. The Army and Navy technology base program element managers have been made aware of the need for responsive attention to this subject.

OAD(E&PS)
1 Dec 76
AIRCRAFT PROPULSION

Issue:

Discussion: At the present time there is no continuing program of advanced development for small aircraft engines technology. Increasing interest in drones, aerial targets, and RPVs indicates a need for active support of this technology.

The Joint USAF/Navy Technology Demonstrator Engine (JUNTE) program meshes the Navy efforts in large aircraft engine technology work with the larger related programs of the Air Force, to the benefit of both.

Positions: DD(R&T), Army and Navy.
LIQUID PROPELLANT GUNS (LPG's)

ISSUE: The House Armed Services Committee (HASC) has deleted all Navy funding in FY 77 and beyond for LPG's and directed that the Defense Advanced Research Projects Agency (DARPA) should support any future efforts.

DISCUSSION:

Work in the technology of LPG's has been supported sporadically since the mid-1950's. However, for a decade prior to about 1970, the level of effort was extremely low. In about 1970 the Navy, jointly with DARPA, decided to support a major effort to develop LPG's based on a bulk-loaded propellant charge design concept. The HASC in acting upon the FY 77 budget observed that LPG's had been supported for over 20 years with little apparent useful outcome and therefore deleted the Navy RDT&E funding.

POSITION:

OAD/ET
30 Nov 76
COMPOSITE MATERIALS

Issue: Should technology base support for R&D work on advanced composite materials be redistributed?

Discussion: Current and planned R&D on these materials encompasses work with organic, carbon, or metal matrices reinforced by graphite, carbon, or boron fibers. Demonstrations of organic (epoxy) matrix composites in full scale aircraft components have been underway for several years and major structures are components of flying aircraft. The Air Force alone has spent more than $150M on this technology since 1961. Army and Navy also have spent large amounts. There is now widespread support and heavy investment by industry for work on these materials, and they are increasingly accepted for state-of-the-art design.

Carbon matrix and metal matrix composites potentially fill more specialized but very demanding roles in aircraft and missile design.

Positions: DD(R&T) Air Force

OAD/ET
30 Nov 1976
TRANSPORTATION AND DISPOSAL OF HAZARDOUS/TOXIC MATERIALS

1. **Subject of Issue:** Transportation and disposal of chemical warfare agents, missile fuels, some industrial type chemicals, ammunition, and similar items has become a public concern.

2. **Background:**
   
   The Environmental Impact Statement process must be fully followed and become a part of the decision making process.

3. **DoD Position:** The NEPA and all applicable laws will be fully followed.

4. **Current Status:** Planning is proceeding in accordance with applicable laws to continue movements necessary in the interests of national security or to improve operations.

OAD(E&LS)
29 November 1976
CHEMICAL WARFARE AGREEMENTS

1. **Subject of Issue:** A part of US Chemical Warfare policy has been our willingness to negotiate an agreement to develop an effective, verifiable ban on CW.

2. **Background:** Article IX of the Biological Weapons Convention (BWC) (ratified by the U.S. in January 1975) binds all signatories to continue negotiations on an agreement banning chemical weapons. The U.S. has negotiated in this area, particularly through the UNGA Conference of the Committee on Disarmament (CCD) for at least ten years. It has been the subject of a number of other Conferences. The USSR submitted a convention to the UN in 1972 almost identical to the BWC which contains no verification procedures. The major obstacle to date in all agreements is the definition of the chemical agents to be banned and reaching agreement on practical and effective inspection and verification procedures and other safeguards.

3. **DoD Position:**

4. **Current Status:**

OAD(E&LS)
29 November 1976
NANSEN DRIFT

1. **Issue:** Should the United States freeze a decommissioned icebreaker into the Arctic Ocean North of Soviet Siberia such that prevailing ocean currents will carry it across the Pole to exit near Greenland in about 2 years? **Project name:** NANSEN DRIFT.

2. **Background:** The Navy has been a strong proponent for the NANSEN DRIFT project, pointing out the opportunity to conduct new research in the Soviet Arctic and to support political objectives of the United States. They estimate the project will cost $15 million over a three year period.

**NSF** has been somewhat reluctant to undertake the project, probably as a ploy to force heavier funding support from DoD and other agencies. The project is supported strongly by the National Research Council, the Department of State, and in principle by DoD. The Norwegians support the project.

3. **DoD Position:** None. DoD needs to establish its position on NANSEN DRIFT. Part of this decision is the level of financial support to provide to the project.

OAD(E&LS)
26 November 1976
NAVAL ARCTIC RESEARCH LABORATORY (NARL)

1. Issue: What should be the future status of NARL?

2. Background: The Naval Arctic Research Laboratory (NARL), Ft. Barrow, Alaska, is the only continuously operated U.S. research laboratory on the Arctic Ocean providing complete logistics support and coordination of mission research for the Navy and other government agencies. It is operated by a civilian contractor and is managed by the Office of Naval Research (ONR). NARL is a complete self-sustaining base facility on over 5,000 acres of land consisting of over 170 buildings, an airstrip, and modern laboratory facilities. The laboratory maintains a fleet of 6 fixed-wing aircraft, plus various over-land vehicles and water craft. In addition, NARL operates some 14 remote camps along the Alaska coast supporting research projects.

The operating budget of NARL is approximately $7.0M per year, paid for from RDT&E funds. Other government agencies doing R&D at NARL provide reimbursements but these reimbursements do not cover their operating and logistics costs. The Navy estimates that only 15% of NARL activity is in direct support of DoD sponsored research and development.

There is a continuing need for NARL as a Navy or National base camp on the Arctic Ocean.

3. DDR&E Position: On 18 October the Navy was asked to review the management and financing of NARL, and to adjust RDT&E funding at NARL to a level consistent with the RDT&E work performed at NARL by 1981.

OAD(E&LS)
26 November 1976
ADVANCED TECHNOLOGY GUN

1. **Problem:** An advanced technology aerial cannon is needed to enhance the capabilities of our tactical aircraft.

2. **Background:** The M1 (20mm), which was developed many years ago, and the GAU-9 (30mm) are the principal guns planned for Service use. Both the Navy and USAF have expended a considerable amount of work trying to overcome the shortcomings of these two guns.

3. **DoD Position:** DoD wishes to continue development of advanced multi-purpose aerial cannons.

4. **Current Status:** FY1978 funding for future gun development continues at a very modest pace.
1. Problem: Why do we need a two-place A-10?

2. Background: 

3. DoD Position: 

4. Status: 
1. **Problem:** Should the COMPASS COPE program be continued.

2. **Background:** COMPASS COPE was conceived by the Air Force as a long-endurance, high-flying, remotely piloted multi-mission vehicle.

3. **DoD Position:**

4. **Current Status:** The PBDs reflect the DoD position.
FLIR/LOPAIR

1. **Subject of Issue:** Advanced chemical agent warning and detection systems; Long Path Infra-Red (LOPAIR) an Army development and Forward Looking Infra-Red (FLIR) a Navy development.

2. **Background:**
   - **Program Objectives:** To provide an advanced chemical agent detection and warning system for combat use.
   - The Army has evaluated long path infrared detection methods for some years. A concept pursued from 1954 to 1965 was terminated in favor of a passive concept. Critical technical problems in discrimination of agents from smoke, dust, and other interferences have existed in the past. However, the present passive LOPAIR which entered Advanced Development in January 1974 is believed to have resolved these technical problems.
   - The Navy, while evaluating the FLIR for fire control purposes (the primary mission), discovered that technicians could observe emissions from incoming aerial targets. By the use of optical filters, some discrimination of emissions can be made.
   - Initially the HASC requested a side-by-side test; this was fully planned, but not performed. Subsequently, the HASC requested that LOPAIR be terminated in favor of FLIR but did authorize reprogramming for a side-by-side test. The Army did not follow complete guidance on the funding for the side-by-side test. The HASC then initiated a GAO investigation of all expenditures.

3. **DoD Position:**

4. **Current Status:** The DoD initial request to the HASC to continue both developments was refused.

*House Armed Service Committee  OAD(E&LS)  29 November 1976*
Outside ARPA Reactions: The ARPA program has been well received by OSD, OMB, and the Congress. Presentation of "threats" has been easily understood and the potential significance of the breakthroughs readily appreciated. Whereas prior to FY 1976, the total ARPA budget remained essentially static at around $200M, this year's budget will be A great deal of enthusiasm has been generated for the program in the Services, Joint Chiefs of Staff, the DDR&E, and the Secretary of Defense.

Management Issues: ARPA's unique position in DoD and its determination to remain a small, hard-hitting research organization presents a set of management issues which must be dealt with successfully to maintain the organization's vigor. Some of these follow:

- Staffing and Personnel Policies -- There must be continuing management sensitivity to the need for professional staff turnover. This is essential to the difficult process of creating new programs, keeping Program Managers who are current in rapidly changing technologies, and maintaining aggressive and vital programs.

- Program Transfer -- Extraordinary and aggressive efforts are required to develop positive mechanisms to transition results of ARPA research to the Military Services. There are no automatic or built-in processes or policies which assure that this happens—the initiative is with ARPA. It is essential that close and continuing contact be maintained with Service Chiefs of Staff, Assistant Secretaries for PEP, and Commanding Officers of Material Acquisition Commands (AFSC, NAVMAT, NARCOM) by deliberately scheduled and regular briefings and meetings.

- The ARPA Image -- Care and selectivity must be exercised to avoid involvement in research programs promoted by Service R&D organizations solely to secure ARPA funding support. ARPA should recognize and remain insensitive to Service R&D and DDR&E Staff members who perceive of ARPA as an "interferor" with institutional biases & objectives. They would prefer to see ARPA outside of the mainstream issues. The vitality of the organization is largely derived from its mission of being the adversary, the risk-taker, the innovator, the outspoken critic.
Visibility of Demonstration Programs -- for the first time, ARPA has established in FY 1976 a program element making visible major new technology demonstration efforts and the relatively large resources they may require. Preliminary Congressional and OSD Staff reaction has been positive, but critics may still raise the question, "Why ARPA?". These technology demonstration programs will materially aid the transfer of technologies to the Services who must ultimately develop the material or techniques for Service application. Meaningful (as near full scale as possible) demonstrations have the effect of more clearly suggesting the potential of new technology and help to accelerate the otherwise long, drawn-out material development cycles of Service programs. The alternative of simply reporting research findings and speculating on their potential more often than not means promising results go unnoticed and are never considered or may be subsequently duplicated by the Services or are subjected to long and frequent sub-critical exploitation attempts.

Teclmology Assessments -- The Technology Assessments Office was established at the end of FY 1976. Those efforts underway which were relatable to the other technical offices were transferred to those offices. In the future, technology assessments will be undertaken as part of the technical office function to examine and compare the U.S. and foreign technology base and create new initiatives for the Office. Those technology assessment efforts which are of broad ARPA or DoD scope will continue under direct management of the Director, ARPA.
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING

The attached documents represent the "issue papers" prepared by DDR&E for the Transition Team in connection with the transition from the Ford to the Carter Administration. Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report letter of December 14, 1976, they are believed to be broadly within the intent of that definition.

Seventeen papers recommended for release in their entirety are listed in Enclosure 1. Some parts of some of these papers qualify for withholding under exemption 5.a.(1), in that they contain advice, opinions, and suggestions. However, it is determined that withholding would not serve a significant and legitimate governmental purpose.

Partial denial is made on the 16 papers listed in Enclosure 2 under exemption 1 in that they contain classified security information. The material has been reviewed and it has been determined that the denied information is properly classified under E.O. 11652 and its disclosure could reasonably be expected to cause damage to the national security.

Partial denial is being made on the 22 papers listed in Enclosure 3 under exemption 5. The particular parts of each paper have been indicated by brackets and categorized as falling either under exemption 5.a.(1); i.e., papers containing advice, opinions, and suggestions, or as falling under 5.a.(2); i.e., information generated preliminary to decision, the release of which might interfere with orderly execution of plans.

With respect to the denied portions of the 22 papers listed in Enclosure 3, the "significant and legitimate governmental purpose" is the protection of the ability of the government to receive candid advice, opinions, and recommendations from its employees without having the rendering of such inhibited and biased through the possibility of public controversy on them prior to their consideration. Similarly, orderly government would suffer if proposed governmental positions were prematurely exposed to those who might benefit or seek to influence them as the result of such premature disclosure.

The Initial Denial Authority in this instance is Mr. S. E. Clements, Executive Assistant, Office of the Director, Defense Research and Engineering.
Enclosure 1.

PAPERS TO BE RELEASED

Note: Some portions of these papers qualify for withholding under Exemption 5, but use of the Exemption is waived.

Defense R&D Laboratories
Federal Contract Research Centers (FCRCs)
DOD R&D Testing Using Human Volunteers
Joint Service Development/Test Programs
Systems Acquisition Management
Prototyping
Travel Funds
DOD Medical Research Charter
Reduction of Outyear Operating and Support (O&S) Costs
Visibility and Management of Operating and Support Costs
Life Cycle Cost (LCC) Reduction
Design to Cost
Specifications and Standards
Reliability and Maintainability
Soviet Technological Doctrine and Practice
Competition in Defense Procurement
Expeditious JOT&E of IIR MAVERICK
1. **Subject of Interest:** ODDR&E is directing various changes which will increase innovation in the Defense Research and Exploratory Development and some advanced technology demonstration programs.

2. **Background:** The DoD Technology Base comprises approximately 74 in-house Research and Development facilities and 56,000 civilian workers, including about 24,000 professionals. These laboratories monitor the expenditure of some $3B per year, about one-half of which is spent internally. Several major changes are underway which are directed toward increasing the innovation and productivity in the laboratories.

- The laboratories' roles in Technology Base planning and supervision is being increased. To initiate this, block funding of the laboratories has been increased and lead laboratory concepts for technology areas have been implemented.

- We are increasing the use of investment strategies as a technique for apportioning the resources across the various technology areas in the Technology Base.

- The laboratories are being assigned prime technology area responsibilities. The size of the laboratories is being reduced by manpower drawdowns in redundant and lesser productive areas.

- The percentage of the Technology Base work which is performed by universities and industry is being increased to take advantage of their unique contributions to the program.

- The roles of the laboratories in support of systems acquisition is being increased. To expedite this a change to DoD 5000.2 was implemented which requires a Technology Assessment Annex to Decision Concept Papers for systems which are meeting Defense Systems Acquisition Review Council Milestones I and II.
3. **DoD Position:** As in-house laboratories play a key role in military R&D, the actions enumerated above have been accepted and are being implemented.

4. **Current Status:** Funding allocation increases in the Technology Base are being applied selectively across the technology areas based on a careful evaluation of various investment strategies. The Air Force and Army have implemented the block funding technique; the Navy is moving in that direction. Ceilings have been placed on the amount of Technology Base program which will be performed in-house with the ultimate goal of achieving a maximum of 30% in-house. The manpower drawdown in the Air Force has been completed and is approximately on schedule for the Army and Navy. The drawdown amounts to approximately 6,900 authorizations to be completed by the end of FY 78.
1. **Issue**: Will the revised policies and procedures for managing DoD-Federal Contract Research Centers (FCRCs) be acceptable to Congress?

2. **Background**: Federal Contract Research Centers (FCRCs) are DoD sponsored non-profit corporations dating from WWII. The number of FCRCs has been reduced from 21 to 8 since 1964. Each FCRC is distinctive and generally performs different functions. Other government agencies have similar organizations.

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>System Engineering/ Tech Direction (SE/TD) (FY76)</th>
<th>Studies &amp; Analyses (S&amp;A) (FY76)</th>
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<tr>
<td>MIT Lincoln</td>
<td>$51M</td>
<td>RAND $17M</td>
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<td>Johns Hopkins</td>
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Laboratory FCRCs perform difficult technical projects embracing both research and new prototype systems concepts. (SE/TD) FCRCs provide technical support in defining, developing, producing and fielding space, communications and command control (C3) systems. (S&A) FCRCs provide sound and unbiased professional analyses and recommendations for force planners, logistics managers, R&D managers, high officials on DoD staffs, etc.

A high degree of control is maintained over FCRCs. The Senate Armed Services Committee provides an overall fiscal ceiling. Four major problems exist with using FCRCs:

- Several years ago, Congress expressed concern regarding salaries, number, size of operation, etc. These concerns resulted in the imposition of a Congressional fiscal ceiling. However, this ceiling has not kept pace with inflation.

- Congressional concern has been expressed more recently regarding how we use FCRCs, i.e., as "extension of headquarters staffs," especially the S&A FCRCs.
Part of the for-profit industry sector is opposed to both the non-profit and sponsored aspects of FCRCs, especially as pertains to the success of some FCRCs in diversification.

The fiscal ceiling has especially been a hindrance in accomplishing space and C⁳ SE/TD work.

3. **DoD Position**: An extensive review was conducted of FCRCs in 1976 in response to Congressional desires. Principal actions are as follows:

- **Analytical Services (ANSER)** will no longer be an FCRC.
- The Applied Physics Laboratory (Johns Hopkins) and Applied Research Laboratory (Penn State) will not be considered FCRCs beginning in FY 1978.
- MIT Lincoln Laboratory, Center for Naval Analyses (CNA), Project Air Force (formerly Project Rand) and the Institute for Defense Analyses (IDA) will not be allowed to exceed their present manpower levels. The non-Project Air Force aspects of RAND Corporation will not be considered an FCRC.
- MITRE-Bedford will be separated from MITRE-Washington. All DoD C³ work will be done at Mitre-Bedford. MITRE-Washington will not be considered a DoD FCRC. Mitre-Bedford will not do non-DoD work unless of direct benefit to DoD. Level of DoD effort at Mitre-Bedford will be governed by DoD C³ workload.
- Aerospace Corp will be restricted to DoD space program endeavors except on programs of direct benefit to DoD (i.e., joint DoD-NASA). Level of DoD effort at Aerospace will be governed by DoD space system workload.

4. **Current Status**: A report was provided the four concerned Congressional Committees. Informal approval received. DoD will be implementing above actions in the FY 78 budget process. Congressional Committees reactions in their reports on the budget will provide basis for future management of FCRCs.
Subject of Issue: Continuing concern by many groups that humans are being used as guinea pigs needlessly and under circumstances of unacceptable hazard.

Background: The DoD, as one of many Federal agencies who perform tests using human test subjects, has been drawn into the overall public and Congressional dialogue on the subject. In 1975, Congressional committees held hearings that discussed tests, primarily related to chemical agent and hallucinogenic drug testing, that were conducted in the 1950s, 60s and early 1970s. This discussion resulted in a report that highlighted abuse and an inadequate follow-up of the test subjects. These practices had been stopped and the control of such experimentation had already been markedly improved in the 1970s by DoD because of its own concern and the national revision of standards for use of human volunteer subjects, although this point was carefully avoided or ignored in the hearings.

DoD Position: DoD must conduct tests that use human test volunteers in several of its human related RDT&E program. Each Service has formal and effective approval procedures to insure that the proposed tests are needed and worth the investment and risk, properly planned, safely and competently conducted, and that proper follow-up is assured. As new guidelines or laws are passed related to this on a national level, they are included in the DoD process of approval, review, conduct, and critique of our R&D. In all cases, only fully informed and volunteer subjects will be used.
JOINT SERVICE DEVELOPMENT/TEST PROGRAMS

1. Problem: Proliferation of hardware and programs aimed at meeting the same basic operational requirements.

2. Background: Unnecessary proliferation of systems and subsystems intended for similar operational requirements can dilute the effectiveness of R&D resources, deters competitive procurement and ultimately consumes excessive operations and support resources. With severe budget constraints in the R&D area, this problem cannot be overemphasized. Operational requirements must be carefully examined and coordinated to eliminate the costly consequences of duplication, strive for subsystem and system interchangeability, and achieve interoperability and flexibility of mixed forces. Commonality of hardware is sought to reduce the costs of training, maintenance, and support. DDR&E places heavy emphasis on structuring joint RDT&E programs through memoranda of agreements, lead Service assignments, and close coordination with other OSD offices such as DTACCS and ASD(I&T) in working groups.

Certain technology areas have been identified as prime candidates for special attention in DDR&E because rapid movement in the state of the art encourages proliferation. As an example, electronics technology can be found as a major cost element of almost every weapon system. Since one-third of the DoD budget in some way or other is tied to electronic related expenditures, it is an area that has been highlighted as worthy of special attention. This is particularly important in electronic subsystems in view of the fact that annual support costs for these military equipments are equal to the annual procurement costs and are increasing due to the relatively high labor content. Therefore, Joint Service programs in the electronics area are highly leveraged and provide a basis for significant cost reductions.

3. DoD Position: Joint Service programs are an effective approach to stemming proliferation of programs aimed at meeting similar operational requirements. Our policies to achieve this objective are stated in DoD Directives; identified and restructured as necessary in the planning, programming, and budgeting cycles; and when necessary, by fiat. A special policy for Single Service Management of Selected Electronic Equipments has received tri-Service Secretarial endorsement and is expected to be finalized in March 1977.

4. Status: We have established commonality between Services that is intended to satisfy sister Service requirements in virtually all DSARC reviews. Working groups and special committees have been formed to more closely examine the areas where high payoff potential exists. The Directive on electronic equipment will utilize the requirements process and other existing means to identify those items which are candidates for Single Service management. The assignment of the "lead"
Service on a case-by-case basis will be made by the appropriate OSD offices.

At the present time, there are 78 joint Service R&D programs; and similarly, there are 14 joint operational test programs. For example, the NAVSTAR (Global Positioning System) is a tri-Service development to reduce net DoD navigation costs by a significant percentage while enhancing the performance of weapons and simplifying their design. During the past year, the Air Force has been assigned as Executive Agent for the development of the new beyond visual range air-to-air missile, which is a replacement for Sparrow. The new missile will be based on previous DARPA research and designed to satisfy a JSOR. Similarly, the ultimate Sidewinder replacement will be based on a continuing evaluation of seekers and development of operational requirements.
SYSTEMS ACQUISITION MANAGEMENT

1. **Issue:** In order to maintain national security in times of highly constrained defense budgets it is imperative that we manage the acquisition of defense systems in a highly efficient manner.

2. **Background:** The basic policies for the management of defense systems acquisition were established in mid-1971 with the publication of DoD Directive 5000.1, "Acquisition of Major Defense Systems." Since that time the results of several study efforts for improving the defense systems acquisition process have been published, i.e., the Commission on Government Procurement, the Army Material Acquisition Review Committee, the Navy/Marine Corps Acquisition Review Committee and most recently the Acquisition Advisory Group.

3. **DoD Position:** While many of the recommended improvements to the defense systems acquisition process have already been implemented we are continuing to evaluate and adopt other promising changes.

4. **Current Status:** In many areas we have made major strides in improving the management of DoD systems acquisition. Some of these management initiatives are:

   a) Fly-before-buy (hardware demonstration)
   b) Achievement milestones vs calendar milestones
   c) Competition, especially during system validation
   d) Design to Cost
   e) Hi-Lo force mix
   f) Creation of viable options
   g) Maintaining strong technical base
   h) Improved program management

Other areas of promising efforts underway but still evolving are:

   a) "Front-end" planning-mission needs and affordability
   b) Life Cycle Costing

Sound management of defense systems acquisition impacts on the defense posture of the U.S. It is probably the single most important task of DoD as it impacts directly on force readiness, the yearly defense budget and also the outyear expenditures for operating and maintaining our weapon systems. We will continue to evaluate all facets of the acquisition process seeking improvements in national defense and more efficient development, production, operation and support of our defense systems.
PROTOTYPING

1. Issue: To improve the basis for management decisions during the development and acquisition of defense systems and equipment.

2. Background: Prototyping stresses the use of hardware demonstration, rather than paper studies, as the basis for key program decisions. It has been referred to as the "fly before buy" or "test before buy" approach to system acquisition. In practice, it calls for investment in a few demonstration models (prototypes) and evaluation of test results prior to making a major commitment of funds or resources. It was promulgated as management policy by former Deputy Secretary of Defense David Packard, has been emphasized as a management tool by his successor, DepSecDef Clements, and has become an important aid to defense decision-making. Congress has debated the merits of prototyping and endorsed its application in defense programs.

3. DoD Position: Prototyping is an aid to management that reflects a basic principle of sound decision-making: systematic reduction of risk. It must always be viewed in the decision-making context. It is not, and must not become, an end or objective in itself. We emphasize prototyping where it is needed to support and strengthen our basis for decisions, not as "the thing to do" in order to get programs approved.

4. Current Status: We have gained considerable experience in prototyping over the past several years; however, there is still some misunderstanding of the difference between its two fundamental applications.

Prototyping is used during the acquisition cycle to reduce the risks associated with applying advanced technology to meet defined operational requirements. These are the "full-scale engineering development" prototypes. (Examples: Mechanized Infantry Combat Vehicle; Utility Tactical Transport Aircraft; Advanced Attack Helicopter; Submarine Launched Cruise Missile.) Where it is impractical to prototype an entire weapon system, the concept is applied to subsystems and components. (Examples: AHACS Radar; Airborne TACAN; Navy Modular Electronic Warfare Suite.)

Prototyping is also used to explore and advance new technology prior to the definition of specific requirements. These are "technology base" or "exploratory development" prototypes. Their purpose is to provide viable options for future decisions. Exploratory prototyping creates technological alternatives, exploits technical opportunities, stimulates competition and innovation, retains key industry design teams, and improves our ability to make performance/cost tradeoffs. (Examples: Air Combat Fighter; Advanced Medium STOL; Electronically Agile Radar.)

DDR&E
30 Nov 76
Budget Related Issue

TRAVEL FUNDS

Issue: ODD(R&AT) has insufficient travel funds to adequately perform its assigned tasks for FY77.

History: ODD(R&AT) is allocated travel funds from DDR&E. These funds are used to pay for transportation and per diem in performing our program monitoring tasks, to satisfy U.S. responsibilities in international travel for the Defense Research Group and for the Technical Cooperation Program, to maintain staff specialists professional proficiency through attendance at technical symposia and meetings and to publicize the technical thrusts and management changes which we are implementing in the Technology Base program. The travel funds allocated in FY76 was $42.3K. Our request for FY77, in view of the total inadequacy of FY76 funds, was $76K. Our allocation for the first 6 months of FY77 is $14.7K. We have reduced the $14.7K by the amount required to meet international obligations for the first 6 months of FY77 plus a $1K contingency fund, and allocated the remainder on a prorata basis to the AD Offices and the Front Office Staff. We anticipate that the funding to be allocated for the second half of FY77 will be approximately $14.7K.

Position: DDR&E is aware that the FY77 allocation is inadequate. Travel, other than that supported by others, is by and large restricted to program monitoring plus the international commitments.
Budget Related Issue

DOD MEDICAL RESEARCH CHARTER
(vis-a-vis other Federal Agencies)

Subject of Issue: Congressional actions on DoD budget requests are being denied in cases where any other agency is conducting research in the area.

History: Congressional actions during FY 76 and FY 77 budget cycle denied DoD requests for money for research in drug and alcohol abuse, and a series of infectious and dental diseases. The basis for denial has been that the Department, Health, Education, and Welfare (DHEW) is doing work in these fields and the DoD, therefore, should not require any effort in the area. This has been cited especially in cases where the DoD level of effort is much smaller than the DHEW commitment. A GAO review of infectious disease research was completed in FY 76, overseas laboratory reviews are underway now which could cause further areas to be so identified in FY 78 and beyond.

Budgetary Impact: Previous reductions were not made until late in the fiscal year. As a result, money had been committed to new and continuing efforts under the authority of the Continuing Resolution. Thus, when all funds programmed for the effort were withdrawn, additional funds were also lost due to the fact that the earlier commitments to contracts had been made and could not be recouped.

DoD Position: DoD does carefully coordinate and draw from the civil and other Federal agency research. It conducts research only on the unique problems of the Military Services or those aspects of the problem that the civil sector cannot or will not address. Thus, rather than duplicate, the smaller DoD investment represents a complimentary effort that provides specialized results of interest to DoD.
1. **Issue**: To reduce the fraction of the outyear DoD budget allocated to system operating and support costs, while at the same time maintaining operational readiness.

2. **Background**: Continued growth in the fraction of the DoD budget allocated to operate and support current systems has impaired force modernization. Greater emphasis is needed on reducing the future O&S costs of systems now being developed, so as to reverse this trend as new systems enter the inventory.

   Better visibility on the specific O&S costs of current systems is a necessary step in defining and reducing the O&S cost of future systems. The next step is to employ the results of that improved visibility.

3. **DoD Position**: We are confident that we can achieve the ability to identify and track the O&S costs of individual types of defense systems. We must also control the future O&S costs of systems now in development, so as to achieve a net reduction in the O&S portion of the DoD budget.

4. **Current Status**: The DapSecDef memorandum on Reduction of Outyear Operating and Support Costs, 28 February 1976, directed the Military Departments to establish O&S cost targets for each major system now in development, and to propose methods to assess the net O&S cost impact on future Department budgets of all DSARC decisions.

   The Services have forwarded their planned approaches to the establishment of O&S cost goals for all major programs now in the DSARC process and proposed methodology for annual assessment of the net O&S cost impact of DSARC decisions during the preceding year. Refinements required by ASD(I&L) review are now in progress.
VISIBILITY AND MANAGEMENT OF OPERATING AND SUPPORT COSTS

1. **Issue:** To develop methods for determining the operating and support costs attributable to particular Defense systems.

2. **Background:** SecDef and DDR&E posture statements for FY 1976 mentioned the need to improve visibility on the operating and support (O&S) costs of current systems, as a necessary step in reducing the life cycle cost (LCC) of future weapon systems.

During SecDef's testimony, Senator Culver asked for LCC estimates on the 10 most expensive systems then in development. DDR&E responded with current estimates for 8 of the 10 systems.

Thereafter, Senator Culver proposed an amendment to the Authorization Bill that required DoD to include LCC estimates for all major systems in its budget, beginning with the FY 1977 submission. This amendment was deleted in conference when DoD stated it was unable to provide such estimates for all major systems. However, DoD did indicate it might be possible to submit LCC estimates for aircraft systems with the FY 1978 budget.

3. **DoD Position:** We can estimate system acquisition costs fairly well, and are improving that capability, but DoD accounting systems were not set up to identify all operating and support costs by individual weapon systems. We are working to improve visibility on operating and support costs.

4. **Current Status:** ASD(I&L) has been tasked to define the management information system needed to account for O&S costs by weapon system type. The Services have presented their proposed management information systems for ASD(I&L) review. Refinements in response to ASD(I&L) review are now in progress.

ASD (Comptroller) has been tasked to modify the DoD accounting systems as necessary to accommodate the information system defined by ASD(I&L).

OSD and the Services are working to improve cost comparability among the Services.

The Air Force demonstrated a prototype O&S cost management information system for aircraft during FY 1977 and is now evaluating its effectiveness prior to scheduling its expansion to other types of weapon systems. The Army and Navy are working on similar projects, and the Navy has also developed plans for an O&S cost Management Information System for ships.
UNCLASSIFIED

LIFE CYCLE COST (LCC) REDUCTION

1. ISSUE: To define and reduce the total cost of acquiring, operating, maintaining and supporting defense systems, while at the same time maintaining force modernization, readiness and operational effectiveness.

2. BACKGROUND: LCC reduction is a major objective of the DoD. There is also considerable Congressional interest in this subject. Present appropriation accounting makes it relatively easy to identify development, procurement and military construction costs of specific weapon systems. However, operating and support (O&S) cost appropriations are related to type of organization and function, rather than to type of weapon system.

3. DoD Position: We can estimate system acquisition costs fairly well, and we are improving that capability. We can and are holding acquisition programs to predetermined unit cost thresholds as a necessary but not sufficient part of LCC reduction. Additional steps are necessary to define and reduce the O&S cost of current and future weapon systems. Those steps are now underway.

4. CURRENT STATUS (more detail in attached backup papers):

- Design to Cost - DoD Directive 5000.28, May 1975, directed the Military Departments to design systems to predetermined unit production costs, and to trade off performance, schedule and quantity as necessary to meet cost goals. Most major systems not yet in production either have established DTC goals or have made cost an "equal partner" with "cost drivers" in early design studies. DTC is an issue at DSARC reviews and corrective action is directed for breach of DTC thresholds.

- Visibility and Management of Operating and Support Costs - A DepSecDef memorandum dated 16 October 1975 directed ASD(I&L) to define the management information system needed to account for the O&S costs of current systems by system type. ASD (Comptroller) was directed to modify DoD accounting systems as necessary. The Military Departments have presented their proposals for such an information system and refinements are in progress.

- Reduction of Out-year Operating and Support Costs - A DepSecDef memorandum dated 28 February 1976 directed the Military Departments to establish O&S cost goals for each major system development program and to propose methods for an annual assessment of the net impact of all DSARC decisions on the O&S portion of their out-year budgets. The overall objective is a net annual reduction in that fraction of the DoD budget allocated to O&S costs.

- Reliability and Maintainability - Reliability and maintainability (R&M) are system parameters that link system design characteristics to O&S cost, readiness and operational effectiveness. Quantitative R&M requirements are now included in almost all DCPs; however, DoD policy on R&M needs to be clarified and extended to subsystems and less-than-major systems, in order to facilitate LCC reduction. DDR&E and ASD(I&L) are preparing a DoD Directive on this subject and preparing the revision of appropriate Military Standards.
DESIGN TO COST

1. Issue: To specify and constrain the cost of each new system so DoD can afford to buy the quantities of systems it needs to meet national security objectives within current and foreseen budget constraints.

2. Background: Design to Cost (DTC) is a management policy similar to cost control techniques used in the commercial sector. DTC established unit cost as a parameter equal in importance with system performance, program schedule and other factors that can drive program cost, such as producibility, logistic support concept, data requirements, safety/survivability, etc. It requires planners to set cost goals the DoD can afford to pay, and to trade off system design parameters against those goals. It further requires that cost be emphasized in trade-off decisions throughout the acquisition process, and that cost estimates be verified as within pre-set goals prior to award of the production contract.

3. DoD Position: Design to Cost is necessary to counter the escalating costs of defense systems. We plan to continue applying it to new development programs (both systems and subsystems).

4. Current Status: Design to Cost policy was formalized in DoD Directive 5000.28, issued in May 1975. Each Program Manager receives comprehensive instruction on Design to Cost policy and implementation experience as he goes through the Defense Systems Management College. Design to Cost objectives have been routinely established on all recent major development programs. Examples include the A-10, F-16 and Advanced Medium STOL aircraft, the F-18, Patrol Frigate, Submarine Launched Cruise Missile, UTTAS helicopter, Advanced Attack Helicopter, and XM-1 tank. Such objectives are being defined for more recent programs on a routine basis. While initial emphasis was on designing to a unit production cost, primarily because DoD's ability to estimate and measure unit cost is better than its ability to estimate and measure Life Cycle Cost, DoD is now increasing emphasis on making design tradeoffs to control life cycle cost drivers.
SPECIFICATIONS AND STANDARDS

1. **Problem:** With increasing costs of defense systems, equipment and material, there were concerns that military specifications were the "cost drivers".

2. **Issue:** Military specifications and standards have occasionally contained unrealistic, obsolete or marginal requirements which resulted in excessive costs.

3. **DoD Position:** DoD is attacking the problem on three fronts:

   a) ASD(I&L) and DDR&E co-sponsor the Defense Material Specifications and Standards Board to review on a continuing basis the total specifications and standardization program management to recommend necessary changes in policy to the SecDef.

   b) At the request of DepSecDef, the Services have established RFP (Request for Proposal) Review Boards to review and "scrub" RFPs, prior to their formal release to bidders, of any excessive requirements and unwarranted cost-driving requirements, including specification requirements.

   c) ASD(I&L) and DDR&E jointly established a Defense Science Board Task Force to recommend appropriate specifications and standards policy.

4. **Status:**

   **A. DMSSB:**

   1) Now have five Technical Panels (i.e., Materials, Electronics, Metrification, Clothing and Textile, Audio Visual). The Metrification Panel, for example, prepared an interim policy on the use of the metric system of measurement in the DoD which was signed by DepSecDef.

   2) A task group revised the DoD Standardization Manual covering specification preparation, coordination and management.

DDR&E
30 Nov 76
B. RFP Review Boards:

All three Services have established these review boards and are actually scrubbing now major system RFPs. On several procurements, draft RFPs were submitted to industry prior to formal release to bidders soliciting comments on the identification of cost-driving elements and suggestions on how to meet the intent of the need at lower cost.

C. Defense Science Board Task Force:

Found that while needing continual attention for improvement, specifications and standards were adequate and not the fundamental problem. The problem was really the over-application (or blanket application) of these documents, which in many cases resulted in unwarranted costs. Among the Task Force recommendations are: 1) "tailoring" or selective application of the specification requirements to each program, 2) establish an environment to provide incentives or contractors/bidders for proposing tailored specifications and for recommending cost effective waivers to reduce costs, and c) education of Program Managers on specification applications to avoid excessive costs. The Services are currently initiating actions to implement those recommendations.
RELIABILITY AND MAINTAINABILITY

1. Issue: To reduce the operating and support cost of defense systems while maintaining or increasing their readiness and operational effectiveness.

2. Background: Reliability and Maintainability (R&M) are measurable performance parameters that link system design characteristics to readiness, effectiveness, operating and support cost. Improved R&M simultaneously increases readiness and percentage of successful missions, while decreasing maintenance, supply and manpower requirements. In the past, field reliability has often been only a fraction of that “demonstrated” by the contractor in REL DEMO done to a MIL STD. This occurred because REL DEMO test criteria did not realistically approximate actual field conditions and definitions of a "failure" were not relevant to actual field experience. OSD has major initiatives underway to improve this situation.

3. DoD Position: Increased emphasis must be placed on improving the R&M of systems during R&D&E, rather than trying to fix systems already in production.

4. Current Status: Quantitative R&M thresholds are now included in virtually all DCPs and attainment of these thresholds has become an issue at DSARC reviews. The Deputy Director (Test and Evaluation) has placed a high priority on R&M in his reviews of test programs and test results, as reflected in his reports to the Deputy Secretary of Defense and the DSARC Chairman at all critical milestone decisions.

DS&E and OASD (ISL) are preparing a DoD Directive on R&M to ensure these parameters are addressed as an integral part of the acquisition process for both major and less-than-major system and subsystem programs.

The Military Departments are revising Military Standards pertaining to reliability, especially the reliability of electronics equipment. These revisions will translate DoD policy to the Defense industries. They include increased realism of tests conducted in laboratory test chambers. The cost of more realistic test facilities is to be paid for by shorter total test time and greater correlation of laboratory and field reliability values.

The Services have recently included in their budgets funds to improve readiness and reduce operating costs for equipment in the field. This is accomplished primarily through the upgrading of equipment reliability and maintainability identified by organizations specifically charged with this responsibility such as the Air Force Productivity, Reliability, Availability and Maintainability (PRAM) Program Office.

Government and industrial technology base activities are exploring the feasibility of using highly reliable electronic modules as basic building blocks for widespread application to electronics equipment. High design reliability and tight quality control are to be paid for by savings achieved through volume production and standardization.

Contractual approaches are being developed which will incentive contractors to design equipment for high reliability and low repair costs. Approaches successfully used include contract award fees and reliability warranties.
1. Subject: The relationships between Soviet science and technology doctrine and practice and their military technological status.

2. Background: Soviet doctrine was enunciated by Lenin—"One must either master the highest technology or be crushed", and has been continually reaffirmed—"The development of Soviet science has special significance today when the scientific-technological revolution has become the most important area in the competition of the two opposed world systems" (Communist Party Central Committee Resolution, December 1973). Soviet policy is set by the Politburo, and is specifically oriented toward establishing credible military scientific-technical superiority over the U.S. and management is highly centralized; the Politburo's executive agent is the Council of Ministers, 75 percent of whom have technical backgrounds. The USSR has deliberately emphasized the greatest possible rate of advance in military technology at the expense of improvements in the civilian sector. Soviet policy is to exploit innovations achieved in civil R&D for military purposes, but because of the weakness of Soviet civil R&D, we have not seen any instances in which it has contributed significantly to their military technology. There is no Soviet counterpart to the cross-fertilization process in U.S. industry and commerce which advances military and civilian technology together in many areas that are militarily important to the U.S. Within the military sector, past Soviet practice emphasized continuity of effort and incremental improvements. Today there are many indications of willingness to take the risks of applying and exploiting advanced technology.

3. DoD Position: Soviet doctrinal emphasis on science and technology has led to a commitment of resources for military R&D which must be regarded as a serious threat to the military balance between the U.S. and USSR. The U.S. can meet this challenge only through a sustained, and vigorous program of R&D to advance and exploit its strong technologies. Such a program is feasible at affordable cost, because of the inherent weakness in the Soviet system of separating military and civil R&D. The rate of advance of Soviet military technology—overall—will be inhibited as long as their civilian sector is excluded from supporting such advances, although with special emphasis they have been able to surpass the U.S. in some fields of technology. The U.S. can retain the technological initiative and preserve the military balance if it has the will to do so.

ODDR&E
2 December 1976
4. **Current Status:** Soviet military R&D increasingly is producing a variety of quality military equipments. Also, there are strong indications, in the form of a number of Soviet military R&D activities and new systems being deployed (e.g., air cushion vehicles, radar satellites), that the Soviets have broken away from their long-standing policy of technological conservatism. Several of the Soviet military R&D activities are not well understood, but are a matter of concern because they appear to be related to key missions of U.S. forces (e.g., new approaches to ballistic missile defense and anti-submarine warfare). Avoidance of technological surprise requires a coherent R&D effort to generate new technological options in mission areas where U.S. vulnerability may be uncertain and where the risk of surprise is great.
1. Issue: To utilize competition to the maximum extent feasible during the acquisition of defense systems and equipment.

2. Background: Competition between system concepts, present and proposed systems, contractors, subcontractors, and even between the Military Departments is the paramount motivating factor during both development and production of defense hardware. Winning the development and/or production contract is a far greater incentive than the profit rate or any "incentive clause" after competition is reduced to a sole source.

3. DoD Position: Competition is to be used wherever economically feasible throughout the acquisition cycle, to include competitive development, production and alternate sourcing.

4. Current Status: Most of our recent major programs include a competitive prototype phase during advanced development, with comparison of test results ("fly-off," "shoot-off") as a key factor in the decision to advance the program into full-scale engineering development. Examples include the A-X prototype competition which resulted in selection of the A-10 Close Support Aircraft, the Air Combat Fighter (F-16), Advanced Attack Helicopter, M1 Abrams tank, and Submarine-Launched Cruise Missile.

On high volume production programs, second source competitions are also held. Examples include the Army's TOW and Shillelagh antitank missiles, the Sparrow and Sidewinder air-to-air missiles, and the Mk-48 torpedo.

When competition is not economically feasible at the weapon system level, subsystem and component competition is often implemented.

DIR&E 30 Nov 1976
EXPEDITIOUS JOT&E OF IIR MAVERICK

1. ISSUE: As a result of DSARC II of IIR MAVERICK in September 1976, operational uncertainties were surfaced which affected the potential operational utility of the system.

2. BACKGROUND: Even though a comprehensive advanced development test program had been successfully accomplished by the developing agency, there remained some doubts about the operational utility of IIR MAVERICK in particular combat scenarios. To resolve these uncertainties, DepSecDef directed that a Joint Operational Test and Evaluation be initiated and conducted in a compressed timeframe. Test planning is in progress with the USAF as the executive Service. A partial report will be provided in March 1977 and a final report by August 1, 1977. An independent contractor has been chosen to assist in test planning, monitor test conduct and provide an independent analysis at the completion of the joint tests.

3. RECOMMENDED POSITION: DD(T&E) support and provide advice and direction as appropriate, to the Joint Test Director.
Enclosure 2

Papers to be Partially Denied on Exemption 1 - (Classified)

Notes: 1. Some portions of these also qualify for Exemption 5 and such papers are also listed on Enclosure 3 for those portions.

2. Some of these papers are unintelligible due to deletions as indicated.

Chemical Warfare Readiness Improvement (also on Enclosure 3)

M-X

SLBM/TRIDENT II (unintelligible w/deletions)

Briefing Paper (also on Enclosure 3)

Special Nuclear Materials (unintelligible w/deletions)

Space Defense (unintelligible w/deletions)

High Energy Lasers (unintelligible w/deletions)

NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 3)

NET Technical Assessment—U.S. vs. USSR RDT&E

Chair Heritage (also on Enclosure 3)

Cannon Launched Guided Projectile Copperhead (CLGP) (also on Enclosure 3)

Impact of Procurement Changes on the F-18 (also on Enclosure 3) (unintelligible w/deletions)

Air to Air Missile Inventory (also on Enclosure 3)

Conventional Airfield Attack Missile (also on Enclosure 3)

General Support Rocket System (GSRS) (also on Enclosure 3)

Infrared Imaging Seeker (also on Enclosure 3)
CHEMICAL WARFARE READINESS IMPROVEMENT

1. (U) Subject of Issue: DoD efforts to improve chemical warfare (CW) posture, both protective and retaliatory.

2. Background:

   a. USSR poses serious threat in CW.

   b. US has ratified Geneva Protocol with reservation which essentially bans first use of CW.

3. (U) DoD Position: Supports efforts to modernize chemical warfare capability and to improve protective posture to allow continuing operations in a CW environment.

4. Current Status:

   Defensive Programs:

   a. FY 1977 budget contained $37.4M for defensive RDT&E; FY 1978 budget contains

   b. FY 1977 Army budget contained $95.8M for procurement, O&M, and war reserve funds; FY 1978 budget contains $17.2M for improvement of defensive and protective posture.

   c. FY 1977 Air Force budget contained $17.2M for protective items; FY 1978 contains

   d. Training is being improved in both Army and Air Force, about 500 personnel will be added to training and disaster preparedness teams by FY 1978.
Retention Programs:

- Binary chemical munition RDT&E is continuing; this is programmed by FY 1978.

- No production decision on binary munitions has been made, nor has any modernization program been undertaken pending further review of national policy in this area. Various studies are in progress to better develop the DoD position.

*Conference of the Committee on Disarmament (UN)*
Issue: What should be the M-X development pace?

1. Subject

The M-X is envisioned as a large, highly accurate, MIRVed missile (approximately 170,000 lbs) capable of being moved from aimpoint to aimpoint in a manner which will conceal its location such that all aimpoints, whether they be visible above-ground shelters or invisible subterranean trenches, are credible to the offense. If attacking weapons are added by the offense, additional aimpoints can be proliferated at relatively low cost. The M-X thus achieves a very high prelaunch survivability. It will also retain the rapid response characteristics and positive command and control features inherent in a land based ICBM.

2. Background

Four new-generation Soviet ICBMs and their payload variants have been developed since the Vladivostok Accord. This evolving Soviet ICBM force with its improvements in accuracy, throwweight, targeting flexibility, and prelaunch survivability is a formidable threat to our land based missile force, as well as our cities. Additionally, vigorous Soviet missile R&D effort beyond the current deployment activities indicates a Soviet trend towards improvement of their counterforce capability and a broadening by its potential base for rapid quantity and quality improvements. Survivability of U.S. land based ICBMs in the 1980s, as well as a partial redress of the growing throwweight imbalance, can be achieved by making the ICBM transportable and hard to an optimal degree. By providing credible aimpoints which are cheaper than the weapons required to destroy them, an arms race can be avoided.

3. DoD Position

The DoD believes in the TRIAD as an absolute necessity for strategic deterrence because the diversity of three entirely different systems will preclude a potential disaster by one technology breakthrough. ICBMs offer a unique capability not present in the other two legs of the TRIAD, namely, capability across the entire target spectrum; a time urgent, hard target kill capability; facility for positive command and control; and an excellent inherent capacity for redressing throwweight imbalances. As the ICBM is vital to the TRIAD, its survivability should therefore be insured.
4. Current Status

M-X technology has proceeded in the advanced development stage for several years, particularly in the areas of guidance and propulsion.

Basing mode studies have been accomplished, indicating that the shelter and trench concepts as the most promising.

5. Funding (Millions)

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**SLBM/TRIDENT II**

**Issue:** Why do we need TRIDENT II missile for a new SLBM?

1. **Subject**

2. **Background**

   In our strategic TRIAD the SLBM force at sea is the least targetable by opposing strategic systems. TRIDENT II represents another timely step in the effort of expanding the "haystack".

3. **DOD Position**

   By virtue of the relative invulnerability and increased capacity of the TRIDENT submarine, an orderly development of the TRIDENT II to fully utilize the new submarine capability is considered highly desirable.

4. **Current Status**

5. **Funding (Millions)**

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<th>FY 77 &amp; Prior</th>
<th>78</th>
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   Originator: DDRSE
   Date: 30 November 1976
Purpose: To describe weapons systems under development which might be:

- Constructed as having a first strike capability.
- Subjects of concern in arms control negotiations because of:
  - Possible verification problems.
  - Possible threats to Soviet strategic war-making capabilities.

1. Possible First Strike Weapons

The only conceivable reason for our attempting a first strike would be to disarm the Soviets, i.e., to deliver a surprise initial attack of such magnitude as to reduce to a relatively negligible level the Soviet capacity for retaliation. Otherwise, we invite their retaliation. They have an assured second strike capability -- achieved through a TRIAD similar to our own -- which we cannot obliterate by any present or proposed capability, or even by capabilities which are still in the realm of speculation. At least twice in the last thirty years the Soviets did not have an assured retaliatory capability; they were engaged in provoking us; and yet, it was not in our nature to attempt even limited military action against them.

The ability to execute a disarming first strike requires three essentials:

- Accurate location of all Soviet strategic weapons.
- Sufficient weapons to attack effectively all Soviet strategic weapons.
- Surprise.

We do not possess either of the first two military capabilities and our open society forecloses the third essential. Still, there are some who believe that the development of certain weapons systems poses a potential first strike capability. In this context, a hard target kill (HTK) capability is most often cited as a first strike capability. An HTK capability would be necessary but not sufficient, without satisfying the above criteria, for a first strike. U.S. HTK capabilities and goals derive from a desire for effectiveness and efficiency in a retaliatory role, and -- for those weapons targeted against his strategic nuclear forces -- to destroy his residual or reserve force to preclude coercion or further war-making capacity after the onset of hostilities.
Not only do we not seek a first strike capability, we seek to reduce incentives for an opponent to strike first in a crisis situation by providing our forces with such characteristics that an aggressor would not significantly change the outcome by striking first in a crisis. This is the essence of strategic stability.

Those systems most frequently criticized as having a first strike capability are:

a. M-X.

which will be deceptively based among a large number of hardened aim points. It will satisfy requirements for, (1) multiple aim point basing to redress the increasing vulnerability of silo based ICBM's; (2) greater payload to somewhat offset the existing Soviet throw-weight advantage in new ICBM's and SLEBM's; and, (3) the capability to attack effectively an expanded and harder set of targets.

Through M-X development we seek the ability to maintain a credible second strike which is in fact that which deters a Soviet first strike. However, the ultimate foundation of the credible second strike is in numbers of deployed weapons and not in the weapon system development. They are separable considerations.

M-X multiple aim point basing is criticized by some on the grounds that it is difficult to verify numbers of missiles. We note that while this may be true in the general case, deployment constraints can be devised which permit high confidence counting even without on-site inspection, and that on-site counting is quite reliable, in any event. Banning mobile missiles is tantamount to giving up on ICBM's, since it is only a matter of time before the survivability of U.S. silo-based ICBM's will be unacceptably low. Further, mobile ICBM's, because of their high survivability, do not invite a first strike (there is no premium for striking first) and hence represent a stabilizing influence.

b. Improved Yield and Accuracy for MINUTEMAN.

MINUTEMAN III is being improved

These are interim improvements to redress throw-weight asymmetries and maintain
essential equivalence pending the availability of M-X. Numbers of MINUTEMAN III are inadequate, even with improved accuracy and higher yield, to represent a first strike threat.

c. MaRV (Maneuvering Reentry Vehicle).

MaRV's are potentially applicable to any ballistic missile. They have two applications. One is for evading defensive missiles, the other is for improving overall missile system accuracy.

As with other weapons systems or components, this development does not threaten any adversary. Further, deployed quantities can satisfy, potentially only one of the three essential criteria for a first strike.

d. Bombers and Cruise Missiles.

These represent no conceivable first strike potential because of the long flight times involved.

2. Subjects of Concern - Verification

a. M-X: Discussed above under first strike.

b. Cruise Missiles: Two cruise missiles are currently in advanced development: the air launched cruise missile (ALCM) and the TOMAHAWK sea launched cruise missile. The ALCM, deployed on B-52s, could significantly enhance bomber force effectiveness by diluting Soviet air defenses, supplementing penetration range, and providing increased overall targeting flexibility. There are two versions of the TOMAHAWK. The conventionally armed anti-ship TOMAHAWK will provide the Navy a much needed capability to insure that our ships and submarines will not be out-ranged by potential adversaries. The nuclear armed Land Attack TOMAHAWK could be deployed on submarines, surface ships, aircraft, and mobile land launchers for tactical or strategic attack.

Both ALCM and TOMAHAWK are highly accurate, flexible, inexpensive weapons. They are small, aerodynamic vehicles that fly at high subsonic speeds at very low altitude making them very difficult to detect and destroy. They use common TERCOM terrain matching guidance, system turbine engine, and nuclear warhead.
It is expected that a decision will be made in the next few months on whether to enter engineering development with either ALCM or TOMAHAWK or both.

If cruise missiles are covered in future SAL agreements, there could be two aspects of compliance verification to be addressed. The first aspect could be verification of the total number of cruise missiles deployed or in storage and the second could involve limits on range of the missiles.

There is no known adequate technical basis for verifiably constraining cruise missile range. For example, some current Soviet missiles, with substantially less range than the potential U.S. cruise missiles, are physically much larger than the U.S. cruise missiles would be. An overriding consideration bearing on the problem of limiting cruise missile range is the fact that the geographical distribution of Soviet targets requires a long range for U.S. cruise missiles whereas heavy coastal population and industrial concentration in the United States permits attack by short range Soviet cruise missiles. There is no realistic way to differentiate between tactical and strategic cruise missiles.

3. Subject of Concern - Threats to Soviet Strategic War-Making Capabilities


b. ABM: We have no deployed ABM capability. We have a program (~$200M) in advanced component and systems technology. No weapons system is under development. ABM R&D has the following objectives which represent no threat to any Soviet strategic war-making capability:

- Maintain a capability to develop and deploy an ABM system should one be required for defense of ICBM forces, C3 systems, or other high value targets.
- Maintain the U.S. lead in ABM technology through investigation of advanced components, technologies, and systems concepts that could yield a technological breakthrough.

c. Space Defense:
SPECIAL NUCLEAR MATERIALS

Issue: Does U. S. run short of special nuclear materials for its weapons?

1. Subject

The term special nuclear materials (SNM), consists of enriched uranium, plutonium, and tritium.

2. Background

There are two alternatives which may be considered:
1. ERDA has "mothballed" capacity.

5. DoD Position (U)
   N/A

4. Current Status [ ]

5. Funding (U)
   N/A

Originator: DDR&E
Date: 30 November 1976
1. Subject

2. Background

3. DoD Position

4. Current Status

5. Funding (Millions)
   FY 76 & Prior  77  78  79  80  81
   9.2  12.0
The program is essentially in the exploratory and early advanced development stage. We have made a concerted effort to focus on technology and avoid directing major portions of our efforts toward specific near term applications.

All three Services and DARPA are involved and DORSE has a stronger than usual coordination role.
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NATO AIRBORNE EARLY WARNING (AEW) AIRCRAFT

PROBLEM: NATO has a need for an airborne early warning aircraft to provide the key element in establishing control of the air environment wherever NATO forces are engaged.

Tri-Major NATO Commanders requirement has been stated for a force of these aircraft. A decision on this matter will have to be made during the Feb-May 1977 time frame.

II. BACKGROUND

Since 1973 the US has proposed that NATO accept the USAF E-3A AWACS (or a derivation thereof) as the candidate aircraft to satisfy the Tri-Major NATO Commanders ROC for a force of NATO Airborne Early Warning aircraft. Several different NATO committees, study groups, and steering committees have been formed to provide recommendations on aircraft type, configuration, force size, ground interface modifications with NADGE, Strida II, UKADGE, and 407L/412L.

Other NATO nations such as Norway and Netherlands have expressed strong support, but

The most recent expression of NATO on this matter was at the 6 December 1976 NATO Defense Planning Committee meeting. At that meeting, the NATO Defense Ministers reaffirmed the importance of a NATO AEW force and agreed to a meeting of high level experts in early January 1977 to examine financial aspects to be followed shortly thereafter by a meeting of Defense Ministers to decide whether or not to proceed.

III. DoD POSITION:

IV. Status: DoD representatives are preparing for participation in the meeting of the NATO high level experts to be held in January 1977.
1. Subject of Interest: The relative capabilities of the U.S. and USSR for performing military RDT&E.

2. Background:

These analyses show the USSR outspending the U.S. in military RDT&E for at least the last six years.

More substantive comparisons take into account differences in RDT&E style (e.g., willingness to innovate), market base for technology advances, and relevance to system mission capability. A judgmental assessment has been made taking these factors into account, and indicates a comprehensive pattern of improvement in the quality of Soviet military RDT&E. Although U.S. technological quality generally continues to surpass that of the USSR, the combination of Soviet quantitative advantage and quality improvements is of serious concern to future U.S. national security.

3. DoD Position: The U.S. leads overall in military technology, and needs to retain the lead to maintain—at reasonable cost—a military balance with the USSR, so as to deter global conflict and deter or win limited wars. The U.S. has an inherent advantage, in that advances in several militarily important technologies are jointly supported by the military and commercial markets (e.g., aircraft gas turbines, semi-conductor and integrated-circuit industries, and computers). There is no counterpart to this joint market support in the Soviet Union. Soviet RDT&E effort in the past has generally emphasized continuity of effort and incrementalism, but in recent years they have shown that they can pull ahead of the U.S. if there is no U.S. commercial base and DoD does not support technology advances (e.g., chemical warfare). Today, Soviet military RDT&E exhibits increasing willingness to invest in high-risk technologies with potentially great payoff in military applications. The U.S. can beat the Soviets without commercial support if DoD chooses to do so (e.g., air-to-air avionics and military space systems), despite the advantages to Soviet intelligence from the U.S. open society.

4. Current Status: The U.S. has shown the Soviets that superior technology can offset numerical advantages in materiel and personnel. Declared Soviet science/technology policy is to surpass the U.S., but they have signalled key deficiencies by aggressive attempts to transfer technology from the U.S.

ODDR&E
2 December 1976
However, there are gaps in our understanding of some Soviet military RDT&E activities, which appear to be related to vital mission areas of U.S. forces. Three steps need to be taken to avoid technological surprise: (1) Continue to monitor and assess Soviet RDT&E activities and their potential relationships to the military balance. (2) Maintain a vigorous R&D effort to generate technological options in areas where our vulnerability is uncertain and risk of surprise is great. (3) Maintain a persistent and coherent program of RDT&E for advancing and exploiting militarily important technology areas where U.S. is strong. In addition, the U.S. must develop new strengths for application in selected mission areas where Soviet efforts are creating an imbalance.
Budget Related Issue

CHAIR HERITAGE

Issue: (U) The Navy has been prevented by Congressional action from continuing the Chair Heritage Program at funding levels.

History: The Fiscal 1977 request for authorization contained an Exploratory Development and an Advanced Development project in support of Chair Heritage. The Advanced Development program, budgeted at $3.4M, was to initiate the development of an Advanced Test Accelerator (ATA). These funds were deleted by the Joint Committee on Armed Services pending recommendations from a review of the Chair Heritage program by the JASON Committee. *

(U) The JASON Committee completed its study and reported favorable regarding program continuation. The results of the JASON review and the proposed program were presented to the Congressional staffs and a request for approval to proceed was sent to the HASC. However, HASC concurrence has not been received. All FY 77 funds are deferred pending resolution of this issue.

Position: (U) HASC - Current position is not known. Impending meeting with HASC staff may clarify situation.

Impact: (U) Delaying this program for more than a year will break up the leading team in Lawrence Livermore Laboratory and delay the answers needed to establish the feasibility of the use of this machine as a viable weapons system.

* A DARPA Advisory Committee

OAD(E&PS)
1 Dec 76
1. **Problem:** The Army has been in Engineering Development since 1975 on a 155mm Cannon Launched Guided Projectile with terminal homing capability, and has the program on contract to Martin-Marietta. The Navy has also been doing similar in-house work on a 5" projectile for shipboard use and more recently has done work on an 8" guided projectile. DoD has continually stressed commonality of the Navy 5" and the Army 155mm rounds.

On the other hand, the House Armed Services Committee has continued to reduce Army funding for COPPERHEAD thus delaying the program, while directing that more commonality studies be conducted.

2. **Background:** Martin Marietta Aerospace and Texas Instruments Incorporated were selected in February 1972 for participation in Advanced Development. During this phase the major subsystems of the COPPERHEAD (CLGP) were gun-fired to determine survivability. The two contractors, with different design concepts, were authorized to enter into the Validation Phase of Advanced Development in September 1973.

...DSARC II was held on 19 June 1975, resulting in authorization to enter Full Scale Engineering Development. Martin-Marietta was awarded an Engineering Development Contract on 25 July 1975. The contract modification for the restructured contract, necessitated by Congressional reduction in FY 76/77 was signed 25 Jul 76 and increased the program by $5M. A task force chaired by EDR&E with Army, Navy, and Marine Corps members, conducted a guided projectile commonality study during May thru Sep 76. This study was completed and forwarded to Congressional Armed Service Committees on 27 Sep 76. The task force recommended that both 5" and 155mm guided projectile development should be continued. In view of the above, the Army was authorized to initiate Producibility Engineering Planning (PEP) on 15 October 1976. The HASC subsequently held up PEP and approval to initiate it was given to the Army on 3 December 1976 with liability limited to $850,000 and efforts to stop at end of February 1977.

3. **DoD Position:**
IMPACT OF PROCUREMENT CHANGES ON THE F18

1. Problem: The F18 program

2. Background:

3. DoD Position:

4. Current Status: The PBD's reflect these changes.
AIR TO AIR MISSILE INVENTORY

1. **Problem:** USN and USAF fighter aircraft are

2. **Background:** A number of factors have caused a shortage of air-to-air guided missiles. The War in Vietnam caused expenditures to be high both for combat and training, the increasing cost of new missiles results in reduced quantity buys, and the low missile kill probability translates into a requirement for more missiles to meet substantially the same threat. In addition, development programs for new missiles (ADM-7F and ADM-9L) both ran into problems which resulted in delays and further exacerbated the inventory problem.

3. **DoD Position:**

   For the immediate future, we must strive to develop a new generation of missiles which (a) are more affordable by virtue of lower cost of acquisition and ownership, (b) have a higher kill probability so that we need to procure them in fewer numbers, and (c) can be developed on schedule.

4. **Current Status:**

   These missiles will be joint (USN/USAF) developments.
CONVENTIONAL AIRFIELD ATTACK MISSILE

1. **Problem:** Do we need a Conventional Airfield Attack Missile (CAAM)?

2. **Background:** The combination of the Warsaw Pact Air Force numbers disparity coupled with their opportunity to initiate an attack against NATO air bases continues to be a difficult problem. Our effort to counter the Red advantage has in the past included sheltering of our aircraft, deployment of ground and air defenses and providing a conventional strike second capability utilizing attack aircraft. The interdiction of Pact Main operating air bases (MDBs) is difficult because of the combination of defenses and weather.

   The prime candidate for the CAAM is

3. **DoD Position:**

4. **Current Status:** The PBns reflect the DoD position with initial funding established in FY78.
2. Background: The GSRS concept has been existent in its current form since 1973. Army Joint Working Group (JWG) was established in February, 1974 to assess the need for a GSRS with a counterfire (counter-battery, air defense suppression) mission. The JWG conducted a preliminary technical and cost assessment of a multiple launch rocket system based on a threat provided by the USA Field Artillery School (FAS). in mid-1974, DA directed a study of the Artillery System (Task Force BATTLEKING) which considered two GSRS concepts.

The JWG prepared a Letter of Agreement (LOA) which was approved by DA in September 1975. A Special Study Group (SSG) was subsequently formed to conduct an in-depth investigation of GSRS concepts, and arrive at a recommended approach to fulfill the system need. The threat was the impetus behind the requirement, and was a major factor in determining the required physical and performance characteristics of the GSRS. Using a representative target list, a request for Proposal was released to industry in December 1975 to assist in determining the best technical approach (BTA). Five contractors were chosen to assist in development of system concepts and to propose in-depth technical and cost tradeoffs and program cost and schedule data. In addition, a survey of foreign rocket system technology was conducted for application. The SSG then proceeded with a Cost and Operational Effectiveness Analysis comparing the BTA to foreign, existing U.S. and parametric systems.

3. DoD Position:
4. Status: The Army is preparing for a DSANC I on 11 January 1977, and if the program is approved, contractual effort will likely begin in March-April 1977.
INFRARED IMAGING SEEKER
(For Air to Ground)

1. **Problem:** The Air Force has received EDCR approval to enter Engineering Development with the MAVERICK missile with an Infrared Imaging Seeker (IIR). The Navy now agrees to utilize MAVERICK IIR, while the Army is not presently fully supporting development of an imaging seeker for HELLFIRE.

2. **Background:** Efforts have been ongoing at the Army Missile Command since 1972 to develop an imaging seeker suitable for heliborne use on a small diameter missile. Contractors involved in this Exploratory Development have been Hughes and Texas Instruments. During the same timeframe the Air Force has more energetically funded an Advanced Development program with Hughes for a MAVERICK seeker. They are now ready for Engineering Development to commence in April 1977. The Navy, while earlier supporting BULLDOG and a non-imaging seeker, is now supporting MAVERICK imaging.

3. **DoD Position:**

4. **Status:** Air Force starts ED in April 1977 on MAVERICK IIR for AF/Navy use. The Army is working a very low level 6.2 effort in FY 77, while planning a nominal 6.3 start in FY 78 for a HELLFIRE Imaging seeker. Joint operational tests are being conducted.
Enclosure 3

Papers to be Partially Denied on Exemption 5

Technology Base Funding Increase
Control of Size of In-House Technology Base Program
DOD Use of Animals in Research
Chemical Warfare-Biological Defense
Chemical Warfare Policy
Chemical Warfare Readiness Improvement (also on Enclosure 2)
Weather Modernization
Computer Software
Bombers
Briefing Paper (also on Enclosure 2)
Ballistic Missile Defense
High/Low MIX
XMl Tank Program
FRG/UK/US Tank Gun Firing Trials
NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 2)
Test and Evaluation Efficiency
Major Range and Test Facility Base
TRIDENT I Flight Test Program at the Eastern Test Range (unintelligible w/deletions)
Independent Research and Development
Export of Technology
Standardization and Interoperability within NATO
Human Resources & Manpower R&D
TECHNOLOGY BASE FUNDING INCREASE

1. Subject of Interest: The term Technology Base refers to the Defense Research (6.1) and Exploratory Development (6.2) categories of the RDT&E budget, and part of the Advanced Development (6.3) category.

2. Background: The Technology Base constitutes approximately 20% of the DoD RDT&E budget. It is the foundation for the RDT&E program and provides the technology options for new techniques, new systems and better manpower use leading toward improved military capability. The Technology Base contributes to the economic health of the nation through commercialization of R&D by-products. The Technology Base is performed in the in-house laboratories as well as through contractual efforts with universities, and industry.

The Technology Base effort decreased about 40% in terms of constant dollars beginning in FY 64. This trend was reversed through increased financial support to the Technology Base beginning in FY 76. This increase has been supported by DoD and the Armed Services Committees and the Appropriations Committees.

3. DoD Position: The Technology Base is our foundation for the future security of the nation. It has given us some notable firsts in military capabilities; including initiatives in laser systems, improved jet engines, improved aerodynamics, advanced simulators for undergraduate pilot training, improved materials, night vision devices, communications technology and reduced mortality for the combat injured.

4. Current Status: The PPGM specifies an increase in Research (6.1) of a minimum of 10% per year in constant dollars through FY 80 and, further, that Exploratory Development (6.2) shall not be decreased below the FY 78 budget request in constant dollars in FY 79-83. It goes on to specify that the percentage of 6.1 achieved in FY 80 to the total RDT&E budget and the percentage of 6.2 achieved in FY 78 to the total RDT&E budget will be maintained as the minimum guidance level in subsequent years.

This increase will continue the trend toward reinvigorating our Technology Base program and will serve as tangible evidence of a renewed commitment to technological superiority on the part of the DoD and Congress.

CDD(R&AT)
1 Dec 76
Budget Related Issue

CONTROL OF SIZE OF IN-HOUSE TECHNOLOGY BASE PROGRAM

Issue: We are restructuring the Technology Base program by decreasing the amount of work done in-house and increasing the amount done in industry and universities.

History: The DoD Technology Base has three major participants (the in-house laboratories, industry and universities), each performing a unique part of the overall program. Over the past ten years there has been a decrease of approximately 40% in the level of effort in the DoD Technology Base program. This decrease has been taken primarily in the university and industry programs while the in-house effort has remained essentially level. The in-house portion had increased from approximately 23% of the total Technology Base program in FY 68 to approximately 43% in FY 74. We are restoring the level of effort as well as the balance between participants by increasing the funding in the program, directing that the increase go primarily to the university and industry programs and by a manpower drawdown of approximately 10% in the in-house RDT&E program. Our goal is to reduce the in-house portion of the DoD Technology Base program to approximately 30%.

Position: In FY 76 the Air Force program was approximately 43% in-house, the Navy 41%, the Army 60%, and, with DARPA and DNA essentially all contract, the overall DoD level is 38%. We are continuing to control the in-house program by establishing a maximum level of effort for the Army, Navy, and Air Force in FY 77.
DOD USE OF ANIMALS IN RESEARCH

Subject of Issue: Periodically, adverse public and Congressional interest to DoD using animals in research, especially beagles, occurs.

History: Annually in the Spring, several animal protective associations and Congressional members reopen a letter campaign which questions the need for, the proper care of, and the use of animals in research. A favorite tactic has been to associate this complaint with a DoD program that is also judged unpopular or inhumane by other groups, such as chemical warfare agent development, and to use this as a basis for getting restrictions on animal use placed into DoD budget and authorization legislation. The constraints, however, are written in a manner making them applicable to more than DoD and more than the unpopular program to which they are attached (i.e., all Federally supported research).

DOD Position: Testing using animals is essential for the conduct of DoD research in the medical and life sciences area. Substitutes for animals are used to the maximum possible.

We comply with all laws and guidelines regarding the proper use of animals. This has been published in DoD Instruction 3216.1, Policy on Animals in DoD RDE/TE, Clinical Investigations and Instructional Programs. Without use of animals in testing, the R&D programs to establish standards for human exposure to toxic substances, combat trauma and blood substitute care, procure new materials and new drugs and vaccines could not be qualified for human use.

OAD(E&LS)23
29 November 1976
1. **Subject of Issue:** Chemical warfare and chemical/biological (CW/BD) defense programs.

2. **Background**
   - **Program Objectives:** In support of current national policy, these programs are designed to maintain a deterrent to possible use of CW/BW against U.S. or Allied forces and to provide a retaliatory capability if deterrence fails. The emphasis of the program is to provide the necessary defensive equipment and procedures to warn of, withstand, and recover from an attack. The effort includes an assessment of the threat and the vulnerability of U.S. forces.
   - The USSR has the world's greatest capability to operate in a CW environment.
   - The US retaliatory stockpile requires modernization to be credible; major improvements in the defensive posture are required.
   - Strong Congressional opposition exists to the development of binary munitions (a new, safe packaging configuration where non-lethal components form the same toxic chemicals as the present stockpile when fired) as a means of modernization; good Congressional support exists for an improved defensive capability.
   - RDT&E is generally adequate; however, procurement of defensive equipment and troop training needs improvement and emphasis.

3. **DoD Position**
   - Supports effort to improve US forces capability to operate in a chemical/biological environment; encourages Allies to follow similar course.
   - Supports limited effort to modernize retaliatory capability.

4. **Current Status**
   - OSD guidance in PPGM* and DPPG** emphasizes defensive programs, both in RDT&E and procurement, while maintaining through selected segments of general purpose forces the capability of limited retaliation.

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*Planning Programming Guidance Memorandum  
**Defense Policy and Planning Guidance  
ODDR&E (E&LS)  
29 November 1976
The Department of the Army has completed one study, "Chemical Warfare Policy, 1980-1990," prepared by the Strategic Studies Institute. A similar study is in progress by Stanford Research Institute, using the same threat analysis and terms of reference, funded jointly by the Army and the ASD(ISA). The JCS is developing, under contract with IDA, a system for estimating chemical munition requirements utilizing a two-sided wargame scenario based on an analysis of targets. The Army has a similar effort in progress at the Concepts Analysis Agency. The Director (P&E) has completed a contract study with SPC Corp. analyzing chemical warfare program issues. NSSM 192 which discusses current national policy alternatives is still outstanding.

Procurement of defensive equipment and training is being emphasized in both Departments of Army and Air Force; Department of Navy contract study in progress to define scope and specific needs.
1. **Subject of Issue:** Long-standing Chemical Warfare (CW) policy is: no-first use of CW, maintain a chemical warfare capability to deter the use of CW against the US or its Allies and to be able to retaliate in kind should deterrence fail, and be able to protect the US forces against CW attacks.

2. **Background:** The above policy has been stated many times, most recently in 1969 when the US relinquished any biological warfare capability. In January 1975, the US ratified both the Geneva Protocol and the Biological Weapons Convention (BWC). The Geneva Protocol bans first use of CW only since all major powers retain the right to retaliate in-kind. The BWC binds all parties to continue negotiations on an agreement banning chemical weapons.

A number of studies by the Department of the Army, ASD(ISA), Director (P&E), the JCS, and the Navy are in various stages of completion. The Congress has requested the GAO to review the total CW policy and posture.

3. **DoD Position:** Supports extensive efforts to improved protective posture through R&D and procurement and encourages Allies to follow similar course; supports limited efforts to maintain a retaliatory capability.

4. **Current Status:**

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OAD(E&LS)
29 November 1976
WEATHER MODIFICATION

1. Issues:
   a. Adversant Modification. Senator Pell opposes DoD involvement in weather modification, and has been instrumental in involving the U.S. in a treaty to prohibit military weather modification.

   b. Inadvertant Modification.

2. Background:

   There is public concern, and in some cases fear, that man's weather modification activities may cause unacceptable damage and human suffering.

   DoD has been criticized for its precipitation enhancement operations over Vietnam. Senator Pell has pressed to restrain DoD from all research or operations in weather modification.

   The U.S. is negotiating a convention, "The Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques."

3. DoD Position:
   a. DoD presently is not engaged in any classified research or operations in weather modification. All DoD activities are reported to and published by the National Oceanic and Atmospheric Administration.
COMPUTER SOFTWARE

1. Subject of Issue: DoD spends approximately $3 billion annually in software development and test in new weapon systems, three times the computer hardware costs. Basic technology is mostly missing to improve the efficiency and standardization of software utilization. Congress has repeatedly cut the software technology budgets, and the Services have been reluctant to properly fund the programs.

2. Background: This problem is now receiving a concerted OSD-wide effort, including ODDR&E, OASD(C), OASD(I&L), and DARPA. Appropriate committees have been formed, a management plan drafted, and a DoD Directive 5000.29 was issued on the Management of Computer Resources in Major Defense Systems establishing policy. Reviews and meetings have been held with key people in the Services and Congress to provide an understanding of our programs and to receive their support. A major effort in establishing a standard higher order language (HOL) has been initiated.

3. DoD Position:

4. Current Status: Work in this area is slowly gaining momentum. The HOL standardization is proceeding fairly well on schedule, but must be closely watched. Coordination among elements of OSD is quite effective. However, much work remains to initiate the appropriate technology work in each of the Services.

OAD(E&PS)
1 Dec 76
BOMBERS

Issue: In the Missile Age, why do we need bombers?

1. Subject

Bombers remain the one leg of the TRIAD where U. S. still retains significant numerical advantage over its Soviet counterpart. This advantage is in both hard and soft target kill capability. Bombers can be launched on warning and dispersed. The bomber is recallable after launch; it can be rerouted enroute; it can be used in different levels of conflict. The bomber can demonstrate U. S. resolve by adjustment of alert rate without actually entering into combat. Its long time to reach intercontinental targets precludes it as a first-strike force. The bomber force is thus a stabilizing force.

2. Background

Continued improvement of Soviet air defenses make the strategic bomber's job increasingly difficult. Since the 1950s, the B-52 has been the backbone of the bomber force. Improved avionics and addition of air launched missiles (SLAM) has permitted growth capability but the aircraft's basic technology is that of the 1950s. Large radar cross section, softness to blast effects and its bombing and navigation system limit the continued potential of the B-52.

The B-1 is scheduled to enter the inventory in the early 1980s. The B-1 will allow the continuance of the most flexible leg of our TRIAD, the bomber, to maintain superiority over the Soviets with its improved penetration capability, low radar cross section, superior avionics, and larger and more flexible weapon mix.

3. Null Position

4. Current Status

Some B-52 avionics improvements are continuing where practical and necessary to maintain its effectiveness. The development of the B-1 is nearing completion. The great wealth of test data show that the B-1 is ready for production.

5. Funding (Millions)

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Originator: DDR&E
Date: 30 November 1976
1. Subject

The Ballistic Missile Defense (BMD) program is comprised of two complementary efforts — The Advanced Technology program and the Systems Technology program.

2. Background

Our BMD efforts are directed at maintaining a technology lead over the Soviets and supporting U.S. strategic offensive forces and Intelligence Agencies by maintaining an in-depth understanding of BMD technology. These are sustained, broad-based efforts to investigate and develop new technologies and concepts and to provide a systems technology base for application to various types of future BMD systems. With the deactivation of the SAFEGUARD system we no longer have a deployed BMD system and with the reorientation of the Site Defense program we are not developing an operational system.

The principal focus of the Systems Technology effort through 1976 will be directed toward terminal defense issues. Modest efforts are also being initiated on a non-nuclear intercept capability that could complement a terminal system, and on a very low altitude concept applicable to the defense of a mobile ICBM force. These two new tasks will form the basis for the future efforts and the level of funding for them requires consideration.

The BMD efforts are the Army's only strategic programs.

3. DoD Position

4. Current Status

- Funding level is inadequate in FY 78 to properly support new tasks.
- The BMD programs are the responsibility of the Army.

5. Funding (millions)  

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1. **Problem:** Is the High/Low Mix a viable concept for modernizing our forces.

2. **Background:** The Warsaw PACT presently has a quantitative advantage in weapon systems over the US and are increasing the quality of new systems as they enter their inventory. At the same time, the US is faced with the problem of increasing weapon system costs. The High/Low Mix is a force structure planning concept which attempts to offset these problems by procuring a small fleet of high-performance systems ("High") to counter the superior threat, and a larger fleet of lower-performance systems ("Low") to counter the average threat. The concept has been implemented by either developing large numbers of "low" systems where we have a qualitative advantage, or to develop small numbers of expensive "high" systems for missions in which we have near parity of numbers. The latter approach has worked fairly well except that it forces a relatively fixed composition because the "low" systems are generally out of production.

   In May 1974, the Secretary of Defense told the SASC that he would approve expansion of the Air Force tactical structure from 21 to 26 wings if the Air Force could develop and field large numbers of missionized versions of the YF-16 Lightweight Fighters such that the total cost of the 26 wing force would not be significantly greater than the previous 21 wing "high" force.

3. **DoD Position:**

4. **Current Status:** The High/Low Mix concept is included in mission area planning and Extended Planning Annexes which provide force structure estimates out to 15 years. Some examples of high/low mixes in which we are developing low systems are the F-15/F-16, F-14/F-18, A-10, and FFG-7 Patrol Frigate. High system mixes being developed are the UTTAS/Uh-1, XM-1/M-60, AAH/Cobra, and MICV/M-113.
XML TANK PROGRAM

1. ISSUE: XM1 Tank/Leopard 2(AV) Tank Comparative Evaluation.

2. BACKGROUND:

a. The US Army and the FRG's Federal Ministry of Defense entered into an agreement in December 1974 to make all reasonable efforts to achieve maximum standardization on the XM1 and Leopard 2 tanks. As part of this agreement, the US Army confirmed its intention to test the Leopard 2, as modified to meet US requirements, to the same ground rules and constraints established for the XM1 and include it in a comparative test and evaluation.

b. The competitive test of the US Chrysler and General Motors XM1 prototypes was conducted during the period February-April 1976. The comparative test of the FRG's Leopard 2 (American Version)(AV) was conducted during the period September-December 1976.

c. In July 1976 an Addendum to the 1974 agreement was approved which concerned the procedures to be followed in attempting to identify and amplify areas of potential standardization in the XM1 and Leopard 2 tank programs. Major areas to be considered were the main gun and ammunition, engine, track, transmission, and fire control.

d. Following a four-month delay in the XM1 program to permit the contractors to resubmit additional proposals based on the standardization addendum, Chrysler was awarded the full-scale engineering development contract on November 12, 1976.

e. Access to XM1 test results were closely controlled within the Army and OSD to protect the highly competitive nature of program. DD(T&E) evaluation of test results was performed by the assigned military staff assistant. DD(T&E) assessment of test results, released prior to selection of winning contractor, was written in a generic sense.

f. The US is scheduled to select by March 31, 1977, either the Chrysler proposal or the FRG's Leopard 2(AV) proposal for continued full-scale engineering development.

g. Charges of lack of OSD and Army objectivity during test and subsequent evaluation of Leopard 2(AV) have been raised in the press and by DCA Int'l representatives. These charges have been manifested in press articles to the effect that OSD has predetermined the US tank to be superior to the Leopard 2(AV); DCA International representatives have discussed their apprehensions concerning objective T&E analysis with various Departments of State and Defense officials.

3. RECOMMENDED POSITION:
FRG/UK/US TANK GUN FIRING TRIALS

1. ISSUE: Relative effectiveness of US 105mm M68 gun with improved ammunition, FRG 120mm smoothbore gun and developmental ammunition, and UK 120mm rifled gun with current and developmental ammunition.

2. BACKGROUND:

a. A FRG/UK/US joint evaluation of main armament systems for main battle tanks was conducted between November 1973 and August 1975. The overall objective of this Trilateral Tank Main Armament Evaluation was to seek a decision on a common solution for the main armament of the FRG Leopard 2, the US XM1, and the UK/FRG Future Main Battle Tank (FMBT). The candidate systems studied in the evaluation were the FRG 120mm smoothbore system, the UK 110mm rifled bore system, and the US 105mm rifled bore system.

b. The Trilateral Group recommended that production of the XM1 be initiated using the improved 105mm system but consideration be given in the XM1 program to possible incorporation of a 120mm armament system at a later date; that the first lot of Leopard 2 be produced with the 105mm system but the Leopard 2's turret design optimized for a 120mm armament system; and that an optimal main armament system, giving consideration to both smooth and rifled bore designs but based initially on the FRG 120mm smoothbore system, be developed as expeditiously as possible for the Leopard 2 Lot 2, FMBT, and possible product improvement of the XM1.

c. In January 1976, the Secretary of Defense approved the Army's recommendations to initiate production of the XM1 with the improved 105mm gun system and plans for a cooperative development program for an optimal tank main armament system for the long term future. The SecDef also requested the Army to assure that the production XM1 design could accommodate a 120mm gun with essentially no change in the tank design other than the turret.

d. A FRG/US July 1976 addendum to original R774 1200 specified that US and US would strive for maximum standardization in tank programs to include eventual use by both countries of 120mm gun. A January 21, 1977, decision date was established for selection of the 120mm gun system design. In July 1976, the XM1 tank program was delayed four months to permit US contractors an opportunity to present proposals based on the standardization agreement.

e. Congress (NASC) objected to delay in XM program and passed a resolution to effect that XM1 should be fielded with US 105mm M68 gun. Further, the resolution stated the gun was not to be replaced until threat dictates need for larger gun, and the 120mm gun proven, through tests, superior to the 105mm gun.

f. FRG/UK/US conducted additional tank firing trials, November-December and to include UK 120mm rifled bore designs, to supplement 1975 Trilateral data and attempt to resolve FRG issues and relative merits of 120mm smooth and rifled bore.
Test and Evaluation Efficiency

1. Issue: Are DD(T&E) policies under DoD Directive 5000.3 resulting in undue program delays, excessive costs, or both, due to test requirements?

2. Background: In carrying out the directives which implement the efforts to correct the deficiencies highlighted by the Blue Ribbon Defense Panel, testing beyond that required under earlier practices is often included in the R&D phases of system acquisition programs. The testing itself, and the correction of deficiencies uncovered in testing are significant elements in the cost of the RDT&E phases of the program and its duration.

Thus, observations and corrective actions, which, under earlier procurement methods, would have taken place after field introduction, are specifically identified as part of the development and initial operational testing efforts, and made a part of the budgetary reckoning.

The present T&E procedures lead to the acquisition of systems which are more nearly ready for operational use, and less susceptible to the need for extensive backfit or "get well" programs to correct previously undetected deficiencies.

3. DSB Assessment: A task force of the Defense Science Board, under the Chairmanship of Dr. Eugene Fubini, was created in May 1976, and charged with assessing the effectiveness of current T&E policies and procedures. The final report of this task force will be available in February 1977.

4. Recommended Position:

...
MAJOR RANGE AND TEST FACILITY BASE

1. Components. The Major Range and Test Facility Base (MRTFB) is comprised of 26 DoD ranges and test facilities which are managed by the Military Departments and monitored for OSD by the DD(T&E).

2. Intended Mission. The MRTFB is a costly national asset (annual TOA about $1.7 billion including $752 million RDT&E) spanning the entire spectrum of physical and simulation environments critically needed for effective testing and training. Containing tropical, arctic, coastal and high desert land areas, the facilities also include associated airspace and water areas required for the wide variety of programs supported. The vast amount of instrumentation, facilities and personnel involved in this program constitutes a large investment that must be continuously upgraded and modified to meet new test program demands. Some of the facilities are extensively used by non-DoD organizations, e.g., NASA, DOE, FAA, non-Government.

3. Basis for FY 1978 Request. FY 1978 budgets were prepared by the military departments based on estimated future workload. An extensive OSD review, with OMB participation, insures that the budget reflects the minimum dollars and personnel needed to support user requirements.


5. Current Program Status. The facilities are funded to provide all mandatory operating, maintenance and improvement dollars. Improvement programs include efforts necessary to meet new requirements, increase efficiency or replace antiquated equipment. Assets are continuously reviewed for need and removed from inventory when no longer cost effective.
1. ISSUE: Tests associated with the effect on the TRIDENT I (C-4) missile upon activation of the missile Flight Termination System (FTS) will be completed in March 1977.

2. BACKGROUND: In preparation for TRIDENT I (C-4) missile flight test initiation on the Eastern Test Range, the Navy conducted a static firing test of the first booster stage and activated the FTS of the TRIDENT I (C-4) missile in June 1976. When the FTS was activated, detonation resulted.

The DERA decision did not specify actions to be taken if the demonstration tests resulted in detonation.

3. RECOMMENDED POSITION:
1. Issue: To develop a means of satisfying the objectives of IR&D and B&F which can be supported by the Executive Branch, the Congress and the Industry.

2. Background: Industrial firms, particularly those in the higher technology product areas must engage in technical effort whose objectives include developing and maintaining a competitive posture in chosen product areas by advancing the technology and exploring innovative concepts in these chosen product areas. Part of the effort may be funded by direct customer technology contracts particularly in the defense environment. The balance must be considered a necessary cost of doing business and these costs must either be expensed in the current accounting period or capitalized for recovery in later accounting periods. DoD has permitted defense contractors to expense such costs as overhead charges on defense contracts since 1959. The rationale and the guidelines for such allowance have been the subject of continuing review and analysis both within DoD and within the Executive Branch. Certain elements of Congress have repeatedly criticized both the rationale and the administration of the IR&D/B&F effort and in recent years has imposed constraints regarding relevancy of the effort via amendment to the Appropriation Acts (see Section 203 of the Defense Appropriation Act for 1972, Public Law 91-441). A further constraint on total dollars to be allowed for recovery in DoD contracts has been threatened (Proxmire).

3. DoD Position: DoD maintains that IR&D/B&F are normal costs of any business and therefore are allowable charges to a contractor's overhead subject to certain restrictions concerning relevancy and amount of dollars allowed. The ASFR details the contractual guidelines for IR&D/B&F allowance while DOD Instruction 5100.66 establishes the policy and procedures for technical evaluation of relevancy and technical quality.

4. Current Status: The subject of IR&D/B&F has not arisen in the Congress since the submission by DoD of the results of a study regarding funding of IR&D/B&F by line items of the budget. This report forwarded to the McKay and Promine Subcommittees in April 1976 resulted from Joint Subcommittee hearings in September 1975 called to discuss the results of a comprehensive GAO study of IR&D over the preceding two years. The concept of Line Item Budgeting and Contract Allocation of IR&D/B&F funds to major contractors was one of the recommendations in the GAO report.

The Office of Federal Procurement Policy is developing an Executive Branch policy on IR&D for release as an OMB Circular.
1. Issue: High technology transfer to the Bloc countries, either directly or via our Allies, is of deep concern to DoD. Past technology transfers and the expiration of the Export Administration Act during the last Congress resulted from strong differences of opinion on the value of present export controls. This was coupled with the criticism of DoD for inadequate allocation of resources to this problem. Arms Export Control Act of 1976 (Public Law 94-329) will require clear definition of "defense articles" and "defense services" that will be subject to the provision of the Act. Also to be considered is the erosion of our competitive economic base resulting from unrestricted exports of high technology.

2. History: The transfer of high U.S. technology to the Soviet and Chinese Bloc is creating increased concern in the DoD and among certain segments of the Congress. During this past two years, various committees have been set up by the Congress, the President, Commerce, Defense, State and the GAO to highlight the various views.

The Defense Science Board completed a study in Feb 1976 recommending a streamlining of the export control list to emphasize control of technology rather than control of products as is now the case. DepSec Clements assigned DDR&E the responsibility to implement the recommendations and the AD (International Programs) has this effort underway. This is now a broad interagency effort. Primary focus is on the identification of critical strategic technologies and mechanisms of technology transfer. Some of the required improvements of the administration of export controls within DoD have also been identified pertaining to the allocation of additional resources to the export control problem.
3. **Impact:** The Congress failed to extend the Export Administration Act due to lack of time and many unresolved issues.

The accomplishment of these aims in timely manner as requested by Congress and Industry will demand high level DoD management attention and allocation of requisite resources.
STANDARDIZATION AND INTEROPERABILITY
WITHIN NATO

1. Problem: NATO's combat capability, military efficiency and
deterrence could be significantly improved through greater standard-
dardization and interoperability of weapon systems in the Alliance.
Greater standardization should also result in appreciable long term
efficiencies in development, production, logistics, training, and
maintenance.

2. Background: The obstacles to achieving standardization of equipment
in NATO are many. Most national procurement decisions are suf-
ficiently large that considerations go beyond purely military aspects
and cover such other vital national-level considerations as industrial
production base, employment, technology base and balance of trade.
However, we are finding ways to deal with these problems.

Generally, the most satisfactory approach to contending with domestic
problems associated with standardization is through licensed pro-
duction of standard equipment in both North America and Europe--
examples are the ROLAND II Short Range Air Defense System and
the F-16 programs.

Many of the benefits of standardization can be realized through
ensuring interoperability of equipment--for example, being able
to service aircraft on each other's airfields, being able to com-
municate with each other, and being able to use common fuels
and ammunition.

3. DoD Position: The DoD strongly supports NATO standardization
and interoperability efforts. We have strengthened the DoD Weapon
System Acquisition process to ensure that adequate consideration is
given to foreign solutions, that U.S. systems are designed to be
interoperable with those of our NATO Allies to the greatest degree
possible and practical. We seek methods by which our NATO Allies
will be encouraged to agree to U.S. solutions (e.g., through co-
production opportunities) when appropriate.

4. Current Status:
HUMAN RESOURCES & MANPOWER R&D

1. **Issue:** The House Appropriations Committee reduced the FY 76 program request in this technical area by $20M. The Senate Appropriations Committee restored $10M.

2. **Background:** This technical area includes work in training; training devices and simulators; personnel, manpower, and contemporary issues (equal opportunity, race relations); and human factors in weapon systems development and operations. In reducing funding, the House Appropriations Committee questioned both the utility and priority of the R&D. The Senate restoration was to enable the highest priority training and simulation projects to be continued.

The FY 77 funding request for the five Program Elements reduced by Congress in FY 76 was held to the FY 76 budget request level, a substantial reduction from the growth planned for this area. The area of Human Resources R&D was separated into three categories of work: (1) the technologies for training, simulation, training equipment and human engineering, (2) a smaller effort in the personnel and manpower area, and (3) a separate effort in the social science contemporary issues area. The purpose was to clearly delineate these three sub-areas of work so that they can be independently structured and appraised.

This action was successful since no across the board reduction was made by Congress in FY 1977.

3. **DoD Position:**

The technology area has been retitled to Training and Personnel Technology to emphasize program reorientation.

4. **Current Status:** Congress has requested and the GAO has conducted a major survey of the area. The GAO report is expected to be released in January 1977 to the House Appropriations Committee.

OAD(E&LS) 12
29 November 1976
1. **Issue:** Remotely Piloted Vehicles (RPV's)

2. **Background:** DoD has considered that RPV's offers significant capabilities for high risk missions in the area of battlefield surveillance. DARPA's 5-year initiating thrust in RPV's for military missions will conclude in FY 77. The three Services are each funding the types of RPV's pertinent to their individual needs, with a Tri-Service coordinating group and DDR&E guarding against redundancy and duplication. The Army (Aquila Program) is concentrating on a mini-RPV (under 200 lbs) for reconnaissance and artillery correction and designation with the objective to provide to TRADOC an interim RPV system for development of the ROC** for the full militarized system. The Navy is also pursuing a mini-RPV (under 300 lbs) to provide an over-the-horizon targeting capability for Harpoon equipped ships. Since many of these ships are small and non-aviation rated, the RPV size is constrained to under 300 lbs for logistics reasons. The Air Force has a long operational history with midi (300 to 3000 lbs) RPV's such as the BGM-34C for photo-reconnaissance and electronic warfare jamming and deception. A large portion of their program is to increase the utility of these systems with engineering improvements. The Air Force expendable drone program, involving a midi-sized decoy and a mini-sized harassment weapon, was cut from $7M to $2M by Congress to keep these programs from going to full scale engineering development. (believed to be premature by Congress). The only maxi-RPV (over 3000 lbs) is the Air Force Compass Cope long-endurance, high-altitude, surveillance platform intended to carry all weather systems such as Side-looking Airborne Radar (SLAR) to provide tactical battlefield surveillance. Congress withheld $3M of the $6M FY 77 appropriation for Compass Cope until the Air Force committed to a specific payload. In general, Congress has paid particular attention to the RPV programs.

3. **DoD Position:**

*Training and Doctrine Command

OAD(E&PS)

1 Dec 76

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**Training and Doctrine Command**

**Required Operational Capability**
4. **Current Status:** Twenty Aquila airframes and two ground control stations will be delivered to TRADOC in the Spring of '77 for a six month evaluation leading to a ROC for the engineering development. A Navy RFQ** for its mini-RPV will be released this month and contractor selection will be made in the Spring of 1977. The Air Force study on the RPV control system will begin in late FY 77.

*Joint Tactical Integrated Data System*

**Request for Quotation**
Budget Related Issue

ELECTRON DEVICES

Issue: The funding for development of electronic devices has decreased over the past ten years in terms of real dollars and as a percentage of investment in electronic systems. Since these devices are key to the performance, reliability, cost, size and weight of future systems, PDM guidance was established two years ago increasing the electron device budget.

History: The current PDM directs an increase in electron device funding of 10% per year with FY 1975 as the base. In addition, the Services were directed to establish device Advanced Development Programs. The Air Force, Navy programs are in accord with the guidance. The Army has decreased device funding and the House Armed Services Committee (HASC) refused to approve their proposed Advanced Development Program start in FY 77. A Navy Advanced Development Program with a similar sounding title was also cancelled by the HASC but the real device program survived.

Impact:

*Program Decision Memorandum

OAD(E&PS)

30 Nov 76
Budget Related Issue

REMOTELY PILOTED VEHICLES
(RPVs)

Issue:

Problems have been encountered in schedule slippages and cost overruns. RPV's have drawn considerable Congressional attention.

History: The Air Force has a long operational history with mid-sized (300 to 3000 lb) RPV's for photo-reconnaissance and electronic warfare. They have not needed to develop small radars and infrared imagers for the 200 to 300 lb class of mini-RPV's the Army and Navy intend to use.

Position:

The Air Force under PE 63739F is formulating the concept of an RPV mission control system that is intended to be JTIDS* compatible.

*Request for Quotation
**Joint Tactical Integrated Data System

OAD(E&PS)
1 Dec 76
Budget Related Issue

IRRADIATED FOOD PROGRAM

Subject of Issue: Congress has charged the DoD to conduct the national RDT&E program for the use of ionizing radiation as a means of sterilizing meat products.

History: DoD initiated R&D to study this approach for preserving meat products over a decade ago. After an initial period, it was decided to terminate the work. The civil sector and other Federal agencies also terminated like efforts. However, Congress rejected the DoD proposal for cancellation and requested that it continue the work even though it had no requirements for the products of the work. In 1974 DoD had brought the technology to a state where four meat products (beef, ham, other pork products, chicken) were ready to undergo testing to demonstrate acceptability for human use, per FDA standards. Beef testing was started. In 1975 the Secretary of the Army accelerated the test program by adding the other meats in simultaneous efforts rather than the sequential tests earlier planned. Congress was advised of the acceleration of the program.

Budgetary Impact:

Funding for all Service food technology R&D is an Army responsibility since they serve as the DoD Executive Service for this effort.

DoD Position:

29 November 1976
Budget Related Issue

MANPOWER, PERSONNEL AND CONTEMPORARY ISSUES

1. **Issue:** R&AT raised serious concerns with regard to both the level of R&D effort allocated to Manpower, Personnel and Contemporary Issues and

2. **History:** Concern over this technical area by the House Appropriations Committee staff resulted in a 25% reduction in the Human Resources program in FY 76. Continued concern by the Congress with regard to utility of R&D in this area is expected.

3. **Current Position:** The Services have been requested to brief ODD(R&AT) on their proposed FY 78 Tech Base programs in this area. The objectives are an assessment of the utility of the R&D, whether the level of investment and the expected return justify an annual investment of over $20M, whether the planned program is correctly focused, and whether the program (or portions thereof) should more appropriately be funded from a non-RDT&E account.

4. **Impact:**

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Budget Related Issue

FACILITY FOR PRODUCTION OF BINARY CHEMICAL WARFARE MUNITIONS

1. Issue: The Department of the Army has proposed a loading, assembly, and packaging (LAP) facility for the new binary artillery projectiles to be constructed at Pine Bluff Arsenal, Arkansas.

2. Background: This facility was included in the FY 1975 procurement and Military Construction Authorization (MCA) request in the amount of $5.5M. It was authorized by both houses of Congress but was deleted on a floor amendment during the appropriations process. It was included again in the FY 1976 budget request for $8.8M. After extensive hearings it was deleted pending further discussions at the UNGA Conference of the Committee on Disarmament (CCD). Because of this decision, no request was made in the FY 1977 budget in accordance with Congressional wishes to delay one year to allow further negotiations. No substantial progress in disarmament discussions has been evident during the one year delay.

3. DoD Position:

4. Current Status: The funding for this facility has been made the subject of an ASD(C) PBD issue and is being raised as a funding issue at OMB level.
1. **Issue:** The entire spectrum of training and simulation technology has been marked by DD(R&AT) as an area for concentrated growth. Programmed increases for this area of technology have begun.

2. **History:** OSD initiated an effort in FY 75 to increase the use of flight simulators to improve training, reduce costs and reduce use of fuel. Congress has in general supported the program. High level interest item due to high leverage in terms of cost reduction/performance effectiveness.

3. **Current Position:**

   The FY 1978 budget request includes

4. **Impact:**

OAD(E&LS)
30 Nov 76
ARMY RDT&E DRAWDOWN

Issue: The Army has agreed to a manpower drawdown to reduce its in-house Technology Base work and to increase its program with universities and industry.

History: The Laboratory Utilization Study which was completed in 1975 concluded that the Army in-house program in several areas including materials and electronics was too large. An agreement was made with the Army to reduce its RDT&E in-house strength by 2900 authorizations using end strength FY74 as the basis and completing the drawdown by FY78. These reductions by fiscal year are as follows: FY75 - 905, FY76 - 829, FY77 - 733, and FY78 - 433. The Army has met its commitments as of FY76, however,

We have encouraged the Army to take these reductions through hiring freezes, attrition, and transfer of the manpower to work and funding in other areas.

Position: ODD(R&AT) is insisting that the manpower drawdown be completed as scheduled.

ODD(R&AT)
30 Nov 76
NAVY BLOCK FUNDING

Issue: We are encouraging the Navy to provide most of their Technology Base funds directly to their laboratories in large "blocks" without distribution through the Systems Commands.

History: The Navy Technology Base funding to the Chief of Naval Material Laboratories is distributed to the laboratories in two ways. Some of the funds are given directly to the laboratory by the Chief of Naval Material for work which has been previously agreed upon. A major portion of the laboratories' Technology Base funds, however, are provided through the Systems Commands for work which is primarily supportive of the particular Systems Command.

We have encouraged the Navy to block fund most of the Technology Base funds directly to the laboratories once the laboratories technical program has been agreed upon by the laboratory, the Systems Command, and the Chief of Naval Material.

Position: The Navy has proposed to "block program" funding to the laboratories.

ODD(R&AT)
1 Dec 76
ELECTRONIC COUNTER COUNTER MEASURES (ECCM)

History: The lessons learned in the Yom Kippur Israeli war indicated the need for a major thrust in ECCM. There are several aspects to a good ECCM posture.

Positions: DoD Directive C-4600.3, Electronic Counter Counter Measures Policy defines the tasks and responsible agencies with regard to threat definition and evaluation of impact upon system performance. The implementation of this policy is still being formulated. To create an ECCM awareness in the service laboratories, DDR&E has sponsored symposia on ECCM topics and has induced the Air Force to create Program Element 63750F-CCM Advanced Development. The Army and Navy technology base program element managers have been made aware of the need for responsive attention to this subject.

OAD(E&PS)
1 Dec 76
AIRCRAFT PROPULSION

Issue:

Discussion: At the present time there is no continuing program of advanced development for small aircraft engines technology. Increasing interest in drones, aerial targets, and RPVs indicates a need for active support of this technology.

The Joint USAF/Navy Technology Demonstrator Engine (JUNE) program meshes the Navy efforts in large aircraft engine technology work with the larger related programs of the Air Force, to the benefit of both.

Positions: DD(R&D).

Army and Navy.
LIQUID PROPELLANT GUNS (LPG's)

ISSUE: The House Armed Services Committee (HASC) has deleted all Navy funding in FY 77 and beyond for LPG's and directed that the Defense Advanced Research Projects Agency (DARPA) should support any future efforts.

DISCUSSION:

Work in the technology of LPG's has been supported sporadically since the mid-1950's. However, for a decade prior to about 1970, the level of effort was extremely low. In about 1970 the Navy, jointly with DARPA, decided to support a major effort to develop LPG's based on a bulk-loaded propellant charge design concept. The HASC in acting upon the FY 77 budget observed that LPG's had been supported for over 20 years with little apparent useful outcome and therefore deleted the Navy RDT&E funding.

Position:

OAD/ET
30 Nov 76
COMPOSITE MATERIALS

Issue: Should technology base support for R&D work on advanced composite materials be redistributed?

Discussion: Current and planned R&D on these materials encompasses work with organic, carbon, or metal matrices reinforced by graphite, carbon, or boron fibers. Demonstrations of organic (epoxy) matrix composites in full-scale aircraft components have been underway for several years and major structures are components of flying aircraft. The Air Force alone has spent more than $150M on this technology since 1951. Army and Navy also have spent large amounts. There is now widespread support and heavy investment by industry for work on these materials, and they are increasingly accepted for state-of-the-art design.

Carbon matrix and metal matrix composites potentially fill more specialized but very demanding roles in aircraft and missile design.

Positions: DD(R&T),

Air Force,

DAD/ET
30 Nov 1976
TRANSPORTATION AND DISPOSAL OF HAZARDOUS/TOXIC MATERIALS

1. Subject of Issue: Transportation and disposal of chemical warfare agents, missile fuels, some industrial type chemicals, ammunition, and similar items has become a public concern.

2. Background: The Environmental Impact Statement process must be fully followed and become a part of the decision making process.

3. DoD Position: The NEPA and all applicable laws will be fully followed.

4. Current Status: Planning is proceeding in accordance with applicable laws to continue movements necessary in the interests of national security or to improve operations.

OAD(E&LS)
29 November 1976
CHEMICAL WARFARE AGREEMENTS

1. Subject of Issue: A part of US Chemical Warfare policy has been our willingness to negotiate an agreement to develop an effective, verifiable ban on CW.

2. Background: Article LX of the Biological Weapons Convention (BWC) (ratified by the U.S. in January 1975) binds all signatories to continue negotiations on an agreement banning chemical weapons. The U.S. has negotiated in this area, particularly through the UNGA Conference of the Committee on Disarmament (CCD) for at least ten years. It has been the subject of a number of other Conferences. The USSR submitted a convention to the UN in 1972 almost identical to the BWC which contains no verification procedures. The major obstacle to date in all agreements is the definition of the chemical agents to be banned and reaching agreement on practical and effective inspection and verification procedures and other safeguards.

3. DoD Position:

4. Current Status:

OAD(E&LS)
29 November 1976
NANSEN DRIFT

1. Issue: Should the United States freeze a decommissioned icebreaker into the Arctic Ocean North of Soviet Siberia such that prevailing ocean currents will carry it across the Pole to exit near Greenland in about 2 years? Project name: NANSEN DRIFT.

2. Background: The Navy has been a strong proponent for the NANSEN DRIFT project, pointing out the opportunity to conduct new research in the Soviet Arctic and to support political objectives of the United States. They estimate the project will cost $15 million over a three year period.

NSF has been somewhat reluctant to undertake the project, probably as a ploy to force heavier funding support from DoD and other agencies. The project is supported strongly by the National Research Council, the Department of State, and in principle by DoD. The Norwegians support the project.

3. DoD Position: None. DoD needs to establish its position on NANSEN DRIFT. Part of this decision is the level of financial support to provide to the project.
NAVAL ARCTIC RESEARCH LABORATORY (NARL)

1. Issue: What should be the future status of NARL?

2. Background: The Naval Arctic Research Laboratory (NARL), Ft. Barrow, Alaska, is the only continuously operated U.S. research laboratory on the Arctic Ocean providing complete logistics support and coordination of mission research for the Navy and other government agencies. It is operated by a civilian contractor and is managed by the Office of Naval Research (ONR). NARL is a complete self-sustaining base facility on over 5,000 acres of land consisting of over 170 buildings, an airstrip, and modern laboratory facilities. The laboratory maintains a fleet of 6 fixed-wing aircraft, plus various over-land vehicles and water craft. In addition, NARL operates some 14 remote camps along the Alaska coast supporting research projects.

The operating budget of NARL is approximately $7.0M per year, paid for from R&D&E funds. Other government agencies doing R&D at NARL provide reimbursements but these reimbursements do not cover their operating and logistics costs. The Navy estimates that only 15% of NARL activity is in direct support of DoD sponsored research and development.

There is a continuing need for NARL as a Navy or National base camp on the Arctic Ocean.

3. DDR&E Position: On 18 October the Navy was asked to review the management and financing of NARL, and to adjust RDT&E funding at NARL to a level consistent with the RDT&E work performed at NARL by 1981.

OAD(E&LS)
26 November 1976
ADVANCED TECHNOLOGY GUN

1. Problem: An advanced technology aerial cannon is needed to enhance the capabilities of our tactical aircraft.

2. Background: The M21 (21mm), which was developed many years ago, and the GDI & (36mm) are the principal guns planned for Service use. Both the Navy and USAF have expended a considerable amount of work trying to overcome the shortcomings of these two guns.

3. DoD Position: DoD wishes to continue development of advanced multi-purpose aerial cannons.

TWO-PLACE A-10

1. **Problem:** Why do we need a two-place A-10?

2. **Background:**

3. **DoD Position:**

4. **Status:**
1. **Problem:** Should the COMPASS COPE program be continued.

2. **Background:** COMPASS COPE was conceived by the Air Force as a long-endurance, high-flying, remotely piloted multi-mission vehicle.

3. **DoD Position:**

4. **Current Status:** The PBDs reflect the DoD position.
FLIR/LOPAIR

1. Subject of Issue: Advanced chemical agent warning and detection systems; Long Path Infra-Red (LOPAIR) an Army development and Forward Looking Infra-Red (FLIR) a Navy development.

2. Background:

   a. Program Objectives: To provide an advanced chemical agent detection and warning system for combat use.

   b. The Army has evaluated long path infrared detection methods for some years. An active concept pursued from 1954 to 1965 was terminated in favor of a passive concept. Critical technical problems in discrimination of agents from smoke, dust, and other interferences have existed in the past. However, the present passive LOPAIR which entered Advanced Development in January 1974 is believed to have resolved these technical problems.

   c. The Navy, while evaluating the FLIR for fire control purposes (the primary mission), discovered that technicians could observe emissions from incoming aerial targets. By the use of optical filters, some discrimination of emissions can be made.

   d. Initially the HASC requested a side-by-side test; this was fully planned, but not performed. Subsequently, the HASC requested that LOPAIR be terminated in favor of FLIR but did authorize reprogramming for a side-by-side test. The Army did not follow complete guidance on the funding for the side-by-side test. The HASC then initiated a GAO investigation of all expenditures.

3. DoD Position:

   a. [Blank]

4. Current Status: The DoD initial request to the HASC to continue both developments was refused.

*House Armed Service Committee

OAD(E&LS)

29 November 1976
The attached documents represent the "issue papers" prepared by DDR&E for the Transition Team in connection with the transition from the Ford to the Carter Administration. Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report letter of December 14, 1976, they are believed to be broadly within the intent of that definition.

Seventeen papers recommended for release in their entirety are listed in Enclosure 1. Some parts of some of these papers qualify for withholding under exemption 5.a.(1), in that they contain advice, opinions, and suggestions. However, it is determined that withholding would not serve a significant and legitimate governmental purpose.

Partial denial is made on the 16 papers listed in Enclosure 2 under exemption 1 in that they contain classified security information. The material has been reviewed and it has been determined that the denied information is properly classified under E.O. 11652 and its disclosure could reasonably be expected to cause damage to the national security.

Partial denial is being made on the 22 papers listed in Enclosure 3 under exemption 5. The particular parts of each paper have been indicated by brackets and categorized as falling either under exemption 5.a.(1); i.e., papers containing advice, opinions, and suggestions, or as falling under 5.a.(2); i.e., information generated preliminary to decision, the release of which might interfere with orderly execution of plans.

With respect to the denied portions of the 22 papers listed in Enclosure 3, the "significant and legitimate governmental purpose" is the protection of the ability of the government to receive candid advice, opinions, and recommendations from its employees without having the rendering of such inhibited and biased through the possibility of public controversy on them prior to their consideration. Similarly, orderly government would suffer if proposed governmental positions were prematurely exposed to those who might benefit or seek to influence them as the result of such premature disclosure.

The Initial Denial Authority in this instance is Mr. S. E. Clements, Executive Assistant, Office of the Director, Defense Research and Engineering.
Enclosure 1

PAPERS TO BE RELEASED

Note: Some portions of these papers qualify for withholding under Exemption 5, but use of the Exemption is waived.

Defense R&D Laboratories

Federal Contract Research Centers (FCRCs)

DOD R&D Testing Using Human Volunteers

Joint Service Development/Test Programs

Systems Acquisition Management

Prototyping

Travel Funds

DOD Medical Research Charter

Reduction of Outyear Operating and Support (O&S) Costs

Visibility and Management of Operating and Support Costs

Life Cycle Cost (LCC) Reduction

Design to Cost

Specifications and Standards

Reliability and Maintainability

Soviet Technological Doctrine and Practice

Competition in Defense Procurement

Expeditious JOT&E of IIR MAVERICK
DEFENSE R&D LABORATORIES

1. Subject of Interest: ODDR&E is directing various changes which will increase innovation in the Defense Research and Exploratory Development and some advanced technology demonstration programs.

2. Background: The DoD Technology Base comprises approximately 74 in-house Research and Development facilities and 56,000 civilian workers, including about 24,000 professionals. These laboratories monitor the expenditure of some $3B per year, about one-half of which is spent internally. Several major changes are underway which are directed toward increasing the innovation and productivity in the laboratories.

   - The laboratories' roles in Technology Base planning and supervision is being increased. To initiate this, block funding of the laboratories has been increased and lead laboratory concepts for technology areas have been implemented.

   - We are increasing the use of investment strategies as a technique for apportioning the resources across the various technology areas in the Technology Base.

   - The laboratories are being assigned prime technology area responsibilities. The size of the laboratories is being reduced by manpower drawdowns in redundant and lesser productive areas.

   - The percentage of the Technology Base work which is performed by universities and industry is being increased to take advantage of their unique contributions to the program.

   - The roles of the laboratories in support of systems acquisition is being increased. To expedite this a change to DoD 5000.2 was implemented which requires a Technology Assessment Annex to Decision Concept Papers for systems which are meeting Defense Systems Acquisition Review Council Milestones I and II.

ODD(R&AT)
1 Dec 76
3. **DoD Position:** As in-house laboratories play a key role in military R&D, the actions enumerated above have been accepted and are being implemented.

4. **Current Status:** Funding allocation increases in the Technology Base are being applied selectively across the technology areas based on a careful evaluation of various investment strategies. The Air Force and Army have implemented the block funding technique; the Navy is moving in that direction. Ceilings have been placed on the amount of Technology Base program which will be performed in-house with the ultimate goal of achieving a maximum of 30% in-house. The manpower drawdown in the Air Force has been completed and is approximately on schedule for the Army and Navy. The drawdown amounts to approximately 6,900 authorizations to be completed by the end of FY 78.
1. **Issue:** Will the revised policies and procedures for managing DoD-Federal Contract Research Centers (FCRCs) be acceptable to Congress?

2. **Background:** Federal Contract Research Centers (FCRCs) are DoD sponsored non-profit corporations dating from WWII. The number of FCRCs has been reduced from 21 to 8 since 1964. Each FCRC is distinctive and generally performs different functions. Other government agencies have similar organizations.

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>System Engineering/ Tech Direction (SE/TD) (FY76)</th>
<th>Studies &amp; Analyses (S&amp;A) (FY76)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT Lincoln</td>
<td>$51M</td>
<td>RAND $17M</td>
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<tr>
<td>Johns Hopkins</td>
<td>$53M</td>
<td>CNA $10M</td>
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<td>Penn State</td>
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<td>ANSER $2M</td>
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<td>IDA $11M</td>
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Laboratory FCRCs perform difficult technical projects embracing both research and new prototype systems concepts. (SE/TD) FCRCs provide technical support in defining, developing, producing and fielding space, communications and command and control (C3) systems. (S&A) FCRCs provide sound and unbiased professional analyses and recommendations for force planners, logistics managers, R&D managers, high officials on DoD staffs, etc.

A high degree of control is maintained over FCRCs. The Senate Armed Services Committee provides an overall fiscal ceiling. Four major problems exist with using FCRCs:

- Several years ago, Congress expressed concern regarding salaries, number, size of operation, etc. These concerns resulted in the imposition of a Congressional fiscal ceiling. However, this ceiling has not kept pace with inflation.

- Congressional concern has been expressed more recently regarding how we use FCRCs, i.e., as "extension of headquarters staffs," especially the S&A FCRCs.
Part of the for-profit industry sector is opposed to both the non-profit and sponsored aspects of FCRCs, especially as pertains to the success of some FCRCs in diversification.

The fiscal ceiling has especially been a hindrance in accomplishing space and C3 SE/TD work.

3. **DoD Position**: An extensive review was conducted of FCRCs in 1976 in response to Congressional desires. Principal actions are as follows:

- Analytical Services (ANSER) will no longer be an FCRC.
- The Applied Physics Laboratory (Johns Hopkins) and Applied Research Laboratory (Penn State) will not be considered FCRCs beginning in FY 1978.
- MIT Lincoln Laboratory, Center for Naval Analyses (CNA), Project Air Force (formerly-Project Rand) and the Institute for Defense Analyses (IDA) will not be allowed to exceed their present manpower levels. The non-Project Air Force aspects of RAND Corporation will not be considered an FCRC.
- MITRE-Bedford will be separated from MITRE-Washington. All DoD C3 work will be done at Mitre-Bedford. MITRE-Washington will not be considered a DoD FCRC. MITRE-Bedford will not do non-DoD work unless of direct benefit to DoD. Level of DoD effort at Mitre-Bedford will be governed by DoD C3 workload.
- Aerospace Corp will be restricted to DoD space program endeavors except on programs of direct benefit to DoD (i.e. joint DoD-NASA). Level of DoD effort at Aerospace will be governed by DoD space system workload.

4. **Current Status**: A report was provided the four concerned Congressional Committees. Informal approval received. DoD will be implementing above actions in the FY 78 budget process. Congressional Committees reactions in their reports on the budget will provide basis for future management of FCRCs.
Subject of Issue: Continuing concern by many groups that humans are being used as guinea pigs needlessly and under circumstances of unacceptable hazard.

Background: The DoD, as one of many Federal agencies who perform tests using human test subjects, has been drawn into the overall public and Congressional dialogue on the subject. In 1975, Congressional committees held hearings that discussed tests, primarily related to chemical agent and hallucinogenic drug testing, that were conducted in the 1950, 60s and early 1970s. This discussion resulted in a report that highlighted abuse and an inadequate follow-up of the test subjects. These practices had been stopped and the control of such experimentation had already been markedly improved in the 1970s by DoD because of its own concern and the national revision of standards for use of human volunteer subjects, although this point was carefully avoided or ignored in the hearings.

DoD Position: DoD must conduct tests that use human test volunteers in several of its human related RDT&E program. Each Service has formal and effective approval procedures to insure that the proposed tests are needed and worth the investment and risk, properly planned, safely and competently conducted, and that proper follow-up is assured. As new guidelines or laws are passed related to this on a national level, they are included in the DoD process of approval, review, conduct, and critique of our R&D. In all cases, only fully informed and volunteer subjects will be used.
JOINT SERVICE DEVELOPMENT/TEST PROGRAMS

1. **Problem:** Proliferation of hardware and programs aimed at meeting the same basic operational requirements.

2. **Background:** Unnecessary proliferation of systems and subsystems intended for similar operational requirements can dilute the effectiveness of R&D resources, deters competitive procurement and ultimately consumes excessive operations and support resources. With severe budget constraints in the R&D area, this problem cannot be overemphasized. Operational requirements must be carefully examined and coordinated to eliminate the costly consequences of duplication, strive for subsystem and system interchangeability, and achieve interoperability and flexibility of mixed forces. Commonality of hardware is sought to reduce the costs of training, maintenance, and support. DDR&E places heavy emphasis on structuring joint RDT&E programs through memoranda of agreements, lead Service assignments, and close coordination with other OSD offices such as DTACCs and ASD(I&L) in working groups.

Certain technology areas have been identified as prime candidates for special attention in DDR&E because rapid movement in the state of the art encourages proliferation. As an example, electronics technology can be found as a major cost element of almost every weapon system. Since one-third of the DoD budget in some way or other is tied to electronic related expenditures, it is an area that has been highlighted as worthy of special attention. This is particularly important in electronic subsystems in view of the fact that annual support costs for these military equipments are equal to the annual procurement costs and are increasing due to the relatively high labor content. Therefore, Joint Service programs in the electronics area are highly leveraged and provide a basis for significant cost reductions.

3. **DoD Position:** Joint Service programs are an effective approach to stemming proliferation of programs aimed at meeting similar operational requirements. Our policies to achieve this objective are stated in DoD Directives; identified and restructured as necessary in the planning, programming, and budgeting cycles; and when necessary, by fiat. A special policy for Single Service Management of Selected Electronic Equipments has received tri-Service Secretarial endorsement and is expected to be finalized in March 1977.

4. **Status:** We have established commonality between Services that is intended to satisfy sister Service requirements in virtually all DSARC reviews. Working groups and special committees have been formed to more closely examine the areas where high payoff potential exists. The Directive on electronic equipment will utilize the requirements process and other existing means to identify those items which are candidates for Single Service management. The assignment of the "lead"
Service on a case-by-case basis will be made by the appropriate OSD offices.

At the present time, there are 78 joint Service R&D programs; and similarly, there are 14 joint operational test programs. For example, the NAVSTAR (Global Positioning System) is a tri-Service development to reduce net DoD navigation costs by a significant percentage while enhancing the performance of weapons and simplifying their design. During the past year, the Air Force has been assigned as Executive Agent for the development of the new beyond visual range air-to-air missile, which is a replacement for Sparrow. The new missile will be based on previous DARPA research and designed to satisfy a JSOR. Similarly, the ultimate Sidewinder replacement will be based on a continuing evaluation of seekers and development of operational requirements.
1. Issue: In order to maintain national security in times of highly constrained defense budgets it is imperative that we manage the acquisition of defense systems in a highly efficient manner.

2. Background: The basic policies for the management of defense systems acquisition were established in mid-1971 with the publication of DoD Directive 5000.1, "Acquisition of Major Defense Systems." Since that time the results of several study efforts for improving the defense systems acquisition process have been published, i.e., the Commission on Government Procurement, the Army Material Acquisition Review Committee, the Navy/Marine Corps Acquisition Review Committee and most recently the Acquisition Advisory Group.

3. DoD Position: While many of the recommended improvements to the defense systems acquisition process have already been implemented we are continuing to evaluate and adopt other promising changes.

4. Current Status: In many areas we have made major strides in improving the management of DoD systems acquisition. Some of these management initiatives are:

a) Fly-before-buy (hardware demonstration)
b) Achievement milestones vs calendar milestones
c) Competition, especially during system validation
d) Design to Cost
e) Hi-Lo force mix
f) Creation of viable options
g) Maintaining strong technical base
h) Improved program management

Other areas of promising efforts underway but still evolving are:

a) "Front-end" planning—mission needs and affordability
b) Life Cycle Costing

Sound management of defense systems acquisition impacts on the defense posture of the U.S. It is probably the single most important task of DoD as it impacts directly on force readiness, the yearly defense budget and also the outyear expenditures for operating and maintaining our weapon systems. We will continue to evaluate all facets of the acquisition process seeking improvements in national defense and more efficient development, production, operation and support of our defense systems.
1. **Issue:** To improve the basis for management decisions during the development and acquisition of defense systems and equipment.

2. **Background:** Prototyping stresses the use of hardware demonstration, rather than paper studies, as the basis for key program decisions. It has been referred to as the "fly before buy" or "test before buy" approach to system acquisition. In practice, it calls for investment in a few demonstration models (prototypes) and evaluation of test results prior to making a major commitment of funds or resources. It was promulgated as management policy by former Deputy Secretary of Defense David Packard, has been emphasized as a management tool by his successor, DepSecDef Clements, and has become an important aid to defense decision-making. Congress has debated the merits of prototyping and endorsed its application in defense programs.

3. **DoD Position:** Prototyping is an aid to management that reflects a basic principle of sound decision-making: systematic reduction of risk. It must always be viewed in the decision-making context. It is not, and must not become, an end or objective in itself. We emphasize prototyping where it is needed to support and strengthen our basis for decisions, not as "the thing to do" in order to get programs approved.

4. **Current Status:** We have gained considerable experience in prototyping over the past several years; however, there is still some misunderstanding of the difference between its two fundamental applications.

Prototyping is used during the acquisition cycle to reduce the risks associated with applying advanced technology to meet defined operational requirements. These are the "full-scale engineering development" prototypes. (Examples: Mechanized Infantry Combat Vehicle; Utility Tactical Transport Aircraft; Advanced Attack Helicopter; Submarine Launched Cruise Missile.) Where it is impractical to prototype an entire weapon system, the concept is applied to subsystems and components. (Examples: AWACS Radar; Airborne TACAN; Navy Modular Electronic Warfare Suite.)

Prototyping is also used to explore and advance new technology prior to the definition of specific requirements. These are "technology base" or "exploratory development" prototypes. Their purpose is to provide viable options for future decisions. Exploratory prototyping creates technological alternatives, exploits technical opportunities, stimulates competition and innovation, retains key industry design teams, and improves our ability to make performance/cost tradeoffs. (Examples: Air Combat Fighter; Advanced Medium STOL; Electronically Agile Radar.)

_DDRGE_

30 Nov 76
Budget Related Issue

TRAVEL FUNDS

Issue: ODD(R&AT) has insufficient travel funds to adequately perform its assigned tasks for FY77.

History: ODD(R&AT) is allocated travel funds from DDR&E. These funds are used to pay for transportation and per diem in performing our program monitoring tasks, to satisfy U.S. responsibilities in international travel for the Defense Research Group and for The Technical Cooperation Program, to maintain staff specialists professional proficiency through attendance at technical symposia and meetings and to publicize the technical thrusts and management changes which we are implementing in the Technology Base program. The travel funds allocated in FY76 was $42.3K. Our request for FY77, in view of the total inadequacy of FY76 funds, was $76K. Our allocation for the first 6 months of FY77 is $14.7K. We have reduced the $14.7K by the amount required to meet international obligations for the first 6 months of FY77 plus a $1K contingency fund, and allocated the remainder on a prorata basis to the AD Offices and the Front Office Staff. We anticipate that the funding to be allocated for the second half of FY77 will be approximately $14.7K.

Position: DDR&E is aware that the FY77 allocation is inadequate. Travel, other than that supported by others, is by and large restricted to program monitoring plus the international commitments.

ODD(R&AT)
30Nov76
Budget Related Issue

DOD MEDICAL RESEARCH CHARTER
(vis-a-vis other Federal Agencies)

Subject of Issue: Congressional actions on DoD budget requests are being denied in cases where any other agency is conducting research in the area.

History: Congressional actions during FY 76 and FY 77 budget cycle denied DoD requests for money for research in drug and alcohol abuse, and a series of infectious and dental diseases. The basis for denial has been that the Department of Health, Education, and Welfare (DHEW) is doing work in these fields and the DoD, therefore, should not require any effort in the area. This has been cited especially in cases where the DoD level of effort is much smaller than the DHEW commitment. A GAO review of infectious disease research was completed in FY 76, overseas laboratory reviews are underway now which could cause further areas to be so identified in FY 78 and beyond.

Budgetary Impact: Previous reductions were not made until late in the fiscal year. As a result, money had been committed to new and continuing efforts under the authority of the Continuing Resolution. Thus, when all funds programmed for the effort were withdrawn, additional funds were also lost due to the fact that the earlier commitments to contracts had been made and could not be recouped.

DoD Position: DoD does carefully coordinate and draw from the civil and other Federal agency research. It conducts research only on the unique problems of the Military Services or those aspects of the problem that the civil sector cannot or will not address. Thus, rather than duplicate, the smaller DoD investment represents a complimentary effort that provides specialized results of interest to DoD.

OAD(E&LS)  
29 November 1976
1. **Issue:** To reduce the fraction of the outyear DoD budget allocated to system operating and support costs, while at the same time maintaining operational readiness.

2. **Background:** Continued growth in the fraction of the DoD budget allocated to operate and support current systems has impaired force modernization. Greater emphasis is needed on reducing the future O&S costs of systems now being developed, so as to reverse this trend as new systems enter the inventory.

Better visibility on the specific O&S costs of current systems is a necessary step in defining and reducing the O&S cost of future systems. The next step is to employ the results of that improved visibility.

3. **DoD Position:** We are confident that we can achieve the ability to identify and track the O&S costs of individual types of defense systems. We must also control the future O&S costs of systems now in development, so as to achieve a net reduction in the O&S portion of the DoD budget.

4. **Current Status:** The DepSecDef memorandum on Reduction of Outyear Operating and Support Costs, 28 February 1976, directed the Military Departments to establish O&S targets for each major system now in development, and to propose methods to assess the net O&S cost impact on future Department budgets of all DSARC decisions.

The Services have forwarded their planned approaches to the establishment of O&S cost goals for all major programs now in the DSARC process and proposed methodology for annual assessment of the net O&S cost impact of DSARC decisions during the preceding year. Refinements required by ASD(I&L) review are now in progress.
UNCLASSIFIED

VISIBILITY AND MANAGEMENT OF OPERATING AND SUPPORT COSTS

1. Issue: To develop methods for determining the operating and support costs attributable to particular Defense systems.

2. Background: SecDef and DDR&E posture statements for FY 1976 mentioned the need to improve visibility on the operating and support (O&S) costs of current systems, as a necessary step in reducing the life cycle cost (LCC) of future weapon systems.

During SecDef's testimony, Senator Culver asked for LCC estimates on the 10 most expensive systems then in development. DDR&E responded with current estimates for 8 of the 10 systems.

Thereafter, Senator Culver proposed an amendment to the Authorization Bill that required DoD to include LCC estimates for all major systems in its budget, beginning with the FY 1977 submission. This amendment was deleted in conference when DoD stated it was unable to provide such estimates for all major systems. However, DoD did indicate it might be possible to submit LCC estimates for aircraft systems with the FY 1978 budget.

3. DoD Position: We can estimate system acquisition costs fairly well, and are improving that capability, but DoD accounting systems were not set up to identify all operating and support costs by individual weapon systems. We are working to improve visibility on operating and support costs.

4. Current Status: ASD(I&L) has been tasked to define the management information system needed to account for O&S costs by weapon system type. The Services have presented their proposed management information systems for ASD(I&L) review. Refinements in response to ASD(I&L) review are now in progress.

ASD (Comptroller) has been tasked to modify the DoD accounting systems as necessary to accommodate the information system defined by ASD(I&L).

OSD and the Services are working to improve cost comparability among the Services.

The Air Force demonstrated a prototype O&S cost management information system for aircraft during FY 1977 and is now evaluating its effectiveness prior to scheduling its expansion to other types of weapon systems. The Army and Navy are working on similar projects, and the Navy has also developed plans for an O&S cost Management Information System for ships.

UNCLASSIFIED

ODDR&E/OAD(P)
29 NOVEMBER 1976
UNCLASSIFIED

LIFE CYCLE COST (LCC) REDUCTION

1. Issue: To define and reduce the total cost of acquiring, operating, maintaining and supporting defense systems, while at the same time maintaining force modernization, readiness and operational effectiveness.

2. Background: LCC reduction is a major objective of the DoD. There is also considerable Congressional interest in this subject. Present appropriation accounting makes it relatively easy to identify development, procurement and military construction costs of specific weapon systems. However, operating and support (O&S) cost appropriations are related to type of organization and function, rather than to type of weapon system.

3. DoD Position: We can estimate system acquisition costs fairly well, and we are improving that capability. We can and are holding acquisition programs to predetermined unit cost thresholds as a necessary but not sufficient part of LCC reduction. Additional steps are necessary to define and reduce the O&S cost of current and future weapon systems. Those steps are now underway.

4. Current Status (more detail in attached backup papers):

Design to Cost - DoD Directive 5000.28, May 1975, directed the Military Departments to design systems to predetermined unit production costs, and to trade off performance, schedule and quantity as necessary to meet cost goals. Most major systems not yet in production either have established DTC goals or have made cost an "equal partner" with "cost drivers" in early design studies. DTC is an issue at DSARC reviews and corrective action is directed for breach of DTC thresholds.

Visibility and Management of Operating and Support Costs - A DepSecDef memorandum dated 16 October 1975 directed ASD(T&L) to define the management information system needed to account for the O&S costs of current systems by system type. ASD (Comptroller) was directed to modify DoD accounting systems as necessary. The Military Departments have presented their proposals for such an information system and refinements are in progress.

Reduction of Outyear Operating and Support Costs - A DepSecDef memorandum dated 28 February 1976 directed the Military Departments to establish O&S cost goals for each major system development program and to propose methods for an annual assessment of the net impact of all DSARC decisions on the O&S portion of their outyear budgets. The overall objective is a net annual reduction in that fraction of the DoD budget allocated to O&S costs.

Reliability and Maintainability - Reliability and maintainability (R&M) are system parameters that link system design characteristics to O&S cost, readiness and operational effectiveness. Quantitative R&M requirements are now included in almost all DCPs; however, DoD policy on R&M needs to be clarified and extended to subsystems and less-than-major systems, in order to facilitate LCC reduction. DDC&E and ASD(T&L) are preparing a DoD Directive on this subject and supervising the revision of appropriate Military Standards.
UNCLASSIFIED

DESIGN TO COST

1. Issue: To specify and constrain the cost of each new system so DoD can afford to buy the quantities of systems it needs to meet national security objectives within current and foreseen budget constraints.

2. Background: Design to Cost (DTC) is a management policy similar to cost control techniques used in the commercial sector. DTC established unit cost as a parameter equal in importance with system performance, program schedule and other factors that can drive program cost, such as produceability, logistic support concept, data requirements, safety/survivability, etc. It requires planners to set cost goals the DoD can afford to pay, and to trade off system design parameters against those goals. It further requires that cost be emphasized in trade-off decisions throughout the acquisition process, and that cost estimates be verified as within pre-set goals prior to award of the production contract.

3. DoD Position: Design to Cost is necessary to counter the escalating costs of defense systems. We plan to continue applying it to new development programs (both systems and subsystems).

4. Current Status: Design to Cost policy was formalized in DoD Directive 5000.28, issued in May 1975. Each Program Manager receives comprehensive instruction on Design to Cost policy and implementation experience as he goes through the Defense Systems Management College. Design to Cost objectives have been routinely established on all recent major development programs. Examples include the A-10, F-16 and Advanced Medium STOL aircraft, the F-18, Patrol Frigate, Submarine Launched Cruise Missile, UTTAS helicopter, Advanced Attack Helicopter, and XM-1 tank. Such objectives are being defined for more recent programs on a routine basis. While initial emphasis was on designing to a unit production cost, primarily because DoD's ability to estimate and measure unit cost is better than its ability to estimate and measure Life Cycle Cost, DoD is now increasing emphasis on making design tradeoffs to control life cycle cost drivers.
SPECIFICATIONS AND STANDARDS

1. Problem: With increasing costs of defense systems, equipment and material, there were concerns that military specifications were the "cost drivers".

2. Issue: Military specifications and standards have occasionally contained unrealistic, obsolete or marginal requirements which resulted in excessive costs.

3. DoD Position: DoD is attacking the problem on three fronts:
   a) ASD(I&L) and DDR&E co-sponsor the Defense Material Specifications and Standards Board to review on a continuing basis the total specifications and standardization program management to recommend necessary changes in policy to the SecDef.
   b) At the request of DepSecDef, the Services have established RFP (Request for Proposal) Review Boards to review and "scrub" RFPs, prior to their formal release to bidders, of any excessive requirements and unwarranted cost-driving requirements, including specification requirements.
   c) ASD(I&L) and DDR&E jointly established a Defense Science Board Task Force to recommend appropriate specifications and standards policy.

4. Status:
   A. DMSSB:
      1) Now have five Technical Panels (i.e., Materials, Electronics, Matrication, Clothing and Textile, Audio Visual). The Matrication Panel, for example, prepared an interim policy on the use of the metric system of measurement in the DoD which was signed by DepSecDef.
      2) A task group revised the DoD Standardization Manual covering specification preparation, coordination and management.

DDR&E
30 Nov 76
B. **RFP Review Boards:**

All three Services have established these review boards and are actually scrubbing new major system RFPs. On several procurements, draft RFPs were submitted to industry prior to formal release to bidders soliciting comments on the identification of cost-driving elements and suggestions on how to meet the intent of the need at lower cost.

C. **Defense Science Board Task Force:**

Found that while needing continual attention for improvement, specifications and standards were adequate and not the fundamental problem. The problem was really the over-application (or blanket application) of these documents, which in many cases resulted in unwarranted costs. Among the Task Force recommendations are: 1) "tailoring" or selective application of the specification requirements to each program, 2) establish an environment to provide incentives or contractors/bidders for proposing tailored specifications and for recommending cost effective waivers to reduce costs; and c) education of Program Managers on specification applications to avoid excessive costs. The Services are currently initiating actions to implement these recommendations.
RELIABILITY AND MAINTAINABILITY

1. Issue: To reduce the operating and support cost of defense systems while maintaining or increasing their readiness and operational effectiveness.

2. Background: Reliability and Maintainability (R&M) are measurable performance parameters that link system design characteristics to readiness, effectiveness, operating and support cost. Improved R&M simultaneously increases readiness and percentage of successful missions, while decreasing maintenance, supply and manpower requirements. In the past, field reliability has often been only a fraction of that "demonstrated" by the contractor in REL DEMO done to a MIL STD. This occurred because REL DEMO test criteria did not realistically approximate actual field conditions and definitions of a "failure" were not relevant to actual field experience. OSD has major initiatives underway to improve this situation.

3. DoD Position: Increased emphasis must be placed on improving the R&M of systems during R&D&E, rather than trying to fix systems already in production.

4. Current Status: Quantitative R&M thresholds are now included in virtually all DCPS and attainment of these thresholds has become an issue at DSARC reviews. The Deputy Director (Test and Evaluation) has placed a high priority on R&M in his reviews of test programs and test results, as reflected in his reports to the Deputy Secretary of Defense and the DSARC Chairman at all critical milestone decisions.

ODG&E and OASD(ISL) are preparing a DoD Directive on R&M to ensure these parameters are addressed as an integral part of the acquisition process for both major and less-than-major system and subsystem programs.

The Military Departments are revising Military Standards pertaining to reliability, especially the reliability of electronics equipment. These revisions will translate DoD policy to the Defense industries. They include increased realism of tests conducted in laboratory test chambers. The cost of more realistic test facilities is to be paid for by shorter total test time and greater correlation of laboratory and field reliability values.

The Services have recently included in their budgets funds to improve readiness and reduce operating costs for equipment in the field. This is accomplished primarily through the upgrading of equipment reliability and maintainability identified by organizations specifically charged with this responsibility such as the Air Force Productivity, Reliability, Availability and Maintainability (PRAM) Program Office.

Government and industrial technology base activities are exploring the feasibility of using highly reliable electronic modules as basic building blocks for widespread application to electronics equipment. High design reliability and tight quality control are to be paid for by savings achieved through volume production and standardization.

Contractual approaches are being developed which will incentivize contractors to design equipment for high reliability and low repair costs. Approaches successfully used include contract award fees and reliability warranties.
SOVIET TECHNOLOGICAL DOCTRINE AND PRACTICE

1. **Subject**: The relationships between Soviet science and technology doctrine and practice and their military technological status.

2. **Background**: Soviet doctrine was enunciated by Lenin—"One must either master the highest technology or be crushed", and has been continually reaffirmed—"The development of Soviet science has special significance today when the scientific-technological revolution has become the most important area in the competition of the two opposed world systems" (Communist Party Central Committee Resolution, December 1973). Soviet policy is set by the Politburo, and is specifically oriented toward establishing credible military scientific-technical superiority over the U.S. R&D management is highly centralized; the Politburo's executive agent is the Council of Ministers, 75 percent of whom have technical backgrounds. The USSR has deliberately emphasized the greatest possible rate of advance in military technology at the expense of improvements in the civilian sector. Soviet policy is to exploit innovations achieved in civil R&D for military purposes, but because of the weakness of Soviet civil R&D, we have not seen any instances in which it has contributed significantly to their military technology. There is no Soviet counterpart to the cross-fertilization process in U.S. industry and commerce which advances military and civilian technology together in many areas that are militarily important to the U.S. Within the military sector, past Soviet practice emphasized continuity of effort and incremental improvements. Today there are many indications of willingness to take the risks of applying and exploiting advanced technology.

3. **DoD Position**: Soviet doctrinal emphasis on science and technology has led to a commitment of resources for military R&D which must be regarded as a serious threat to the military balance between the U.S. and USSR. The U.S. can meet this challenge only through a sustained and vigorous program of RDT&E to advance and exploit its strong technologies. Such a program is feasible at affordable cost, because of the inherent weakness in the Soviet system of separating military and civil R&D. The rate of advance of Soviet military technology—overall—will be inhibited as long as their civilian sector is excluded from supporting such advances, although with special emphasis they have been able to surpass the U.S. in some fields of technology. The U.S. can retain the technological initiative and preserve the military balance if it has the will to do so.

ODDR&E
2 December 1976
4. Current Status: Soviet military R&D increasingly is producing a variety of quality military equipments. Also, there are strong indications, in the form of a number of Soviet military R&D activities and new systems being deployed (e.g., air cushion vehicles, radar satellites), that the Soviets have broken away from their long-standing policy of technological conservatism. Several of the Soviet military R&D activities are not well understood, but are a matter of concern because they appear to be related to key missions of U.S. forces (e.g., new approaches to ballistic missile defense and anti-submarine warfare). Avoidance of technological surprise requires a coherent R&D effort to generate new technological options in mission areas where U.S. vulnerability may be uncertain and where the risk of surprise is great.
1. **Issue:** To utilize competition to the maximum extent feasible during the acquisition of defense systems and equipment.

2. **Background:** Competition between system concepts, present and proposed systems, contractors, subcontractors, and even between the Military Departments is the paramount motivating factor during both development and production of defense hardware. Winning the development and/or production contract is a far greater incentive than the profit rate or any "incentive clause" after competition is reduced to a sole source.

3. **DoD Position:** Competition is to be used wherever economically feasible throughout the acquisition cycle, to include competitive development, production and alternate sourcing.

4. **Current Status:** Most of our recent major programs include a competitive prototype phase during advanced development, with comparison of test results ("fly-off", "shoot-off") as a key factor in the decision to advance the program into full-scale engineering development. Examples include the A-X prototype competition which resulted in selection of the A-10 Close Support Aircraft, the Air Combat Fighter (F-16), Advanced Attack Helicopter, XM-1 tank, and Submarine-Launched Cruise Missile.

On high volume production programs, second source competitions are also held. Examples include the Army's TOW and Shillelagh antitank missiles, the Sparrow and Sidewinder air-to-air missiles, and the MK-48 torpedo.

When competition is not economically feasible at the weapon system level, subsystem and component competition is often implemented.
EXPEDITIOUS JOT&E OF IIR MAVERICK

1. ISSUE: As a result of DSARC II of IIR MAVERICK in September 1976, operational uncertainties were surfaced which affected the potential operational utility of the system.

2. BACKGROUND: Even though a comprehensive advanced development test program had been successfully accomplished by the developing agency, there remained some doubts about the operational utility of IIR MAVERICK in particular combat scenarios. To resolve these uncertainties, DepSecDef directed that a Joint Operational Test and Evaluation be initiated and conducted in a compressed timeframe. Test planning is in progress with the USAF as the executive Service. A partial report will be provided in March 1977 and a final report by August 1, 1977. An independent contractor has been chosen to assist in test planning, monitor test conduct and provide an independent analysis at the completion of the joint tests.

3. RECOMMENDED POSITION: DD(T&E) support and provide advice and direction as appropriate, to the Joint Test Director.
Enclosure 2

Papers to be Partially Denied on Exemption 1 - (Classified)

Notes: 1. Some portions of these also qualify for Exemption 5 and such papers are also listed on Enclosure 3 for those portions.

2. Some of these papers are unintelligible due to deletions as indicated.

Chemical Warfare Readiness Improvement (also on Enclosure 3)

M-X

SLBM/TRIDENT II (unintelligible w/deletions)

Briefing Paper (also on Enclosure 3)

Special Nuclear Materials (unintelligible w/deletions)

Space Defense (unintelligible w/deletions)

High Energy Lasers (unintelligible w/deletions)

NATO Airborne Early Warning (AEW) Aircraft. (also on Enclosure 3)

NET Technical Assessment—U.S. vs. USSR RDT&E

Chair Heritage (also on Enclosure 3)

Cannon Launched Guided Projectile Copperhead (CLGP) (also on Enclosure 3)

Impact of Procurement Changes on the F-18 (also on Enclosure 3) (unintelligible w/deletions)

Air to Air Missile Inventory (also on Enclosure 3)

Conventional Airfield Attack Missile (also on Enclosure 3)

General Support Rocket System (GSRS) (also on Enclosure 3)

Infrared Imaging Seeker (also on Enclosure 3)
CHEMICAL WARFARE READINESS IMPROVEMENT

1. (U) **Subject of Issue:** DoD efforts to improve chemical warfare (CW) posture, both protective and retaliatory.

2. **Background:**

   o USSR poses serious threat in CW.

   o US has ratified Geneva Protocol with reservation which essentially bans first use of CW.

3. (U) **DoD Position:** Supports efforts to modernize chemical warfare capability and to improve protective posture to allow continuing operations in a CW environment.

4. **Current Status:***

   **Defensive Programs:**

   o FY 1977 budget contained $37.4M for defensive RDT&E, FY 1978 budget contains

   o FY 1977 Army budget contained $95.8M for procurement, O&M, and war reserve funds; FY 1978 budget contains all for improvement of defensive and protective posture.

   o FY 1977 Air Force budget contained $17.2M for protective items; FY 1978 contains

   o Training is being improved in both Army and Air Force, about personnel will be added to training and disaster preparedness teams by FY 1978.

OAD(E&LS)
30 November 1975
Retaliatory Programs:

- Binary chemical munition RDT&E is continuing; it is programmed by FY 1978.

- No production decision on binary munitions has been made, nor has any modernization program been undertaken pending further review of national policy in this area. Various studies are in progress to better develop the DoD position.

*Conference of the Committee on Disarmament (UN)*
Issue: What should be the M-X development pace?

1. Subject

The M-X is envisioned as a large, highly accurate, MIRVed missile (approximately 170,000 lbs) capable of being moved from aimpoint to aimpoint in a manner which will conceal its location such that all aimpoints, whether they be visible above-ground shelters or invisible subterranean trenches, are credible to the offense. If attacking weapons are added by the offense, additional aimpoints can be proliferated at relatively low cost. The M-X thus achieves a very high prelaunch survivability. It will also retain the rapid response characteristics and positive command and control features inherent in a land based ICBM.

2. Background

Four new-generation Soviet ICBMs and payload variants have been developed since the Vladivostok Accord. This evolving Soviet ICBM force with its improvements in accuracy, throwweight, targeting flexibility, and prelaunch survivability is a formidable threat to our land based missile force, as well as our cities. Additionally, vigorous Soviet missile R&D effort beyond the current deployment activities indicates a Soviet trend towards improvement of their counterforce capability and a broadening by its potential base for rapid quantity and quality improvements.

Survivability of U. S. land based ICBMs in the 1980s, as well as a partial redress of the growing throwweight imbalance, can be achieved by making the ICBM transportable and hard to an optimal degree. By providing credible aimpoints which are cheaper than the weapons required to destroy them, an arms race can be avoided.

3. DoD Position

The DoD believes in the TRIAD as an absolute necessity for strategic deterrence because the diversity of three entirely different systems will preclude a potential disaster by one technology breakthrough. ICBMs offer a unique capability not present in the other two legs of the TRIAD, namely, capability across the entire target spectrum; a time urgent, hard target kill capability; facility for positive command and control; and an excellent inherent capacity for redressing throwweight imbalances. As the ICBM is vital to the TRIAD, its survivability should therefore be insured.
4. Current Status

M-X technology has proceeded in the advanced development stage for several years, particularly in the areas of guidance and propulsion.

Basing mode studies have been accomplished, indicating that the shelter and trench concepts as the most promising.

5. Funding (Millions)

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SLEBM/TRIDENT II

Issue: Why do we need TRIDENT II missile for a new SLEBM?

1. Subject

2. Background

In our strategic TRIAD the SLEBM force at sea is the least targetable by opposing strategic systems. TRIDENT II represents another timely step in the effort of expanding the "haystack".

3. DoD Position

By virtue of the relative invulnerability and increased capacity of the TRIDENT submarine, an orderly development of the TRIDENT II to fully utilize the new submarine capability is considered highly desirable.

4. Current Status

5. Funding (Millions)

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Originator: DDR5E
Date: 30 November 1976
Purpose: To describe weapons systems under development which might be:

- Conceived as having a first strike capability
- Subjects of concern in arms control negotiations because of:
  - Possible verification problems
  - Possible threats to Soviet strategic war-making capabilities

1. Possible First Strike Weapons

The only conceivable reason for our attempting a first strike would be to disarm the Soviets, i.e., to deliver a surprise initial attack of such magnitude as to reduce to a relatively negligible level the Soviet capacity for retaliation. Otherwise, we invite their retaliation. They have an assured second strike capability -- achieved through a TRAAD similar to our own -- which we cannot obliterate by any present or proposed capability, or even by capabilities which are still in the realm of speculation. At least twice in the last thirty years the Soviets did not have an assured retaliatory capability; they were engaged in provoking us; and yet, it was not in our nature to attempt even limited military action against them.

The ability to execute a disarming first strike requires three essentials:

- Accurate location of all Soviet strategic weapons.
- Sufficient weapons to attack effectively all Soviet strategic weapons.
- Surprise.

We do not possess either of the first two military capabilities and our open society forecloses the third essential. Still, there are some who believe that the development of certain weapons systems poses a potential first strike capability. In this context, a hard target kill (HTK) capability is most often cited as a first strike capability. An HTK capability would be necessary but not sufficient, without satisfying the above criteria, for a first strike. U.S. HTK capabilities and goals derive from a desire for effectiveness and efficiency in a retaliatory role, and -- for those weapons targeted against his strategic nuclear forces -- to destroy his residual or reserve force to preclude coercion or further war-making capacity after the onset of hostilities.
Not only do we not seek a first strike capability, we seek to reduce incentives for an opponent to strike first in a crisis situation by providing our forces with such characteristics that an aggressor would not significantly change the outcome by striking first in a crisis. This is the essence of strategic stability.

Those systems most frequently criticized as having a first strike capability are:

a. M-X, which will be deceptively based among a large number of hardened aim points. It will satisfy requirements for, (1) multiple aim point basing to redress the increasing vulnerability of silo based ICBM's; (2) greater payload to somewhat offset the existing Soviet throw-weight advantage in new ICBM's and SLBM's; and, (3) the capability to attack effectively an expanded and harder set of targets.

Through M-X development we seek the ability to maintain a credible second strike which is in fact that which deters a Soviet first strike. However, the ultimate foundation of the credible second strike is in numbers of deployed weapons and not in the weapon system development. They are separable considerations.

M-X multiple aim point basing is criticized by some on the grounds that it is difficult to verify numbers of missiles. We note that while this may be true in the general case, deployment constraints can be devised which permit high confidence counting even without on-site inspection, and that on-site counting is quite reliable, in any event. Banning mobile missiles is tantamount to giving up on ICBM's, since it is only a matter of time before the survivability of U.S. silo-based ICBM's will be unacceptably low. Further, mobile ICBM's, because of their high survivability, do not invite a first strike (there is no premium for striking first) and hence represent a stabilizing influence.

b. Improved Yield and Accuracy for MINUTEMAN.

MINUTEMAN III is being improved improvements to redress throw-weight asymmetries and maintain
essential equivalence pending the availability of M-X. Numbers of MINUTEMAN III are inadequate, even with improved accuracy and higher yield, to represent a first strike threat.

c. MaRV (Maneuvering Reentry Vehicle).

MaRV's are potentially applicable to any ballistic missile. They have two applications. One is for evading defensive missiles, the other is for improving overall missile system accuracy.

As with other weapons systems or components, this development does not threaten any adversary. Further, deployed quantities can satisfy, potentially only one of the three essential criteria for a first strike.

d. Bombers and Cruise Missiles.

These represent no conceivable first strike potential because of the long flight times involved.

2. Subjects of Concern - Verification

a. M-X: Discussed above under first strike.

b. Cruise Missiles: Two cruise missiles are currently in advanced development: the air launched cruise missile (ALCM) and the TOMAHAWK sea launched cruise missile. The ALCM, deployed on B-52s, could significantly enhance bomber force effectiveness by diluting Soviet air defenses, supplementing penetration range, and providing increased overall targeting flexibility. There are two versions of the TOMAHAWK. The conventionally armed anti-ship TOMAHAWK will provide the Navy a much needed capability to insure that our ships and submarines will not be out-ranged by potential adversaries. The nuclear armed Land Attack TOMAHAWK could be deployed on submarines, surface ships, aircraft, and mobile land launchers for tactical or strategic attack.

Both ALCM and TOMAHAWK are highly accurate, flexible, inexpensive weapons. They are small, aerodynamic vehicles that fly at high subsonic speeds at very low altitude making them very difficult to detect and destroy. They use common TERCOM terrain matching guidance, system turbine engine, and nuclear warhead.
It is expected that a decision will be made in the next few months on whether to enter engineering development with either ALCM or TOMAHAWK or both.

If cruise missiles are covered in future SAL agreements, there could be two aspects of compliance verification to be addressed. The first aspect could be verification of the total number of cruise missiles deployed or in storage and the second could involve limits on range of the missiles.

There is no known adequate technical basis for verifiably constraining cruise missile range. For example, some current Soviet missiles, with substantially less range than the potential U.S. cruise missiles, are physically much larger than the U.S. cruise missiles would be. An overriding consideration bearing on the problem of limiting cruise missile range is the fact that the geographical distribution of Soviet targets requires a long range for U.S. cruise missiles whereas heavy coastal population and industrial concentration in the United States permits attack by short range Soviet cruise missiles. There is no realistic way to differentiate between tactical and strategic cruise missiles.

3. Subject of Concern - Threats to Soviet Strategic War-Making Capabilities
   b. ABM: We have no deployed ABM capability. We have a program (~ $200M) in advanced component and systems technology. No weapons system is under development. ABM R&D has the following objectives which represent no threat to any Soviet strategic war-making capability:

      - Maintain a capability to develop and deploy an ABM system should one be required for defense of ICBM forces, C3 systems, or other high value targets.
Maintain the U.S. lead in ABM technology through investigation of advanced components, technologies, and systems concepts that could yield a technological breakthrough.

c. Space Defense:
SPECIAL NUCLEAR MATERIALS

Issue: Does U. S. run short of special nuclear materials for its weapons?

1. Subject

The term special nuclear materials (SNM), consists of enriched uranium, plutonium, and tritium.

2. Background

- There are two alternatives which may be considered:
ERDA has "mothballed" capacity.

5. DoD Position (U)
   N/A

4. Current Status

5. Funding (U)
   N/A

Originator: DDR&E
Date: 30 November 1976
1. **Subject**

2. **Background**

3. **DoD Position**

4. **Current Status**

5. **Funding (Millions)**

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7. Subject of Interest

2. Background

- The program is essentially in the exploratory and early advanced development stage.
- We have made a concerted effort to focus on technology and avoid directing major portions of our efforts toward specific near term applications.
- All three Services and DARPA are involved and DORSE has a stronger than usual coordination role.

3. DoD Position
4. Current Status

[Blank space]

[Blank space]
NATO AIRBORNE EARLY WARNING (AEW) AIRCRAFT

I. PROBLEM: NATO has a need for an airborne early warning aircraft to provide the key element in establishing control of the air environment wherever NATO forces are engaged. Tri-Major NATO Commanders requirement has been stated for a force of these aircraft. A decision on this matter will have to be made during the Feb-May 1977 time frame.

II. BACKGROUND

Since 1973 the US has proposed that NATO accept the USAF E-3A AWACS (or a derivation thereof) as the candidate aircraft to satisfy the Tri-Major NATO Commanders ROC for a force of NATO Airborne Early Warning aircraft. Several different NATO committees, study groups, and steering committees have been formed to provide recommendations on aircraft type, configuration, force size, ground interface modifications with BADGE, Strida II, UKADGE, and 407L/412L.

Other NATO nations such as Norway and Netherlands have expressed strong support, but...

The most recent expression of NATO on this matter was at the 8 December 1976 NATO Defense Planning Committee meeting. At that meeting, the NATO Defense Ministers reaffirmed the importance of a NATO AEW force and agreed to a meeting of high level experts in early January-1977 to examine financial aspects to be followed shortly thereafter by a meeting of Defense Ministers to decide whether or not to proceed.

III. DOD POSITION:


IV. Status: DOD representatives are preparing for participation in the meeting of the NATO high level experts to be held in January 1977.
1. **Subject of Interest**: The relative capabilities of the U.S. and USSR for performing military RDT&E.

2. **Background**: These analyses show the USSR outspending the U.S. in military RDT&E for at least the last six years. More substantive comparisons take into account differences in RDT&E style (e.g., willingness to innovate), market base for technology advances, and relevance to system mission capability. A judgmental assessment has been made taking these factors into account, and indicates a comprehensive pattern of improvement in the quality of Soviet military RDT&E. Although U.S. technological quality generally continues to surpass that of the USSR, the combination of Soviet quantitative advantage and quality improvements is of serious concern to future U.S. national security.

3. **DoD Position**: The U.S. leads overall in military technology, and needs to retain the lead to maintain—at reasonable cost—a military balance with the USSR, so as to deter global conflict and deter or win limited wars. The U.S. has an inherent advantage, in that advances in several militarily important technologies are jointly supported by the military and commercial markets (e.g., aircraft gas turbines, semi-conductor and integrated-circuit industries, and computers). There is no counterpart to this joint market support in the Soviet Union. Soviet RDT&E effort in the past has generally emphasized continuity of effort and incrementalism, but in recent years they have shown that they can pull ahead of the U.S. if there is no U.S. commercial base and DoD does not support technology advances (e.g., chemical warfare). Today, Soviet military RDT&E exhibits increasing willingness to invest in high-risk technologies with potentially great payoff in military applications. The U.S. can beat the Soviets without commercial support if DoD chooses to do so (e.g., air-to-air avionics and military space systems), despite the advantages to Soviet intelligence from the U.S. open society.

4. **Current Status**: The U.S. has shown the Soviets that superior technology can offset numerical advantages in materiel and personnel. Declared Soviet science/technology policy is to surpass the U.S., but they have signalled key deficiencies by aggressive attempts to transfer technology from the U.S.
However, there are gaps in our understanding of some Soviet military RDT&E activities, which appear to be related to vital mission areas of U.S. forces. Three steps need to be taken to avoid technological surprise: (1) Continue to monitor and assess Soviet RDT&E activities and their potential relationships to the military balance. (2) Maintain a vigorous R&D effort to generate technological options in areas where our vulnerability is uncertain and risk of surprise is great. (3) Maintain a persistent and coherent program of RDT&E for advancing and exploiting militarily important technology areas where U.S. is strong. In addition, the U.S. must develop new strengths for application in selected mission areas where Soviet efforts are creating an imbalance.
Budget Related Issue

CHAIR HERITAGE

Issue: (U) The Navy has been prevented by Congressional action from continuing the Chair Heritage Program at [blank] funding levels.

History: The Fiscal 1977 request for authorization contained an Exploratory Development and an Advanced Development project in support of Chair Heritage. The Advanced Development program, budgeted at $3.4M, was to initiate the development of an Advanced Test Accelerator (ATA). These funds were deleted by the Joint Committee on Armed Services pending recommendations from a review of the Chair Heritage program by the JASON Committee.*

(U) The JASON Committee completed its study and reported favorable regarding program continuation. The results of the JASON review and the proposed program were presented to the Congressional staffs and a request for approval to proceed was sent to the HASC. However, HASC concurrence has not been received. All FY 77 funds are deferred pending resolution of this issue.

Position: (U) HASC - Current position is not known. Impending meeting with HASC staff may clarify situation.

ODDR&E - [Blank]

Impact: (U) Delaying this program for more than a year will break up the leading team in Lawrence Livermore Laboratory and delay the answers needed to establish the feasibility of the use of this machine as a viable weapons system.

*A DARPA Advisory Committee

OAD(E&PS)
1 Dec 76
CANNON LAUNCHED GUIDED PROJECTILE COPPERHEAD (CLGP)

1. Problem: The Army has been in Engineering Development since 1975 on a 155mm Cannon Launched Guided Projectile with terminal homing capability, and has the program on contract to Martin-Marietta. The Navy has also been doing similar in-house work on a 5" projectile for shipboard use and more recently has done work on an 8" guided projectile. DoD has continually stressed commonality of the Navy 5" and the Army 155mm rounds.

On the other hand, the House Armed Services Committee has continued to reduce Army funding for COPPERHEAD thus delaying the program, while directing that more commonality studies be conducted.

2. Background: Martin Marietta Aerospace and Texas Instruments Incorporated were selected in February 1972 for participation in Advanced Development. During this phase the major subsystems of the COPPERHEAD (CLGP) were gun-fired to determine survivability. The two contractors, with different design concepts, were authorized to enter into the Validation Phase of Advanced Development in September 1973.

DSARC II was held on 19 June 1973, resulting in authorization to enter Full Scale Engineering Development. Martin-Marietta was awarded an Engineering Development Contract on 25 July 1975. The contract modification for the restructured contract, necessitated by Congressional reduction in FY 76/77 was signed 25 Jun 76 and increased the program by $5M. A task force chaired by DORSE with Army, Navy, and Marine Corps members, conducted a guided projectile commonality study during May thru Sep 76. This study was completed and forwarded to Congressional Armed Service Committees on 27 Sep 76. The task force recommended that both 5" and 155mm guided projectile development should be continued. In view of the above, the Army was authorized to initiate Productivity Engineering Planning (PEP) on 15 October 1976. The HASC subsequently held up PEP and approval to initiate it was given to the Army on 3 December 1976 with liability limited to $350,000 and efforts to stop at end of February 1977.

3. DoD Position:
IMPACT OF PROCUREMENT CHANGES ON THE FIS

1. Problem: The FIS program

2. Background:

3. DoD Position:

4. Current Status: The PBD's reflect these changes.
AIR TO AIR MISSILE INVENTORY

1. Problem: USN and USAF fighter aircraft are

2. Background: A number of factors have caused a shortage of air-to-air guided missiles. The War in Vietnam caused expenditures to be high both for combat and training, the increasing cost of new missiles results in reduced quantity buys, and the low missile kill probability translates into a requirement for more missiles to meet substantially the same threat. In addition, development programs for new missiles (AIM-7F and AIM-9L) both ran into problems which resulted in delays and further exacerbated the inventory problem.

3. DoD Position:

For the immediate future, we must strive to develop a new generation of missiles which (a) are more affordable by virtue of lower cost of acquisition and ownership, (b) have a higher kill probability so that we need to procure them in fewer numbers, and (c) can be developed on schedule.

4. Current Status:

These missiles will be joint (USN/USAF) developments.
CONVENTIONAL AIRFIELD ATTACK MISSILE

1. **Problem:** Do we need a Conventional Airfield Attack Missile (CAAM)?

2. **Background:** The combination of the Warsaw Pact Air Force numbers disparity coupled with their opportunity to initiate an attack against NATO air bases continues to be a difficult problem. Our effort to counter the Red advantage has in the past included sheltering of our aircraft, deployment of ground and air defenses and providing a conventional strike second capability utilizing attack aircraft. The interdiction of Pact Main operating air bases (MOBs) is difficult because of the combination of defenses and weather.

3. **DoD Position:**

4. **Current Status:** The PBDs reflect the DoD position with initial funding established in FY78.
1. Problem:

2. Background: The GSRS concept has been existent in its current form since 1973. Army Joint Working Group (JWG) was established in February 1974 to assess the need for a GSRS with a counterfire (counter-battery, air defense suppression) mission. The JWG conducted a preliminary technical and cost assessment of a multiple launch rocket system based on a threat provided by the USA Field Artillery School (FAS). In mid-1974, DA directed a study of the Artillery System (Task Force BATTLEKING) which considered two GSRS concepts.

The JWG prepared a Letter of Agreement (LOA) which was approved by DA in September 1975. A Special Study Group (SSG) was subsequently formed to conduct an in-depth investigation of GSRS concepts and arrive at a recommended approach to fulfill the system need. The threat was the impetus behind the requirement, and was a major factor in determining the required physical and performance characteristics of the GSRS. Using a representative target list, a Request for Proposal was released to industry in December 1975 to assist in determining the best technical approach (BTA). Five contractors were chosen to assist in development of system concepts and to propose in-depth technical and cost tradeoffs and program cost and schedule data. In addition, a survey of foreign rocket system technology was conducted for application. The SSG then proceeded with a Cost and Operational Effectiveness Analysis comparing the BTA to foreign, existing U.S. and parametric systems.

3. DoD Position:
4. Status: The Army is preparing for a DSARS 1 on 11 January 1977, and if the program is approved, contractual effort will likely begin in March-April 1977.
INFRARED IMAGING SEEKER
(For Air to Ground)

1. Problem: The Air Force has received NSCOR approval to enter Engineering Development with the MAVERICK missile with an Infrared Imaging Seeker (FIR). The Navy now agrees to utilize MAVERICK FIR, while the Army is not presently fully supporting development of an imaging seeker for HELLFIRE.

2. Background: Efforts have been on-going at the Army Missile Command since 1972 to develop an imaging seeker suitable for heliborne use on a small diameter missile. Contractors involved in this Exploratory Development have been Hughes and Texas Instruments. During the same timeframe the Air Force has more energetically funded an Advanced Development program with Hughes for a MAVERICK seeker. They are now ready for Engineering Development to commence in April 1977. The Navy, while earlier supporting BULLDOG and a non-imaging seeker, is now supporting MAVERICK imaging.

3. DoD Position:

4. Status: Air Force starts ED in April 1977 on MAVERICK FIR for AF/Navy use. The Army is working a very low level 6.2 effort in FY 77, while planning a nominal 6.3 start in FY 78 for a HELLFIRE imaging seeker. Joint operational tests are being conducted.
Enclosure 3

Papers to be Partially Denied on Exemption 5

Technology Base Funding Increase
Control of Size of In-House Technology Base Program
DOD Use of Animals in Research
Chemical Warfare-Biological Defense
Chemical Warfare Policy
Chemical Warfare Readiness Improvement (also on Enclosure 2)
Weather Modernization
Computer Software
Bombers
Briefing Paper (also on Enclosure 2)
Ballistic Missile Defense
High/Low MIX
XM1 Tank Program
FRG/UK/US Tank Gun Firing Trials
NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 2)
Test and Evaluation Efficiency
Major Range and Test Facility Base
TRIDENT I Flight Test Program at the Eastern Test Range (unintelligible w/deletions)
Independent Research and Development
Export of Technology
Standardization and Interoperability within NATO
Human Resources & Manpower R&D
1. **Subject of Interest:** The term Technology Base refers to the Defense Research (6.1) and Exploratory Development (6.2) categories of the RDT&E budget, and part of the Advanced Development (6.3) category.

2. **Background:** The Technology Base constitutes approximately 20% of the DoD RDT&E budget. It is the foundation for the RDT&E program and provides the technology options for new techniques, new systems and better manpower use leading to improved military capability. The Technology Base contributes to the economic health of the nation through commercialization of R&D by-products. The Technology Base is performed in the in-house laboratories as well as through contractual efforts with universities and industry.

   The Technology Base effort decreased about 40% in terms of constant dollars beginning in FY 64. This trend was reversed through increased financial support to the Technology Base beginning in FY 76. This increase has been supported by DoD and the Armed Services Committees and the Appropriations Committees.

3. **DoD Position:** The Technology Base is our foundation for the future security of the nation. It has given us some notable firsts in military capabilities; including initiatives in laser systems, improved jet engines, improved aerodynamics, advanced simulators for undergraduate pilot training, improved materials, night vision devices, communications technology and reduced mortality for the combat injured.

4. **Current Status:** The PPGM specifies an increase in Research (6.1) of a minimum of 10% per year in constant dollars through FY 80 and, further, that Exploratory Development (6.2) shall not be decreased below the FY 78 budget request in constant dollars in FY 79-83. It goes on to specify that the percentage of 6.1 achieved in FY 80 to the total RDT&E budget and the percentage of 6.2 achieved in FY 72 to the total RDT&E budget will be maintained as the minimum guidance level in subsequent years.

   This increase will continue the trend toward reinvigorating our Technology Base program and will serve as tangible evidence of a renewed commitment to technological superiority on the part of the DoD and Congress.

CDD(R&AT)
1 Dec 76
Issue: We are restructuring the Technology Base program by decreasing the amount of work done in-house and increasing the amount done in industry and universities.

History: The DoD Technology Base has three major participants (the in-house laboratories, industry and universities), each performing a unique part of the overall program. Over the past ten years there has been a decrease of approximately 40% in the level of effort in the DoD Technology Base program. This decrease has been taken primarily in the university and industry programs while the in-house effort has remained essentially level. The in-house portion had increased from approximately 23% of the total Technology Base program in FY 68 to approximately 43% in FY 74. We are restoring the level of effort as well as the balance between participants by increasing the funding in the program, directing that the increase go primarily to the university and industry programs and by a manpower drawdown of approximately 10% in the in-house RDT&E program. Our goal is to reduce the in-house portion of the DoD Technology Base program to approximately 30%.

Position: In FY76 the Air Force program was approximately 43% in-house, the Navy 41%, the Army 60%, and, with DARPA and DNA essentially all contract, the overall DoD level is 38%. We are continuing to control the in-house program by establishing a maximum level of effort for the Army, Navy, and Air Force in FY 77.
DOD USE OF ANIMALS IN RESEARCH

Subject of Issue: Periodically, adverse public and Congressional interest to DoD using animals in research, especially beagles, occurs.

History: Annually in the spring, several animal protective associations and Congressional members reopen a letter campaign which questions the need for, the proper care of, and the use of animals in research. A favorite tactic has been to associate this complaint with a DoD program that is also judged unpopular or inhumane by other groups, such as chemical warfare agent development, and to use this as a basis for getting restrictions on animal use placed into DoD budget and authorization legislation. The constraints, however, are written in a manner making them applicable to more than DoD and more than the unpopular program to which they are attached (i.e., all Federally supported research).

DoD Position: Testing using animals is essential for the conduct of DoD research in the medical and life sciences area. Substitutes for animals are used to the maximum possible.

We comply with all laws and guidelines regarding the proper use of animals. This has been published in DoD Instruction 3216.1, Policy on Animals in DoD R&D, Clinical Investigations and Instructional Programs. Without use of animals in testing, the R&D programs to establish standards for human exposure to toxic substance, combat trauma and blood substitute care, procedures and materials and new drugs and vaccines could not be qualified for human use.

29 November 1976
CHEMICAL WARFARE-BIOLOGICAL DEFENSE

1. Subject of Issue: Chemical warfare and chemical/biological (CW/BD) defense programs.

2. Background

- Program Objectives: In support of current national policy, these programs are designed to maintain a deterrent to possible use of CW/BW against U.S. or Allied forces and to provide a retaliatory capability if deterrence fails. The emphasis of the program is to provide the necessary defensive equipment and procedures to warn of, withstand, and recover from an attack. The effort includes an assessment of the threat and the vulnerability of U.S. forces.

- The USSR has the world's greatest capability to operate in a CW environment.

- The US retaliatory stockpile requires modernization to be credible; major improvements in the defensive posture are required.

- Strong Congressional opposition exists to the development of binary munitions (a new, safe packaging configuration where non-lethal components form the same toxic chemicals as the present stockpile when fired) as a means of modernization; good Congressional support exists for an improved defensive capability.

- RDT&E is generally adequate; however, procurement of defensive equipment and troop training needs improvement and emphasis.

3. DoD Position

- Supports effort to improve US forces capability to operate in a chemical/biological environment; encourages Allies to follow similar course.

- Supports limited effort to modernize retaliatory capability.

4. Current Status

- OSD guidance in PPGM* and DPPG** emphasizes defensive programs, both in RDT&E and procurement, while maintaining through selected segments of general purpose forces the capability of limited retaliation.

*Planning Programming Guidance Memorandum
**Defense Policy and Planning Guidance

ODDR&E (E&LS) 29 November 1976
The Department of the Army has completed one study, "Chemical Warfare Policy, 1980-1990," prepared by the Strategic Studies Institute. A similar study is in progress by Stanford Research Institute, using the same threat analysis and terms of reference, funded jointly by the Army and the ASD(ISA). The JCS is developing, under contract with IDA, a system for estimating chemical munition requirements utilizing a two-sided wargame scenario based on an analysis of targets. The Army has a similar effort in progress at the Concepts Analysis Agency. The Director (P&E) has completed a contract study with SPC Corp. analyzing chemical warfare program issues. NSSM 192 which discusses current national policy alternatives is still outstanding.

Procurement of defensive equipment and training is being emphasized in both Departments of Army and Air Force; Department of Navy contract study in progress to define scope and specific needs.
Budget Related Issue

CHEMICAL WARFARE POLICY

1. Subject of Issue: Long-standing Chemical Warfare (CW) policy is: no-first use of CW, maintain a chemical warfare capability to deter the use of CW against the US or its Allies and to be able to retaliate in kind should deterrence fail, and be able to protect the US forces against CW attacks.

2. Background: The above policy has been stated many times, most recently in 1969 when the US relinquished any biological warfare capability. In January 1975, the US ratified both the Geneva Protocol and the Biological Weapons Convention (BWC). The Geneva Protocol bans first use of CW only since all major powers retain the right to retaliate in-kind. The BWC binds all parties to continue negotiations on an agreement banning chemical weapons.

A number of studies by the Department of the Army, ASD(ISA), Director (P&E), the JCS, and the Navy are in various stages of completion. The Congress has requested the GAO to review the total CW policy and posture.

3. DoD Position: Supports extensive efforts to improved protective posture through R&D and procurement and encourages Allies to follow similar course; supports limited efforts to maintain a retaliatory capability.

4. Current Status:

OAD(E&LS)
29 November 1976
WEATHER MODIFICATION

1. Issues:

a. Advertant Modification. Senator Pell opposes DoD involvement in weather modification, and has been instrumental in involving the U.S. in a treaty to prohibit military weather modification.

b. Inadvertant Modification.

2. Background:

There is public concern, and in some cases fear, that man's weather modification activities may cause unacceptable damage and human suffering.

DoD has been criticized for its precipitation enhancement operations over Vietnam. Senator Pell has pressed to restrain DoD from all research or operations in weather modification.

The U.S. is negotiating a convention, "The Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques."

The Congress has asked the Executive Agencies to conduct research into stratospheric pollution. NASA and NOAA are tasked to conduct a research and monitoring program. DoD operates majority of facilities that can sample in stratosphere, but such routine sampling beyond DoD mission.

3. DoD Position:

a. DoD presently is not engaged in any classified research or operations in weather modification. All DoD activities are reported to and published by the National Oceanic and Atmospheric Administration.
COMPUTER SOFTWARE

1. Subject of Issue: DoD spends approximately $3 billion annually in software development and test in new weapon systems, three times the computer hardware costs. Basic technology is mostly missing to improve the efficiency and standardization of software utilization. Congress has repeatedly cut the software technology budgets, and the Services have been reluctant to properly fund the programs.

2. Background: This problem is now receiving a concerted OSD-wide effort, including ODDR&E, OASD(C), OASD(I&L), and DARPA. Appropriate committees have been formed, a management plan drafted, and a DoD Directive 5000.29 was issued on the Management of Computer Resources in Major Defense Systems establishing policy. Reviews and meetings have been held with key people in the Services and Congress to provide an understanding of our programs and to receive their support. A major effort in establishing a standard higher order language (HOL) has been initiated.

3. DoD Position:

4. Current Status: Work in this area is slowly gaining momentum. The HOL standardization is proceeding fairly well on schedule, but must be closely watched. Coordination among elements of OSD is quite effective. However, much work remains to initiate the appropriate technology work in each of the Services.

OAD(E&PS)
1 Dec 76
BOMBERS

Issue: In the Missile Age, why do we need bombers?

1. Subject

Bombers remain the one leg of the TRIAD where U. S. still retains significant numerical advantage over its Soviet counterpart. This advantage is in both hard and soft target kill capability. Bombers can be launched on warning and dispersed. The bomber is recallable after launch; it can be recruited enroute; it can be used in different levels of conflict. The bomber can demonstrate U. S. resolve by adjustment of alert rate without actually entering into combat. Its long time to reach intercontinental targets precludes it as a first-strike force. The bomber force is thus a stabilizing force.

2. Background

Continued improvement of Soviet air defenses make the strategic bomber's job increasingly difficult. Since the 1950s, the B-52 has been the backbone of the bomber force. Improved avionics and addition of air launched missiles (SRAM) has permitted growth capability but the aircraft's basic technology is that of the 1950s. Large radar cross section, softness to blast effects and its bombing and navigation system limit the continued potential of the B-52.

The B-1 is scheduled to enter the inventory in the early 1980s. The B-1 will allow the continuance of the most-flexible leg of our TRIAD, the bomber, to maintain superiority over the Soviets with its improved penetration capability, low radar cross section, superior avionics, and larger and more flexible weapon mix.

3. Ball Position

4. Current Status

Some B-52 avionics improvements are continuing where practical and necessary to maintain its effectiveness. The development of the B-1 is nearing completion. The great wealth of test data show that the B-1 is ready for production.

5. Funding (Millions)

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Originator: DDR&E
Date: 30 November 1978
BALLISTIC MISSILE DEFENSE

1. Subject

The Ballistic Missile Defense (BMD) program is comprised of two complementary efforts -- The Advanced Technology program and the Systems Technology program.

2. Background

Our BMD efforts are directed at maintaining a technology lead over the Soviets and supporting U.S. strategic offensive forces and Intelligence Agencies by maintaining an in-depth understanding of BMD technology. These are sustained, broad-based efforts to investigate and develop new technologies and concepts and to provide a systems technology base for application to various types of future BMD systems. With the deactivation of the SAFEGUARD system we no longer have a deployed BMD system and with the realignment of the Site Defense program we are not developing an operational system.

The principal focus of the Systems Technology effort through 1978 will be directed toward terminal defense issues. Modest efforts are also being initiated on a non-nuclear intercept capability that could complement a terminal system, and on a very low altitude concept applicable to the defense of mobile ICBM force. These two new tasks will form the basis for the future efforts and the level of funding for them requires consideration.

The BMD efforts are the Army's only strategic programs.

3. DoD Position

4. Current Status

- Funding level is inadequate in FY 78 to properly support new tasks.
- The BMD programs are the responsibility of the Army.

5. Funding (millions)

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HIGH/LOW MIX

1. Problem: Is the High/Low Mix a viable concept for modernizing our forces.

2. Background: The Warsaw PACT presently has a quantitative advantage in weapon systems over the US and are increasing the quality of new systems as they enter their inventory. At the same time, the US is faced with the problem of increasing weapon system costs. The High/Low Mix is a force structure planning concept which attempts to offset these problems by procuring a small fleet of high-performance systems ("High") to counter the superior threat, and a larger fleet of lower-performance systems ("Low") to counter the average threat. The concept has been implemented by either developing large numbers of "low" systems where we have a qualitative advantage, or to develop small numbers of expensive "high" systems for missions in which we have near parity of numbers. The latter approach has worked fairly well except that it forces a relatively fixed composition because the "low" systems are generally out of production.

In May 1974, the Secretary of Defense told the SASC that he would approve expansion of the Air Force tactical structure from 21 to 26 wings if the Air Force could develop and field large numbers of missionized versions of the YF-16 Lightweight Fighters such that the total cost of the 26 Wing force would not be significantly greater than the previous 21 wing "high" force.

3. DoD Position:

4. Current Status: The High/Low Mix concept is included in mission area planning and Extended Planning Annexes which provide force structure estimates out to 15 years. Some examples of high/low mixes in which we are developing low systems are the F-15/F-16, F-14/F-18, A-10, and FFG-7 Patrol Frigate. High system mixes being developed are the UH-1, XM-1/M-60, AAH/Cobra, and MICV/M-113.
1. ISSUE: XM1 Tank/Leopard 2(AV) Tank Comparative Evaluation.

2. BACKGROUND:

a. The US Army and the FRG's Federal Ministry of Defense entered into an agreement in December 1974 to make all reasonable efforts to achieve maximum standardization on the XM1 and Leopard 2 tanks. As part of this agreement, the US Army confirmed its intention to test the Leopard 2, as modified to meet US requirements, to the same ground rules and constraints established for the XM and include it in a comparative test and evaluation.

b. The competitive test of the US Chrysler and General Motors XM1 prototypes was conducted during the period February-April 1976. The comparative test of the FRG's Leopard 2 (American Version) (AV) was conducted during the period September-December 1976.

c. In July 1976 an Addendum to the 1974 agreement was approved which concerned the procedures to be followed in attempting to identify and amplify areas of potential standardization in the XM and Leopard 2 tank programs. Major areas to be considered were the main gun and ammunition, engine, track, transmission, and fire control.

d. Following a four-month delay in the XM program to permit the contractors to resubmit additional proposals based on the standardization addendum, Chrysler was awarded the full-scale engineering development contract on November 12, 1976.

e. Access to XM test results were closely controlled within the Army and OSD to protect the highly competitive nature of program. DD(T&E) evaluation of test results was performed by the assigned military staff assistant. DD(T&E) assessment of test results, released prior to selection of winning contractor, was written in a generic sense.

f. The US is scheduled to select by March 31, 1977, either the Chrysler proposal or the FRG's Leopard 2(AV) proposal for continued full-scale engineering development.

g. Charges of lack of OSD and Army objectivity during test and subsequent evaluation of Leopard 2(AV) have been raised in the press and by DGA Int'l representatives. These charges have been manifested in press articles to the effect that OSD has predetermined the US tank to be superior to the Leopard 2(AV); DGA International representatives have discussed their apprehensions concerning objective T&E analysis with various Departments of State and Defense officials.

3. RECOMMENDED POSITION:
1. **ISSUE:** Relative effectiveness of US 105mm M68 gun with improved ammunition, FRC 120mm smoothbore gun and developmental ammunition, and UK 120mm rifled gun with current and developmental ammunition.

2. **BACKGROUND:**
   a. A FRC/UK/US joint evaluation of main armament systems for main battle tanks was conducted between November 1973 and August 1975. The overall objective of this Trilateral Tank Main Armament Evaluation was to seek a decision on a common solution for the main armament of the FRC Leopard 2, the US XM1, and the UK/FRG Future Main Battle Tank (FMBT). The candidate systems studied in the evaluation were the FRC 120mm smoothbore system, the UK 110mm rifled bore system, and the US 105mm rifled bore system.

   b. The Trilateral Group recommended that production of the XM1 be initiated using the improved 105mm system but consideration be given in the XM1 program to possible incorporation of a 120mm armament system at a later date; that the first lot of Leopard 2 be produced with the 105mm system but the Leopard 2's turret design optimized for a 120mm armament system; and that an optimal main armament system, giving consideration to both smooth and rifled bore designs but based initially on the FRC 120mm smoothbore system, be developed as expeditiously as possible for the Leopard 2 Lot 2, FMBT, and possible product improvement of the XM1.

   c. In January 1976, the Secretary of Defense approved the Army's recommendations to initiate production of the XM1 with the improved 105mm gun system and plans for a cooperative development program for an optimal tank main armament system for the long term future. The Secretary also requested the Army to ensure that the production XM1 design could accommodate a 120mm gun with essentially no change in the tank design other than the turret.

   d. A FRC/US July 1976 addendum to original 1974 120 specified FRC and US would strive for maximum standardization in tank programs to include eventual use by both countries of 120mm gun. A January 15, 1977, decision date was established for selection of the 120mm gun system design. In July 1976, the XM1 tank program was delayed four months to permit US contractors an opportunity to present proposals based on the standardization agreement.

   e. Congress (HASC) objected to delay in XM1 program and passed a resolution to effect that XM1 should be fielded with US 105mm M68 gun. Further, the resolution stated the gun was not to be replaced until threat dictates need for larger gun, and the 120mm gun proven, through tests, superior to the 105mm gun.

   f. FRC/UK/US conducted additional tank firing trials, November-December 1975 to include UK 120mm rifled bore designs, to supplement 1975 Trilateral data and attempt to resolve FRC issues and relative merits of 120mm smooth and rifled b.
1. **Issue:** Are DD(T&E) policies under DoD Directive 5000.3 resulting in undue program delays, excessive costs, or both, due to test requirements?

2. **Background:** In carrying out the directives which implement the efforts to correct the deficiencies highlighted by the Blue Ribbon Defense Panel, testing beyond that required under earlier practices is often included in the R&D phases of system acquisition programs. The testing itself, and the correction of deficiencies uncovered in testing are significant elements in the cost of the RDT&E phases of the program and its duration.

Thus, observations and corrective actions, which, under earlier procurement methods, would have taken place after field introduction, are specifically identified as part of the development and initial operational testing efforts, and made a part of the budgetary reckoning.

The present T&E procedures lead to the acquisition of systems which are more nearly ready for operational use, and less susceptible to the need for extensive backfit or "get well" programs to correct previously undetected deficiencies.

3. **DSE Assessment:** A task force of the Defense Science Board, under the Chairmanship of Dr. Eugene Fubini, was created in May 1976, and charged with assessing the effectiveness of current T&E policies and procedures. The final report of this task force will be available in February 1977.

4. **Recommended Position:**
MAJOR RANGE AND TEST FACILITY BASE

1. Components. The Major Range and Test Facility Base (MRTFB) is comprised of 26 DoD ranges and test facilities which are managed by the Military Departments and monitored for OSD by the DD(TAE).

2. Intended Mission. The MRTFB is a costly national asset (annual TOA about $1.7 billion including $752 million RDT&E) spanning the entire spectrum of physical and simulation environments critically needed for effective testing and training. Containing tropical, arctic, coastal and high desert land areas, the facilities also include associated airspace and water areas required for the wide variety of programs supported. The vast amount of instrumentation, facilities and personnel involved in this program constitutes a large investment that must be continuously upgraded and modified to meet new test program demands. Some of the facilities are extensively used by non-DoD organizations, e.g., NASA, DDT, FDA, NOAA, non-Government.

3. Basis for FY 1978 Request. FY 1978 budgets were prepared by the military departments based on estimated future workload. An extensive OSD review, with OMB participation, insures that the budget reflects the minimum dollars and personnel needed to support user requirements.


5. Current Program Status. The facilities are funded to provide all mandatory operating, maintenance and improvement dollars. Improvement programs include efforts necessary to meet new requirements, increase efficiency or replace antiquated equipment. Assets are continuously reviewed for need and removed from inventory when no longer cost effective.
TRIDENT I FLIGHT TEST PROGRAM AT THE EASTERN TEST RANGE

1. ISSUE: Tests associated with the effect on the TRIDENT I (C-4) missile upon activation of the missile Flight Termination System (FTS) will be completed in March 1977.

2. BACKGROUND: In preparation for TRIDENT I (C-4) missile flight test initiation on the Eastern Test Range, the Navy conducted a static firing test of the first booster stage and activated the FTS of the TRIDENT I (C-4) missile in June 1976. When the FTS was activated, detonation resulted.

The DORAE decision did not specify actions to be taken if the demonstration tests resulted in detonation.

3. RECOMMENDED POSITION:
1. **Issue:** To develop a means of satisfying the objectives of IR&D and B&P which can be supported by the Executive Branch, the Congress and the Industry.

2. **Background:** Industrial firms, particularly those in the higher technology product areas, must engage in technical effort whose objectives include developing and maintaining a competitive posture in chosen product areas by advancing the technology and exploring innovative concepts in these chosen product areas. Part of the effort may be funded by direct customer technology contracts primarily in the defense environment. The balance must be considered a necessary cost of doing business and these costs must either be expensed in the current accounting period or capitalized for recovery in later accounting periods. DoD has permitted defense contractors to expense such costs as overhead charges on defense contracts since 1959. The rationale and the ground rules for such allowance have been the subject of continuing review and analysis both within DoD and within the Executive Branch. Certain elements of Congress have repeatedly criticized both the rationale for the administration of the IR&D/B&P effort and in recent years has imposed constraints regarding relevancy of the effort via amendment to the appropriation acts (see Section 203 of the Defense Appropriation Act for FY 71, Public Law 91-444). A further constraint on total dollars to be allowed for recovery in DoD contractors has been threatened (Excerpts).

3. **DOD Position:** DoD maintains that IR&D/B&P are normal costs of any business and therefore are allocable charges to a contractor's overhead subject to certain restrictions concerning relevancy and amount of dollars allowed. The ASPR details the contractual ground rules for IR&D/B&P allowance while DOD Instruction 5100.66 establishes the policy and procedures for technical evaluation of relevancy and technical quality.

4. **Current Status:** The subject of IR&D/B&P has not arisen in the Congress since the submission by DoD of the results of a study regarding funding of IR&D/B&P by line items of the budget. This report forwarded to the McIntyre and Proxmire Subcommittees in April 1976 resulted from Joint Subcommittee hearings in September 1975 called to discuss the results of a comprehensive, GAO study of IR&D over the preceding two years. The concept of Line Item Budgeting and Contract Allocation of IR&D/B&P funds to major contractors was one of the recommendations in the GAO report.

The Office of Federal Procurement Policy is developing an Executive Branch policy on IR&D for release as an OMB Circular.

**UNCLASSIFIED**

2 Dec 1976
EXPORT OF TECHNOLOGY

1. Issue: High technology transfer to the Bloc countries, either directly or via our Allies, is of deep concern to DoD. Past technology transfers and the expiration of the Export Administration Act during the last Congress resulted from strong differences of opinion on the value of present export controls. This was coupled with the criticism of DoD for inadequate allocation of resources to this problem. Arms Export Control Act of 1976 (Public Law 94-329) will require clear definition of "defense articles" and "defense services" that will be subject to the provision of the Act. Also to be considered is the erosion of our competitive economic base resulting from unrestricted exports of high technology.

2. History: The transfer of high U.S. technology to the Soviet and Chinese Bloc is creating increased concern in the DoD and among certain segments of the Congress. During this past two years, various committees have been set up by the Congress, the President, Commerce, Defense, State and the GAO to highlight the various views.

The Defense Science Board completed a study in Feb 1976 recommending a streamlining of the export control list to emphasize control of technology rather than control of products as is now the case. DepSec Clements assigned DDR&E the responsibility to implement the recommendations and the AD (International Programs) has this effort underway. This is now a broad interagency effort. Primary focus is on the identification of critical strategic technologies and mechanisms of technology transfer. Some of the required improvements of the administration of export controls within DoD have also been identified pertaining to the allocation of additional resources to the export control problem.
3. Impact: The Congress failed to extend the Export Administration Act due to lack of time and many unresolved issues.

The accomplishment of these aims in timely manner as requested by Congress and industry will demand high level DoD management attention and allocation of requisite resources.
STANDARDIZATION AND INTEROPERABILITY WITHIN NATO

1. **Problem:** NATO's combat capability, military efficiency and deterrence could be significantly improved through greater standardization and interoperability of weapon systems in the Alliance. Greater standardization should also result in appreciable long term efficiencies in development, production, logistics, training, and maintenance.

2. **Background:** The obstacles to achieving standardization of equipment in NATO are many. Most national procurement decisions are sufficiently large that considerations go beyond purely military aspects and cover such other vital national-level considerations as industrial production base, employment, technology base and balance of trade. However, we are finding ways to deal with these problems.

   Generally, the most satisfactory approach to contending with domestic problems associated with standardization is through licensed production of standard equipment in both North America and Europe—examples are the ROLAND II Short Range Air Defense System and the F-16 programs.

   Many of the benefits of standardization can be realized through ensuring interoperability of equipment—for example, being able to service aircraft on each other's airfields, being able to communicate with each other, and being able to use common fuels and ammunition.

3. **DoD Position:** The DoD strongly supports NATO standardization and interoperability efforts. We have strengthened the DoD Weapon System Acquisition process to ensure that adequate consideration is given to foreign solutions, that U.S. systems are designed to be interoperable with those of our NATO Allies to the greatest degree possible and practical. We seek methods by which our NATO Allies will be encouraged to agree to U.S. solutions (e.g., through co-production opportunities) when appropriate.

4. **Current Status:**
HUMAN RESOURCES & MANPOWER R&D

1. Issue: The House Appropriations Committee reduced the FY 76 program request in this technical area by $20M. The Senate Appropriations Committee restored $10M.

2. Background: This technical area includes work in training; training devices and simulators; personnel, manpower, and contemporary issues (equal opportunity, race relations); and human factors in weapon systems development and operations. In reducing funding, the House Appropriations Committee questioned both the utility and priority of the R&D. The Senate restoration was to enable the highest priority training and simulation projects to be continued.

The FY 77 funding request for the five Program Elements reduced by Congress in FY 76 was held to the FY 76 budget request level, a substantial reduction from the growth planned for this area. The area of Human Resources R&D was separated into three categories of work: (1) the technologies for training, simulation, training equipment and human engineering, (2) a smaller effort in the personnel and manpower area, and (3) a separate effort in the social science contemporary issues area. The purpose was to clearly delineate these three sub-areas of work so that they can be independently structured and appraised.

This action was successful since no across the board reduction was made by Congress in FY 1977.

3. DoD Position:

The technology area has been entitled to Training and Personnel Technology to emphasize program reorientation.

4. Current Status: Congress has requested and the GAO has conducted a major survey of the area. The GAO report is expected to be released in January 1977 to the House Appropriations Committee.

OAD(E&LS) /EB
29 November 1976
REMTELY PILOTED VEHICLES (RPV'S)

1. Issue: Remotely Piloted Vehicles (RPV's).

2. Background: DoD has considered that RPV's offers significant capabilities for high risk missions in the area of battlefield surveillance. DARPA's 5-year initiating thrust in RPV's for military missions will conclude in FY 77. The three Services are each funding the types of RPV's pertinent to their individual needs, with a Tri-Service coordinating group and DDR&E guarding against redundancy and duplication. The Army (Aquila Program) is concentrating on a mini-RPV (under 200 lbs) for reconnaissance and artillery correction and designation with the objective to provide to TRADOC an interim RPV system for development of the ROC** for the full militarized system. The Navy is also pursuing a mini-RPV (under 300 lbs) to provide an over-the-horizon targeting capability for Harpoon equipped ships. Since many of these ships are small and non-aviation rated, the RPV size is constrained to under 300 lbs for logistics reasons. The Air Force has a long operational history with midi (300 to 3000 lbs) RPV's such as the BGM-34C for photo-reconnaissance and electronic warfare jamming and deception. A large portion of their program is to increase the utility of these systems with engineering improvements. The Air Force expendable drone program, involving a midi-sized decoy and a mini-sized harassment weapon, was cut from $7M to $2M by Congress to keep these programs from going to full scale engineering development. (believed to be premature by Congress). The only maxi-RPV (over 3000 lbs) is the Air Force Compass Cope long-endurance, high-altitude, surveillance platform intended to carry all weather systems such as Sideloooking Airborne Radar (SLAR) to provide tactical battlefield surveillance. Congress withheld $3M of the $6M FY 77 appropriation for Compass Cope until the Air Force committed to a specific payload. In general, Congress has paid particular attention to the RPV programs.

3. DoD Position:

*Training and Doctrine Command
**Required Operational Capability

OAD(E&PS)
1 Dec 76
4. **Current Status:** Twenty Aquila airframes and two ground control stations will be delivered to TRADOC in the Spring of '77 for a six month evaluation leading to a ROC for the engineering development. A Navy RFQ** for its mini-RPV will be released this month and contractor selection will be made in the Spring of '77. The Air Force study on the RPV control system will begin in late FY '77.

*Joint Tactical Integrated Data System

**Request for Quotation
ELECTRON DEVICES

Issue: The funding for development of electronic devices has decreased over the past ten years in terms of real dollars and as a percentage of investment in electronic systems. Since these devices are key to the performance, reliability, cost, size and weight of future systems, PDM guidance was established two years ago increasing the electron device budget.

History: The current PDM directs an increase in electron device funding of 10% per year with FY 1975 as the base. In addition, the Services were directed to establish device Advanced Development Programs. The Air Force, Navy programs are in accord with the guidance. The Army has decreased device funding and the House Armed Services Committee (HASC) refused to approve their proposed Advanced Development Program start in FY 77. A Navy Advanced Development Program with a similiar sounding title was also cancelled by the HASC but the real device program survived.

Impact:

*Program Decision Memorandum

OAD(E&PS)

30 Nov 76
Budget Related Issue

REMOTELY PILOTED VEHICLES (RPVs)

Issue:

Problems have been encountered in schedule slippages and cost overruns. RPV's have drawn considerable Congressional attention.

History: The Air Force has a long operational history with mid-sized (300 to 3000 lb) RPV's for photo-reconnaissance and electronic warfare. They have not needed to develop small radars and infrared imagers for the 200 to 300 lb class of mini-RPV's the Army and Navy intend to use.

Position:

The Air Force under PE 63739F is formulating the concept of an RPV mission control system that is intended to be JTIDS* compatible.

*Request for Quotation
**Joint Tactical Integrated Data System

OAD(E&PS)
1 Dec 76
Budget Related Issue

IRRADIATED FOOD PROGRAM

Subject of Issue: Congress has charged the DoD to conduct the national RDT&E program for the use of ionizing radiation as a means of sterilizing meat products.

History: DoD initiated R&D to study this approach for preserving meat products over a decade ago. After an initial period, it was decided to terminate the work. The civil sector and other Federal agencies also terminated like efforts. However, Congress rejected the DoD proposal for cancellation and requested that it continue the work even though it had no requirements for the products of the work. In 1974 DoD had brought the technology to a state where four meat products (beef, ham, other pork products, chicken) were ready to undergo testing to demonstrate acceptability for human use, per FDA standards. Beef testing was started. In 1975 the Secretary of the Army accelerated the test program by adding the other meats in simultaneous efforts rather than the sequential tests earlier planned. Congress was advised of the acceleration of the program.

Budgetary Impact:

Funding for all Service food technology R&D is an Army responsibility since they serve as the DoD Executive Service for this effort.

DoD Position:

OAD(E&LS)                     29 November 1976
Budget Related Issue

MANPOWER, PERSONNEL AND CONTEMPORARY ISSUES

1. Issue: R&AT raised serious concerns with regard to both the level of R&D effort allocated to Manpower, Personnel and Contemporary Issues and

2. History: Concern over this technical area by the House Appropriations Committee staff resulted in a 25% reduction in the Human Resources program in FY 76. Continued concern by the Congress with regard to utility of R&D in this area is expected.

3. Current Position: The Services have been requested to brief ODD(R&AT) on their proposed FY 78 Tech Base programs in this area. The objectives are an assessment of the utility of the R&D, whether the level of investment and the expected return justify an annual investment of over $20M, whether the planned program is correctly focused, and whether the program (or portions thereof) should more appropriately be funded from a non-RDT&E account.

4. Impact:

OAD(E&LS)
30 Nov 76
Budget Related Issue

FACILITY FOR PRODUCTION OF BINARY CHEMICAL WARFARE MUNITIONS

1. Issue: The Department of the Army has proposed a loading, assembly, and packaging (LAP) facility for the new binary artillery projectiles to be constructed at Pine Bluff Arsenal, Arkansas.

2. Background: This facility was included in the FY 1975 procurement and Military Construction Authorization (MCA) request in the amount of $5.5M. It was authorized by both houses of Congress but was deleted on a floor amendment during the appropriations process. It was included again in the FY 1976 budget request for $8.8M. After extensive hearings it was deleted pending further discussions at the UNGA Conference on Disarmament (CCD). Because of this decision, no request was made in the FY 1977 budget in accordance with Congressional wishes to delay one year to allow further negotiations. No substantial progress in disarmament discussions has been evident during the one year delay.

3. DoD Position:

4. Current Status: The funding for this facility has been made the subject of an ASD(C) PBD issue and is being raised as a funding issue at OMB level.

OAD('E&LS)
29 Nov 76
Budget Related Issue

SIMULATORS - FLIGHT AND NON-FLIGHT

1. Issue: The entire spectrum of training and simulation technology has been marked by DD(R&AT) as an area for concentrated growth. Programmed increases for this area of technology have begun.

2. History: OSD initiated an effort in FY 75 to increase the use of flight simulators to improve training, reduce costs and reduce use of fuel. Congress has in general supported the program. High level interest item due to high leverage in terms of cost reduction/performance effectiveness.

3. Current Position:

   The FY 1978 budget request includes

4. Impact:

OAD(E&LS)
30 Nov 76
ARMY RDT&E DRAWDOWN

Issue: The Army has agreed to a manpower drawdown to reduce its in-house Technology Base work and to increase its program with universities and industry.

History: The Laboratory Utilization Study which was completed in 1975 concluded that the Army in-house program in several areas including materials and electronics was too large. An agreement was made with the Army to reduce its RDT&E in-house strength by 2900 authorizations using end strength FY74 as the basis and completing the drawdown by FY78. These reductions by fiscal year are as follows: FY75 - 905, FY76 - 829, FY77 - 733, and FY78 - 433. The Army has met its commitments as of FY76, however,

We have encouraged the Army to take these reductions through hiring freezes, attrition, and transfer of the manpower to work and funding in other areas.

Position: ODD(R&AT) is insisting that the manpower drawdown be completed as scheduled.

ODD(R&AT)
30 Nov 76
NAVY BLOCK FUNDING

Intent: We are encouraging the Navy to provide most of their Technology Base funds directly to their laboratories in large "blocks" without distribution through the Systems Commands.

History: The Navy Technology Base funding to the Chief of Naval Material Laboratories is distributed to the laboratories in two ways. Some of the funds are given directly to the laboratory by the Chief of Naval Material for work which has been previously agreed upon. A major portion of the laboratories' Technology Base funds, however, are provided through the Systems Commands for work which is primarily supportive of the particular Systems Command.

We have encouraged the Navy to block fund most of the Technology Base funds directly to the laboratories once the laboratories technical program has been agreed upon by the laboratory, the Systems Command, and the Chief of Naval Material.

Position: The Navy has proposed to "block program" funding to the laboratories.

ODD(R&AT)
1 Dec 76
ELECTRONIC COUNTER COUNTER MEASURES (ECCM)

History: The lessons learned in the Yom Kippur Israeli war indicated the need for a major thrust in ECCM. There are several aspects to a good ECCM posture.

Positions: DoD Directive C-4600.3, Electronic Counter Counter Measures Policy defines the tasks and responsible agencies with regard to threat definition and evaluation of impact upon system performance. The implementation of this policy is still being formulated. To create an ECCM awareness in the service laboratories, DDR&E has sponsored symposia on ECCM topics and has induced the Air Force to create Program Element 63750F-CCM Advanced Development. The Army and Navy technology base program element managers have been made aware of the need for responsive attention to this subject.

OAD(E&PS)
1 Dec 76
AIRCRAFT PROPULSION

Issue:

Discussion: At the present time there is no continuing program of advanced development for small aircraft engines technology. Increasing interest in drones, aerial targets, and RPVs indicates a need for active support of this technology.

The Joint USAF/Navy Technology Demonstrator Engine (JTDE) program meshes the Navy efforts in large aircraft engine technology work with the larger related programs of the Air Force, to the benefit of both.

Positions: DR(PALT).

Army and Navy.

OAD/ET
30 Nov 76
LIQUID PROPELLANT GUNS (LPG's)

Issue: The House Armed Services Committee (HASC) has deleted all Navy funding in FY 77 and beyond for LPG's and directed that the Defense Advanced Research Projects Agency (DARPA) should support any future efforts.

Discussion:

Work in the technology of LPG's has been supported sporadically since the mid-1950's. However, for a decade prior to about 1970, the level of effort was extremely low. In about 1970 the Navy, jointly with DARPA, decided to support a major effort to develop LPG's based on a bulk-loaded propellant charge design concept. The HASC in acting upon the FY 77 budget observed that LPG's had been supported for over 20 years with little apparent useful outcome and therefore deleted the Navy RDT&E funding.

OAD/ET
30 Nov 76
COMPOSITE MATERIALS

Issue: Should technology base support for R&D work on advanced composite materials be redistributed?

Discussion: Current and planned R&D on these materials encompasses work with organic, carbon, or metal matrices reinforced by graphite, carbon, or boron fibers. Demonstrations of organic (epoxy) matrix composites in full scale aircraft components have been underway for several years and major structures are components of flying aircraft. The Air Force alone has spent more than $150M on this technology since 1961. Army and Navy also have spent large amounts. There is now widespread support and heavy investment by industry for work on these materials, and they are increasingly accepted for state-of-the-art design.

Carbon matrix and metal matrix composites potentially fill more specialized but very demanding roles in aircraft and missile design.

Positions: DD(R&D)

Air Force

OAD/ET
30 Nov 1976
TRANSPORTATION AND DISPOSAL OF HAZARDOUS/TOXIC MATERIALS

1. **Subject of Issue:** Transportation and disposal of chemical warfare agents, missile fuels, some industrial type chemicals, ammunition, and similar items has become a public concern.

2. **Background:**

   The Environmental Impact Statement process must be fully followed and become a part of the decision making process.

3. **DoD Position:** The NEPA and all applicable laws will be fully followed.

4. **Current Status:** Planning is proceeding in accordance with applicable laws to continue movements necessary in the interests of national security or to improve operations.

OAD(E&LS)
29 November 1976
CHEMICAL WARFARE AGREEMENTS

1. Subject of Issue: A part of US Chemical Warfare policy has been our willingness to negotiate an agreement to develop an effective, verifiable ban on CW.

2. Background: Article II of the Biological Weapons Convention (BWC) (ratified by the U.S. in January 1975) binds all signatories to continue negotiations on an agreement banning chemical weapons. The U.S. has negotiated in this area, particularly through the UNGA Conference of the Committee on Disarmament (CCD) for at least ten years. It has been the subject of a number of other Conferences. The USSR submitted a convention to the UN in 1972 almost identical to the BWC which contains no verification procedures. The major obstacle to date in all agreements is the definition of the chemical agents to be banned and reaching agreement on practical and effective inspection and verification procedures and other safeguards.

3. DoD Position:

4. Current Status:

OAD(E&LS)
29 November 1976
1. **Issue:** Should the United States freeze a decommissioned icebreaker into the Arctic Ocean North of Soviet Siberia such that prevailing ocean currents will carry it across the Pole to exit near Greenland in about 2 years? **Project name:** NANSEN DRIFT.

2. **Background:** The Navy has been a strong proponent for the NANSEN DRIFT project, pointing out the opportunity to conduct new research in the Soviet Arctic and to support political objectives of the United States. They estimate the project will cost $15 million over a three year period.

   NSF has been somewhat reluctant to undertake the project, probably as a ploy to force heavier funding support from DoD and other agencies. The project is supported strongly by the National Research Council, the Department of State, and in principle by DoD. The Norwegians support the project.

3. **DoD Position:** None. DoD needs to establish its position on NANSEN DRIFT. Part of this decision is the level of financial support to provide to the project.

OAD(E&LS)
26 November 1976
NAVAL ARCTIC RESEARCH LABORATORY (NARL)

1. Issue: What should be the future status of NARL?

2. Background: The Naval Arctic Research Laboratory (NARL), Ft. Barrow, Alaska, is the only continuously operated U.S. research laboratory on the Arctic Ocean providing complete logistics support and coordination of mission research for the Navy and other government agencies. It is operated by a civilian contractor and is managed by the Office of Naval Research (ONR). NARL is a complete self-sustaining base facility on over 5,000 acres of land consisting of over 170 buildings, an airstrip, and modern laboratory facilities. The laboratory maintains a fleet of 6 fixed-wing aircraft, plus various over-land vehicles and water craft. In addition, NARL operates some 14 remote camps along the Alaska coast supporting research projects.

The operating budget of NARL is approximately $7.0M per year, paid for from RDT&E funds. Other government agencies doing R&D at NARL provide reimbursements but these reimbursements do not cover their operating and logistics costs. The Navy estimates that only 15% of NARL activity is in direct support of DoD sponsored research and development.

There is a continuing need for NARL as a Navy or National base camp on the Arctic Ocean.

3. DDR&E Position: On 18 October the Navy was asked to review the management and financing of NARL, and to adjust RDT&E funding at NARL to a level consistent with the RDT&E work performed at NARL by 1981.

OAD(E&LS)
26 November 1976
ADVANCED TECHNOLOGY GUN

1. **Problem:** An advanced technology aerial cannon is needed to enhance the capabilities of our tactical aircraft.

2. **Background:** The M61 (20mm), which was developed many years ago, and the GAU-8 (50mm) are the principal guns planned for Service use. Both the Navy and USAF have expended a considerable amount of work trying to overcome the shortcomings of these two guns.

3. **DoD Position:** DoD wishes to continue development of advanced multi-purpose aerial cannon.

4. **Current Status:** FY1976 funding for future gun development continues at a very modest pace.
TWO-PLACE A-10

1. **Problem:** Why do we need a two-place A-10?

2. **Background:**

3. **DoD Position:**

4. **Status:**
1. **Problem:** Should the COMPASS COPE program be continued.

2. **Background:** COMPASS COPE was conceived by the Air Force as a long-endurance, high flying, remotely piloted multi-mission vehicle.

3. **DoD Position:**

4. **Current Status:** The PBDs reflect the DoD position.
FLIR/LOPAIR

1. Subject of Issue: Advanced chemical agent warning and detection systems; Long Path Infra-Red (LOPAIR) an Army development and Forward Looking Infra-Red (FLIR) a Navy development.

2. Background:

   a. Program Objectives: To provide an advanced chemical agent detection and warning system for combat use.

   b. The Army has evaluated long path infrared detection methods for some years in an active concept pursued from 1954 to 1965 was terminated in favor of a passive concept. Critical technical problems in discrimination of agents from smoke, dust, and other interferences have existed in the past. However, the present passive LOPAIR which entered Advanced Development in January 1974 is believed to have resolved these technical problems.

   c. The Navy, while evaluating the FLIR for fire control purposes (the primary mission), discovered that technicians could observe emissions from incoming aerial targets. By the use of optical filters, some discrimination of emissions can be made.

   d. Originally the HASC requested a side-by-side test; this was fully planned, but not performed. Subsequently, the HASC requested that LOPAIR be terminated in favor of FLIR but did authorize reprogramming for a side-by-side test. The Army did not follow complete guidance on the funding for the side-by-side test. The HASC then initiated a GAO investigation of all expenditures.

3. DoD Position:

4. Current Status: The DoD initial request to the HASC to continue both developments was refused.

*House Armed Service Committee  OAD(E&LS)  29 November 1976
Outside ARPA Reactions. The ARPA program has been well received by OSD, OMB, and the Congress. Presentation of "thrusts" has been easily understood and the potential significance of the breakthroughs readily appreciated. Whereas prior to FY 1976, the total ARPA budget remained essentially static at around $200M, this year's budget will be A great deal of enthusiasm has been generated for the program in the Services, Joint Chiefs of Staff, the DDR&E, and the Secretary of Defense.

Management Issues. ARPA's unique position in DoD and its determination to remain a small but hard-hitting research organization presents a set of management issues which must be dealt with successfully to maintain the organization's vigor. Some of these follow:

- **Staffing and Personnel Policies** — There must be continuing management sensitivity to the need for professional staff turnover. This is essential to the difficult process of creating new programs, keeping Program Managers who are current in rapidly changing technologies, and maintaining aggressive and vital programs.

- **Program Transfer** — Extraordinary and aggressive efforts are required to develop positive mechanisms to transition results of ARPA research to the Military Services. There are no automatic or built-in processes or policies which assure that this happens—the initiative is with ARPA. It is essential that close and continuing contact be maintained with Service Chiefs of Staff, Assistant Secretaries for R&D, and Commanding Officers of Material Acquisition Commands (AFSC, NAVMAT, DDCOM) by deliberately scheduled and regular briefings and meetings.

- **The ARPA Image** — Care and selectivity must be exercised to avoid involvement in research programs promoted by Service R&D organizations solely to secure ARPA funding support. ARPA should recognize and remain insensitive to Service R&D and DDR&E Staff members who perceive of ARPA as an "interferor" with institutional biases & objectives. They would prefer to see ARPA outside of the mainstream issues. The vitality of the organization is largely derived from its mission of being the adversary, the risk-taker, the innovator, the outspoken critic.
Visibility of Demonstration Programs -- for the first time, ARPA has established in FY 1976 a program element making visible major new technology demonstration efforts and the relatively large resources they may require. Preliminary Congressional and OSD Staff reaction has been positive, but critics may still raise the question, "Why ARPA?". These technology demonstration programs will materially aid the transfer of technologies to the Services who must ultimately develop the material or techniques for Service application. Meaningful (as near full scale as possible) demonstrations have the effect of more clearly suggesting the potential of new technology and help to accelerate the otherwise long, drawn-out material development cycles of Service programs. The alternative of simply reporting research findings and speculating on their potential more often than not means promising results go unnoticed and are never considered or may be subsequently duplicated by the Services or are subjected to long and frequent sub-critical exploitation attempts.

Technology Assessments -- The Technology Assessments Office was disestablished at the end of FY 1976. Those efforts underway which were relatable to the other technical offices were transferred to those offices. In the future, technology assessments will be undertaken as part of the technical office function to examine and compare the U.S. and foreign technology base and create new initiatives for the Office. Those technology assessment efforts which are of broad ARPA or DoD scope will continue under direct management of the Director, ARPA.
The attached documents represent the "issue papers" prepared by DDR&E for the Transition Team in connection with the transition from the Ford to the Carter Administration. Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report letter of December 14, 1976, they are believed to be broadly within the intent of that definition.

Seventeen papers recommended for release in their entirety are listed in Enclosure 1. Some parts of some of these papers qualify for withholding under exemption 5.a.(1), in that they contain advice, opinions, and suggestions. However, it is determined that withholding would not serve a significant and legitimate governmental purpose.

Partial denial is made on the 16 papers listed in Enclosure 2 under exemption 1 in that they contain classified security information. The material has been reviewed and it has been determined that the denied information is properly classified under E.O. 11652 and its disclosure could reasonably be expected to cause damage to the national security.

Partial denial is being made on the 22 papers listed in Enclosure 3 under exemption 5. The particular parts of each paper have been indicated by brackets and categorized as falling either under exemption 5.a.(1); i.e., papers containing advice, opinions, and suggestions, or as falling under 5.a.(2); i.e., information generated preliminary to decision, the release of which might interfere with orderly execution of plans.

With respect to the denied portions of the 22 papers listed in Enclosure 3, the "significant and legitimate governmental purpose" is the protection of the ability of the government to receive candid advice, opinions, and recommendations from its employees without having the rendering of such inhibited and biased through the possibility of public controversy on them prior to their consideration. Similarly, orderly government would suffer if proposed governmental positions were prematurely exposed to those who might benefit or seek to influence them as the result of such premature disclosure.

The Initial Denial Authority in this instance is Mr. S. E. Clements, Executive Assistant, Office of the Director, Defense Research and Engineering.
Enclosure 1

PAPERS TO BE RELEASED

Note: Some portions of these papers qualify for withholding under Exemption 5, but use of the Exemption is waived.

Defense R&D Laboratories

Federal Contract Research Centers (FCRCs)

DOD R&D Testing Using Human Volunteers

Joint Service Development/Test Programs

Systems Acquisition Management

Prototyping

Travel Funds

DOD Medical Research Charter

Reduction of Outyear Operating and Support (O&S) Costs

Visibility and Management of Operating and Support Costs

Life Cycle Cost (LCC) Reduction

Design to Cost

Specifications and Standards

Reliability and Maintainability

Soviet Technological Doctrine and Practice

Competition in Defense Procurement

Expeditious JOT&E of IIR MAVERICK
DEFENSE R&D LABORATORIES

1. Subject of Interest: ODDR&E is directing various changes which will increase innovation in the Defense Research and Exploratory Development and some advanced technology demonstration programs.

2. Background: The DoD Technology Base comprises approximately 74 in-house Research and Development facilities and 56,000 civilian workers, including about 24,000 professionals. These laboratories monitor the expenditure of some $3B per year, about one-half of which is spent internally. Several major changes are underway which are directed toward increasing the innovation and productivity in the laboratories.

- The laboratories' roles in Technology Base planning and supervision is being increased. To initiate this, block funding of the laboratories has been increased and lead laboratory concepts for technology areas have been implemented.

- We are increasing the use of investment strategies as a technique for apportioning the resources across the various technology areas in the Technology Base.

- The laboratories are being assigned prime technology area responsibilities. The size of the laboratories is being reduced by manpower drawdowns in redundant and lesser productive areas.

- The percentage of the Technology Base work which is performed by universities and industry is being increased to take advantage of their unique contributions to the program.

- The roles of the laboratories in support of systems acquisition is being increased. To expedite this a change to DoD 5000.2 was implemented which requires a Technology Assessment Annex to Decision Concept Papers for systems which are meeting Defense Systems Acquisition Review Council Milestones I and II.

ODD(R&AT)
1 Dec 76
3. **DoD Position:** As in-house laboratories play a key role in military R&D, the actions enumerated above have been accepted and are being implemented.

4. **Current Status:** Funding allocation increases in the Technology Base are being applied selectively across the technology areas based on a careful evaluation of various investment strategies. The Air Force and Army have implemented the block funding technique; the Navy is moving in that direction. Ceilings have been placed on the amount of Technology Base program which will be performed in-house with the ultimate goal of achieving a maximum of 30% in-house. The manpower drawdown in the Air Force has been completed and is approximately on schedule for the Army and Navy. The drawdown amounts to approximately 6,900 authorizations to be completed by the end of FY 78.
1. **Issue:** Will the revised policies and procedures for managing DoD-Federal Contract Research Centers (FCRCs) be acceptable to Congress?

2. **Background:** Federal Contract Research Centers (FCRCs) are DoD sponsored non-profit corporations dating from WWII. The number of FCRCs has been reduced from 21 to 8 since 1964. Each FCRC is distinctive and generally performs different functions. Other government agencies have similar organizations.

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>System Engineering/ Tech Direction (SE/TD) (FY76)</th>
<th>Studies &amp; Analyses (S&amp;A) (FY76)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT Lincoln</td>
<td>MITRE Corp $45M</td>
<td>RAND $17M</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>Aerospace Corp $82M</td>
<td>CNA $10M</td>
</tr>
<tr>
<td>Penn State</td>
<td>$8M</td>
<td>ANSER $2M</td>
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<td></td>
<td></td>
<td>IDA $11M</td>
</tr>
</tbody>
</table>

Laboratory FCRCs perform difficult technical projects embracing both research and new prototype systems concepts. (SE/TD) FCRCs provide technical support in defining, developing, producing and fielding space, communications and command and control (C^3) systems. (S&A) FCRCs provide sound and unbiased professional analyses and recommendations for force planners, logistics managers, R&D managers, high officials on DoD staffs, etc.

A high degree of control is maintained over FCRCs. The Senate Armed Services Committee provides an overall fiscal ceiling. Four major problems exist with using FCRCs:

- Several years ago, Congress expressed concern regarding salaries, number, size of operation, etc. These concerns resulted in the imposition of a Congressional fiscal ceiling. However, this ceiling has not kept pace with inflation.

- Congressional concern has been expressed more recently regarding how we use FCRCs, i.e., as "extension of headquarters staffs," especially the S&A FCRCs.
Part of the for-profit industry sector is opposed to both the non-profit and sponsored aspects of FCRCs, especially as pertains to the success of some FCRCs in diversification.

The fiscal ceiling has especially been a hindrance in accomplishing space and C^3 SE/TD work.

3. DoD Position: An extensive review was conducted of FCRCs in 1976 in response to Congressional desires. Principal actions are as follows:

- Analytical Services (ANSER) will no longer be an FCRC.
- The Applied Physics Laboratory (Johns Hopkins) and Applied Research Laboratory (Penn State) will not be considered FCRCs beginning in FY 1978.
- MIT Lincoln Laboratory, Center for Naval Analyses (CNA), Project Air Force (formerly Project RAND) and the Institute for Defense Analyses (IDA) will not be allowed to exceed their present manpower levels. The non-Project Air Force aspects of RAND Corporation will not be considered an FCRC.
- MITRE-Bedford will be separated from MITRE-Washington. All DoD C^3 work will be done at Mitre-Bedford. MITRE-Washington will not be considered a DoD FCRC. Mitre-Bedford will not do non-DoD work unless of direct benefit to DoD. Level of DoD effort at Mitre-Bedford will be governed by DoD C^3 workload.
- Aerospace Corp will be restricted to DoD space program endeavors except on programs of direct benefit to DoD (i.e. joint DoD-NASA). Level of DoD effort at Aerospace will be governed by DoD space system workload.

4. Current Status: A report was provided the four concerned Congressional Committees. Informal approval received. DoD will be implementing above actions in the FY '78 budget process. Congressional Committees reactions in their reports on the budget will provide basis for future management of FCRCs.
Subject of Issue: Continuing concern by many groups that humans are being used as guinea pigs needlessly and under circumstances of unacceptable hazard.

Background: The DoD, as one of many Federal agencies who perform tests using human test subjects, has been drawn into the overall public and Congressional dialogue on the subject. In 1975, Congressional committees held hearings that discussed tests, primarily related to chemical agent and hallucinogenic drug testing, that were conducted in the 1950, 60s and early 1970s. This discussion resulted in a report that highlighted abuse and an inadequate follow-up of the test subjects. These practices had been stopped and the control of such experimentation had already been markedly improved in the 1970s by DoD because of its own concern and the national revision of standards for use of human volunteer subjects, although this point was carefully avoided or ignored in the hearings.

DoD Position: DoD must conduct tests that use human test volunteers in several of its human related RDT&E program. Each Service has formal and effective approval procedures to insure that the proposed tests are needed and worth the investment and risk, properly planned, safely and competently conducted, and that proper follow-up is assured. As new guidelines or laws are passed related to this on a national level, they are included in the DoD process of approval, review, conduct, and critique of our R&D. In all cases, only fully informed and volunteer subjects will be used.
**JOINT SERVICE DEVELOPMENT/TEST PROGRAMS**

1. **Problem:** Proliferation of hardware and programs aimed at meeting the same basic operational requirements.

2. **Background:** Unnecessary proliferation of systems and subsystems intended for similar operational requirements can dilute the effectiveness of R&D resources, deters competitive procurement and ultimately consumes excessive operations and support resources. With severe budget constraints in the R&D area, this problem cannot be overemphasized. Operational requirements must be carefully examined and coordinated to eliminate the costly consequences of duplication, strive for subsystem and system interchangeability, and achieve interoperability and flexibility of mixed forces. Commonality of hardware is sought to reduce the costs of training, maintenance, and support. DDR&E places heavy emphasis on structuring joint RDT&E programs through memoranda of agreements, lead Service assignments, and close coordination with other OSD offices such as DTACCS and ASD(I&L) in working groups.

   Certain technology areas have been identified as prime candidates for special attention in DDR&E because rapid movement in the state of the art encourages proliferation. As an example, electronics technology can be found as a major cost element of almost every weapon system. Since one-third of the DoD budget in some way or other is tied to electronic related expenditures, it is an area that has been highlighted as worthy of special attention. This is particularly important in electronic subsystems in view of the fact that annual support costs for these military equipments are equal to the annual procurement costs and are increasing due to the relatively high labor content. Therefore, Joint Service programs in the electronics area are highly leveraged and provide a basis for significant cost reductions.

3. **DoD Position:** Joint Service programs are an effective approach to stemming proliferation of programs aimed at meeting similar operational requirements. Our policies to achieve this objective are stated in DoD Directives; identified and restructured as necessary in the planning, programming, and budgeting cycles; and when necessary, by fiat. A special policy for Single Service Management of Selected Electronic Equipments has received tri-Service Secretarial endorsement and is expected to be finalized in March 1977.

4. **Status:** We have established commonality between Services that is intended to satisfy sister Service requirements in virtually all DSARC reviews. Working groups and special committees have been formed to more closely examine the areas where high payoff potential exists. The Directive on electronic equipment will utilize the requirements process and other existing means to identify those items which are candidates for Single Service management. The assignment of the "lead"
Service on a case-by-case basis will be made by the appropriate OSD offices.

At the present time, there are 78 joint Service R&D programs; and similarly, there are 14 joint operational test programs. For example, the NAVSTAR (Global Positioning System) is a tri-Service development to reduce net DoD navigation costs by a significant percentage while enhancing the performance of weapons and simplifying their design. During the past year, the Air Force has been assigned as Executive Agent for the development of the new beyond visual range air-to-air missile, which is a replacement for Sparrow. The new missile will be based on previous DARPA research and designed to satisfy a JSOR. Similarly, the ultimate Sidewinder replacement will be based on a continuing evaluation of seekers and development of operational requirements.
SYSTEMS ACQUISITION MANAGEMENT

1. Issue: In order to maintain national security in times of highly constrained defense budgets it is imperative that we manage the acquisition of defense systems in a highly efficient manner.

2. Background: The basic policies for the management of defense systems acquisition were established in mid-1971 with the publication of DoD Directive 5000.1, "Acquisition of Major Defense Systems." Since that time the results of several study efforts for improving the defense systems acquisition process have been published, i.e., the Commission on Government Procurement, the Army Material Acquisition Review Committee, the Navy/Marine Corps Acquisition Review Committee and most recently the Acquisition Advisory Group.

3. DoD Position: While many of the recommended improvements to the defense systems acquisition process have already been implemented we are continuing to evaluate and adopt other promising changes.

4. Current Status: In many areas we have made major strides in improving the management of DoD systems acquisition. Some of these management initiatives are:

   a) Fly-before-buy (hardware demonstration)
   b) Achievement milestones vs calendar milestones
   c) Competition, especially during system validation
   d) Design to Cost
   e) Hi-Lo force mix
   f) Creation of viable options
   g) Maintaining strong technical base
   h) Improved program management

Other areas of promising efforts underway but still evolving are:

   a) "Front-end" planning- mission needs and affordability
   b) Life Cycle Costing

Sound management of defense systems acquisition impacts on the defense posture of the U.S. It is probably the single most important task of DoD as it impacts directly on force readiness, the yearly defense budget and also the outyear expenditures for operating and maintaining our weapon systems. We will continue to evaluate all facets of the acquisition process seeking improvements in national defense and more efficient development, production, operation and support of our defense system.
PROTOTYPING

1. **Issue:** To improve the basis for management decisions during the development and acquisition of defense systems and equipment.

2. **Background:** Prototyping stresses the use of hardware demonstration, rather than paper studies, as the basis for key program decisions. It has been referred to as the "fly before buy" or "test before buy" approach to system acquisition. In practice, it calls for investment in a few demonstration models (prototypes) and evaluation of test results prior to making a major commitment of funds or resources. It was promulgated as management policy by former Deputy Secretary of Defense David Packard, has been emphasized as a management tool by his successor, DepSecDef Clements, and has become an important aid to defense decision-making. Congress has debated the merits of prototyping and endorsed its application in defense programs.

3. **DoD Position:** Prototyping is an aid to management that reflects a basic principle of sound decision-making: systematic reduction of risk. It must always be viewed in the decision-making context. It is not, and must not become, an end or objective in itself. We emphasize prototyping where it is needed to support and strengthen our basis for decisions, not as "the thing to do" in order to get programs approved.

4. **Current Status:** We have gained considerable experience in prototyping over the past several years; however, there is still some misunderstanding of the difference between its two fundamental applications.

Prototyping is used during the acquisition cycle to reduce the risks associated with applying advanced technology to meet defined operational requirements. These are the "full-scale engineering development" prototypes. (Examples: Mechanized Infantry Combat Vehicle; Utility Tactical Transport Aircraft; Advanced Attack Helicopter; Submarine Launched Cruise Missile.) Where it is impractical to prototype an entire weapon system, the concept is applied to subsystems and components. (Examples: AWACS Radar; Airborne TACAN; Navy Modular Electronic Warfare Suite.)

Prototyping is also used to explore and advance new technology prior to the definition of specific requirements. These are "technology base" or "exploratory development" prototypes. Their purpose is to provide viable options for future decisions. Exploratory prototyping creates technological alternatives, exploits technical opportunities, stimulates competition and innovation, retains key industry design teams, and improves our ability to make performance/cost tradeoffs. (Examples: Air Combat Fighter; Advanced Medium STOL; Electronically Agile Radar.)

DDRE
30 Nov 76
Budget Related Issue

TRAVEL FUNDS

Issue: ODD(R&AT) has insufficient travel funds to adequately perform its assigned tasks for FY77.

History: ODD(R&AT) is allocated travel funds from DDR&E. These funds are used to pay for transportation and per diem in performing our program monitoring tasks, to satisfy U.S. responsibilities in international travel for the Defense Research Group and for The Technical Cooperation Program, to maintain staff specialists professional proficiency through attendance at technical symposia and meetings and to publicize the technical thrusts and management changes which we are implementing in the Technology Base program. The travel funds allocated in FY76 was $42.3K. Our request for FY77, in view of the total inadequacy of FY76 funds, was $76K. Our allocation for the first 6 months of FY77 is $14.7K. We have reduced the $14.7K by the amount required to meet international obligations for the first 6 months of FY77 plus a $1K contingency fund, and allocated the remainder on a prorata basis to the AD Offices and the Front Office Staff. We anticipate that the funding to be allocated for the second half of FY77 will be approximately $14.7K.

Position: DDR&E is aware that the FY77 allocation is inadequate. Travel, other than that supported by others, is by and large restricted to program monitoring plus the international commitments.

ODD(R&AT)
30Nov76
Subject of Issue: Congressional actions on DoD budget requests are being denied in cases where any other agency is conducting research in the area.

History: Congressional actions during FY 76 and FY 77 budget cycle denied DoD requests for money for research in drug and alcohol abuse, and a series of infectious and dental diseases. The basis for denial has been that the Department, Health, Education, and Welfare (DHEW) is doing work in these fields and the DoD, therefore, should not require any effort in the area. This has been cited especially in cases where the DoD level of effort is much smaller than the DHEW commitment. A GAO review of infectious disease research was completed in FY 76, overseas laboratory reviews are underway now which could cause further areas to be so identified in FY 78 and beyond.

Budgetary Impact: Previous reductions were not made until late in the fiscal year. As a result, money had been committed to new and continuing efforts under the authority of the Continuing Resolution. Thus, when all funds programmed for the effort were withdrawn, additional funds were also lost due to the fact that the earlier commitments to contracts had been made and could not be recouped.

DoD Position: DoD does carefully coordinate and draw from the civil and other Federal agency research. It conducts research only on the unique problems of the Military Services or those aspects of the problem that the civil sector cannot or will not address. Thus, rather than duplicate, the smaller DoD investment represents a complimentary effort that provides specialized results of interest to DoD.
UNCLASSIFIED

REDUCTION OF OUTYEAR OPERATING AND SUPPORT (O&$) COSTS

1. Issue: To reduce the fraction of the outyear DoD budget allocated to system operating and support costs, while at the same time maintaining operational readiness.

2. Background: Continued growth in the fraction of the DoD budget allocated to operate and support current systems has impaired modernization. Greater emphasis is needed on reducing the future O&$ costs of systems now being developed, so as to reverse this trend as new systems enter the inventory.

Better visibility on the specific O&$ costs of current systems is a necessary step in defining and reducing the O&$ cost of future systems. The next step is to employ the results of that improved visibility.

3. DoD Position: We are confident that we can achieve the ability to identify and track the O&$ costs of individual types of defense systems. We must also control the future O&$ costs of systems now in development, so as to achieve a net reduction in the O&$ portion of the DoD budget.

4. Current Status: The DepSecDef memorandum on Reduction of Outyear Operating and Support Costs, 28 February 1976, directed the Military Departments to establish O&$ cost targets for each major system now in development, and to propose methods to assess the net O&$ cost impact on future Department budgets of all DSARC decisions.

The Services have forwarded their planned approaches to the establishment of O&$ cost goals for all major programs now in the DSARC process and proposed methodology for annual assessment of the net O&$ cost impact of DSARC decisions during the preceding year. Refinements required by ASD(I&L) review are now in progress.
UNCLASSIFIED

VISIBILITY AND MANAGEMENT OF OPERATING AND SUPPORT COSTS

1. Issue: To develop methods for determining the operating and support costs attributable to particular Defense systems.

2. Background: SecDef and DDR&E posture statements for FY 1976 mentioned the need to improve visibility on the operating and support (O&S) costs of current systems, as a necessary step in reducing the life cycle cost (LCC) of future weapon systems.

During SecDef's testimony, Senator Culver asked for LCC estimates on the 10 most expensive systems then in development. DDR&E responded with current estimates for 8 of the 10 systems.

Thereafter, Senator Culver proposed an amendment to the Authorization Bill that required DoD to include LCC estimates for all major systems in its budget, beginning with the FY 1977 submission. This amendment was deleted in conference when DoD stated it was unable to provide such estimates for all major systems. However, DoD did indicate it might be possible to submit LCC estimates for aircraft systems with the FY 1978 budget.

3. DoD Position: We can estimate system acquisition costs fairly well, and are improving that capability, but DoD accounting systems were not set up to identify all operating and support costs by individual weapon systems. We are working to improve visibility on operating and support costs.

4. Current Status: ASD(I&L) has been tasked to define the management information system needed to account for O&S costs by weapon system type. The Services have presented their proposed management information systems for ASD(I&L) review. Refinements in response to ASD(I&L) review are now in progress.

ASD (Comptroller) has been tasked to modify the DoD accounting systems as necessary to accommodate the information system defined by ASD(I&L).

OSD and the Services are working to improve cost comparability among the Services.

The Air Force demonstrated a prototype O&S cost management information system for aircraft during FY 1977 and is now evaluating its effectiveness prior to scheduling its expansion to other types of weapon systems. The Army and Navy are working on similar projects, and the Navy has also developed plans for an O&S cost management Information System for ships.

UNCLASSIFIED

ODR&E/OAD(p)

29 NOVEMBER 1976
LIFE CYCLE COST (LCC) REDUCTION

1. Issue: To define and reduce the total cost of acquiring, operating, maintaining and supporting defense systems, while at the same time maintaining force modernization, readiness and operational effectiveness.

2. Background: LCC reduction is a major objective of the DoD. There is also considerable Congressional interest in this subject. Present appropriation accounting makes it relatively easy to identify development, procurement and military construction costs of specific weapon systems. However, operating and support (O&S) cost appropriations are related to type of organization and function, rather than to type of weapon system.

3. DoD Position: We can estimate system acquisition costs fairly well, and we are improving that capability. We can and are holding acquisition programs to predetermined unit cost thresholds as a necessary but not sufficient part of LCC reduction. Additional steps are necessary to define and reduce the O&S cost of current and future weapon systems. Those steps are now underway.

4. Current Status (more detail in attached backup papers):

   Design to Cost - DoD Directive 5000.28, May 1975, directed the Military Departments to design systems to predetermined unit production costs, and to trade off performance, schedule and quantity as necessary to meet cost goals. Most major systems not yet in production either have established DTC goals or have made cost an "equal partner" with "cost drivers" in early design studies. DTC is an issue at DSARC reviews and corrective action is directed for breach of DTC thresholds.

   Visibility and Management of Operating and Support Costs - A DepSecDef memorandum dated 16 October 1975 directed ASD(I&L) to define the management information system needed to account for the O&S costs of current systems by system type. ASD (Comptroller) was directed to modify DoD accounting systems as necessary. The Military Departments have presented their proposals for such an information system and refinements are in progress.

   Reduction of Outyear Operating and Support Costs - A DepSecDef memorandum dated 28 February 1976 directed the Military Departments to establish O&S cost goals for each major system development program and to propose methods for an annual assessment of the net impact of all DSARC decisions on the O&S portion of their outyear budgets. The overall objective is a net annual reduction in that fraction of the DoD budget allocated to O&S costs.

   Reliability and Maintainability - Reliability and maintainability (R&M) are system parameters that link system design characteristics to O&S cost, readiness and operational effectiveness. Quantitative R&M requirements are now included in almost all DCPs; however, DoD policy on R&M needs to be clarified and extended to subsystems and less-than-major systems, in order to facilitate LCC reduction. DDR&E and ASD(I&L) are preparing a DoD Directive on this subject and supervising the revision of appropriate Military Standards.
UNCLASSIFIED

DESIGN TO COST

1. Issue: To specify and constrain the cost of each new system so DoD can afford to buy the quantities of systems it needs to meet national security objectives within current and foreseen budget constraints.

2. Background: Design to Cost (DTC) is a management policy similar to cost control techniques used in the commercial sector. DTC established unit cost as a parameter equal in importance with system performance, program schedule and other factors that can drive program cost, such as produceability, logistic support concept, data requirements, safety/ survivability, etc. It requires planners to set cost goals the DoD can afford to pay, and to trade off system design parameters against those goals. It further requires that cost be emphasized in trade-off decisions throughout the acquisition process, and that cost estimates be verified as within pre-set goals prior to award of the production contract.

3. DoD Position: Design to Cost is necessary to counter the escalating costs of defense systems. We plan to continue applying it to new development programs (both systems and subsystems).

4. Current Status: Design to Cost policy was formalized in DoD Directive 5000.28, issued in May 1975. Each Program Manager receives comprehensive instruction on Design to Cost policy and implementation experience as he goes through the Defense Systems Management College. Design to Cost objectives have been routinely established on all recent major development programs. Examples include the A-10, F-16 and Advanced Medium STOL aircraft, the F-18, Patrol Frigate, Submarine Launched Cruise Missile, UTTAS helicopter, Advanced Attack Helicopter, and XM-1 tank. Such objectives are being defined for more recent programs on a routine basis. While initial emphasis was on designing to a unit production cost, primarily because DoD’s ability to estimate and measure unit cost is better than its ability to estimate and measure Life Cycle Cost, DoD is now increasing emphasis on making design tradeoffs to control life cycle cost drivers.
SPECIFICATIONS AND STANDARDS

1. Problem: With increasing costs of defense systems, equipment and material, there were concerns that military specifications were the "cost drivers".

2. Issue: Military specifications and standards have occasionally contained unrealistic, obsolete or marginal requirements which resulted in excessive costs.

3. DoD Position: DoD is attacking the problem on three fronts:

   a) ASD(I&L) and DDR&E co-sponsor the Defense Material Specifications and Standards Board to review on a continuing basis the total specifications and standardization program management to recommend necessary changes in policy to the SecDef.

   b) At the request of DepSecDef, the Services have established RFP (Request for Proposal) Review Boards to review and "scrub" RFPs, prior to their formal release to bidders, of any excessive requirements and unwarranted cost-driving requirements, including specification requirements.

   c) ASD(I&L) and DDR&E jointly established a Defense Science Board Task Force to recommend appropriate specifications and standards policy.

4. Status:

   A. DMSSB:

   1) Now have five Technical Panels (i.e., Materials, Electronics, Metricalion, Clothing and Textile, Audio Visual). The Metricalion Panel, for example, prepared an interim policy on the use of the metric system of measurement in the DoD which was signed by DepSecDef.

   2) A task group revised the DoD Standardization Manual covering specification preparation, coordination and management.

DDR&E
30 Nov 76
B. **RFP Review Boards:**

All three Services have established these review boards and are actually scrubbing new major system RFPs. On several procurements, draft RFPs were submitted to industry prior to formal release to bidders soliciting comments on the identification of cost-driving elements and suggestions on how to meet the intent of the need at lower cost.

C. **Defense Science Board Task Force:**

Found that while needing continual attention for improvement, specifications and standards were adequate and not the fundamental problem. The problem was really the over-application (or blanket application) of these documents, which in many cases resulted in unwarranted costs. Among the Task Force recommendations are: 1) "tailoring" or selective application of the specification requirements to each program, 2) establish an environment to provide incentives or contractors/bidders for proposing tailored specifications and for recommending cost effective waivers to reduce costs, and c) education of Program Managers on specification applications to avoid excessive costs. The Services are currently initiating actions to implement these recommendations.
UNCLASSIFIED

RELIABILITY AND MAINTAINABILITY

1. **Issue:** To reduce the operating and support cost of defense systems while maintaining or increasing their readiness and operational effectiveness.

2. **Background:** Reliability and Maintainability (R&M) are measurable performance parameters that link system design characteristics to readiness, effectiveness, operating and support cost. Improved R&M simultaneously increases readiness and percentage of successful missions, while decreasing maintenance, supply and manpower requirements. In the past, field reliability has often been only a fraction of that "demonstrated" by the contractor in REL DEMO done to a MIL STD. This occurred because REL DEMO test criteria did not realistically approximate actual field conditions and definitions of a "failure" were not relevant to actual field experience. OSD has major initiatives underway to improve this situation.

3. **DoD Position:** Increased emphasis must be placed on improving the R&M of systems during RDT&E, rather than trying to fix systems already in production.

4. **Current Status:** Quantitative R&M thresholds are now included in virtually all DCPs and attainment of these thresholds has become an issue at DSARC reviews. The Deputy Director (Test and Evaluation) has placed a high priority on R&M in his reviews of test programs and test results, as reflected in his reports to the Deputy Secretary of Defense and the DSARC Chairman at all critical milestone decisions.

ODOR&E and OASD(I&L) are preparing a DoD Directive on R&M to ensure these parameters are addressed as an integral part of the acquisition process for both major and less-than-major system and subsystem programs.

The Military Departments are revising Military Standards pertaining to reliability, especially the reliability of electronics equipment. These revisions will translate DoD policy to the Defense industries. They include increased realism of tests conducted in laboratory test chambers. The cost of more realistic test facilities is to be paid for by shorter total test time and greater correlation of laboratory and field reliability values.

The Services have recently included in their budgets funds to improve readiness and reduce operating costs for equipment in the field. This is accomplished primarily through the upgrading of equipment reliability and maintainability identified by organizations specifically charged with this responsibility such as the Air Force Productivity, Reliability, Availability and Maintainability (PRAM) Program Office.

Government and industrial technology base activities are exploring the feasibility of using highly reliable electronic modules as basic building blocks for widespread application to electronics equipment. High design reliability and tight quality control are to be paid for by savings achieved through volume production and standardization.

Contractual approaches are being developed which will incentivize contractors to design equipment for high reliability and low repair costs. Approaches successfully used include contract award fees and reliability warranties.
SOVIET TECHNOLOGICAL DOCTRINE AND PRACTICE

1. Subject: The relationships between Soviet science and technology doctrine and practice and their military technological status.

2. Background: Soviet doctrine was enunciated by Lenin—"One must either master the highest technology or be crushed", and has been continually reaffirmed—"The development of Soviet science has special significance today when the scientific-technological revolution has become the most important area in the competition of the two opposed world systems" (Communist Party Central Committee Resolution, December 1973). Soviet policy is set by the Politburo, and is specifically oriented toward establishing credible military scientific-technical superiority over the U.S. R&D management is highly centralized; the Politburo's executive agent is the Council of Ministers, 75 percent of whom have technical backgrounds. The USSR has deliberately emphasized the greatest possible rate of advance in military technology at the expense of improvements in the civilian sector. Soviet policy is to exploit innovations achieved in civil R&D for military purposes, but because of the weakness of Soviet civil R&D, we have not seen any instances in which it has contributed significantly to their military technology. There is no Soviet counterpart to the cross-fertilization process in U.S. industry and commerce which advances military and civilian technology together in many areas that are militarily important to the U.S. Within the military sector, past Soviet practice emphasized continuity of effort and incremental improvements. Today there are many indications of willingness to take the risks of applying and exploiting advanced technology.

3. DoD Position: Soviet doctrinal emphasis on science and technology has led to a commitment of resources for military R&D which must be regarded as a serious threat to the military balance between the U.S. and USSR. The U.S. can meet this challenge only through a sustained and vigorous program of RDT&E to advance and exploit its strong technologies. Such a program is feasible at affordable cost, because of the inherent weakness in the Soviet system of separating military and civil R&D. The rate of advance of Soviet military technology—overall—will be inhibited as long as their civilian sector is excluded from supporting such advances, although with special emphasis they have been able to surpass the U.S. in some fields of technology. The U.S. can retain the technological initiative and preserve the military balance if it has the will to do so.

ODDR&E
2 December 1976
4. **Current Status:** Soviet military R&D increasingly is producing a variety of quality military equipments. Also, there are strong indications, in the form of a number of Soviet military R&D activities and new systems being deployed (e.g., air cushion vehicles, radar satellites), that the Soviets have broken away from their long-standing policy of technological conservatism. Several of the Soviet military R&D activities are not well understood, but are a matter of concern because they appear to be related to key missions of U.S. forces (e.g., new approaches to ballistic missile defense and anti-submarine warfare). Avoidance of technological surprise requires a coherent R&D effort to generate new technological options in mission areas where U.S. vulnerability may be uncertain and where the risk of surprise is great.
COMETITION IN DEFENSE PROCUREMENT

1. Issue: To utilize competition to the maximum extent feasible during the acquisition of defense systems and equipment.

2. Background: Competition between system concepts, present and proposed systems, contractors, subcontractors, and even between the Military Departments is the paramount motivating factor during both development and production of defense hardware. Winning the development and/or production contract is a far greater incentive than the profit rate or any "incentive clause" after competition is reduced to a sole source.

3. DoD Position: Competition is to be used wherever economically feasible throughout the acquisition cycle, to include competitive development, production and alternate sourcing.

4. Current Status: Most of our recent major programs include a competitive prototype phase during advanced development, with comparison of test results ("fly-off", "shoot-off") as a key factor in the decision to advance the program into full-scale engineering development. Examples include the A-X prototype competition which resulted in selection of the A-10 Close Support Aircraft, the Air Combat Fighter (F-15), Advanced Attack Helicopter, XM-1 tank, and Submarine-Launched Cruise Missile.

On high volume production programs, second source competitions are also held. Examples include the Army's TOW and Shillelagh antitank missiles, the Sparrow and Sidewinder air-to-air missiles, and the MK-48 torpedo.

When competition is not economically feasible at the weapon system level, subsystem and component competition is often implemented.
EXPEDITIOUS JOT&E OF IIR MAVERICK

1. ISSUE: As a result of DSARC II of IIR MAVERICK in September 1976, operational uncertainties were surfaced which affected the potential operational utility of the system.

2. BACKGROUND: Even though a comprehensive advanced development test program had been successfully accomplished by the developing agency, there remained some doubts about the operational utility of IIR MAVERICK in particular combat scenarios. To resolve these uncertainties, DepSecDef directed that a Joint Operational Test and Evaluation be initiated and conducted in a compressed timeframe. Test planning is in progress with the USAF as the executive Service. A partial report will be provided in March 1977 and a final report by August 1, 1977. An independent contractor has been chosen to assist in test planning, monitor test conduct and provide an independent analysis at the completion of the joint tests.

3. RECOMMENDED POSITION: DD(T&E) support and provide advice and direction as appropriate, to the Joint Test Director.
Enclosure 2

Papers to be Partially Denied on Exemption 1 - (Classified)

Notes:
1. Some portions of these also qualify for Exemption 5 and such papers are also listed on Enclosure 3 for those portions.
2. Some of these papers are unintelligible due to deletions as indicated.

Chemical Warfare Readiness Improvement (also on Enclosure 3)

M-X

SLBM/TRIDENT II (unintelligible w/deletions)

Briefing Paper (also on Enclosure 3)

Special Nuclear Materials (unintelligible w/deletions)

Space Defense (unintelligible w/deletions)

High Energy Lasers (unintelligible w/deletions)

NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 3)

NET Technical Assessment—U.S. vs. USSR RDT&E

Chair Heritage (also on Enclosure 3)

Cannon Launched Guided Projectile Copperhead (CLGP) (also on Enclosure 3)

Impact of Procurement Changes on the P-18 (also on Enclosure 3) (unintelligible w/deletions)

Air to Air Missile Inventory (also on Enclosure 3)

Conventional Airfield Attack Missile (also on Enclosure 3)

General Support Rocket System (GSRS) (also on Enclosure 3)

Infrared Imaging Seeker (also on Enclosure 3)
CHEMICAL WARFARE READINESS IMPROVEMENT

1. (U) Subject of Issue: DoD efforts to improve chemical warfare (CW) posture, both protective and retaliatory.

2. Background:

   - USSR poses serious threat in CW.
   - US has ratified Geneva Protocol with reservation which essentially bans first use of CW.

3. (U) DoD Position: Supports efforts to modernize chemical warfare capability and to improve protective posture to allow continuing operations in a CW environment.

4. Current Status:

   Defensive Programs:

   - FY 1977 budget contained $37.4M for defensive RDT&E, FY 1978 budget contains $37.4M for defensive RDT&E.
   - FY 1977 Army budget contained $95.8M for procurement, O&M, and war reserve funds; FY 1978 budget contains $95.8M for improvement of defensive and protective posture.
   - FY 1977 Air Force budget contained $17.2M for protective items; FY 1978 contains $17.2M for protective items.
   - Training is being improved in both Army and Air Force, about 7,000 personnel will be added to training and disaster preparedness teams by FY 1978.

OAD(E&LS)
30 November 1973
Retaliatory Programs:

- Binary chemical munition RDT&E is continuing, programmed by FY 1978.

- No production decision on binary munitions has been made, nor has any modernization program been undertaken pending further review of national policy in this area. Various studies are in progress to better develop the DoD position.

*Conference of the Committee on Disarmament (UN)*
Issue: What should be the M-X development pace?

1. Subject

The M-X is envisioned as a large, highly accurate, MIRVed missile (approximately 170,000 lbs) capable of being moved from aimpoint to aimpoint in a manner which will conceal its location such that all aimpoints, whether they be visible above-ground shelters or invisible subterranean trenches, are credible to the offense. If attacking weapons are added by the offense, additional aimpoints can be proliferated at relatively low cost. The M-X thus achieves a very high prelaunch survivability. It will also retain the rapid response characteristics and positive command and control features inherent in a land based ICBM.

2. Background

Four new-generation Soviet ICBMs and payload variants have been developed since the Vladivostok Accord. This evolving Soviet ICBM force with its improvements in accuracy, throwweight, targeting flexibility, and prelaunch survivability is a formidable threat to our land based missile force, as well as our cities. Additionally, vigorous Soviet missile R&D effort beyond the current deployment activities indicates a Soviet trend towards improvement of their counterforce capability and a broadening by its potential base for rapid quantity and quality improvements. Survivability of U. S. land based ICBMs in the 1980s, as well as a partial redress of the growing throwweight imbalance, can be achieved by making the ICBM transportable and hard to an optimal degree. By providing credible aimpoints which are cheaper than the weapons required to destroy them, an arms race can be avoided.

3. DoD Position

The DoD believes in the TRIAD as an absolute necessity for strategic deterrence because the diversity of three entirely different systems will preclude a potential disaster by one technology breakthrough. ICBMs offer a unique capability not present in the other two legs of the TRIAD, namely, capability across the entire target spectrum; a time urgent, hard target kill capability; facility for positive command and control; and an excellent inherent capacity for redressing throwweight imbalances. As the ICBM is vital to the TRIAD, its survivability should therefore be insured.
4. **Current Status**

M-X technology has proceeded in the advanced development stage for several years, particularly in the areas of guidance and propulsion.

Basing mode studies have been accomplished, indicating that the shelter and trench concepts as the most promising.

5. **Funding (Millions)**

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Originator: DUR&E
Date: 30 November 1976
SLBM/TRIDENT II

Issue: Why do we need TRIDENT II missile for a new SLBM?

1. Subject |

2. Background |
In our strategic TRIAD the SLBM force at sea is the least
targetable by opposing strategic systems.

TRIDENT II represents another
timely step in the effort of expanding the "haystack".

3. DoD Position |
By virtue of the relative invulnerability and increased capacity
of the TRIDENT submarine, an orderly development of the TRIDENT II
to fully utilize the new submarine capability is considered highly
desirable.

4. Current Status |

5. Funding (Millions)
FY 77 & Prior  78  79  80  81  82

Originator: DDRSE
Date: 30 November 1979.
BRIEFING PAPER

Purpose: To describe weapons systems under development which might be:

- Constructed as having a first strike capability
- Subjects of concern in arms control negotiations because of:
  - Possible verification problems.
  - Possible threats to Soviet strategic war-making capabilities.

1. Possible First Strike Weapons

The only conceivable reason for our attempting a first strike would be to disarm the Soviets, i.e., to deliver a surprise initial attack of such magnitude as to reduce to a relatively negligible level the Soviet capacity for retaliation. Otherwise, we invite their retaliation. They have an assured second strike capability -- achieved through a TRIAD similar to our own -- which we cannot obliterate by any present or proposed capability, or even by capabilities which are still in the realm of speculation. At least twice in the last thirty years the Soviets did not have an assured retaliatory capability; they were engaged in provoking us; and yet, it was not in our nature to attempt even limited military action against them.

The ability to execute a disarming first strike requires three essentials:

- Accurate location of all Soviet strategic weapons.
- Sufficient weapons to attack effectively all Soviet strategic weapons.
- Surprise.

We do not possess either of the first two military capabilities and our open society forecloses the third essential. Still, there are some who believe that the development of certain weapons systems poses a potential first strike capability. In this context, a hard target kill (HTK) capability is most often cited as a first strike capability. An HTK capability would be necessary but not sufficient, without satisfying the above criteria, for a first strike. U.S. HTK capabilities and goals derive from a desire for effectiveness and efficiency in a retaliatory role, and -- for those weapons targeted against his strategic nuclear forces -- to destroy his residual or reserve force to preclude coercion or further war-making capacity after the onset of hostilities.
Not only do we not seek a first strike capability, we seek to reduce incentives for an opponent to strike first in a crisis situation by providing our forces with such characteristics that an aggressor would not significantly change the outcome by striking first in a crisis. This is the essence of strategic stability.

Those systems most frequently criticized as having a first strike capability are:

a. M-X.

which will be deceptively based among a large number of hardened aim points. It will satisfy requirements for: (1) multiple aim point basing to redress the increasing vulnerability of silo based ICBM's; (2) greater payload to somewhat offset the existing Soviet throw-weight advantage in new ICBM's and SLBM's; and, (3) the capability to attack effectively an expanded and harder set of targets.

Through M-X development we seek the ability to maintain a credible second strike which is in fact that which deters a Soviet first strike. However, the ultimate foundation of the credible second strike is in numbers of deployed weapons and not in the weapon system development. They are separable considerations.

M-X multiple aim point basing is criticized by some on the grounds that it is difficult to verify numbers of missiles. We note that while this may be true in the general case, deployment constraints can be devised which permit high confidence counting even without on-site inspection, and that on-site counting is quite reliable, in any event. Banning mobile missiles is tantamount to giving up on ICBM's, since it is only a matter of time before the survivability of U.S. silo-based ICBM's will be unacceptably low. Further, mobile ICBM's, because of their high survivability, do not invite a first strike (there is no premium for striking first) and hence represent a stabilizing influence.

b. Improved Yield and Accuracy for MINUTEMAN.

MINUTEMAN III is being improved, These are interim improvements to redress throw-weight asymmetries and maintain
essential equivalence pending the availability of M-X. Numbers of MINUTEMAN III are inadequate, even with improved accuracy and higher yield, to represent a first strike threat.

c. MaRV (Maneuvering Reentry Vehicle).

MaRV’s are potentially applicable to any ballistic missile. They have two applications. One is for evading defensive missiles, the other is for improving overall missile system accuracy.

As with other weapons systems or components, this development does not threaten any adversary. Further, deployed quantities can satisfy, potentially only one of the three essential criteria for a first strike.

d. Bombers and Cruise Missiles.

These represent no conceivable first strike potential because of the long flight times involved.

2. Subjects of Concern - Verification

a. M-X: Discussed above under first strike.

b. Cruise Missiles: Two cruise missiles are currently in advanced development: the air launched cruise missile (ALCM) and the TOMAHAWK sea launched cruise missile. The ALCM, deployed on B-52s, could significantly enhance bomber force effectiveness by diluting Soviet air defenses, supplementing penetration range, and providing increased overall targeting flexibility. There are two versions of the TOMAHAWK. The conventionally armed anti-ship TOMAHAWK will provide the Navy a much needed capability to insure that our ships and submarines will not be out-ranged by potential adversaries. The nuclear armed Land Attack TOMAHAWK could be deployed on submarines, surface ships, aircraft, and mobile land launchers for tactical or strategic attack.

Both ALCM and TOMAHAWK are highly accurate, flexible, inexpensive weapons. They are small, aerodynamic vehicles that fly at high subsonic speeds at very low altitude making them very difficult to detect and destroy. They use common TERCOM terrain matching guidance, system turbine engine, and nuclear warhead.
It is expected that a decision will be made in the next few months on whether to enter engineering development with either ALCM or TOMAHAWK or both.

If cruise missiles are covered in future SAL agreements, there could be two aspects of compliance verification to be addressed. The first aspect could be verification of the total number of cruise missiles deployed or in storage and the second could involve limits on range of the missiles.

There is no known adequate technical basis for verifiably constraining cruise missile range. For example, some current Soviet missiles, with substantially less range than the potential U.S. cruise missiles, are physically much larger than the U.S. cruise missiles would be. An overriding consideration bearing on the problem of limiting cruise missile range is the fact that the geographical distribution of Soviet targets requires a long range for U.S. cruise missiles whereas heavy coastal population and industrial concentration in the United States permits attack by short range Soviet cruise missiles. There is no realistic way to differentiate between tactical and strategic cruise missiles.

3. Subject of Concern - Threats to Soviet Strategic War-Making Capabilities


b. ABM: We have no deployed ABM capability. We have a program (∼$200M) in advanced component and systems technology. No weapons system is under development. ABM R&D has the following objectives which represent no threat to any Soviet strategic war-making capability:

- Maintain a capability to develop and deploy an ABM system should one be required for defense of ICBM forces, C3 systems, or other high value targets.
Maintain the U.S. lead in ABM technology through investigation of advanced components, technologies, and systems concepts that could yield a technological breakthrough.

c. Space Defense:
Issue: Does U.S. run short of special nuclear materials for its weapons?

1. Subject

The term special nuclear materials (SNM), consists of enriched uranium, plutonium, and tritium.

2. Background

- There are two alternatives which may be considered:
ERDA has "mothballed" capacity.

5. **DoD Position (U)**
   N/A

4. **Current Status**

5. **Funding (U)**
   N/A

Originator: DDR5E
Date: 30 November 1976
1. Subject

2. Background

3. DoD Position

4. Current Status

5. Funding (Millions)

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7. Subject of Interest

2. Background

- The program is essentially in the exploratory and early advanced development stage.
- We have made a concerted effort to focus on technology and avoid directing major portions of our efforts toward specific near term applications.
- All three Services and DARPA are involved and DDR&E has a stronger than usual coordination role.

3. DoD Position
PROBLEM: NATO has a need for an airborne early warning aircraft to provide the key element in establishing control of the air environment wherever NATO forces are engaged.

Tri-Major NATO Commanders requirement has been stated for a force of these aircraft. A decision on this matter will have to be made during the Feb-May 1977 timeframe.

II. BACKGROUND

Since 1973 the US has proposed that NATO accept the USAF E-3A AWACS (or a derivation thereof) as the candidate aircraft to satisfy the Tri-Major NATO Commanders ROC for a force of NATO Airborne Early Warning aircraft. Several different NATO committees, study groups, and steering committees have been formed to provide recommendations on aircraft type, configuration, force size, ground interface modifications with NADGE, Strida II, UKADGE, and 407L/412L.

Other NATO nations such as Norway and Netherlands have expressed strong support, but

The most recent expression of NATO on this matter was at the 6 December 1976 NATO Defense Planning Committee meeting. At that meeting the NATO Defense Ministers reaffirmed the importance of a NATO AEW force and agreed to a meeting of high level experts in early January 1977 to examine financial aspects to be followed shortly thereafter by a meeting of Defense Ministers to decide whether or not to proceed.

III. DoD POSITION:

IV. Status: DoD representatives are preparing for participation in the meeting of the NATO high level experts to be held in January 1977.
1. Subject of Interest: The relative capabilities of the U.S. and USSR for performing military RDT&E.

2. Background:

These analyses show the USSR outspending the U.S. in military RDT&E for at least the last six years.

More substantive comparisons take into account differences in RDT&E style (e.g., willingness to innovate), market base for technology advances, and relevance to system mission capability. A judgmental assessment has been made taking these factors into account, and indicates a comprehensive pattern of improvement in the quality of Soviet military RDT&E. Although U.S. technological quality generally continues to surpass that of the USSR, the combination of Soviet quantitative advantage and quality improvements is of serious concern to future U.S. national security.

3. DoD Position: The U.S. leads overall in military technology, and needs to retain the lead to maintain—at reasonable cost—a military balance with the USSR, so as to deter global conflict and deter or win limited wars. The U.S. has an inherent advantage, in that advances in several militarily important technologies are jointly supported by the military and commercial markets (e.g., aircraft gas turbines, semiconductor and integrated-circuit industries, and computers). There is no counterpart to this joint market support in the Soviet Union. Soviet RDT&E effort in the past has generally emphasized continuity of effort and incrementalism, but in recent years they have shown that they can pull ahead of the U.S. if there is no U.S. commercial base and DoD does not support technology advances (e.g., chemical warfare). Today, Soviet military RDT&E exhibits increasing willingness to invest in high-risk technologies with potentially great payoff in military applications. The U.S. can beat the Soviets without commercial support if DoD chooses to do so (e.g., air-to-air avionics and military space systems), despite the advantages to Soviet intelligence from the U.S. open society.

4. Current Status: The U.S. has shown the Soviets that superior technology can offset numerical advantages in materiel and personnel. Declared Soviet science/technology policy is to surpass the U.S., but they have signalled key deficiencies by aggressive attempts to transfer technology from the U.S.

ODDR&E
2 December 1976
there are gaps in our understanding of some Soviet military RDT&E activities, which appear to be related to vital mission areas of U.S. forces. Three steps need to be taken to avoid technological surprise: (1) Continue to monitor and assess Soviet RDT&E activities and their potential relationships to the military balance. (2) Maintain a vigorous R&D effort to generate technological options in areas where our vulnerability is uncertain and risk of surprise is great. (3) Maintain a persistent and coherent program of RDT&E for advancing and exploiting militarily important technology areas where U.S. is strong. In addition, the U.S. must develop new strengths for application in selected mission areas where Soviet efforts are creating an imbalance.
Budget Related Issue

CHAIR HERITAGE

Issue: (U) The Navy has been prevented by Congressional action from continuing the Chair Heritage Program at funding levels.

History: 

The Fiscal 1977 request for authorization contained an Exploratory Development and an Advanced Development project in support of Chair Heritage. The Advanced Development program, budgeted at $3.4M, was to initiate the development of an Advanced Test Accelerator (ATA). These funds were deleted by the Joint Committee on Armed Services pending recommendations from a review of the Chair Heritage program by the JASON Committee. *

(U) The JASON Committee completed its study and reported favorable regarding program continuation. The results of the JASON review and the proposed program were presented to the Congressional staffs and a request for approval to proceed was sent to the HASC. However, HASC concurrence has not been received. All FY 77 funds are deferred pending resolution of this issue.

Position: (U) HASC - Current position is not known. Impending meeting with HASC staff may clarify situation.

ODDR&E -

Impact: (U) Delaying this program for more than a year will break up the leading team in Lawrence Livermore Laboratory and delay the answers needed to establish the feasibility of the use of this machine as a viable weapons system.

*A DARPA Advisory Committee

OAD(E&PS)
1 Dec 76
Cannon Launched Guided Projectile Copperhead (CLGP)

1. Problem: The Army has been in Engineering Development since 1975 on a 155mm Cannon Launched Guided Projectile with terminal homing capability, and has the program on contract to Martin-Marietta. The Navy has also been doing similar in-house work on a 5" projectile for shipboard use and more recently has done work on a 6" guided projectile. DoD has continually stressed commonality of the Navy 5" and the Army 155mm rounds.

On the other hand, the House Armed Services Committee has continued to reduce Army funding for COPPERHEAD thus delaying the program, while directing that more commonality studies be conducted.

2. Background: Martin Marietta Aerospace and Texas Instruments Incorporated were selected in February 1972 for participation in Advanced Development. During this phase the major subsystems of the COPPERHEAD (CLGP) were gun-fired to determine survivability. The two contractors, with different design concepts, were authorized to enter into the Validation Phase of Advanced Development in September 1973.

DSARC II was held on 19 June 1975, resulting in authorization to enter Full Scale Engineering Development. Martin-Marietta was awarded an Engineering Development Contract on 25 July 1975. The contract modification for the restructured contract, necessitated by Congressional reduction in FY 76/77, was signed 25 Jun 76 and increased the program by $5M. A task force chaired by DDR&E with Army, Navy, and Marine Corps members, conducted a guided projectile commonality study during May thru Sep 76. This study was completed and forwarded to Congressional Armed Service Committees on 27 Sep 76. The task force recommended that both 5" and 155mm guided projectile development should be continued. In view of the above, the Army was authorized to initiate Productivity Engineering Planning (PFP) on 15 October 1976. The HASC subsequently held up PFP and approval to initiate it was given to the Army on 3 December 1976 with liability limited to $350,000 and efforts to stop at end of February 1977.

3. DoD Position:
IMPACT OF PROCUREMENT CHANGES ON THE FIS

1. Problem: The FIS program

2. Background:

3. DoD Position:

4. Current Status: The PBD's reflect these changes.
AIR TO AIR MISSILE INVENTORY

1. Problem: USN and USAF fighter aircraft are

2. Background: A number of factors have caused a shortage of air-to-air guided missiles. The War in Vietnam caused expenditures to be high both for combat and training, the increasing cost of new missiles results in reduced quantity buys, and the low missile kill probability translates into a requirement for more missiles to meet substantially the same threat. In addition, development programs for new missiles (AIM-7F and AIM-9L) both ran into problems which resulted in delays and further exacerbated the inventory problem.

3. DoD Position:

   For the immediate future, we must strive to develop a new generation of missiles which (a) are more affordable by virtue of lower cost of acquisition and ownership, (b) have a higher kill probability so that we need to procure them in fewer numbers, and (c) can be developed on schedule.

4. Current Status:

   These missiles will be joint (USN/USAF) developments.
1. Problem: Do we need a Conventional Airfield Attack Missile (CAAM)?

2. Background: The combination of the Warsaw Pact Air Force numbers disparity coupled with their opportunity to initiate an attack against NATO air bases continues to be a difficult problem. Our effort to counter the Red advantage has in the past included sheltering of our aircraft, deployment of ground and air defenses and providing a conventional strike second capability utilizing attack aircraft. The interdiction of Pact Main operating air bases (MOBs) is difficult because of the combination of defenses and weather.

3. DoD Position:

4. Current Status: The PIDs reflect the DoD position with initial funding established in FY78.
2. Background: The GSRS concept has been existent in its current form since 1973. Army Joint Working Group (JWG) was established in February 1974 to assess the need for a GSRS with a counterfire (counter-battery, air defense suppression) mission. The JWG conducted a preliminary technical and cost assessment of a multiple launch rocket system based on a threat provided by the USA Field Artillery School (FAS). In mid-1974, DA directed a study of the Artillery System (Task Force BATTLEKING) which considered two GSRS concepts.

The JWG prepared a Letter of Agreement (LOA) which was approved by DA in September 1975. A Special Study Group (SSG) was subsequently formed to conduct an in-depth investigation of GSRS concepts, and arrive at a recommended approach to fulfill the system need. The threat was the impetus behind the requirement, and was a major factor in determining the required physical and performance characteristics of the GSRS. Using a representative target list, a request for Proposal was released to industry in December 1975 to assist in determining the best technical approach (BTA). Five contractors were chosen to assist in development of system concepts and to propose in-depth technical and cost tradeoffs and program cost and schedule data. In addition, a survey of foreign rocket system technology was conducted for application. The SSG then proceeded with a Cost and Operational Effectiveness Analysis comparing the BTA to foreign, existing U.S. and parametric systems.
4. Status: The Army is preparing for a DSARG I on 11 January 1977, and if the program is approved, contractual effort will likely begin in March-April 1977.
Infrared Imaging Seeker
(For Air to Ground)

1. Problem: The Air Force has received DOD approval to enter Engineering Development with the MAVERICK missile with an Infrared Imaging Seeker (IIR). The Navy now agrees to utilize MAVERICK IIR, while the Army is not presently fully supporting development of an imaging seeker for HELLFIRE.

2. Background: Efforts have been on-going at the Army Missile Command since 1972 to develop an imaging seeker suitable for heliborne use on a small diameter missile. Contractors involved in this Exploratory Development have been Hughes and Texas Instruments. During the same timeframe the Air Force has more energetically funded an Advanced Development program with Hughes for a MAVERICK seeker. They are now ready for Engineering Development to commence in April 1977. The Navy, while earlier supporting BULLDOG and a non-imaging seeker, is now supporting MAVERICK imaging.

3. DoD Position:

4. Status: Air Force starts ED in April 1977 on MAVERICK IIR for AF/Navy use. The Army is working a very low level 6.2 effort in FY 77, while planning a nominal 6.3 start in FY 78 for a HELLFIRE imaging seeker. Joint operational tests are being conducted.
Enclosure 3

Papers to be Partially Denied on Exemption 5

Technology Base Funding Increase
Control of Size of In-House Technology Base Program
DOD Use of Animals in Research
Chemical Warfare-Biological Defense
Chemical Warfare Policy
Chemical Warfare Readiness Improvement (also on Enclosure 2)
Weather Modernization
Computer Software
Bombers
Briefing Paper (also on Enclosure 2)
Ballistic Missile Defense
High/Low MIX
XM1 Tank Program
FRG/UK/US Tank Gun Firing Trials
NATO Airborne Early Warning (AEW) Aircraft (also on Enclosure 2)
Test and Evaluation Efficiency
Major Range and Test Facility Base
TRIDENT I Flight Test Program at the Eastern Test Range (unintelligible w/deletions)
Independent Research and Development
Export of Technology
Standardization and Interoperability within NATO
Human Resources & Manpower R&D
Subject of Interest: The term Technology Base refers to the Defense Research (6.1) and Exploratory Development (6.2) categories of the RDT&E budget, and part of the Advanced Development (6.3) category.

Background: The Technology Base constitutes approximately 20% of the DoD RDT&E budget. It is the foundation for the RDT&E program and provides the technology options for new techniques, new systems and better manpower use leading toward improved military capability. The Technology Base contributes to the economic health of the nation through commercialization of R&D by-products. The Technology Base is performed in the in-house laboratories as well as through contractual efforts with universities, and industry.

The Technology Base effort decreased about 40% in terms of constant dollars beginning in FY 64. This trend was reversed through increased financial support to the Technology Base beginning in FY 76. This increase has been supported by DoD and the Armed Services Committees and the Appropriations Committees.

DoD Position: The Technology Base is our foundation for the future security of the nation. It has given us some notable firsts in military capabilities, including initiatives in laser systems, improved jet engines, improved aerodynamics, advanced simulators for undergraduate pilot training, improved materials, night vision devices, communications technology and reduced mortality for the combat injured.

Current Status: The PPGM specifies an increase in Research (6.1) of a minimum of 10% per year in constant dollars through FY 80 and, further, that Exploratory Development (6.2) shall not be decreased below the FY 78 budget request in constant dollars in FY 79-83. It goes on to specify that the percentage of 6.1 achieved in FY 80 to the total RDT&E budget and the percentage of 6.2 achieved in FY 78 to the total RDT&E budget will be maintained as the minimum guidance level in subsequent years.

This increase will continue the trend toward reinvigorating our Technology Base program and will serve as tangible evidence of a renewed commitment to technological superiority on the part of the DoD and Congress.

CDD(R&AT)
1 Dec 76
Budget Related Issue

CONTROL OF SIZE OF IN-HOUSE TECHNOLOGY BASE PROGRAM

Issue: We are restructuring the Technology Base program by decreasing the amount of work done in-house and increasing the amount done in industry and universities.

History: The DoD Technology Base has three major participants (the in-house laboratories, industry and universities), each performing a unique part of the overall program. Over the past ten years there has been a decrease of approximately 40% in the level of effort in the DoD Technology Base program. This decrease has been taken primarily in the university and industry programs while the in-house effort has remained essentially level. The in-house portion had increased from approximately 23% of the total Technology Base program in FY 68 to approximately 43% in FY 74. We are restoring the level of effort as well as the balance between participants by increasing the funding in the program, directing that the increase go primarily to the university and industry programs and by a manpower drawdown of approximately 10% in the in-house RDT&E program. Our goal is to reduce the in-house portion of the DoD Technology Base program to approximately 30%.

Position: In FY76 the Air Force program was approximately 43% in-house, the Navy 41%, the Army 60%, and, with DARPA and DNA essentially all contract, the overall DoD level is 38%. We are continuing to control the in-house program by establishing a maximum level of effort for the Army, Navy, and Air Force in FY 77.

ODD(R&AT)
30 Nov 76
Subject of Issue: Periodically, adverse public and Congressional interest to DoD using animals in research, especially beagles, occurs.

History: Annually in the Spring, several animal protective associations and Congressional members reopen a letter campaign which questions the need for, the proper care of, and the use of animals in research. A favorite tactic has been to associate this complaint with a DoD program that is also judged unpopular or inhumane by other groups, such as chemical warfare agent development, and to use this as a basis for getting restrictions on animal use placed into DoD budget and authorization legislation. The constraints, however, are written in a manner making them applicable to more than DoD and more than the unpopular program to which they are attached (i.e., all Federally supported research).

DoD Position: Testing using animals is essential for the conduct of DoD research in the medical and life sciences area. Substitutes for animals are used to the maximum possible.

We comply with all laws and guidelines regarding the proper use of animals. This has been published in DoD Instruction 3216.1, Policy on Animals in DoD R&D, Clinical Investigations and Instructional Programs. Without use of animals in testing, the R&D programs to establish standards for human exposure to toxic substances, combat trauma and blood substitute care, procedures and materials and new drugs and vaccines could not be qualified for human use.
CHEMICAL WARFARE-BIOLOGICAL DEFENSE

1. Subject of Issue: Chemical warfare and chemical/biological (CW/BD) defense programs.

2. Background

- Program Objectives: In support of current national policy, these programs are designed to maintain a deterrent to possible use of CW/BW against U.S. or Allied forces and to provide a retaliatory capability if deterrence fails. The emphasis of the program is to provide the necessary defensive equipment and procedures to warn of, withstand, and recover from an attack. The effort includes an assessment of the threat and the vulnerability of U.S. forces.

- The USSR has the world’s greatest capability to operate in a CW environment.

- The US retaliatory stockpile requires modernization to be credible; major improvements in the defensive posture are required.

- Strong Congressional opposition exists to the development of binary munitions (a new, safe packaging configuration where non-lethal components form the same toxic chemicals as the present stockpile when fired) as a means of modernization; good Congressional support exists for an improved defensive capability.

- RDT&E is generally adequate; however, procurement of defensive equipment and troop training needs improvement and emphasis.

3. DoD Position

- Supports effort to improve US forces capability to operate in a chemical/biological environment; encourages Allies to follow similar course.

- Supports limited effort to modernize retaliatory capability.

4. Current Status

- OSD guidance in PPGM and DPPG* emphasizes defensive programs, both in RDT&E and procurement, while maintaining through selected segments of general purpose forces the capability of limited retaliation.

*Planning Programming Guidance Memorandum
**Defense Policy and Planning Guidance

ODDR&E (E&LS) 29 November 1976
The Department of the Army has completed one study, "Chemical Warfare Policy, 1980-1990," prepared by the Strategic Studies Institute. A similar study is in progress by Stanford Research Institute, using the same threat analysis and terms of reference, funded jointly by the Army and the ASD(ISA). The JCS is developing, under contract with IDA, a system for estimating chemical munition requirements utilizing a two-sided wargame scenario based on an analysis of targets. The Army has a similar effort in progress at the Concepts Analysis Agency. The Director (P&E) has completed a contract study with SPC Corp. analyzing chemical warfare program issues. NSSM 192 which discusses current national policy alternatives is still outstanding.

Procurement of defensive equipment and training is being emphasized in both Departments of Army and Air Force; Department of Navy contract study in progress to define scope and specific needs.
Budget Related Issue

CHEMICAL WARFARE POLICY

1. **Subject of Issue:** Long-standing Chemical Warfare (CW) policy is: no-first use of CW, maintain a chemical warfare capability to deter the use of CW against the US or its Allies and to be able to retaliate in-kind should deterrence fail, and be able to protect the US forces against CW attacks.

2. **Background:** The above policy has been stated many times, most recently in 1969 when the US relinquished any biological warfare capability. In January 1975, the US ratified both the Geneva Protocol and the Biological Weapons Convention (BWC). The Geneva Protocol bans first use of CW only since all major powers retain the right to retaliate in-kind. The BWC binds all parties to continue negotiations on an agreement banning chemical weapons.

A number of studies by the Department of the Army, ASD(ISA), Director (P&E), the JCS, and the Navy are in various stages of completion. The Congress has requested the GAO to review the total CW policy and posture.

3. **DoD Position:** Supports extensive efforts to improved protective posture through R&D and procurement and encourages Allies to follow similar course; supports limited efforts to maintain a retaliatory capability.

4. **Current Status:**

OAD(E&LS)
29 November 1976
WEATHER MODIFICATION

1. Issues:
   
a. Advertant Modification. Senator Pell opposes DoD involvement in weather modification, and has been instrumental in involving the U.S. in a treaty to prohibit military weather modification.
   
b. Inadvertant Modification.

2. Background:
   
   There is public concern, and in some cases fear, that man's weather modification activities may cause unacceptable damage and human suffering.

   DoD has been criticized for its precipitation enhancement operations over Vietnam. Senator Pell has pressed to restrain DoD from all research or operations in weather modification.

   The U.S. is negotiating a convention, "The Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques."

   The Congress has asked the Executive Agencies to conduct research into stratospheric pollution. NASA and NOAA are tasked to conduct a research and monitoring program. DoD operates majority of facilities that can sample in stratosphere, but such routine sampling beyond DoD mission.

3. DoD Position:
   
a. DoD presently is not engaged in any classified research or operations in weather modification. All DoD activities are reported to and published by the National Oceanic and Atmospheric Administration.
COMPUTER SOFTWARE

1. Subject of Issue: DoD spends approximately $3 billion annually in software development and test in new weapon systems, three times the computer hardware costs. Basic technology is mostly missing to improve the efficiency and standardization of software utilization. Congress has repeatedly cut the software technology budgets, and the Services have been reluctant to properly fund the programs.

2. Background: This problem is now receiving a concerted OSD-wide effort, including ODDR&E, OASD(C), OASD(I&L), and DARPA. Appropriate committees have been formed, a management plan drafted, and a DoD Directive 5000.29 was issued on the Management of Computer Resources in Major Defense Systems establishing policy. Reviews and meetings have been held with key people in the Services and Congress to provide an understanding of our programs and to receive their support. A major effort in establishing a standard higher order language (HOL) has been initiated.

3. DoD Position:

4. Current Status: Work in this area is slowly gaining momentum. The HOL standardization is proceeding fairly well on schedule, but must be closely watched. Coordination among elements of OSD is quite effective. However, much work remains to initiate the appropriate technology work in each of the Services.

OAD(E&PS)
1 Dec 76
ISSUE: In the Missile Age, why do we need bombers?

1. Subject

Bombers remain the one leg of the TRIAD where the U.S. still retains significant numerical advantage over its Soviet counterpart. This advantage is in both hard and soft target kill capability. Bombers can be launched on warning and dispersed. The bomber is recallable after launch; it can be rerouted enroute; it can be used in different levels of conflict. The bomber can demonstrate U.S. resolve by adjustment of alert rate without actually entering into combat. Its long time to reach intercontinental targets precludes it as a first-strike force. The bomber force is thus a stabilizing force.

2. Background

Continued improvement of Soviet air defenses make the strategic bomber's job increasingly difficult. Since the 1950s, the B-52 has been the backbone of the bomber force. Improved avionics and addition of air-launched missiles (SAM) has permitted growth capability but the aircraft's basic technology is that of the 1950s. Large radar cross section, softness to blast effects and its bombing and navigation system limit the continued potential of the B-52.

The B-1 is scheduled to enter the inventory in the early 1980s. The B-1 will allow the continuance of the most flexible leg of our TRIAD, the bomber, to maintain superiority over the Soviets with its improved penetration capability, low radar cross section, superior avionics, and larger and more flexible weapon mix.

3. NoF Position

4. Current Status

Some B-52 avionics improvements are continuing where practical and necessary to maintain its effectiveness. The development of the B-1 is nearing completion. The great wealth of test data show that the B-1 is ready for production.

5. Funding (Millions)

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Originator: DDR&E
Date: 30 November 1976
1. Subject

The Ballistic Missile Defense (BMD) program is comprised of two complementary efforts -- The Advanced Technology program and the Systems Technology program.

2. Background

Our BMD efforts are directed at maintaining a technology lead over the Soviets and supporting U.S. strategic offensive forces and Intelligence Agencies by maintaining an in-depth understanding of BMD technology. These are sustained, broad-based efforts to investigate and develop new technologies and concepts and to provide a systems technology base for application to various types of future BMD systems. With the deactivation of the SAFEGUARD system we no longer have a deployed BMD system and with the reorientation of the Site Defense program we are not developing an operational system.

The principal focus of the Systems Technology effort through 1978 will be directed toward terminal defense issues. Modest efforts are also being initiated on a non-nuclear intercept capability that could complement a terminal system, and on a very low altitude concept applicable to the defense of a mobile ICBM force. These two new tasks will form the basis for the future efforts and the level of funding for them requires consideration.

The BMD efforts are the Army's only strategic programs.

3. DoD Position


4. Current Status

- Funding level is inadequate in FY 78 to properly support new tasks.
- The BMD programs are the responsibility of the Army.

5. Funding (millions)  

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HIGH/LOW MIX

1. Problem: Is the High/Low Mix a viable concept for modernizing our forces?

2. Background: The Warsaw PACT presently has a quantitative advantage in weapon systems over the US and are increasing the quality of new systems as they enter their inventory. At the same time, the US is faced with the problem of increasing weapon system costs. The High/Low Mix is a force structure planning concept which attempts to offset these problems by procuring a small fleet of high-performance systems ("High") to counter the superior threat, and a larger fleet of lower-performance systems ("Low") to counter the average threat. The concept has been implemented by either developing large numbers of "low" systems where we have a qualitative advantage, or to develop small numbers of expensive "high" systems for missions in which we have near parity of numbers. The latter approach has worked fairly well except that it forces a relatively fixed composition because the "low" systems are generally out of production.

In May 1974, the Secretary of Defense told the SASC that he would approve expansion of the Air Force tactical structure from 21 to 26 wings if the Air Force could develop and field large numbers of missionized versions of the YF-16 Lightweight Fighters such that the total cost of the 26 Wing force would not be significantly greater than the previous 21 Wing "high" force.

3. DoD Position:

4. Current Status: The High/Low Mix concept is included in mission area planning and Extended Planning Annexes which provide force structure estimates out to 15 years. Some examples of high/low mixes in which we are developing low systems are the F-15/F-16, F-14/F-18, A-10, and FFG-7 Patrol Frigate. High system mixes being developed are the UTTAS/Uh-1, XM-1/M-60, AAH/COBRA, and MICV/M-113.
1. ISSUE: XM1 Tank/Leopard 2(AV) Tank Comparative Evaluation.

2. BACKGROUND:

a. The US Army and the FRG's Federal Ministry of Defense entered into an agreement in December 1974 to make all reasonable efforts to achieve maximum standardization on the XM1 and Leopard 2 tanks. As part of this agreement, the US Army confirmed its intention to test the Leopard 2, as modified to meet US requirements, to the same ground rules and constraints established for the XM1 and include it in a comparative test and evaluation.

b. The competitive test of the US Chrysler and General Motors XM1 prototypes was conducted during the period February-April 1976. The comparative test of the FRG's Leopard 2 (American Version)(AV) was conducted during the period September-December 1976.

c. In July 1976 an Addendum to the 1974 agreement was approved which concerned the procedures to be followed in attempting to identify and amplify areas of potential standardization in the XM1 and Leopard 2 tank programs. Major areas to be considered were the main gun and ammunition, engine, track, transmission, and fire control.

d. Following a four-month delay in the XM1 program to permit the contractors to resubmit additional proposals based on the standardization addendum, Chrysler was awarded the full-scale engineering development contract on November 12, 1976.

e. Access to XM1 test results were closely controlled within the Army and OSD to protect the highly competitive nature of program. DD(T&E) evaluation of test results was performed by the assigned military staff assistant. DD(T&E) assessment of test results, released prior to selection of winning contractor, was written in a generic sense.

f. The US is scheduled to select by March 31, 1977, either the Chrysler proposal or the FRG's Leopard 2(AV) proposal for continued full-scale engineering development.

g. Charges of lack of OSD and Army objectivity during test and subsequent evaluation of Leopard 2(AV) have been raised in the press and by DCA Int'l representatives. These charges have been manifested in press articles to the effect that OSD has predetermined the US tank to be superior to the Leopard 2(AV); DCA International representatives have discussed their apprehensions concerning objective T&E analysis with various Departments of State and Defense officials.

3. RECOMMENDED POSITION:
1. ISSUE: Relative effectiveness of US 105mm M68 gun with improved ammunition, FRG 120mm smoothbore gun and developmental ammunition, and UK 120mm rifled gun with current and developmental ammunition.

2. BACKGROUND:

e. A FRG/UK/US joint evaluation of main armament systems for main battle tanks was conducted between November 1973 and August 1975. The overall objective of this Trilateral Tank Main Armament Evaluation was to seek a decision on a common solution for the main armament of the FRG Leopard 2, the US XM1, and the UK/FRG Future Main Battle Tank (FM31). The candidate systems studied in the evaluation were the FRG 120mm smoothbore system, the UK 110mm rifled bore system, and the US 105mm rifled bore system.

b. The Trilateral Group recommended that production of the XM1 be initiated using the improved 105mm system but consideration be given in the XM1 program to possible incorporation of a 155mm armament system at a later date; that the first lot of Leopard 2 be produced with the 120mm system but the Leopard 2's turret design optimized for a 120mm armament system; and that an optimal main armament system, giving consideration to both smooth and rifled bore designs but based initially on the FRG 120mm smoothbore system, be developed as expeditiously as possible for the Leopard 2 Lot 2, FM31, and possible product improvement of the XM1.

c. In January 1976, the Secretary of Defense approved the Army's recommendations to initiate production of the XM1 with the improved 105mm gun system and plans for a cooperative development program for an optimal tank main armament system for the long term future. The SecDef also requested the Army to assure that the production XM1 design could accommodate a 120mm gun with essentially no change in the tank design other than the turret.

d. A FRG/US July 1976 addendum to original 1974 (10mm) specified FRG and US would strive for maximum standardization in tank programs to include eventual use by both countries of 120mm gun. A January 23, 1977, decision date was established for selection of the 120mm gun system design. In July 1976, the XM1 tank program was delayed four months to permit US contractors an opportunity to present proposals based on the standardization agreement.

e. Congress (HASC) objected to delay in XM1 program and passed a resolution to effect that XM1 should be fielded with US 105mm M68 gun. Further, the resolution stated the gun was not to be replaced until threat dictates need for larger gun, and the 120mm gun proven, through tests, superior to the 105mm gun.

f. FRG/UK/US conducted additional tank firing trials, November-December 1976, to include UK 120mm rifled bore designs, to supplement 1975 Trilateral data and attempt to resolve FRG issues and relative merits of 120mm smooth and rifled bore.
Test and Evaluation Efficiency

1. Issue: Are DD(T&E) policies under DoD Directive 5000.3 resulting in undue program delays, excessive costs, or both, due to test requirements?

2. Background: In carrying out the directives which implement the efforts to correct the deficiencies highlighted by the Blue Ribbon Defense Panel, testing beyond that required under earlier practices is often included in the R&D phases of system acquisition programs. The testing itself, and the correction of deficiencies uncovered in testing are significant elements in the cost of the RDT&E phases of the program and its duration.

Thus, observations and corrective actions, which, under earlier procurement methods, would have taken place after field introduction, are specifically identified as part of the development and initial operational testing efforts, and made a part of the budgetary reckoning.

The present T&E procedures lead to the acquisition of systems which are more nearly ready for operational use, and less susceptible to the need for extensive backfit or "get well" programs to correct previously undetected deficiencies.

3. DSB Assessment: A task force of the Defense Science Board, under the Chairmanship of Dr. Eugene Fubini, was created in May 1976, and charged with assessing the effectiveness of current T&E policies and procedures. The final report of this task force will be available in February 1977.

4. Recommended Position:
MAJOR RANGES AND TEST FACILITY BASE

1. Components. The Major Range and Test Facility Base (MR&TB) is comprised of 26 DoD ranges and test facilities which are managed by the Military Departments and monitored for OSD by the DD(T&F).

2. Intended Mission. The MR&TB is a costly national asset (annual TOA about $1.7 billion including $752 million RDT&E) spanning the entire spectrum of physical and simulation environments critically needed for effective testing and training. Containing tropical, arctic, coastal and high desert land areas, the facilities also include associated airspace and water areas required for the wide variety of programs supported. The vast amount of instrumentation, facilities and personnel involved in this program constitutes a large investment that must be continuously upgraded and modified to meet new test program demands. Some of the facilities are extensively used by non-DoD organizations, e.g., NASA, DOT, FAA, non-Government.

3. Basis for FY 1978 Request. FY 1978 budgets were prepared by the military departments based on estimated future workload. An extensive OSD review, with OMB participation, insures that the budget reflects the minimum dollars and personnel needed to support user requirements.


5. Current Program Status. The facilities are funded to provide all mandatory operating, maintenance and improvement dollars. Improvement programs include efforts necessary to meet new requirements, increase efficiency or replace antiquated equipment. Assets are continuously reviewed for need and removed from inventory when no longer cost effective.
TRIDENT I FLIGHT TEST PROGRAM AT THE EASTERN TEST RANGE

1. ISSUE: Tests associated with the effect on the TRIDENT I (C-4) missile upon activation of the missile Flight Termination System (FTS) will be completed in March 1977.

2. BACKGROUND: In preparation for TRIDENT I (C-4) missile flight test initiation on the Eastern Test Range, the Navy conducted a static firing test of the first booster stage and activated the FTS of the TRIDENT I (C-4) missile in June 1976. When the FTS was activated, detonation resulted.

The DDR&E decision did not specify actions to be taken if the demonstration tests resulted in detonation.

3. RECOMMENDED POSITION:
1. Issue: To develop a means of satisfying the objectives of IR&D and D&B which can be supported by the Executive Branch, the Congress and the Industry.

2. Background: Industrial firms, particularly those in the higher technology product areas must engage in technical efforts whose objectives include developing and maintaining a competitive posture in chosen product areas by advancing the technology and exploring innovative concepts in these chosen product areas. Part of this effort may be funded by direct customer technology contracts specifically in the defense environment. The balance must be considered a necessary cost of doing business and these costs must either be expensed in the current accounting period or capitalized for recovery in later accounting periods. DoD has permitted defense contractors to expense such costs as overhead charges on defense contracts since 1959. The rationale and the groundrules for such allowance have been the subject of continuing review and analysis both within DoD and within the Executive Branch. Certain elements of Congress have repeatedly criticized both the rationale and the rationalization of the IR&D/D&B effort and in recent years has imposed constraints regarding relevancy of the effort via amendment to the appropriation acts (see Section 203 of the Defense Appropriation Act for FY 74, Public Law 93-441). A further constraint on total dollars to be allowed for recovery in DoD contracts has been threatened (Proxmire).

3. DoD Position: DoD continues that IR&D/D&B are normal costs of any business and therefore are allocable charges to a contractor's overhead subject to certain restrictions concerning relevancy and amount of dollars allowed. The ASER details the contractual groundrules for IR&D/D&B allowance while DoD instruction 5100.66 establishes the policy and procedures for technical evaluation of relevancy and technical quality.

4. Current Status: The subject of IR&D/D&B has not arisen in the Congress since the submission by DoD of the results of a study regarding funding of IR&D/D&B by line-item of the budget. This report forwarded to the McIntyre and Promiire Subcommittee in April 1976 resulted from Joint Subcommittee hearings in September 1975 called to discuss the results of a comprehensive GAO study of IR&D over the preceding two years. The concept of Line Item Budgeting and Contract Allocation of IR&D/D&B funds to major contractors was one of the recommendations in the GAO report.

The Office of Federal Procurement Policy is developing an Executive Branch policy on IR&D for release as an OMB Circular.

DD&E
2 Dec 1976

UNCLASSIFIED
EXPORT OF TECHNOLOGY

1. Issue: High technology transfer to the Bloc countries, either directly or via our Allies, is of deep concern to DoD. Past technology transfers and the expiration of the Export Administration Act during the last Congress resulted from strong differences of opinion on the value of present export controls. This was coupled with the criticism of DoD for inadequate allocation of resources to this problem. Arms Export Control Act of 1976 (Public Law 94-329) will require clear definition of "defense articles" and "defense services" that will be subject to the provision of the Act. Also to be considered is the erosion of our competitive economic base resulting from unrestricted exports of high technology.

2. History: The transfer of high U.S. technology to the Soviet Bloc is creating increased concern in the DoD and among certain segments of the Congress. During this past two years, various committees have been set up by the Congress, the President, Commerce, Defense, State and the GAO to highlight the various views.

The Defense Science Board completed a study in Feb 1976 recommending a streamlining of the export control list to emphasize control of technology rather than control of products as is now the case. DepSec Clements assigned DDR&E the responsibility to implement the recommendations and the AD (International Programs) has this effort underway. This is now a broad interagency effort. Primary focus is on the identification of critical strategic technologies and mechanisms of technology transfer. Some of the required improvements of the administration of export controls within DoD have also been identified pertaining to the allocation of additional resources to the export control problem.
3. **Impact:** The Congress failed to extend the Export Administration Act due to lack of time and many unresolved issues.

The accomplishment of these aims in timely manner as requested by Congress and Industry will demand high level DoD management attention and allocation of requisite resources.
STANDARDIZATION AND INTEROPERABILITY WITHIN NATO

1. **Problem:** NATO's combat capability, military efficiency and deterrence could be significantly improved through greater standardization and interoperability of weapon systems in the Alliance. Greater standardization should also result in appreciable long term efficiencies in development, production, logistics, training, and maintenance.

2. **Background:** The obstacles to achieving standardization of equipment in NATO are many. Most national procurement decisions are sufficiently large that considerations go beyond purely military aspects and cover such other vital national-level considerations as industrial production base, employment, technology base and balance of trade. However, we are finding ways to deal with these problems.

   Generally, the most satisfactory approach to contending with domestic problems associated with standardization is through licensed production of standard equipment in both North America and Europe—examples are the ROLAND II Short Range Air Defense System and the F-16 programs.

   Many of the benefits of standardization can be realized through ensuring interoperability of equipment—for example, being able to service aircraft on each other's airfields, being able to communicate with each other, and being able to use common fuels and ammunition.

3. **DoD Position:** The DoD strongly supports NATO standardization and interoperability efforts. We have strengthened the DoD Weapon System Acquisition process to ensure that adequate consideration is given to foreign solutions, that U.S. systems are designed to be interoperable with those of our NATO Allies to the greatest degree possible and practical. We seek methods by which our NATO Allies will be encouraged to agree to U.S. solutions (e.g., through co-production opportunities) when appropriate.

4. **Current Status:**

   /
HUMAN RESOURCES & MANPOWER R&D

1. **Issue:** The House Appropriations Committee reduced the FY 76 program request in this technical area by $20M. The Senate Appropriations Committee restored $10M.

2. **Background:** This technical area includes work in training; training devices and simulators; personnel, manpower, and contemporary issues (equal opportunity, race relations); and human factors in weapon systems development and operations. In reducing funding, the House Appropriations Committee questioned both the utility and priority of the R&D. The Senate restoration was to enable the highest priority training and simulation projects to be continued.

The FY 77 funding request for the five Program Elements reduced by Congress in FY 76 was held to the FY 76 budget request level, a substantial reduction from the growth planned for this area. The area of Human Resources R&D was separated into three categories of work: (1) the technologies for training, simulation, training equipment and human engineering, (2) a smaller effort in the personnel and manpower area, and (3) a separate effort in the social science contemporary issues area. The purpose was to clearly delineate these three sub-areas of work so that they can be independently structured and appraised.

This action was successful since no across the board reduction was made by Congress in FY 1977.

3. **DoD Position:**

   The technology area has been entitled to Training and Personnel Technology to emphasize program reorientation.

4. **Current Status:** Congress has requested and the GAO has conducted a major survey of the area. The GAO report is expected to be released in January 1977 to the House Appropriations Committee.

OAD(E&LS) 29
29 November 1976
1. **Issue:** Remotely Piloted Vehicles (RPV's).

2. **Background:** DoD has considered that RPV's offers significant capabilities for high risk missions in the area of battlefield surveillance. DARPA's 5-year initiating thrust in RPV's for military missions will conclude in FY 77. The three Services are each funding the types of RPV's pertinent to their individual needs, with a Tri-Service coordinating group and DDR&E guarding against redundancy and duplication. The Army (Aquila Program) is concentrating on a mini-RPV (under 200 lbs) for reconnaissance and artillery correction and designation with the objective to provide to TRADOC an interim RPV system for development of the ROC for the full militarized system. The Navy is also pursuing a mini-RPV (under 300 lbs) to provide an over-the-horizon targeting capability for Harpoon equipped ships. Since many of these ships are small and non-aviation rated, the RPV size is constrained to under 300 lbs for logistics reasons. The Air Force has a long operational history with mid (300 to 3000 lbs) RPV's such as the EGM-34C for photo-reconnaissance and electronic warfare jamming and deception. A large portion of their program is to increase the utility of these systems with engineering improvements. The Air Force expendable drone program, involving a mid-sized decoy and a mini-sized harassment weapon, was cut from $7M to $2M by Congress to keep these programs from going to full scale engineering development, (believed to be premature by Congress). The only maxi-RPV (over 3000 lbs) is the Air Force Compass Cope long-endurance, high-altitude, surveillance platform intended to carry all weather systems such as Sidelooking Airborne Radar (SLAR) to provide tactical battlefield surveillance. Congress withheld $3M of the $6M FY 77 appropriation for Compass Cope until the Air Force committed to a specific payload. In general, Congress has paid particular attention to the RPV programs.

3. **DoD Position:**

*Training and Doctrine Command

**Required Operational Capability

OAD(E&PS) 1 Dec 76
4. **Current Status**: Twenty Aquila airframes and two ground control stations will be delivered to TRADOC in the Spring of '77 for a six month evaluation leading to a ROC for the engineering development. A Navy RFQ** for its mini-RPV will be released this month and contractor selection will be made in the Spring of 1977. The Air Force study on the RPV control system will begin in late FY 77.

*Joint Tactical Integrated Data System

**Request for Quotation*
Budget Related Issue

ELECTRON DEVICES

Issue: The funding for development of electronic devices has decreased over the past ten years in terms of real dollars and as a percentage of investment in electronic systems. Since these devices are key to the performance, reliability, cost, size and weight of future systems, PDM guidance was established two years ago increasing the electron device budget.

History: The current PDM directs an increase in electron device funding of 10% per year with FY 1975 as the base. In addition, the Services were directed to establish device Advanced Development Programs. The Air Force, Navy programs are in accord with the guidance. The Army has decreased device funding and the House Armed Services Committee (HASC) refused to approve their proposed Advanced Development Program start in FY 77. A Navy Advanced Development Program with a similar sounding title was also cancelled by the HASC but the real device program survived.

Impact:

*Program Decision Memorandum

OAD(E&PS)
30 Nov 76
Budget Related Issue

REMOTELY PILOTED VEHICLES (RPVs)

Issue:
Problems have been encountered in schedule slippages and cost overruns. RPV's have drawn considerable Congressional attention.

History: The Air Force has a long operational history with mid-sized (300 to 3000 lb) RPV's for photo-reconnaissance and electronic warfare. They have not needed to develop small radars and infrared imagers for the 200 to 300 lb class of mini-RPV's the Army and Navy intend to use.

Position:
The Air Force under PE 63739F is formulating the concept of an RPV mission control system that is intended to be JTIDS* compatible.

*Request for Quotation
**Joint Tactical Integrated Data System

OAD(E&PS)
1 Dec 76
Budget Related Issue

IRRADIATED FOOD PROGRAM

Subject of Issue: Congress has charged the DoD to conduct the national RDT&E program for the use of ionizing radiation as a means of sterilizing meat products.

History: DoD initiated R&D to study this approach for preserving meat products over a decade ago. After an initial period, it was decided to terminate the work. The civil sector and other Federal agencies also terminated like efforts. However, Congress rejected the DoD proposal for cancellation and requested that it continue the work even though it had no requirements for the products of the work. In 1974 DoD had brought the technology to a state where four meat products (beef, ham, other pork products, chicken) were ready to undergo testing to demonstrate acceptability for human use, per FDA standards. Beef testing was started. In 1975 the Secretary of the Army accelerated the test program by adding the other meats in simultaneous efforts rather than the sequential tests earlier planned. Congress was advised of the acceleration of the program.

Budgetary Impact:

Funding for all Service food technology R&D is an Army responsibility since they serve as the DoD Executive Service for this effort.

DoD Position:

OAD(E&LS)

29 November 1976
Budget Related Issue

MANPOWER, PERSONNEL AND CONTEMPORARY ISSUES

1. Issue: R&DAT raised serious concerns with regard to both the level of R&D effort allocated to Manpower, Personnel and Contemporary Issues and

2. History: Concern over this technical area by the House Appropriations Committee staff resulted in a 25% reduction in the Human Resources program in FY 76. Continued concern by the Congress with regard to utility of R&D in this area is expected.

3. Current Position: The Services have been requested to brief ODD(R&DAT) on their proposed FY 78 Tech Base programs in this area. The objectives are an assessment of the utility of the R&D, whether the level of investment and the expected return justify an annual investment of over $20M, whether the planned program is correctly focused, and whether the program (or portions thereof) should more appropriately be funded from a non-RDT&E account.

4. Impact:

OAD(E&LS)
30 Nov 76
Budget Related Issue

FACILITY FOR PRODUCTION OF BINARY CHEMICAL WARFARE MUNITIONS

1. Issue: The Department of the Army has proposed a loading, assembly, and packaging (LAP) facility for the new binary artillery projectiles to be constructed at Pine Bluff Arsenal, Arkansas.

2. Background: This facility was included in the FY 1975 procurement and Military Construction Authorization (MCA) request in the amount of $5.5M. It was authorized by both houses of Congress but was deleted on a floor amendment during the appropriations process. It was included again in the FY 1976 budget request for $8.5M. After extensive hearings it was deleted pending further discussions at the UNGA Conference of the Committee on Disarmament (CCD). Because of this decision, no request was made in the FY 1977 budget in accordance with Congressional wishes to delay one year to allow further negotiations. No substantial progress in disarmament discussions has been evident during the one year delay.

3. DoD Position:

4. Current Status: The funding for this facility has been made the subject of an ASD(C) PBD issue and is being raised as a funding issue at OMB level.

OAD/E&LS
29 Nov 76
Budget Related Issue

SIMULATORS - FLIGHT AND NON-FLIGHT

1. Issue: The entire spectrum of training and simulation technology has been marked by DD(R&AT) as an area for concentrated growth. Programmed increases for this area of technology have begun.

2. History: OSD initiated an effort in FY 75 to increase the use of flight simulators to improve training, reduce costs and reduce use of fuel. Congress has in general supported the program. High level interest item due to high leverage in terms of cost reduction/performance effectiveness.

3. Current Position:

The FY 1978 budget request includes

4. Impact:

OAD(E&LS)
30 Nov 76
ARMY RDT&E DRAWDOWN

Issue: The Army has agreed to a manpower drawdown to reduce its in-house Technology Base work and to increase its program with universities and industry.

History: The Laboratory Utilization Study which was completed in 1975 concluded that the Army in-house program in several areas including materials and electronics was too large. An agreement was made with the Army to reduce its RDT&E in-house strength by 2900 authorizations using end strength FY74 as the basis and completing the drawdown by FY78. These reductions by fiscal year are as follows: FY75 - 905, FY76 - 829, FY77 - 733, and FY78 - 433. The Army has met its commitments as of FY76, however,...

We have encouraged the Army to take these reductions through hiring freezes, attrition, and transfer of the manpower to work and funding in other areas.

Position: ODD(R&AT) is insisting that the manpower drawdown be completed as scheduled.

ODD(R&AT)
30 Nov 76
NAVY BLOCK FUNDING

Issue: We are encouraging the Navy to provide most of their Technology Base funds directly to their laboratories in large "blocks" without distribution through the Systems Commands.

History: The Navy Technology Base funding to the Chief of Naval Material Laboratories is distributed to the laboratories in two ways. Some of the funds are given directly to the laboratory by the Chief of Naval Material for work which has been previously agreed upon. A major portion of the laboratories' Technology Base funds, however, are provided through the Systems Commands for work which is primarily supportive of the particular Systems Command.

We have encouraged the Navy to block fund most of the Technology Base funds directly to the laboratories once the laboratories technical program has been agreed upon by the laboratory, the Systems Command, and the Chief of Naval Material.

Position: The Navy has proposed to "block program" funding to the laboratories.

ODD(R&AT)
1 Dec 76
ELECTRONIC COUNTER COUNTER MEASURES (ECCM)

Issue:

History: The lessons learned in the Yom Kippur Israeli war indicated the need for a major thrust in ECCM. There are several aspects to a good ECCM posture.

Positions: DoD Directive C-4600.3, Electronic Counter Counter Measures Policy defines the tasks and responsible agencies with regard to threat definition and evaluation of impact upon system performance. The implementation of this policy is still being formulated. To create an ECCM awareness in the service laboratories, DDR&E has sponsored symposia on ECCM topics and has induced the Air Force to create Program Element 63750F-CCM Advanced Development. The Army and Navy technology base program element managers have been made aware of the need for responsive attention to this subject.

OAD(E&PS)
1 Dec 76
AIRCRAFT PROPULSION

Discussion: At the present time there is no continuing program of advanced development for small aircraft engines technology. Increasing interest in drones, aerial targets, and RPVs indicates a need for active support of this technology.

The Joint USAF/Navy Technology Demonstrator Engine (JUET) program meshes the Navy efforts in large aircraft engine technology work with the larger related programs of the Air Force, to the benefit of both.

Positions: DD(R&T).

Army and Navy.

OAD/ET
30 Nov 76
LIQUID PROPELLANT GUNS (LPG's)

Issue: The House Armed Services Committee (HASC) has deleted all Navy funding in FY 77 and beyond for LPG's and directed that the Defense Advanced Research Projects Agency (DARPA) should support any future efforts.

Discussion:

Work in the technology of LPG's has been supported sporadically since the mid-1950's. However, for a decade prior to about 1970, the level of effort was extremely low. In about 1970 the Navy, jointly with DARPA, decided to support a major effort to develop LPG's based on a bulk-loaded propellant charge design concept. The HASC in acting upon the FY 77 budget observed that LPG's had been supported for over 20 years with little apparent useful outcome and therefore deleted the Navy RDT&E funding.

Position:

OAD/ET
30 Nov 76
COMPOSITE MATERIALS

ISSUE: Should technology base support for R&D work on advanced composite materials be redistributed?

DISCUSSION: Current and planned R&D on these materials encompasses work with organic, carbon, or metal matrices reinforced by graphite, carbon, or boron fibers. Demonstrations of organic (epoxy) matrix composites in full scale aircraft components have been underway for several years and major structures are components of flying aircraft. The Air Force alone has spent more than $150M on this technology since 1961. Army and Navy also have spent large amounts. There is now widespread support and heavy investment by industry for work on these materials, and they are increasingly accepted for state-of-the-art design.

Carbon matrix and metal matrix composites potentially fill more specialized but very demanding roles in aircraft and missile design.

Positions: DD(R&D&T)
TRANSPORTATION AND DISPOSAL OF HAZARDOUS/TOXIC MATERIALS

1. Subject of Issue: Transportation and disposal of chemical warfare agents, missile fuels, some industrial type chemicals, ammunition, and similar items has become a public concern.

2. Background:

The Environmental Impact Statement process must be fully followed and become a part of the decision making process.

3. DoD Position: The NEPA and all applicable laws will be fully followed.

4. Current Status: Planning is proceeding in accordance with applicable laws to continue movements necessary in the interests of national security or to improve operations.

OAD(E&LS)
29 November 1976
CHEMICAL WARFARE AGREEMENTS

1. Subject of Issue: A part of US Chemical Warfare policy has been our willingness to negotiate an agreement to develop an effective, verifiable ban on CW.

2. Background: Article IX of the Biological Weapons Convention (BWC) (ratified by the U.S. in January 1975) binds all signatories to continue negotiations on an agreement banning chemical weapons. The U.S. has negotiated in this area, particularly through the UNGA Conference of the Committee on Disarmament (CCD) for at least ten years. It has been the subject of a number of other Conferences. The USSR submitted a convention to the UN in 1972 almost identical to the BWC which contains no verification procedures. The major obstacle to date in all agreements is the definition of the chemical agents to be banned and reaching agreement on practical and effective inspection and verification procedures and other safeguards.

3. DoD Position:

4. Current Status:

OAD(E&LS)
29 November 1976
NANSEN DRIFT

1. Issue: Should the United States freeze a decommissioned icebreaker into the Arctic Ocean North of Soviet Siberia such that prevailing ocean currents will carry it across the Pole to exit near Greenland in about 2 years? Project name: NANSEN DRIFT.

2. Background: The Navy has been a strong proponent for the NANSEN DRIFT project, pointing out the opportunity to conduct new research in the Soviet Arctic and to support political objectives of the United States. They estimate the project will cost $15 million over a three year period.

NSF has been somewhat reluctant to undertake the project, probably as a ploy to force heavier funding support from DoD and other agencies. The project is supported strongly by the National Research Council, the Department of State, and in principle by DoD. The Norwegians support the project.

3. DoD Position: None. DoD needs to establish its position on NANSEN DRIFT. Part of this decision is the level of financial support to provide to the project.

OAD(E&LS)
26 November 1976
NAVAL ARCTIC RESEARCH LABORATORY (NARL)

1. Issue: What should be the future status of NARL?

2. Background: The Naval Arctic Research Laboratory (NARL), Ft. Barrow, Alaska, is the only continuously operated U.S. research laboratory on the Arctic Ocean providing complete logistics support and coordination of mission research for the Navy and other government agencies. It is operated by a civilian contractor and is managed by the Office of Naval Research (ONR). NARL is a complete self-sustaining base facility on over 5,000 acres of land consisting of over 170 buildings, an airstrip, and modern laboratory facilities. The laboratory maintains a fleet of 6 fixed-wing aircraft, plus various over-land vehicles and water craft. In addition, NARL operates some 14 remote camps along the Alaska coast supporting research projects.

The operating budget of NARL is approximately $7.0M per year, paid for from RDT&E funds. Other government agencies doing R&D at NARL provide reimbursements but these reimbursements do not cover their operating and logistics costs. The Navy estimates that only 15% of NARL activity is in direct support of DoD sponsored research and development.

There is a continuing need for NARL as a Navy or National base camp on the Arctic Ocean.

3. DDF&E Position: On 18 October the Navy was asked to review the management and financing of NARL, and to adjust RDT&E funding at NARL to a level consistent with the RDT&E work performed at NARL by 1981.

OAD(E&LS)
26 November 1976
ADVANCED TECHNOLOGY GUN

1. **Problem:** An advanced technology aerial cannon is needed to enhance the capabilities of our tactical aircraft.

2. **Background:** The M21 (30mm), which was developed many years ago, and the GAU 8 (20mm) are the principal guns planned for Service use. Both the Navy and USAF have expended a considerable amount of work trying to overcome the shortcomings of these two guns.

3. **DoD Position:** DoD wishes to continue development of advanced multi-purpose aerial cannons.

4. **Current Status:** FY1978 funding for future gun development continues at a very modest pace.
TWO-PLACE A-10

1. Problem: Why do we need a two-place A-10?

2. Background:

3. DoD Position:

4. Status:
COMPASS COPE

1. **Problem:** Should the COMPASS COPE program be continued.

2. **Background:** COMPASS COPE was conceived by the Air Force as a long-endurance, high-flying, remotely piloted multi-mission vehicle.

3. **DoD Position:**

4. **Current Status:** The PBDs reflect the DoD position.
FLIR/LOPAIR

1. **Subject of Issue**: Advanced chemical agent warning and detection systems; Long Path Infra-Red (LOPAIR) an Army development and Forward Looking Infra-Red (FLIR) a Navy development.

2. **Background**:

   o **Program Objectives**: To provide an advanced chemical agent detection and warning system for combat use.

   o The Army has evaluated long path infrared detection methods for some years. An active concept pursued from 1954 to 1965 was terminated in favor of a passive concept. Critical technical problems in discrimination of agents from smoke, dust, and other interferences have existed in the past. However, the present passive LOPAIR which entered Advanced Development in January 1974 is believed to have resolved these technical problems.

   o The Navy, while evaluating the FLIR for fire control purposes (the primary mission), discovered that technicians could observe emissions from incoming aerial targets. By the use of optical filters, some discrimination of emissions can be made.

   o Initially the HASC requested a side-by-side test; this was fully planned, but not performed. Subsequently, the HASC requested that LOPAIR be terminated in favor of FLIR but did authorize reprogramming for a side-by-side test. The Army did not follow complete guidance on the funding for the side-by-side test. The HASC then initiated a GAO investigation of all expenditures.

3. **DoD Position**:

4. **Current Status**: The DoD initial request to the HASC to continue both developments was refused.

*House Armed Service Committee*  
OAD(E&LS)  
29 November 1976
Outside ARPA Reactions: The ARPA program has been well received by OSD, OSD, and the Congress. Presentation of "thrusts" has been easily understood and the potential significance of the breakthroughs readily appreciated. Whereas prior to FY 1976, the total ARPA budget remained essentially static at around $200M, this year's budget will be ... A great deal of enthusiasm has been generated for the program in the Services, Joint Chiefs of Staff, the DDR&E, and the Secretary of Defense.

Management Issues: ARPA's unique position in DoD and its determination to remain a small, hard-hitting research organization presents a set of management issues which must be dealt with successfully to maintain the organization's vigor. Some of these follow:

- **Staffing and Personnel Policies** — There must be continuing management sensitivity to the need for professional staff turnover. This is essential to the difficult process of creating new programs, keeping Program Managers who are current in rapidly changing technologies, and maintaining aggressive and vital programs.

- **Program Transfer** — Extraordinary and aggressive efforts are required to develop positive mechanisms to transition results of ARPA research to the Military Services. There are no automatic or built-in processes or policies which ensure that this happens—the initiative is with ARPA. It is essential that close and continuing contact be maintained with Service Chiefs of Staff, Assistant Secretaries for R&D, and Commanding Officers of Material Acquisition Commands (AFSC, NAVMAT, DARCO) by deliberately scheduled and regular briefings and meetings.

- **The ARPA Image** — Care and selectivity must be exercised to avoid involvement in research programs promoted by Service R&D organizations solely to secure ARPA funding support. ARPA should recognize and remain insensitive to Service R&D and DDR&E Staff members who perceive of ARPA as an "interferor" with institutional biases & objectives. They would prefer to see ARPA outside of the mainstream issues. The vitality of the organization is largely derived from its mission of being the adversary, the risk-taker, the innovator, the outspoken critic.
Visibility of Demonstration Programs -- for the first time, ARPA has established in FY 1978 a program element making visible major new technology demonstration efforts and the relatively large resources they may require. Preliminary Congressional and OSD Staff reaction has been positive, but critics may still raise the question, "Why ARPA?". These technology demonstration programs will materially aid the transfer of technologies to the Services who must ultimately develop the material or techniques for Service application. Meaningful (as near full scale as possible) demonstrations have the effect of more clearly suggesting the potential of new technology and help to accelerate the otherwise long, drawn-out material development cycles of Service programs. The alternative of simply reporting research findings and speculating on their potential more often than not means promising results go unnoticed and are never considered or may be subsequently duplicated by the Services or are subjected to long and frequent sub-critical exploitation attempts.

Technology Assessments -- The Technology Assessments Office was established at the end of FY 1976. Those efforts underway which were relatable to the other technical offices were transferred to those offices. In the future, technology assessments will be undertaken as part of the technical office function to examine and compare the U.S. and foreign technology base and create new initiatives for the Office. Those technology assessment efforts which are of broad ARPA or DoD scope will continue under direct management of the Director, ARPA.
Three issue papers were prepared by the Assistant Secretary of Defense for Legislative Affairs. The issue paper concerning "Congressional Limitation of Legislative Liaison Activities" is released without deletions. Portions of the remaining two documents, DoD Legislative Program for 95th Congress and Congressional Travel, are denied under the provisions of 5 U.S.C. 552(b)(5) as they provide opinions and recommendations in the context of interagency correspondence. Public disclosure of the recommendations and comments would inhibit the essential exchange of future staff comments and advice which could severely hamper the decision-making process. The Initial Denial Authority (IDA) for these documents is Mr. Harry E. Bergold, Jr. (ASD(LA)).
CONGRESSIONAL LIMITATION OF LEGISLATIVE LIAISON ACTIVITIES

1. SUBJECT/ISSUE:

There is a funding deficit for the legislative liaison function of approximately $3 million for FY 1977.

2. BACKGROUND:

Section 728 of Public Law 94-414, Department of Defense Appropriation Act for fiscal year 1977, imposes a limitation of $5 million on "legislative liaison" activities. The budget program presented to the Congress requested $7.9 million for this function. Consequently, a deficit of approximately $3 million remains. The funding limitation is based on the allocation of personnel and personnel costs to specified categories through the use of definitions that were developed jointly by the DoD and the Senate Appropriations Committee. The Senate supported the full amount of the Department's request, but the House did not. The $5 million amount was determined in conference.

3. DOD POSITION:

The ASD/LA is working with both of the Appropriations Committees to secure relief through modification of the current definitions and consequent reallocation of personnel. Should this initiative prove unsuccessful, two possible courses of action remain. Additional funds could be requested through a supplemental appropriation or the personnel cuts dictated by the limitation could be imposed. The magnitude of the reduction that would be required in following the latter course of action (in excess of one-third of the Department's Legislative Affairs work force) would, in all likelihood, severely impact our present capability to maintain effective working relations with the Congress.
1. SUBJECT/ISSUE: Excluded, 5th Exemption FOIA

2. BACKGROUND:

Except for several major proposals recommended for the President's legislative program, the DoD Legislative Program does not attempt any prioritization of its sixty plus components. The Department's initial program list for the first session of the 95th Congress (attachment 1) does not address the issues of how, when, or under what circumstances the individual proposals, if cleared by OMB, will be ushered to and through the Congress. In the past the Services and OSD elements sponsoring particular legislation have worked separately for passage of items they deemed the most important.

3. DOD POSITION: Excluded, 5th Exemption FOIA
DoD Legislative Program

Part I. President's Program

DoD Appropriation Authorization, FY 1978
DoD Appropriation Authorization, FY 1979
Military Construction Authorization, FY 1978
Uniform Services Retirement Modernization Act (94-4)
Defense Officer Personnel Management Act (94-5)
Reserve Officer Personnel Management Act (94-6)
Reserve Retirement Modernization Act (94-7)
Enlistment and Selective Reenlistment Bonuses (94-116)

Part II. Other Department of Defense Proposals

A. Readiness and Total Force Enhancement

Ready Reserve, require 91 days active duty before transfer to
Stand-by Reserve. (94-10)
Ready Reserve, authorize assignment of certain persons to (94-9)
Reserve Technicians, authorize extended retention. (94-8)
Officer Candidates, authorize financial assistance while
attending college. (94-115)
Require six year obligation for female members. (94-131)
ROTC, two year course, remove limitation on scholarships. (94-15)
Authorize additional Army ROTC scholarships. (94-16)
Authorize Service Secretaries to establish enlistment qualifications.
(94-132)
Authorize exchange of equipment, services among NATO countries. (94-141)
Authorize furnishing of routine port services - on a reciprocal
basis - at no cost to friendly nation and NATO vessels. (94-59)
Allow Service Secretaries to determine frequency of Guard inspections.
(94-92)
Reserve Officers, remove requirement of ordering to active duty for
training for not less than 3 months. (94-69)

B. Pay and Allowances

Eliminate dual compensation of GS civilian/reservists. (94-111)
Revise Cadet/Midshipman pay policies. (94-109)
Reserve Benefits Omnibus Legislation. (94-12)
Amendments to Aviation Career Incentive Act. (94-70)
Increase rates of sea pay. (94-93)
Family separation allowance for 2-4's and below with dependents. (94-27)
Remove limitations on trailer moving allowances. (94-26)
RSFPP adjustments based on CPI increases. (94-121)
SOLI, increase coverage for Guard and Reserves. (94-133)
Additional retirement credit for certain reservists. (94-13)
Quarters allowance, authorize reimbursement to ship-based personnel
when on-board quarters temporarily unavailable. (94-124)
Civil Service retirement, credit for military service. (94-99)
MIA's, make PL 92-177 retroactive to February 1961, (94-23)
Dependent students, authorize travel and transportation overseas. (94-23)
Transportation allowances on consecutive overseas tours. (94-24)
Travel and transportation of separating civilians under mobility agreements to home of record. (94-31)
Travel and transportation allowances for civilians separating and remaining outside the CONUS. (94-34)

C. Installations and Logistics

Authorize home-to-work use of Government vehicles outside United States when other transportation unsafe. (94-117)
Amend conflict of interest laws. (94-35)
Expand jurisdiction of Controlled Substances Act. (94-81)
Personal property and spare parts, authorize sale to contractors under certain conditions. (94-143)
Civil Air Patrol, authorize DoD to budget and extend appropriation for use of (94-15)
Unclaimed personal property, more efficient disposition. (94-17)
Clarity use of aircraft accident reports. (94-83)
Authorize long-term charter of ships to be constructed for Navy use. (94-50)
Withdrawal and reservation of Chocolate Mountain Aerial Gunnery Range for defense purposes. (94-80)
Alaska Land withdrawal, Ladd-Eielson Area, Fort Wainwright. (94-102)
Alaska Land withdrawal, Granite Creek Area, Fort Greely. (94-103)
Alaska Land withdrawal, Big Delta Area, Fort Greely. (94-104)
Sale of certain naval vessels to Peru. (94-131)
Sale of certain naval vessels to Uruguay. (94-133)

D. Other Legislative Requirements

Eliminate Quadrennial Physical Examinations for Fleet Reserve and Fleet Marine Corps Reserve. (94-14)
Naval Academy, remove dates for nomination of candidates. (94-17)
Authorize Flag Rank for Navy Medical Service Corps. (94-19)
Margarine, use as part of Navy ration. (94-48)
Defense Intelligence School, authorize award of Masters Degree. (94-62)
Repeal certain obsolete reporting requirements. (94-44)
Ryukyu Islands, authorize reimbursement of nonappropriated fund facilities for severance payments. (94-40)
Chaplains, remove from under Chief of Naval Personnel. (94-74)
Relief for non-US citizen employees at Guantanamo Bay, Cuba. (94-135)
Off-duty employment of military cardmembers. (94-23)
Secretary Navy to set pay for Naval Research Advisory Committee. (94-39)
Amend laws re to DoD overseas teachers' leave entitlements. (94-31)
Academy registrars, authorize retirement after 30 years. (94-21)
Change Cadet Cath at US Military Academy. (94-65)
Admirals, revise distribution in Naval Reserves. (94-95)
Navy Postgraduate School, eliminate reimbursement requirements
for uniformed personnel. (94-94)
Naval Observatory Publication, change name of (94-120)
Officers commanding companies of West Point Cadet Corps. (94-137)
Walters, Vernon Andrew: retire as Lt. General. (94-130)
CONGRESSIONAL TRAVEL

1. SUBJECT/ISSUE:
   Department of Defense Support of Congressional Travel

2. BACKGROUND:

   Section 1314, Public Law 207, 83d Congress provides authority for Members of Congress and professional staff to use appropriated funds of any Executive Agency for the purpose of examination of estimates in the field. The chairmen of standing Congressional committees authorize such travel and cite this law as authority to expend funds in support of these investigations.

   Because of the vagueness of DoD directives pertaining to DoD support of Congressional travel, the Secretary of Defense has directed a thorough review of Defense Department travel directives and practices to insure compliance with the law. As an interim step, expense items that may be paid for by Defense escort officers have been defined more specifically. Escort officers are authorized to expend funds for food and beverages, lodging, transportation, newspapers, official phone calls and cables, tips and gratuities, and incidentals necessary for administrative support and control.

3. DOD POSITION: Excluded, 5th Exemption FOIA
The attached documents represent the "issue papers" prepared by ASD(I) for
the Transition Team in connection with the transition from the Ford to
the Carter Administration. Although they do not fully conform to the
definition of "issue papers" as defined by U.S. News and World Report
letter of December 14, 1976, they are believed to be broadly within the
intent of that definition. The Director of Defense Intelligence Advises
that portions of the material has been denied as follows:

a. Table of Contents. One word is deleted. This exemption is made
pursuant to 5 U.S.C. 552b(3); 50 U.S.C. 403(d)(3) provides for the pro-
tection of intelligence sources and methods from unauthorized disclosure.

b. Issue paper entitled: Conflicting Management Authorities of the
Secretary of Defense, the Committee on Foreign Intelligence and the
Director of Central Intelligence can be released in part. Portions are
withheld pursuant to 5 U.S.C. 552b(5) because it pertains to on-going
national security policy discussions involving Cabinet and Sub-Cabinet
level officials which in all likelihood will be referred to the President
for a decision.

c. Issue papers entitled: Tasking of National Collectors in Support
of Military Operations has six deletions because they reveal sensitive
intelligence sources and methods that are properly classified SECRET
according to E.O. 11652 to protect national defense plans for employing
intelligence methods from unauthorized disclosure, pursuant to 5 U.S.C.
552b(1) and (3). For the b(3) exemption 50 U.S.C. 403(d)(3) applies as
well as 50 U.S.C. 403g which provides for the protection of the nature of
CIA's functions.

The Initial Denial Authority in this instance is Thomas K. Latimer,
Principal Deputy, OASD(I)/DDI.
CONTENTS

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Intelligence Automatic Data Processing Systems

Conflicting Management Authorities of the Secretary of Defense, the Committee on Foreign Intelligence and the Director of Central Intelligence

Tasking of Collectors in Support of Military Operations

5 USC 552 b [3]

50 USC 403 (d)(3)
Conflicting Management Authorities of the Secretary of Defense, the Committee on Foreign Intelligence and the Director of Central Intelligence

Background

The National Security Act of 1947 gives the Secretary of Defense authority, direction and control over the Department of Defense. Under Executive Order, National Security Council Directive, and/or Executive Agreement, he has been designated as executive agent for operating the National Security Agency and the Air Force special program, for which last he shares management with the DCI, but retains ultimate responsibility for the program.

Executive Order 11905 of last February confirms the Secretary of Defense's authority to fund, direct, and operate NSA and the special programs (cited as "national reconnaissance entities"). At the same time, however, a different part of the Order confers on a subcabinet committee, the Committee on Foreign Intelligence of the NSC (DCI chairman; Deputy Secretary of Defense and Deputy Assistant to the President for National Security Affairs members), control over budget preparation and resource allocation for the "National Foreign Intelligence Program", which includes all of the major DoD intelligence programs. The CFI is also charged with establishing policy for the management of the NFIP. The DCI's staff is charged with assisting the CFI in exercising these authorities.
Key Considerations
Intelligence Automatic Data Processing Systems

The House Appropriations Committee's 1976 classified letter is sharply critical of the proliferation of dedicated intelligence communications and computer networks.

Within DoD, there are three major aggregations of these -- those dedicated to signals intelligence processing, those dedicated to the Air Force special program, and the general intelligence communications and ADP systems managed by DIA. DIA has a further management responsibility of ensuring interoperability of general intelligence ADP systems with tactical systems and satisfactory interface with command and control systems.

NSA and the Air Force special program have strong management forces with which to attack the problem of reducing or eliminating unnecessary systems. DIA is now moving to create a special team to direct its ADP management. This issue is certain to be raised by the House Appropriations Committee in next year's testimony by responsible DoD officials.
Tasking of Collectors in Support of Military Operations

For the past three years, the Department of Defense has been studying the "national-tactical interface" regarding intelligence resources. This problem has had three principal aspects:

- How best to utilize the contribution of intelligence-related resources assigned to operational commanders to contribute to national requirements;

- How best to utilize the SIGINT and future imagery collection systems to support operational commanders in crisis and combat; and

- How to ensure (i.e., demonstrate to Congress) that there is no unnecessary overlap between intelligence and intelligence-related systems.

The first issue does not appear to be a real problem; the third is addressed elsewhere in this book.

The CCP is now formally operational, but lacks the fundamental authority to place emergency override tasking on the or to task these at all except with the consent and under the authority of the DCI.

Key Considerations

What action should the Department of Defense take to obtain satisfactory emergency or wartime authority to place direct tasking on systems in support of operational commanders?
Congressional Justification for Intelligence-Related Resources

Last year, the House Appropriations Committee demanded and received very extensive and detailed intelligence justification books for the budgets of the various intelligence programs from the DoD and the CIA. Since the DoD and the Secretary of Defense control the major share of intelligence resources, most of the justification books were prepared within the DoD. The Committee was in general pleased but it was highly critical of the DoD "intelligence-related" justification books covering intelligence resources integral or assigned to operational commanders. The thrust of the Committee's instructions is that the intelligence-related justification books in this year's structure must be presented in a format compatible with and parallel to those for the structured major intelligence programs (CCP, GDIP, etc.).

As an added point, the Committee was critical of the lack of review of intelligence-related resources by the DCI (who has no assigned responsibility in this area), and of the lack of centralized DoD management control over these resources.

An evident objective, both of the House Appropriates Committee and the Senate Select Committee on Intelligence, is that there be a single DoD spokesman for intelligence and intelligence-related resources, and that full program visibility be provided for both.

This problem is complexed by:

- The continued lack of a generally agreed boundary of what is "intelligence-related" in such areas as electronics warfare and multi-sensor correlation systems.

- The unresolved jurisdictional problems within Defense between DDI, DDR&E, the JCS, and the Service Operations staffs.

- The likelihood that the DCI's staff will insist on control over the preparation of DoD justification books for the major programs, and may seek to impose standards and formats not compatible with those for intelligence-related programs.

Key Considerations

- What management controls must the DDI exert over the Military Departments to ensure satisfaction of Congressional requirements for presentation of justification of intelligence-related resources?

- What standards of DoD internal integrity and control must the DDI insist on in regard to the preparation of major program justification books in order to ensure compatibility between intelligence and intelligence-related program structure and presentation?
What other actions must the DDI take to satisfy Congressional pressures to demonstrate coherent DoD management of intelligence-related resources together with intelligence resources.
The Senate has established a Select Committee on Intelligence with authority to write annual authorization legislation for intelligence activities, including DoD's. The Committee will write its first authorizations in CY 77. There is no similar committee in the House, and the House Armed Services Committee writes authorization for the DoD as a whole, covering certain appropriation categories, but not embracing entire functional areas, such as intelligence.

In this situation, there is created a serious asymmetry between Senate and House processes and scope as regards DoD intelligence authorization, with the prospect that an authorization bill originating in one house may not be compatible in structure, scope, or Committee responsibility with that emerging from the other.

Key Considerations

Should the Department of Defense intercede to prevent or modify a potentially serious authorization tangle on DoD intelligence during the CY 77 session? If so, what form should such intercession take?
The Future of DIA

As originally conceived, the Defense Intelligence Agency, under the JCS, was intended to be the senior DoD intelligence production agency, to provide support services of common concern, and to exercise a coordination and planning role over the DoD intelligence community. Its performance of management functions in such areas as resource review and intelligence ADP has been criticized by Congress as ineffective.

The House Appropriations Committee has stated in its 1976 classified letter that its belief has been strengthened that there is duplication between DIA and the Service Intelligence Agencies and resultant overmanning, and that if either one or the other is not reduced by DoD in FY 1978, the Committee may be freed to act unilaterally. The Director, DIA has sought an external audit by the DCI staff to review DIA's manning and functions.

The Committee has also stated a belief that last summer's realignments of DIA's subordination are ineffective, in that the residual operational control over DIA vested in the JCS flaws effective Secretary of Defense line control over the agency and has requested that FY 1978 budget justification include a statement in response to this concern.

Key Considerations

What is required for satisfaction of Congressional concerns re DIA? What should be the tenor of our response to Congress?
The attached documents represent the "issue papers" prepared by DP&E for the transition team in connection with the transition from the Ford to the Carter Administration. Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report letter of December 14, 1976, they are believed to be broadly within the intent of that definition. The Director, P&E, advises that nothing has been withheld or deleted from these documents.
A. Issues.

The slow, but steady and nevertheless real, buildup of Soviet power combined with the changed strategic circumstances in Asia and the Pacific plus continuing instability in the Middle East and Africa require continuing reexamination of our force requirements worldwide. Although we have made substantial progress in articulating a comprehensive global strategy in the most recent Defense Guidance, we still have a long way to go, as the NSSM 246 exercise has demonstrated. I see three major areas which require study.

-- First, we need a careful examination of what the Soviet buildup means in capability to project force into regions traditionally controlled by the West. At the same time we need to carefully search out Soviet weaknesses and exploitable vulnerabilities.

-- Second, we must give much greater attention to the capabilities, real and potential, of our Allies. The NATO Center Region gets a lot of attention and, at least for conventional force calculations, we do pay attention to the forces of our NATO partners. But elsewhere we still have a tendency to go it alone. I believe we have fertile opportunities for improving our collective defense position vis-a-vis the USSR through exploitation of our relations with Spain, Turkey, Iran, Australia and Japan, to name the most obvious. Also, we should take positive steps to bring France back into the fold as far and as quickly as possible.

-- Third, I believe there are a series of major weapons issues which require early attention.

The first two of these areas are within the purview of Regional Programs, the third belongs to the force deputies.

Following is a discussion by team division of the major projects, problems and initiatives for the next year.
Section II

Major Near-Term Program Issues (Jan - April 1977)

- Tanks
  - Chrysler won U.S. XM-1 competition
  - U.S. winner currently under evaluation vs FRG Leopard-2 Tank
  - Winner to be selected as new U.S. tank, decision due in March 1977

- Army Helicopters
  - Army currently studying helicopter force structure
  - Need for new scout helicopter in addition to new attack and utility helicopters uncertain
  - Decision on initiation of new scout helicopter scheduled for 1st quarter 1977

- Shipbuilding Program
  - DRP study outlining alternative programs completed
  - Principal issues are: Follow-on Nimitz carrier; nuclear vs. conventional powerplants; roles of strike cruisers and VSS ships

- ASW Helicopter
  - Industry competition underway
  - Congressional insistence on open competition rather than adaptation of Army utility helicopter
  - Decision on winner and development initiation due in 1st quarter 1977

- Cruise Missiles
  - Tactical version of strategic cruise missile with conventional warhead currently under evaluation
  - Value vs cost for naval missions currently being studied
  - Program decision due January 1977
Divisional Air Defense Gun
- Army briefing on new air defense gun to replace vulcan lacked adequate justification for a $3M + system.
- Army is currently reassessing its requirements and candidate gun systems for DSARC I early next year.

Imaging Infra-Red (IIR) Maverick Air-Ground Missile
- IIR Maverick is to replace optical Maverick missiles which have severe operational limitations in Central European NATO environment.
- Concern over operational utility of IIR Maverick in target acquisition phase caused the initiation of a joint operational test in a realistic battlefield environment.
- Results of these tests could determine whether or not to proceed with a major IIR Maverick procurement.
Current Major Force Related Issues

The following are issues requiring attention by the ODD (General Purpose Programs) either as a result of the FY 78 program review or in anticipation of the FY 79 planning cycle:

**Army**

- War Reserve Requirements
  - What level of materiel and ammunition are required in support of our total force?

- Aviation Requirements
  - Are Army programs still excessively oriented for S.E. Asia type operations?

- European Capabilities Enhancement
  - Which of the Hollingsworth proposals should be included in current programming?

- Utility of 17th Active Army Division
  - Should the Army activate an additional division headquarters and base with existing manpower constraints?

- Mix of Nondivisional Artillery
  - What is the proper mix of self-propelled and towed artillery?

**Navy and Marine Corps** (other than overall shipbuilding program currently under study)

- Amphibious Forces
  - What level of amphibious assault echelon lift capability can be justified in terms of current defense objectives, tactical utility and cost?

- VSTOL Aircraft
  - Is the Navy's proposed VSTOL program justified on the basis of tactical utility and cost?
USMC Tacair Force Level and Mix
- Are the Marine Corps' tactical air programs consistent with their principal mission as amphibious assault forces?

Air Force
- Tactical Reconnaissance (RECCE) Force Levels
  - What RECCE force levels and aircraft types can be justified on the basis of tactical utility and cost?

- Advanced Tactical Fighter
  - Is initiation of a new tactical fighter program required?
    - If so, what characteristics are consistent with future Air Force missions; the projected threat; and alternate budget allocations for tactical fighter aircraft?

- Advance Tanker-Cargo Aircraft (ATCA)
  - Should we continue the ATCA program on the basis of its utility and cost as a tanker for tactical aircraft?

- Advanced Medium Stol Transport (AMST)
  - Should the AMST program be continued on the basis of its utility and cost as an intra-theatre logistical aircraft?
Major Studies Sponsored by OSD Related to General Purpose Forces

Either Underway or Planned for CY 77

- **Roles of Rotary and Fixed Wing Aircraft in a Mid-Intensity European Conflict**

  This study is jointly sponsored by ODP&E and ODDR&E and is being conducted by the Institute for Defense Analyses (IDA).

- **Air Defense of the North Atlantic**

  A joint ODP&E/ODDR&E sponsored study being conducted at IDA to determine the potential impact of new technology on the relative roles of either land-based or carrier-based aircraft and surface ships in defense of the North Atlantic.

- **Vulnerability of Pre-Positioned Material in Central NATO**

  An ODP&E sponsored study being conducted by RAND.

- **Multi-Purpose Missile Systems**

  Sponsored by ODP&E to be conducted at IDA. Objective is to determine the potential feasibility of a single missile for the anti-tank and anti-aircraft roles.

- **Theater Air Defense Requirements**

  Requested by Congress, sponsored by ODDR&E and being conducted at IDA. The principal purpose of the study is to determine the relative capabilities of Air Force and Army air defense systems in Central NATO.
RESOURCE ANALYSIS

A. Issues:

Fiscal Guidance - The first issue that will arrive in January concerns the Planning and Programming Guidance memorandum. The PPGM contains the Fiscal Guidance that the Services use in preparing their Program Objective Memoranda. The Fiscal Guidance is a particular responsibility of this office. It requires an analysis and projection of Defense resources for the next five years.

War Reserves - Another issue that will arise in connection with the PPGM is the appropriate target for war reserve inventories. The guidance on the number of days of reserves that should be available has been a controversial issue during the past several years and is still in contention.

Industrial Preparedness Planning - Likewise the appropriate scenario for industrial preparedness planning will arise in connection with the PPGM. Here again, there is a history of controversy.

PPBS - The structure of the PPB system will arise soon in the new administration. Considerable study has been devoted to possible PPBS reforms. Secretary Rumsfeld decided for evolutionary rather than radical reform. However, advocates of radical reform will no doubt appeal and what evolutionary changes should be made are still in doubt.

Mission Oriented Budgets - The Senate Budget Committee has been pressing for a mission display of the DoD budget. By law DoD must submit a mission display with the FY 1979 budget. Here again there is a considerable history in which P&E has been a major player.

DSARC's - DSARC's and program reviews occur regularly. Cost analysis is almost always involved.

Readiness - A major concern of this organization has been force readiness. Substantial initiatives in the FY 1978 budget are directed at improving readiness. This office will no doubt be involved in explaining the need for such funds and their expected results.

Other issues - In the longer term there are a variety of subjects that should be addressed. A list of potential analytical effort is attached.
B. Calendar:

The basic calendar events for this component are those of the PPBS cycle and the DSARC's. The DSARC calendar is published monthly (latest is attached).

The PPBS calendar for 1976 is attached. The 1977 calendar will be similar.
PROJECTS THAT SHOULD BE ADDRESSED IN FY 77

FORCE STRUCTURE, READINESS AND SUSTAINABILITY RELATIONSHIPS

- Materiel Reserves
  -- Planning Assumptions
  -- Munitions requirements
  -- Other reserves

- Industrial Base Planning and Programming Assumptions
  -- Wartime requirements
  -- Peacetime surges

- Manpower
  -- Impact of shortages
  -- Reserve policies

- Resource and Readiness Relationships
  -- Readiness measurement
  -- Navy manpower inventories

EFFICIENCY POSSIBILITIES

- Military schooling/training requirement
- Capital/labor and in-house/contractors shift
- Rationalization of maintenance
- Base structure and operations

COST PROJECTS

- Improving weapon system costing methodology
- Expand cost analysis data base
- Improve O&S cost visibility and projection capability
Current Major Force Related Issues

The following are issues requiring attention by the ODD (Strategic Programs) either as a result of the FY 78 program review or in anticipation of the FY 79 planning cycle:

All Services

- Special Nuclear Materials (SNM)
  - What level of SNM should be made available from reopened or new reactors?
  - What are the appropriate priorities for use of SNM?

- Force Levels and Deployments
  - What level and mix of nuclear forces, among nuclear artillery, surface-to-surface missiles, and air delivered systems, are required in NATO's Center and Southern regions to provide options for limited nuclear attacks in the vicinity of the FEBA to retaliate to WP nuclear attack on NATO forces?
  - What nuclear capability (delivery systems, warheads, essential support, etc.) should the U.S. deploy in the Pacific theater, and where should it be deployed?
  - How can deployed resources dedicated to tactical nuclear weapons be used to support the conventional forces during a non-nuclear conflict?
  - What is the utility of nuclear armed cruise missiles for theater use?

- Strategic Forces Mission Criteria
  - What effectiveness criteria should U.S. nuclear forces be able to satisfy in fulfilling deterrent and force employment objectives (e.g., should we be capable of destroying the other side's ICBM silos)?

- Soviet Civil Defense
  - What additional improvements, if any, would be required for U.S. deterrent forces should various postulations of Soviet civil defense capability materialize?
Strategic Balance

- What is the significance of static and other simplified indicators of the Strategic Balance and should we acquire forces to satisfy political-military perceptions?

Army

- Artillery Fired Atomic Projectiles (AFAP)
  - What is the appropriate final level and mix of nuclear projectiles?

- Pershing Earth Penetrator
  - Should earth penetrator nuclear warheads be procured for use with the Pershing missile?

Navy/Air Force

- Theater Aircraft Nuclear Armament
  - What should be the level and composition of the U.S. stockpile of theater nuclear bombs/air-to-surface missiles for the NATO theater and for the Pacific theater?

- Nuclear AAW/ASW
  - What is the appropriate level and composition of nuclear AAW/ASW forces?

Navy

- Pace of Trident Submarine Construction
  - What should be the construction rate and ultimate force level of Trident submarines considering Polaris/Poseidon block obsolescence, SLBM effectiveness and program cost?

- Trident II Missile
  - Is there a requirement for a larger, more accurate submarine launched ballistic missile than the Trident I missile, and if so, when?

- Cruise Missile
  - Is there a strategic nuclear role for a SLCM?
Air Force

- Space Defense
  - What are the appropriate programs for an adequate space defense posture?

- Air Defense
  - What are appropriate missions for air defense forces?
  - Do we need a follow-on interceptor (FOI) with early 80's IOC and if so, what is the appropriate FOI (F-14, F-15, F-16)?

- B-1 Production
  - What should be the pace of B-1 procurement and what should be the ultimate force objective?

- Bomber-Weapons Mix
  - What mix of gravity bombs, SRAM and ALCM should be planned for the strategic bomber force?

- Cruise Missile
  - How should we plan to employ the ALCM and at what pace? Should the ALCM program be combined with SLCM?

- ICBM
  - What level of MIRVed ICBM deployments (MX-III) should we plan in view of Vladivostok Accords?

- MX ICBM
  - What should be the pace of the MX program and in what basing mode should it be initially deployed?

- ICBM Warheads
  - Are current plans for MX-12A and a new MX-II warhead and current MX warhead candidates consistent with total force nuclear material considerations and force effectiveness?
ASSISTANT TO THE SECRETARY (ATOMIC ENERGY)

The attached documents represent all the issue papers prepared by the ATS(AE) for the Ford-Carter Transition Team. There have been no deletions or omissions from these documents.
SECTION II...ISSUES

Issues related to the management of the nuclear weapon program can be summarized in two categories: those issues that should be addressed within the Executive Branch of the Government; and those issues that should be addressed with the Legislative Branch of the Government.

I. Issues for the Executive Branch

The principle issues that face the Executive Branch of the Government, related to management of the U.S. nuclear weapon program, center on the contribution that these weapons make to our deterrent posture and warfighting capability. A continuing review is necessary to insure that:

-- the nuclear weapon stockpile quantity and quality meet U.S. deterrence and warfighting objectives.

-- the nuclear weapons are deployed optimally to meet U.S. and Allied security interests.

-- the nuclear weapons will be employed only as directed by the U.S. President.

-- the nuclear weapons are provided adequate protection against the spectrum of peacetime, crisis and wartime threats.

-- the nuclear weapons receive the maximum safety, security and command-control improvements that can be provided.

-- the availability of special nuclear materials will meet modernization and force level objectives.

-- nuclear force capabilities complement the conventional capabilities of US and Allied forces to enhance deterrence and raise the nuclear threshold.

Detailed classified briefings and reports on these issues will be made available to the transition team on request.

II. Issues for the Legislative Branch

Two principal issues related to the nuclear weapons program that will require legislative review and possible legislation in the U.S. Congress are:
-- What should be the disposition of the Nuclear Weapons Complex in connection with further consolidation of Energy-Related Federal Agencies?

-- What recommendations should DoD make on congressional committee oversight functions for the DoD nuclear weapons program as legislated by the Atomic Energy Act of 1954, as amended?

These two issues are examined in some detail in the material that follows.
ISSUE: What should be the disposition of Nuclear Weapons Complex in connection with further consolidation of Energy-Related Federal Agencies?

-- The Energy Reorganization Act of 1974 merged the energy and nuclear weapons programs under the Energy Research and Development Administration (ERDA). Section 307(b) of the Act required that the DoD collaborate with ERDA in conducting a thorough review of the desirability and feasibility of transferring the military application and restricted data functions of ERDA to the DoD or other agencies. When a report of that review was forwarded to the President in January 1976, the Secretary of Defense concurred with the recommendation that these functions be retained by ERDA. He recommended that the question be reexamined in two to three years (Memorandum attached).

-- Currently a study of the organization of energy and energy related functions within the government is being conducted under the joint chairmanship of the Energy Resources Council (ERC) and the Office of Management and Budget (OMB). A report to the Congress is planned by 31 December 1976. This study addresses future management of the nuclear weapons functions as "Critical Issue 8" (details attached).

-- Further consolidation of energy related agencies presents the danger that the priority assigned to development of nuclear weapons may suffer.

-- Objectives are to ensure that the focus of the Weapons Complex remains nuclear weapons, to ensure that the complex continues to attract and hold top-caliber personnel, and to ensure that the Weapons Laboratories maintain their present independence and objectivity on the breadth of their technical and supporting research programs.

-- Alternatives that require fuller study are:

  o Retain the Complex in a new Energy Department with special organizational measures to ensure undiminished weapons priority.

  o Transfer the Complex to DoD with equivalent measures.

  o Transfer the Complex to a new independent agency.
MEMORANDUM FOR THE PRESIDENT

SUBJECT: Department of Defense Recommendation of the Management and Funding Alternative for ERDA Military Application and Restricted Data Functions

In accordance with Section 307(h) of the Energy Reorganization Act of 1974, the Department of Defense (DoD) has collaborated with the Energy Research and Development Administration (ERDA) in the conduct of a thorough review of the desirability and feasibility of transferring to the DoD or other federal agencies the functions of the Administrator, ERDA, respecting military application and restricted data. An ERDA report of this review is being forwarded to you by the Administrator.

Three military applications of atomic energy were at issue, in addition to the question of Restricted Data generation and control:

--- The Nuclear Weapons Program
--- The Naval Reactors Program
--- Space Nuclear Power Systems

In regard to the weapons program, the primary focus of the study, I concur with the conclusions and recommendations of the Administrator that management and funding be retained within ERDA for the present. Some administrative changes in the program are desirable which will increase the visibility of the weapons program within ERDA and minimize penalties to the weapons program caused by funding competition between weapons and energy programs.

Thus, I recommend that we adopt Management Alternative #2 as defined in the study. A separate budget identification and dollar ceiling set for the nuclear weapons program would properly elevate the competition for resources.
above the agency level and to a level where all federal institutions compete. In this connection, I support the proposed provision to include full ERDA costs on a nonadditive basis for each major nuclear weapon system in DoD budget and cost reporting submissions. This should allow better congressional visibility on the matter.

I also recommend no changes on the other aspects of ERDA's program for the following reasons:

--- **Naval Reactor Program.** The beneficial aspects of the program's close ties to ERDA's overall reactor research and development effort should be maintained; and the relatively small budget impact ($250M) does not justify management or funding changes.

--- **Space Nuclear Systems.** While this program supports DoD earth-orbital space efforts, the program involves only $31M and is 85 percent oriented to civilian applications.

--- **Restricted Data (RD) Control.** It is prudent to continue the RD system to restrict access to sensitive atomic energy information having military implications. However, it is sensible for the RD basic responsibility functions to remain with ERDA's National Security program management while maintaining the system of joint ERDA-DoD review and determination on specific classification matters.

Since its inception, the weapons program has been extraordinarily successful in achieving and maintaining technological excellence. Under the Atomic Energy Commission, the nuclear weapon complex established a record of quality and on-time delivery of nuclear weapons to the DoD. Dual agency judgment and responsibility for safety, security, and control of nuclear weapons has worked well and clearly served the best interests of the nation and both agencies. The confidence and high reliability demanded of our nuclear weapon inventory has been enhanced through the concept of competition and inter-laboratory peer review between two nuclear physics laboratories without unnecessary cost in overlap and redundancy.

I have some concern, however, about the longer term viability of the weapons program under ERDA. The nuclear weapons budget is now roughly 20 percent of ERDA's overall budget. Top management attention to the expanding energy program may lead to erosion of weapons priority and funding in the future. We are seeing the reassignment of top talent from
the weapons program to energy matters within the weapons laboratories. While this might be a short-term effect, I believe we must watch it with extreme care. Hopefully, we will see some positive aspects, such as new talent coming into the energy program and moving into the weapons area, due to the unique technical challenge presented by weapons design and development.

Since only one year has elapsed between the merging of energy and weapons programs, I propose that the management question be examined again within two or three years by ERDA and DoD to determine if another formal review is warranted. This will allow us to more fully assess the impact of the competing demands of energy programs on weapons development and production.

Our review of the nuclear weapons program and its continued importance to the national security of the United States has been beneficial. I recommend that you forward the report to the Congress endorsing the provisions of Management Alternative 2 and the above views on Naval Reactors, Space Nuclear Systems and RD matters.

[Signature]

D. W. 

[Date]
CRITICAL ISSUE EIGHT

Organizational Placement of Military Application and Restricted Data Functions which are now ERDA Responsibilities

BACKGROUND

During Congressional consideration of the Energy Reorganization Act of 1974, considerable concern was expressed over the appropriateness of ERDA retaining the military application and restricted data functions previously vested in the Atomic Energy Commission. Some in Congress viewed these functions (principally those associated with development and production of nuclear weapons) as more appropriate for placement in the DOD, and indicated a concern that these functions would detract from ERDA's ability to carry out its demanding energy R&D mission. Others in Congress and in the nuclear science community expressed concerns that a transfer of the nuclear weapon functions to DOD would inadvisably terminate what had proven to be a sound organizational partitioning of responsibilities for safety, security performance and military operational characteristics, would risk degrading the organizational and operational structures that had demonstrated a highly successful performance record for more than two decades, and decrease natural opportunities for beneficial technological interchange between weapon and nonweapon programs. The issue was formally addressed by Section 307(b) of the Energy Reorganization Act, which required that the Administrator, in collaboration with the Secretary of Defense, conduct a comprehensive study of the feasibility and desirability of transferring ERDA military application and restricted data functions to the DOD or other Federal agencies. The military application functions consists of the nuclear weapons program, the naval reactor program and space nuclear power systems.

The study required by Section 307(b) was completed in January 1976. The Secretary of Defense, in a memorandum to the President, concurred in the Administrator's recommendations. Essentially, the report recommended that ERDA retain responsibility for its nuclear weapon functions as well as other military related functions and restricted data, and recommended certain improvements in regard to organization and budgeting information, namely that:

1. OMB establish a separate budget activity (Title) for the ERDA weapons program, providing budget target ceilings, budget reviews, and appropriations separate from those of other programs in ERDA.

2. DOD revise its nuclear weapons budget and cost reporting submissions to Congress to include, on a non-add basis, additional detail of the ERDA costs associated with each new nuclear weapon or weapon system.
3. If DOD or ERDA concluded, following 2-3 years of experience, that this arrangement needs to be reconsidered, the President could direct an update of this study and its recommendations.

The Secretary of Defense, in his concurring memorandum to the President, had placed emphasis on the importance of a reexamination of the management question after 2-3 years of experience. In forwarding the Report to Congress in May 1976, the President endorsed the recommendation regarding costs reporting and management reexamination and stated the recommendation to establish a separate target ceiling would be taken in consideration in the preparation of future budgets.

Concerns Related to Current Energy Reorganization Considerations

The DOD testified during hearings on the Energy Reorganization Act of 1974, that while ERDA assumption of AEC military application functions was acceptable, DOD would need to conduct a detailed study before evaluating the desirability of placing these functions in a broader organization than the current ERDA organization. DOD concern was specifically with respect to the weapons program and the need to retain its current priority in any new parent organization, that management of weapons research, development, testing, production, surveillance, and maintenance be conducted by a single organization and that the existing nuclear weapons laboratory structure be preserved. This reflects the view that it would be more difficult for the weapons program to receive appropriate management attention and priority in a more diverse, multipurpose organization. This suggests a reconsideration would be necessary of the proposal to transfer the weapons functions to DOD or to a new Federal agency.

In the case of a transfer of nuclear weapons responsibilities to DOD, the principal factors or concerns are as described in ERDA-97. DOD placement would appear to insure undiminished high priority and responsiveness to Defense needs. The possible adverse impact of the weapons program on the energy mission might likewise favor this option. On the other hand, there would be concerns about (a) providing a substitute for dual agency judgments on matters of safety and security; (b) means of retaining substantial interlacing and effective association of nuclear scientists in the weapons complex with the broader community of nuclear scientists in universities and national laboratories, to insure that U.S. nuclear weapons technology is based on the most current advances available in nuclear science; and (c) preservation of a close association between advanced nuclear weapons technology and energy RD&D programs so that each can benefit from advances in the other.

Another generic option is establishment of a new independent agency to assume responsibility for ERDA nuclear weapon functions, and possibly weapons-related nuclear high technology R&D activities as well. Such
an approach would have to be considered in the event DOE, DENR, or DOD placement were all judged to be undesirable. There are serious questions, however, regarding the viability of a relatively small agency, and the mechanisms for interlacing the new agency with the DOD and the successor to ERDA.

Alternative Presidential Positions on Critical Issue 8

Should the President decide to endorse either Alternative 2 (DENR) or 3 (DOE), there are several alternatives for dealing with the question of organizational placement of the nuclear weapons functions in his public announcement of the reorganization. The general nature of the alternatives and their advantages and disadvantages are discussed below.

Alternative 1 - The President to state the critical importance of the nuclear weapons program and complex to National Security and to recognize the importance of organizational placement of these ERDA functions, but simply indicate that "the President has directed the DOD and ERDA to jointly review the matter and to provide their recommendations to him by a certain date." This alternative would fulfill the minimum objective of publicly recognizing the importance of the matter, would provide time for a careful study, and would be an acceptable approach to DOD and ERDA.

Alternative 2 - State that it is the President's intention that the nuclear weapons function be transferred to the DOD, and indicate that actions would be taken to insure minimum adverse impact on the function by the transition and that, though the nuclear weapons complex will have as its primary purpose the nuclear weapons program, use for DENR (or DOE) work can be accomplished as agreed between the SECDEF and Department Secretary.

This alternative would be advantageous insofar as it would reduce speculation regarding the transfer. It may also be looked upon as a constructive step towards limiting the diversity of the new energy entity.

Alternative 3 - State that it is the President's intention that ERDA nuclear weapons functions be transferred to a new independent agency to avoid the undesirable consequences of a transfer to either the DOD or a new energy entity, and that features have been identified to insure viability of the new agency and to minimize adverse impact on the nuclear weapons program.

The advantage of this approach is that it would clearly avoid the concerns which exist regarding transfer to either DOD or a DENR. Concerns related to viability of a new agency may still exist, however, and it might be argued that insufficient consideration had been given to alternative solutions in adoption of this approach.
ISSUE: What recommendations should DoD make on congressional committee oversight functions for the DoD nuclear weapons programs as legislated by the Atomic Energy Act of 1954, as amended?

-- Section 202 of the Atomic Energy Act of 1954, as amended, requires that the DoD keep the Joint Committee on Atomic Energy fully and currently informed with respect to all matters within the Department of Defense relating to the development, utilization, or application of atomic energy.

-- In fulfilling this requirement of the law, the ATSD(AE) has provided a wide range of information to the JCAE, as illustrated hereunder. Most is classified information vital to the national security, and includes Restricted Data (RD), Formerly Restricted Data (FRD), and Critical Nuclear Weapons Design Information (CNWDI). Information on weapon stockpile quantities, deployments and other military uses of atomic energy are routinely provided. The JCAE, in compliance with the Atomic Energy Act, has provided special storage facilities and security measures to protect and safeguard this sensitive information.

-- Other committees have held hearings on nuclear weapons security, development programs, deployments, and employment doctrine. Additionally, the General Accounting Office (GAO), Surveys and Investigative Staff (S&I), and Congressional Budget Office (CBO) have conducted surveys and studies on nuclear weapons matters.

-- A summary of the activity outside the JCAE arena is attached.

-- Of immediate concern to the DoD is assuring that, whatever congressional restructuring takes place, committee responsibilities include adequate protection of nuclear national security information and a well defined focus on nuclear weapon programmatic matters.

-- New legislation to replace or modify the Atomic Energy Act may be necessary early in the 95th Congress. Some possible legislative alternatives are furnished.
Currently, ATSD(AE) provides the following to the Joint Committee on Atomic Energy (JCAE) in compliance with the Atomic Energy Act of 1954:

---Events as they occur:

- Notification of security violations involving NATO ATOMAL information documents.
- Changes to statutory determinations which are required for release of atomic information to NATO and/or NATO members.
- Reports of nuclear security surveys, or accidents/incidents involving nuclear weapons or their storage sites.
- Review of testimony transcripts and provision of additional information for either the record or in reply to specifically addressed questions.

---Recurring reports:

- The Defense Nuclear Agency (DNA) annual report on nuclear weapons technology (DNA-49M) and DNA annual nuclear test summary (DNA-170M).
- Quarterly reports, including:
  
  ---Portions of the DNA stockpile report to include US sovereignty, foreign sovereignty and location sequence showing type, location, coordinates, supported force, and quantity.
  
  ---Summary of ATSD(AE) activities, briefly describing developments for the preceding quarter and furnishing additional background information as required.
  
  ---Essential elements of Nuclear Weapons Deployment and Stockpile plans.

---Other information is frequently provided on a one-time basis, as required. For example:

- Nunn Amendment report, "The Theater Nuclear Force Posture in Europe."
- DoD Nuclear Weapons Security Manual (DoD 5210.41M).
- "Nuclear Weapons Security Primer"
- Responses to JCAE member or staffer queries.
**ACTIVITY OUTSIDE OF THE JCAE**

**1973-1976**

**SENATE**

**Armed Services Committee** (to include subcommittees):
- 1973 - nuclear AFAP development, collateral damage
- 1974 - developmental systems (MK12A, SRAM, Trident, 8-inch)
- 1975 - status of NATO TNF report required by PL 93-365 (Nunn Amendment)
- 1976 - physical security of nuclear weapons, employment policy

**Foreign Relations Committee** (to include subcommittees):
- 1974 - energy reorganization
  - US nuclear weapons in Europe and their relationship to the conventional and strategic forces of the Alliance (NATO strategy)
- 1975 - stockpile composition including details on offensive and defensive strategic and tactical systems and warheads and also stockpile megatonnage
- 1976 - flexible response strategy, targeting and collateral damage
- 1976 - DoD witnesses concerning first use of nuclear weapons and preserving responsible controls

**Banking and Currency Committee** (to include subcommittees):
- 1974 - sale of reactors to Egypt and Israel

**Appropriations Committee** (to include subcommittees):
- 1974 - AEC(ERDA) Budget, test programs relating to SRAM, B61-2 and Lance

**HOUSE OF REPRESENTATIVES**

**Armed Services Committee** (to include subcommittees):
- 1973 - tactical nuclear weapons effects
  - nuclear AFAP development
- 1974 - AEC(ERDA) test program—advanced systems, in detail, to include MK12A, B77 (FUFO), Trident and 8" AFAP

**Appropriations Committee** (to include subcommittees):
- 1974 - AEC(ERDA) test program to include MK12A, SRAM, Lance, 8" AFAP, Trident and B61
- 1975 - AEC(ERDA) national security program to include B61, SRAM, Lance, Trident, MK12A, tactical nuclear weapons, international agreements and off-continent test readiness capabilities
  - tactical nuclear weapons development, deployment and security
  - S&I staff investigation review of tactical nuclear weapons to include the development, deployment and rationale involved
1976 - ERDA supplemental budget information and systems under development to include SRAM, Lance and B61-3 and 4
- review of overseas deployments of tactical nuclear weapons

International Relations Committee
1976 - export controls and nuclear proliferation

Congressional Budget Office
1976 - review of NATO theater nuclear force modernization program and employment doctrine and strategy
LEGISLATIVE ALTERNATIVES

-- Retain the Joint Committee on Atomic Energy to oversee the nuclear weapons programs only; energy responsibility would pass to other committees.

-- Assign oversight of the nuclear weapons programs to the Armed Services Committees (SASC and HASC).

-- Create new subcommittees within the SASC and JIASC to oversee the nuclear weapons programs.

-- Create a new joint committee made up of SASC and HASC members to oversee the nuclear weapons programs.

-- Move the ERDA nuclear weapons budget authorization to the House Appropriations Defense Subcommittee from the Public Works Subcommittee.
The attached documents represent all of the issue papers prepared by the ASD(PA) for the Ford-Carter Transition Team. There have been no deletions or omissions from these documents.
1. **SUBJECT/ISSUE:** To develop new concepts for the management and operation of European and Pacific Stars and Stripes to assure continued publication of the newspapers on a financially viable, cost effective basis.

2. **BACKGROUND:** European and Pacific Stars and Stripes are operated as non-appropriated fund activities. Heretofore, both newspapers have operated at a profit, with a large percentage of the earnings turned over to the respective welfare funds. European Stars and Stripes continues to operate at a profit. However, Pacific Stars and Stripes (PS&S) has incurred an operating loss of over $2 million since 1973. Inflation, rising costs, currency revaluations, Japanese labor market, and reductions and redeployments of forces have seriously undermined the financial viability of PS&S. The first six months of CY77 are critical months for PS&S. Management actions have been initiated and, if successful, results should be realized during this six-month period. Management actions include, but are not limited to: conversion to cold-type printing operation; computerization of administrative functions; implementation of 1976 Army Audit Agency recommendations; increased market area sales for books and magazines; and a further reduction of personnel.

3. **DOD POSITION:** To monitor effectively and assist U.S. Pacific Command, and the Pacific Stars and Stripes to stabilize the PS&S operation and operate on a profit-sharing basis. PS&S is regarded by commanders as one of the most important instrumentalities for maintaining a high state of morale among their personnel. As long as sizeable U.S. forces are deployed overseas the need for a newspaper like PS&S will remain. Use of appropriated funds may be considered if necessary to insure continued operation of the newspaper.
1. SUBJECT/ISSUE: Establish policy guidance and management controls for Department of Defense periodicals.

2. BACKGROUND: There is Congressional interest in this subject by both House and Senate Appropriations Committees. An annual report is required by the Senate Appropriations Committee. In January 1971, the GAO began a review of DoD periodicals. It found that adequate procedures did not exist for controlling and preventing duplication and proliferation of periodicals. The issue also surfaced in the press. On January 31, 1972, the SecDef directed ASD (Comptroller) and ASD (Manpower and Reserve Affairs) to begin an audit, review and evaluation of DoD periodicals. A Periodical Evaluation Task Force was established to conduct the review. The task force submitted its report on September 1, 1972, and was approved by the Secretary. Major recommendation was the assignment to ASD (M&RA) the responsibility for establishing guidelines and management controls governing DoD periodicals. This responsibility was transferred to ASD (Public Affairs) with the transfer of IAF functions to ASD(PA) in February, 1976. From September 1972 through the end of fiscal year '75, the number and total annual cost of DoD periodicals has been reduced substantially, as shown:

<table>
<thead>
<tr>
<th>As of:</th>
<th>No. of Periodicals</th>
<th>Total Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1972</td>
<td>1,402</td>
<td>$17.2 million</td>
</tr>
<tr>
<td>June 30, 1975</td>
<td>653</td>
<td>$15.7 million</td>
</tr>
</tbody>
</table>

DoD Directive 5120.43, Department of Defense Periodicals, was issued in September, 1973, to establish DoD policy and guidance. The DoD Periodicals file is computerized and reports are required every other year. Next reporting date: as of October 31, 1977.

3. DOD POSITION: It is the DoD position as set forth in the Secretary's memorandum of September 16, 1972, to initiate appropriate corrective action, including the development of guidance and management controls, governing Department of Defense periodicals.
HUMAN GOALS

1. SUBJECT/ISSUE: Announced by Secretary of Defense Melvin Laird August 18, 1969, the Human Goals Credo describes five basic goals to be observed by the Department of Defense in recognition of the individual needs, aspirations and capabilities of its military and civilian members.

2. BACKGROUND: The document has been reaffirmed and signed by each succeeding Secretary of Defense, Deputy Secretary of Defense, Service Secretary, and the members of the Joint Chiefs of Staff.

3. DOD POSITION: Upon reaffirmation and signature of the newly-appointed Secretary of Defense and his staff, the document will be printed and distributed to Department of Defense installations worldwide.
1. SUBJECT: Develop a DoD Integrated Audiovisual Equipment Inventory

2. BACKGROUND: Within the Department of Defense, audiovisual equipment ranges in complexity from simple manual devices to highly sophisticated systems. No one to date has been able to identify total DoD assets in terms of quantities, types, and acquisition costs.

To correct this problem, a plan was developed to gather individual equipment inventory tapes from the Services and by extraction of selected data elements, develop an integrated equipment inventory of DoD assets. The Services were tasked to provide copies of their existing inventory tapes to the Directorate for Audiovisual Activities (DAVA).

It was discovered that not all Services maintained a central inventory of in-use world-wide assets, although they do maintain inventory information on warehouse assets.

The information contained in inventory tapes submitted varied greatly. The premise that any accounting system would contain basic information such as stock number, nomenclature and price proved invalid. Although all Services have not submitted inventory tapes, it is becoming apparent that unless the Services modify the information contained in their respective inventories, an integrated equipment inventory file is impossible.

As an interim measure, audiovisual activities are being tasked to provide total dollar acquisition costs of assets by Federal Supply Class. This information will be provided as part of the Annual Facilities Report. For the first time, we will be able to provide valid cost data although we will still lack specifics on equipment.

3. DOD POSITION: Effective management of the DoD audiovisual inventory requires that a current and accurate data base which shows the location, quantities and cost of all end-items of equipment be maintained and made available to DoD management. This information will assist in developing equipment utilization standards in conjunction with facilities utilization criteria in areas of procurement, retention and reallocation of equipment.
AUDIIOVISUAL ACTIVITIES

1. SUBJECT: Standardized Audiovisual Product Contracting

2. BACKGROUND: Past management studies indicate widespread dissatisfaction with the Government's current audiovisual production contracting program. Commercial producers as well as many Government users are critical of the present program, which permits each agency to use its own forms, procedures, and policies in contracting for productions.

In furtherance of the responsibilities assigned to the Federal Audiovisual Committee, Office of Federal Procurement Policy (OFPP), the Department of Defense was requested to lead an effort to develop a uniform audiovisual procurement system for use by all Federal agencies. The proposed system, developed by the Directorate for Audiovisual Activities, Office of Information for the Armed Forces, was published in the Federal Register in August, 1976. The comments and suggestions received from a wide segment of the industry and from Government will be consolidated and presented to the Federal Audiovisual Committee before the end of 1976 for development of final recommendations. The Committee's decisions will be incorporated into a revised proposal by the OFPP Audiovisual Contract Group, Directorate for Audiovisual Activities, for review and approval by the OFPP.

3. DoD POSITION: The implementation of a standard and simplified procedure which embodies good business practice and is necessary for improved audiovisual procurement is in the best interest of the Department of Defense. This is an issue which is important and should receive the personal attention of the Assistant Secretary of Defense (Public Affairs). The possibility for substantial dollar savings is great, but care must be taken to assure that the Department receives a quality product in a very competitive industry.
DIRECTORATE FOR AUDIOVISUAL ACTIVITIES
AUDIOVISUAL ACTIVITIES

1. SUBJECT: Development of a Plan for DoD Which Meets
   the Objectives Established by OMB and OSD

2. BACKGROUND: The Department of Defense recently
   completed a draft report in response to a study
   entitled Review of Audiovisual Facilities in the
   Washington, D.C., and San Bernardino, California,
   Areas written in December 1975 by the Federal Audio-
   Visual Committee.

   The plan reflects ongoing and planned actions of the
   Military Services and DoD Agencies for consolidation
   and elimination of facilities and adds other actions
   required to meet OMB and OSD objectives, including
   completion of evaluation of facilities according to
   OMB Circular A-76 and conversion to use of private
   sector support where indicated.

   The process of coordination of the first draft of
   the plan has proven more refractory than anticipated,
   delaying the replies from the DoD components. The
   complexities of the plan and in its coordination
   have indicated the need for coordination of a second
   draft.

   The responses to the second draft of the plan are
   due back to OASD(PA) by January 24, 1977. A lack of
   unanimity in the DoD components' positions is expected
   even after the second cycle of coordination.

3. DOD POSITION: The responses from the Military Depart-
   ments will be made by the Secretaries. A determination
   of the DoD position on the parts of the plan on which
   concurrence has not been reached must be made prior
   to writing the final plan for DoD. A decision on
   these points by the Secretary of Defense may be
   necessary. The final plan is due to OMB in early
   April, 1977.
Subject: Alternatives to the Joint Civilian Orientation Conference (JCOC)

Background: The JCOC is a week-long tour of selected military installations (in the continental U. S.) and the Pentagon. Civilian opinion leaders participate — at the invitation of the Secretary of Defense.

The program was established in 1948. There have been one or more conferences per year since then, except in 1961, 1971, 1975, and 1976.

Participants are selected from nominees submitted by elements of DoD, former participants, and — occasionally — Members of Congress. They arrange for their own transportation to the initial site on the tour and from the termination point (Washington, D. C.) to their homes. They also pay in part for the costs of food, lodging, and incidental expenses while on tour.

While on the tour, the participants are transported by military aircraft. OASD(PA) has budgeted for the costs of the aircraft and the transportation of the military escort personnel.

After reviews of the 1970 and 1972 tours, the General Accounting Office reported that DoD did not account for all of the costs properly attributable to the program. (For 1970, DoD estimated the costs at $14,000, the GAO at $80,000; for 1972 the estimates were, respectively, $17,000 and $35,000.) In its 1970 report the GAO said it was unaware of any statute that would preclude DoD from incurring the costs of the tour programs or that would require DoD to recover the full cost from the invited participants.

Present status: The Directorate for Community Relations, OASD(PA), is evaluating other means of communicating with key opinion leaders from a diversity of occupations and geographical locations. The objective is to develop a less expensive program. Now under consideration is a proposal to conduct four-day seminar programs in the Pentagon at which participants would be exposed to the workings of the OSD, Joint Staff, and headquarters of the Military Services. Participants would be expected to provide their own transportation and living expenses. DoD expenditures would be minimal.
ISSUE

Subject: Credibility of the Department of Defense

Background: Some members of the press and some private citizens believe the Department of Defense has been too secretive about its activities and insufficiently candid on those occasions when it has released information. Although complaints of lack of credibility are now heard less infrequently than in years past, some people seem to harbor a lingering doubt about the statements of Department of Defense spokespersons. The Vietnam war experience, the aura of Watergate, and distrust of the "military-industrial complex" have militated against acceptance of DoD arguments supportive of Defense programs. After 1973 the weight of press and public criticism appeared to shift from doubts about truthfulness to doubts about openness.

Members of the OASD(PA) staff who deal with news media representatives on a continuing basis sense that, during 1976, there has been a significant lowering in the level of distrust on the part of many or most of those representatives.

DoD Position: National security depends upon the support of an informed public. We recognize our obligation to provide to the public as much information as possible about their Armed Forces and the activities of the Department of Defense. The attached statement of public information principles provides for a free flow of information to the press and the American people within the limitations imposed by the requirements of national security, the need to protect the lives of people in the military service, and the provisions of the Privacy Act.

Each new Secretary of Defense should reaffirm our adherence to those principles.

Attachment
MEMORANDUM FOR Secretaries of the Military Departments
Chairman of the Joint Chiefs of Staff
Director of Defense Research and Engineering
Assistant Secretaries of Defense
The General Counsel
Assistant to the Secretary of Defense
Directors of the Defense Agencies

SUBJECT: Public Information

To assure that the American people are fully informed about matters of national defense, the Department of Defense will conduct its activities in an open manner, consistent always with the need for security and personnel safety. It has been said that ours is a nation which is guided and directed by the people, and that given access to information they will find their way to right decisions. From this it follows that Government will serve us well only if the citizens are well informed. In accordance with the Freedom of Information Act, unclassified information, other than that specifically exempted by the Act, is to be readily accessible to the public. As a Member of Congress, I was an advocate of the Freedom of Information Act. As Secretary of Defense, I reaffirm my commitment to its intent. The following principles apply:

1. The Department's first concern must be the security of the United States and the safety of the men and women of the Armed Forces. Information which would adversely affect the nation's security or endanger military personnel should not be disclosed.

2. No information is to be classified solely because disclosure might result in criticism of the Department. To avoid abuses, the declassification and classification criteria set forth in Department Directive 5200.1K will be strictly observed.

3. The provisions of the Freedom of Information Act (5 USC 552), as amended, are to be supported in both letter and spirit.

4. The Department has a responsibility to make available accurate and timely information about plans, budgets, and
activities so that the public, the press, and the Congress may assess and understand proposals and programs. In our increasingly interdependent world, it is even more important that the elements of national security and defense strategy be available to and understood by the public. Successful recruitment and retention of the active and reserve All-Volunteer Force also require that there be information available as to the Department's goals and objectives. Therefore, when interested citizens request defense information and/or speakers, every reasonable effort should be made to be responsive.

5. The Department's responsibility to provide the public with accurate, timely information on its major programs will require, in some instances, detailed public information planning and coordination within the Department and with other government agencies. The sole purpose of such planning and coordination is to expedite the flow of information to the public.

Each addressee will review all pertinent policies and public information plans to insure prompt and complete compliance with these principles. Practices which do not meet the foregoing criteria will be revised or rescinded.

The Assistant Secretary of Defense (Public Affairs) is responsible for advising and assisting me in the fulfillment of these public information principles throughout the Department.

SIGNED
DONALD HUSSLEAD
2. Issue: Frequency of news briefings.

Background: By 1974, the daily news briefings which had been held during the Vietnam War had dwindled to two per week. After months of requests, they were held almost daily until the spring of 1975, at which time they slowly dwindled until June. After that, they were held on an average of once a month. This displeased a few reporters. Secretary Green began holding two briefings a week and that has been true for all of 1976. The Press Corps is very satisfied with this arrangement.

The basic argument in favor of such briefings from the Press point of view is that this Department should be held publicly accountable on a frequent basis in an open forum. There are reporters who would prefer that there be no briefing unless we have something to announce. Most, however, like the idea of being able to ask questions in a briefing on a regular, planned basis. None of them would care for briefings more than twice a week, unless there is a reason for it.

DoD Position: Briefings are held Tuesdays and Thursdays at 1130 A.M.
1. **Issue**: Release to the Press of daily calendars of Secretary of Defense, Deputy Secretary of Defense, and Service Secretaries.

**Background**: After repeated urging by two or three reporters over a period of many months, it has been the policy to post these calendars. Not all appointments are shown, but appointments with foreign diplomats, members of Congress, defense contractors, and others connected with DoD affairs are listed. This has served to open up the conduct of public business by senior Departmental officials.

**DoD Position**: Calendars are posted routinely each day in the Pentagon press office.
1. SUBJECT/ISSUE: Fund for vital, viable National Committee for Employer Support of the Guard and Reserve.

2. BACKGROUND: The National Committee for Employer Support of the Guard and Reserve was originally established as an Advisory Committee in June 1972, by Presidential Announcement. The National Committee was recharted as an Operational Committee in July 1975, under provisions of DoD Directive 5165.18. The National Committee for Employer Support operates with a voluntary organization consisting of (a) A National Chairman, Mr. James M. Roche, an individual of National Statue, former Chairman of the Board and Chief Executive Officer of General Motors Corporation, (b) An Executive Committee of 21 members who are distinguished leaders from industry, business, labor, media, government, and other organizations, (c) Field Operations Council - some 200 plus members who are selected on a basis of outstanding business and civic reputation who act as regional and local contacts for the National Committee, (d) Military Staff - The National Committee was originally staffed at 21 people in 1972. This staff was reduced to 7 at the end of FY 75.

New concern has been expressed by the ASD(M&RA) and other high level OSD managers over the present manning shortages within the Reserve Forces and the projected further reduction in strengths because of poor retention rates being experienced. Additionally, they have expressed concern over the noticeable trend among both public and private employers toward a lessening of their support for employee participation in the Guard and Reserve Programs.

3. DOD POSITION: Deputy Secretary Clements, in a meeting with Mr. James M. Roche, National Chairman of the Employer Support Committee reaffirmed the need for a strong National Committee for Employer Support that could direct and conduct a vibrant program to maintain awareness and public understanding, enlist support of employers, and encourage employee participation in the Guard and Reserve. Secretary Clements directed a memorandum be prepared specifying direct action to accomplish the fulfillment of the requirements of the Committee for increased manpower and funding resources to carry out their charter and mission.
Although they do not fully conform to the definition of "issue papers" as defined by U.S. News and World Report's letter of December 14, 1976, the ten attached documents represent all issue material furnished by the General Counsel for the Transition Team of the Carter Administration. Eight of the issue papers are provided without deletions. The remaining two papers contain deletions as specified below:

In the Briefing Paper entitled "Unionization of the Armed Forces," which is attached to the December 17, 1976 memorandum from Mr. Wiley to Mr. Herbits on that subject (Atch. 9), all of the last paragraph on page 2 (except the first sentence), which paragraph continues on page 3, is denied. This material constitutes legal advice and opinion in the nature of lawyer work-product being provided by the General Counsel to the Special Assistant to the Secretary and Deputy Secretaries of Defense and to the Transition Team. As a result, it is denied as part of an intra-agency memorandum under 5 U.S.C. 552(b)(5) which would not be available by law even to a party in litigation with the agency. The Defense Department considers the Transition Team to be a part of the Defense Department for purposes of receipt of documents under the fifth exemption. The legal advice therein relates to policy alternatives which are still being considered within the Defense Department regarding unionization of the armed forces, and, therefore, the legitimate government purpose being served by withholding the information is to protect legal advice which is part of the deliberative decision-making process, and release of which could inhibit that process.

At Attachment 10 is a memorandum dated December 22, 1976, prepared by the General Counsel at the request of the Transition Team, which outlines the "Pending Business" of the Office of the General Counsel. All 24 pages are released, except for 27 sentences and a portion of another sentence which are denied as described below:

1. The last three sentences on page 5 of the memorandum are denied under 5 U.S.C. 552(b)(5) and (7)(A), (B), and (C). These sentences constitute the legal judgment of the General Counsel that certain allegations against Defense Department employees required their being referred to the Justice Department for investigation. Accordingly, they are denied under 5 U.S.C. 552(b)(5) as being a legal determination in an intra-agency memorandum which would not be available by law to a party other than a party in litigation with the agency. Additionally, all three sentences are denied under 5 U.S.C. 552(b)(7)(A), (B), and (C) as being information that is part of a law enforcement investigatory record, the release of which would interfere with enforcement proceedings, deprive
persons of the right to a fair trial, and constitute an unwarranted invasion of the personal privacy of the persons who are being investigated, but against whom no formal allegations have been brought at this time.

2. A portion of the last sentence on page 6 of the memorandum (which continues on page 7) is denied under 5 U.S.C. 552(b)(5) as being an evaluation contained in an intra-agency memorandum which would not be available by law to a party other than a party in litigation with the agency. The legitimate government purpose being served is that release of this portion could result in misunderstanding of this issue by the public, who might construe this subjective evaluation to be fact, which in turn could hamper efforts to resolve the identified issue.

3. The last sentence on page 7 and the first full sentence on page 8 of the memorandum; the second through fifth sentences in paragraph 4 on page 8; the second sentence in paragraph 5 on page 8; the last sentence in paragraph 5 on page 9; the second sentence in paragraph 6 on page 9; the third and fourth sentences in paragraph 8 on page 10; and the first two sentences in paragraph 9 on pages 10-11 are denied as exempt under 5 U.S.C. 552(b)(5), as being policy recommendations contained in an intra-agency memorandum. Release of such policy advice prior to its consideration and a decision by the appropriate official would interfere with the deliberative decision-making process of the Defense Department.

4. The last two sentences on page 11 are denied as exempt under 5 U.S.C. 552(b)(5) because they are an assessment of a potential problem and an implied recommendation in an intra-agency memorandum concerning the appointment of military officers at the three- and four-star level, release of which would interfere with the deliberative decision-making processes of the Defense Department.

5. The last two sentences in paragraph 10 on pages 12-13 of the memorandum and the last sentence in paragraph 11 on page 13 are denied as exempt under 5 U.S.C. 552(b)(5) as being policy recommendations and advice in an intra-agency memorandum, release of which would interfere with the deliberative decision-making process of the Defense Department.

6. The second sentence in paragraph 14 on page 14 of the memorandum is denied as exempt under 5 U.S.C. 552(b)(5). It is an evaluation and opinion concerning the so-called Arab
boycott as it relates to DoD activities, contained in an intra-agency memorandum, release of which would interfere with the policy-making functions of the Defense Department on that issue.

7. The last sentence in paragraph 17 on page 16 and the last sentence in paragraph 22 on page 19 are denied as exempt under 5 U.S.C. 552(b)(5). They are policy recommendations contained in an intra-agency memorandum, release of which would interfere with the deliberative decision-making process of the Defense Department.

8. The last sentence in paragraph 26 on page 21 is denied as exempt under 5 U.S.C. 552(b)(5). It is an assessment of, and opinion on, the possible impact of a lawsuit involving Mead Data, and release would interfere with policy decisions which must be made in how to deal with this problem.

9. The last two sentences in paragraph 31 on page 23 are denied as exempt under 5 U.S.C. 552(b)(5). The first sentence constitutes a policy recommendation, release of which would interfere with policies which are presently being formulated within the Defense Department on whether to suggest changes to these board procedures. The second sentence is lawyer work-product which is presently being considered in connection with pending litigation, premature release of which could interfere with the Government's position in that case.

The Initial Denial Authority for the above deletions is Mr. Robert L. Gilliat, Assistant General Counsel.
MEMORANDUM FOR THE SPECIAL ASSISTANT

SUBJECT: Transition Team - Request for Information and Papers - November 27, 1976

In response to your memorandum of 29 November 1976, and Mr. Steadman's memorandum of 27 November 1976, attached are the following briefs:

1. "The limits of Presidential power in the application of force and/or the deployment of US Forces" (Attachment 1).

2. "The authority of the Secretary of Defense in the deployment and command of US Forces" (Attachment 2).

3. "Statutory restraint on the Secretary of Defense and/or President to reorganization of DoD" (Attachment 3).

4. "Summary of DoD rules and regulations regarding conflicts of interest." - The standards of conduct directive has been revised and will be published in the Federal Register for public comment on Wednesday, 8 December 1976. The proposed new regulation is attached at Attachment 4.

5. "The status of outstanding programs to reintegrate Vietnam draft evaders/deserters in US society including DoD estimates of the number of persons in each category." - A summary of this program prepared in the Office of the Assistant Secretary of Defense (Manpower & Reserve Affairs) is attached at Attachment 5.

The three other items are under preparation.

Richard A. Wiley

Attachments

cc: General Counsel Subject: Transition
MEMORANDUM FOR General Counsel (Attention: Mr. Neiderlehner)

SUBJECT: Transition Team – Request for Information and Papers

Attached from Mr. R. C. Steadman, head of the President-elect's transition team for DoD, are a number of specific requests for briefing/information papers in General Counsel areas of responsibility.

As Mr. Steadman's memorandum indicates, he would like these papers as soon as possible, and hopefully all within a week.

To the extent possible, responses to these specific requests should be addressed in Section II ("Issues") of the briefing book requested in my November 10, 1976 memorandum and due to my office by close of business Friday, 3 December.

Stephen E. Herbits
The Special Assistant

Attached
The limits of Presidential power in the application of force and/or the deployment of US Forces outside US territory

The legal limits of Presidential power are contained in international law, US Constitutional law, and Acts of Congress.

The limits of international law are contained in rules of general applicability, such as the UN Charter prohibition on "the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations," and customary international law limitations on belligerent and neutral states, conduct of hostilities, use of some kinds of weapons, etc. The limits of international law are also contained in Treaties and executive agreements to which the US is a party but which are not of general applicability, such as the OAS Charter prohibition on intervention "directly or indirectly, for any reason whatever, in the internal or external affairs of any other State, "and foreign base rights agreements which limit the US right to deploy certain kinds of weapons, to use the bases in the event of hostilities, etc. The fundamental international legal limitation on the deployment of US forces outside US territory is the requirement of the prior consent, tacit or express, of the territorial sovereign.

The limits of US Constitutional law and Acts of Congress on Presidential power in the application of force and/or the deployment of US forces outside US territory have never been fully determined or exhaustively compiled, although most agree that such limits exist. A summary of the issues and pertinent texts is set forth in the attached prepared statement of the Acting General Counsel, DoD, for a Senate Judiciary Subcommittee hearing scheduled for September 9, 1975 (the hearing was indefinitely postponed).

Special note should be taken of the War Powers Resolution (P.L. 93-148, enacted on November 7, 1973 over Presidential veto) which requires the President to report in writing to the Congress within 48 hours after US forces are introduced, in absence of a declaration of war (1) into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances; (2) into the territory, airspace or waters of a foreign nation, while equipped for combat, except for deployments which relate solely to supply, replacement, repair, or training of such forces; or (3) in numbers which substantially enlarge United
States Armed Forces equipped for combat already located in a foreign nation. In case of a report in situation (1), the War Powers Resolution requires the President to terminate the use of US forces in such situation within 60 days, unless the Congress has declared war or has enacted a specific authorization for such use, has extended by law such 60-day period, or is physically unable to meet as a result of an armed attack upon the United States. The 60-day period can also be extended for an additional 30 days if the President determines that unavoidable military necessity respecting US forces safety requires their continued use in the course of bringing about a prompt removal of such forces.
The authority of the Secretary of Defense
in the deployment and command of US Forces

Article II, Section 2 of the US Constitution provides that "The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States". Pursuant to Title 10 United States Code, section 133, the President appoints the Secretary of Defense who "is the head of the Department of Defense" and "is the principal assistant to the President in all matters relating to the Department of Defense."

Title 10 USC, sec. 133(b), provides that the Secretary of Defense "has authority, direction, and control over the Department of Defense" subject to (1) the direction of the President, (2) Title 10 of the United States Code, and (3) 50 USC, sec. 401. The last-mentioned section sets forth the Congressional declaration of purpose in enacting the National Security Act of 1947, as amended, including "to provide for the establishment of unified or specified combatant commands, and a clear and direct line of command to such commands; ...[and] to provide for the unified strategic direction of the combatant forces, for their operation under unified command, and for their integration into an efficient team of land, naval, and air forces but not to establish a single Chief of Staff over the armed forces nor an overall armed forces general staff."

Title 10 USC, sec. 141, establishes the Joint Chiefs of Staff as "the principal military advisers to the President, the National Security Council, and the Secretary of Defense" and requires the Joint Chiefs of Staff, subject to the authority and direction of the President and the Secretary of Defense, to "establish unified commands in strategic areas". The Chairman of the JCS is appointed by the President pursuant to Title 10 USC, sec. 142, to, inter alia, "preside over the Joint Chiefs of Staff"; however, "he may not exercise military command over the Joint Chiefs of Staff or any of the armed forces."

Title 10 USC, sec. 143, establishes the Joint Staff to perform such duties as the Joint Chiefs of Staff or the Chairman prescribes, but provides that the Joint Staff "shall not operate or be organized as an overall Armed Forces General Staff and shall have no executive authority."

Title 10 USC, sec. 124, provides:

"(a) With the advice and assistance of the Joint Chiefs of Staff, the President, through the Secretary of Defense, shall"
(1) establish unified combatant commands or specified combatant commands to perform military missions; and

(2) shall prescribe the force structure of those commands.

"(b) The military departments shall assign forces to combatant commands established under this section to perform the missions of those commands. A force so assigned is under the full operational command of the commander of the command to which it is assigned. It may be transferred from the command to which it is assigned only by authority of the Secretary and under procedures prescribed by the Secretary with the approval of the President. A force not so assigned remains, for all purposes, in the military department concerned.

"(c) Combatant commands established under this section are responsible to the President and to the Secretary for such military missions as may be assigned to them by the Secretary with the approval of the President.

"(d) Subject to the authority, direction, and control of the Secretary, each military department is responsible for the administration of forces assigned by that department to combatant commands established under this section. The Secretary shall assign the responsibility for the support of forces assigned to those commands to one or more of the military departments."

The authority of the Secretary of Defense in the deployment of US forces is therefore: (1) derived from the authority of the President as Commander in Chief and is subject to the limits on the President's authority; (2) subject to the direction of the President; (3) subject to the provisions of title 10 United States Code and other statutory provisions as well as the availability of the necessary funds; and (4) executed pursuant to (a) the unified command plan approved under title 10 USC, sec. 124(a), and (b) the assignment of forces to the combatant commands by the military departments under title 10 USC, sec. 124(b). The authority of the Secretary of Defense in the command of deployed US Forces is subject to the approval of the President pursuant to title 10 USC, sec. 124(c), and the exercise of that authority is subject to lawful limitation.
29 November 1976 Memorandum Item No. 4:

"Statutory restraint on the Secretary of Defense and/or President to reorganization of the Department of Defense."

The general authority of the President to accomplish reorganizations within the Executive Branch is covered in section 901 ff. of Title 5 of the United States Code. This authority expired on April 1, 1973. Its renewal was requested by President Ford, but the request was not acted upon by the Congress. President-Elect Carter has indicated that he will request a renewal of this authority.

In essence, a reorganization plan is a reverse legislative process in that the President acts before the Congress acts. The President formally submits his plan to the Congress, and if neither House adopts a disapproval resolution within 60 days of continuous session of the Congress, the plan becomes law. The process permits the establishment of a cohesive organization which is not subject to legislative amendment to accommodate special interests.

Extensive reorganization authority is vested by current law in the Secretary of Defense with respect to only the Department of Defense. Section 125 of Title 10 (text attached at Tab A) provides a scheme for the transfer, reassignment, consolidation, or abolition of any function, power, or duty, subject to the same sort of disapproval authority as is provided for in the Presidential Reorganization Act. With respect to either authority, the Reorganization Plan takes effect as law, unless it is disapproved by either House of the Congress. Sixty days of continuous session is prescribed for Presidential plans; and in the case of the Secretary of Defense, a 30-day period for either Armed Services Committee to act, plus an additional 40 days after a disapproval resolution is reported from Committee.

An important difference between a Presidential Reorganization Plan and a Secretary of Defense Plan is that the former may provide for appointment and pay of officers. It may also change the name of an agency. It is, however, subject to some limitations, such as a prohibition against creating a new Executive Department, or consolidating two Executive Departments.

There is one additional authority vested by the National Security Act in the President with respect to the Department of Defense. This is the authority of the President to establish unified (more than one military
service) or specified (a single military service) combatant commands, and the assignment of military forces and missions to these commands. This authority is not subject to approval by the Congress except through the indirect medium of the appropriation process (text attached at Tab B).

Within the Office of the Secretary of Defense, there is the Secretary of Defense who is the head of the entire Department of Defense. The National Security Act, as amended, provides for two Deputy Secretaries, to perform such duties as the Secretary of Defense prescribes. There is a Director of Defense Research and Engineering whose duties are limited to research and engineering under 10 U.S.C. 135. There are nine Assistant Secretaries of Defense of whom the duties of these are prescribed (or limited) by statute:

1. Health Affairs;
2. Manpower and Reserve Affairs; and
3. Comptroller.

The other six Assistant Secretaries perform such duties as the Secretary of Defense may prescribe.

Although the six Assistant Secretaries perform such duties as the Secretary of Defense prescribes, and although the six are nominated and confirmed "in blank", i.e., each simply as an Assistant Secretary of Defense, the Senate Armed Services Committee has vigorously objected to the assignment of new duties to an Assistant Secretary already in office, and has forced a renomination. The Committee's position is that each nominee's qualifications are examined in relation to specific duties even though he is nominated "in blank".

The General Counsel is, by statute, the Chief Legal Officer of the Department, and performs such other duties as the Secretary may prescribe.

The National Security Act further provides for a Deputy Assistant Secretary of Defense for Reserve Affairs, appointed by the President, by and with the advice and consent of the Senate. There is also a Chairman of the Military Liaison Committee to the Atomic Energy Commission, appointed by the President, with the advice and consent of the Senate. This officer customarily serves also as the Assistant to the Secretary of Defense for Atomic Energy Matters.
Within each military department, there is a Secretary who is the head of the department, and an Under Secretary who is his general backup. There are four Assistant Secretaries for the Navy and the Air Force, whose duties are prescribed by their respective Secretaries. In the Army, there are five Assistant Secretaries. The duties of one are prescribed by statute as "Civil Works."
armed service to which transferred; according to the provisions of law governing promotion, seniority, and retirement therein. No officer upon a transfer to any service from which previously transferred shall be given a higher grade, or place on the applicable promotion list, than that which he could have attained had he remained continuously in the service to which transferred. [Section 202(h), Act of July 26, 1947, ch. 343, as added by section 3, Act of September 9, 1950, ch. 939, 64 Stat. 628. This provision is temporary law and will expire on July 1, 1971, unless otherwise extended.] See note following subsection (g), above.

(i) Any officer transferred hereunder shall be credited with the unused leave to which he was entitled at the time of transfer. [Section 202(i), Act of July 26, 1947, ch. 343, as added by section 3, Act of September 9, 1950, ch. 939, 64 Stat. 628. This provision is temporary law and will expire on July 1, 1971, unless otherwise extended. See note following subsection (g), above.]

(j) [Repealed and restated in section 124 of title 10, United States Code.]

§ 124. Combatant commands: establishment, composition; functions; administration and support

(a) With the advice and assistance of the Joint Chiefs of Staff, the President, through the Secretary of Defense, shall—

(1) establish unified combatant commands or specified combatant commands to perform military missions; and

(2) shall prescribe the force structure of those commands.

(b) The military departments shall assign forces to combatant commands established under this section to perform the missions of those commands. A force so assigned is under the full operational control of the commander of the command to which it is assigned. It may be transferred from the command to which it is assigned only by authority of the Secretary and under procedures prescribed by the Secretary with the approval of the President. A force not so assigned remains, for all purposes, in the military department concerned.

(c) Combatant commands established under this section are responsible to the President and to the Secretary for such military missions as may be assigned to them by the Secretary with the approval of the President.

(d) Subject to the authority, direction, and control of the Secretary, each military department is responsible for the administration of forces assigned by that department to combatant commands established under this section. The Secretary shall assign the responsibility for the support of forces assigned to those commands to one or more of the military departments.

DEPUTY SECRETARIES OF DEFENSE: ASSISTANT SECRETARIES OF DEFENSE: MILITARY ASSISTANTS

SEC. 203. (a) [Repealed and restated in section 134 of title 10, United States Code.]

§ 134. Deputy Secretaries of Defense: appointment; powers and duties; precedence

(a) There are two Deputy Secretaries of Defense, appointed from civilian life by the President, by and with the advice and consent of the Senate. A person may not be appointed as a Deputy Secretary of Defense within ten years after relief from active duty as a commissioned officer of a regular component of an armed force.

(b) The Deputy Secretaries shall perform such duties and exercise such powers as the Secretary of Defense may prescribe. The Deputy Secretaries, in the order of precedence, designated by the President shall act for, and exercise the powers of, the Secretary when the Secretary is disabled or there is no Secretary of Defense.

(c) The Deputy Secretaries take precedence in the Department of Defense immediately after the Secretary.

§ 125. Director of Defense Research and Engineering: appointment; powers and duties; precedence

(a) There is a Director of Defense Research and Engineering, appointed from civilian life by the President, by and with the advice and consent of the Senate.

(b) The Director performs such duties relating to research and engineering as the Secretary of Defense may prescribe, including—

(1) being the principal adviser to the Secretary on scientific and technical matters;

(2) supervising all research and engineering activities in the Department of Defense; and

(3) directing, controlling, assigning, and reassigning research and engineering activities that the Secretary considers need centralised management.

(c) The Director takes precedence in the Department of Defense after the Secretary of Defense, the Deputy Secretary of Defense, and the Secretaries of the military departments.

§ 2355. Research projects

Subject to approval by the President, the Secretary of Defense or his designee may engage in basic and applied research projects that are necessary to the responsibilities of the Department of Defense in the field of basic and applied research and development and that relate to weapons systems and other military needs. Subject to approval by the President, the Secretary or his designee may perform assigned research and development projects—

(1) by contract with educational or research institutions, private businesses, or other agencies of the United States;

(2) through one or more of the military departments; or

(3) by using employees and consultants of the Department of Defense.


(c) [Repealed and restated in section 136 (a), (b), and (c) of title 10, United States Code.]
DEPARTMENT OF DEFENSE
Office of the Secretary
(32 CFR 40)
STANDARDS OF CONDUCT
Notice of Proposed Rulemaking


Part 40 prescribes standards of conduct relating to possible conflict between private interests and official duties required of all Department of Defense personnel, regardless of assignment.

The primary revision provides for a more concise and effective regulation.

Public comment on the proposed revision may be submitted within thirty days after publication in the Federal Register to Office of the General Counsel, Room 3E980, Pentagon, Washington, D.C. 20301.

The proposed amendment to Part 40 reads as follows:

Sec.

40.1 Purpose and Objectives
40.2 Applicability
40.3 Definitions
40.4 Appropriate Conduct of Official Activities
40.5 Information to Personnel
40.6 Standards of Conduct Counsellors
40.7 Reporting Suspected Violations
40.8 Resolving Violations
40.9 Statements of Affiliations and Financial Interests
40.10 Nondisqualifying Financial Interest
40.11 Required Statement of Employment
40.12 Requirements for Submission of Statements of Affiliations and Financial Interests
40.13 Effective Date

AUTHORITY: The provisions of §§ 40.1 - 40.13 are issued under E.O. 11222 and P.L. 87-651.

§ 40.1 Purpose and Objectives

(a) Government employment, as a public trust, requires that DoD personnel put loyalty to ethical and legal principles and to country above personal gain and any other interests. This Part prescribes standards of conduct required of all Department of Defense (DoD) personnel, regardless of assignment.

(b) Penalties for violations of this Part include the full range of statutory and regulatory sanctions for civilian and military personnel.


1/ Filed as part of original. Copies available from Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, Pa. 19120, Attn: Code 320.
§ 40.2 Applicability

This Part applies to all DoD personnel in the Office of the Secretary of Defense, the Military Departments, the Organization of the Joint Chiefs of Staff, and the Defense Agencies including nonappropriated fund activities (hereinafter referred to as "DoD Components").

§ 40.3 Definitions

(a) **DoD Personnel** means all civilian officers and employees, including special Government employees, of all DoD Components and all active duty officers (commissioned and warrant) and enlisted members of the Army, Navy, Air Force, and Marine Corps.

(b) **Gratuity** means any gift, favor, entertainment, hospitality, transportation, loan, any other tangible item, and any intangible benefits, for example discounts, passes, and promotional vendor training, given or extended to or on behalf of DoD personnel or their families for which fair market value is not paid by the recipient or the U.S. Government.

(c) **Officer or employee** means all civilian officers and employees, and all military officers on active duty, except those who are "special Government employees."

(d) **Special Government employee** means an officer or employee who is retained, designated, appointed, or employed to perform, with or without compensation, for not to exceed 130 days during any period of 365 consecutive days, temporary duties either on a full-time or intermittent basis. The term also includes a Reserve officer while on active duty solely for training for any length of time, one who is serving on
active duty involuntarily for any length of time, and one who is serving voluntarily on extended active duty for 130 days or less. It does not include enlisted personnel.

(e) Standards of Conduct Counsellors are discussed in § 40.6.

§ 40.4 Appropriate Conduct of Official Activities

(a) General

(1) DoD personnel shall become familiar with the scope of legal authority for, and the legal limitations concerning, the activities for which they have responsibilities.

(2) The attention of DoD personnel is directed to the statutory prohibitions which apply to DoD personnel conduct.

(3) DoD personnel shall not make or recommend any expenditure of funds or take or recommend any action known or believed to be in violation of U.S. laws, Executive Orders, or applicable Directives, Instructions, or regulations.

(4) In cases of doubt as to the propriety of a proposed action or decision in terms of regulation or law, DoD personnel shall consult the Standards of Conduct Counsellor and, as appropriate, legal counsel to ensure the proper and lawful conduct of DoD programs and activities.

(b) Conduct Prejudicial to the Government

DoD personnel shall avoid any action, whether or not specifically prohibited by this Part, which might result in or reasonably be expected to create the appearance of:

(1) Using public office for private gain;

(2) Giving preferential treatment to any person or entity;

(3) Impeding Government efficiency or economy;
(4) Losing complete independence or impartiality;

(5) Making a Government decision outside official channels; or

(6) Affecting adversely the confidence of the public in the integrity of the Government.

(c) Conflicts of Interests

(1) **Affiliations and Financial Interests**—DoD personnel shall not engage in any personal, business, or professional activity, or receive or retain any direct or indirect financial interest, which places them in a position of conflict between their private interests and the public interests of the United States related to the duties or responsibilities of their DoD positions. For the purpose of this prohibition, the private interests of a spouse, minor child, or dependent member of one's household shall be deemed to be private interests of the DoD personnel.

(2) **Using Inside Information**—DoD personnel shall not use, directly or indirectly, inside information to further a private gain for themselves or others if that information is not generally available to the public and was obtained by reason of their DoD position.

(3) **Using DoD Position**—DoD personnel are prohibited from using their DoD positions to induce, coerce, or in any manner influence any person, including subordinates, to provide any benefit, financial or otherwise, to themselves or others.

(4) **Disqualification or Divestiture Requirements**

Unless otherwise expressly authorized by action taken under 18 USC 207 or 208, all DoD personnel who have affiliations with or interests in Defense contractors must disqualify themselves from any official activities in relation to those entities. The formal disqualification must be sent to the individual's superior and immediate subordinates. If the
individual cannot adequately perform his official duties after such a disqualification, he must divest himself of such involvement or be removed from the position.

(d) Membership in Associations

DoD personnel who are members or officers of non-governmental associations or organizations must avoid activities on behalf of the association or organization that are incompatible with their official Government positions. (DoD Directive 5500.2, "Policies Governing Participation of Department of Defense Components and Personnel in Activities of Private Associations," August 4, 1972 (37 FR 16674) and DoD Instruction 5410.20, "Public Affairs Relations with Business and Non-Governmental Organizations Representing Business," January 16, 1974. 1/)

(e) Dealing with Present and Former Military and Civilian Personnel

DoD personnel shall not knowingly deal on behalf of the Government with military or civilian personnel, or former military or civilian personnel, of the Government, whose participation in the transaction would be in violation of a statute, regulation, or policy set forth in this Part.

(f) Commercial Soliciting by DoD Personnel

In order to eliminate the appearance of coercion, intimidation, or pressure from rank, grade, or position, fulltime civilian personnel and active duty military personnel are prohibited from making commercial solicitations or sales to DoD personnel junior in rank or grade, at any time, on or off duty, in or out of uniform. This limitation includes, but is not limited to, the solicitation and sale of insurance, stocks, mutual funds, real estate, and any other commodities, goods, or services.
This prohibition is not applicable to the one-time sale by an individual of his own personal property or privately owned dwelling or to the off-duty employment of DoD personnel as employees of retail store outlets or similar establishments where the sales of goods and services do not involve solicited sales situations.

(g) Assignment of Reserves for Training

DoD personnel who are responsible for assigning Reserves for training shall not assign them to duties in which they will obtain information that could be used by them or their private sector employers to give them an unfair advantage over their civilian competitors.

(h) Prohibited Selling by Retired Officers

There are legal limitations on sales by retired regular military officers to any component of the DoD, Coast Guard, National Oceanic and Atmospheric Administration, or Public Health Service.

(i) Equal Opportunity

DoD personnel shall scrupulously adhere to the DoD program of equal opportunity regardless of race, color, religion, sex, age, or national origin. (DoD Directive 1100.15, "The Department of Defense Equal Opportunity Program," June 3, 1976.)

(j) Gratuities

(1) Policy Basis

Acceptance of gratuities by DoD personnel or their families, no matter how innocently tendered and received, from those who have or seek business with the Department of Defense and from those whose business interests are affected by Department functions may be a source of embarrassment to the Department, may affect the objective judgment of the DoD
personnel involved, and may impair public confidence in the integrity of
the Government.

(2) General Prohibition

Except as provided in paragraph (j) of this section, DoD personnel
shall not solicit, accept, or agree to accept any gratuity, for themselves,
members of their families, or others, either directly or indirectly
from, or on behalf of, any source which:

(i) Is engaged in or seeks business or financial relations of any
sort with any DoD Component;

(ii) Conducts operations or activities that are either regulated by
any DoD Component or significantly affected by DoD decisions; or

(iii) Has interests that may be substantially affected by the per-
formance or nonperformance of the official duty of DoD personnel.

(3) Limited Exceptions

The general prohibition in subparagraph (2), paragraph (j) of this
section, do not apply to the following:

(i) Continued participation in employee welfare or benefit plans
of a former employer when permitted by law and approved by the Standards
of Conduct Counsellor.

(ii) Advertising or promotional items of clearly less than $5 in
retail value.

(iii) Trophies, entertainment, prizes, or awards for public service
or achievement or given in games or contests which are clearly open to
the public generally or which are officially approved for DoD personnel
(iv) Things available to the public such as university scholarships covered by DoD Directive 1322.6, "Fellowships, Scholarships, and Grants for Members of the Armed Forces," April 27, 1963 (32 Part 139) and free exhibitions by Defense contractors at public trade fairs.

(v) Discounts or concessions extended component-wide and available to all personnel in the component.

(vi) Participation in civic and community activities by DoD personnel when any relationship with defense contractors is remote, for example, participation in a little league or Combined Federal Campaign luncheon which is subsidized by a concern doing business with a DoD Component.

(vii) Social activities engaged in by officials of the Department and officers in command, or their representatives, with local civic leaders as part of community relations programs of the Department, in accordance with DoD Directive 5410.18, "Community Relations," July 3, 1974. 1/

(viii) Participation of DoD personnel in widely attended gatherings of mutual interest to Government and industry, sponsored or hosted by industrial, technical, and professional associations, not by individual contractors, provided that they have been approved in accordance with DoD Instruction 5410.20, "Public Affairs Relations with Business and Nongovernmental Organizations Representing Business," January 14, 1974. 1/

(ix) Situations in which (a) participation by DoD personnel at public ceremonial activities of mutual interest to industry, local communities, and the Department serves the interests of the Government and (b) the invitation is approved by the Head of the employing DoD Component or his designee.
(x) Contractor-provided transportation, meals, or overnight accommodations in connection with official business when arrangements for Government or commercial transportation, meals, or accommodations are clearly impracticable. In any such case, the individual shall report the circumstances to his supervisor as soon as possible.

(xi) Situations in which, in the sound judgment of the individual concerned or his supervisor, the Government's interest will be served by DoD personnel participating in activities otherwise prohibited. In any such case, a report of the circumstances shall be made in advance, or, when an advance report is not possible, within 48 hours by the individual or his supervisor to the appropriate Standards of Conduct Counselor, who, for this purpose, shall be directly responsible to the head of the military department or the Secretary of Defense.

(4) The acceptance of accommodations, subsistence, or services furnished in kind in connection with official travel from other than sources indicated in (j) (2) of this section, is authorized only when the individual attending is to be a speaker, panelist, project officer or other bona fide participant in the activity attended and when such attendance and acceptance is authorized by the order-issuing authority as in the overall Government interest.

(5) DoD personnel may not accept personal reimbursement from a private source for expenses incident to official travel, unless authorized by the Standards of Conduct Counselor (pursuant to 5 U.S.C. 4111 or other statutory authority). Rather, any reimbursement must be made to the Government by check payable to the Treasurer of the United States.
Personnel will be reimbursed by the Government in accordance with regulations relating to reimbursement. In no case shall DoD personnel accept, either in kind or for cash reimbursement, benefits which are extravagant or excessive in nature.

(6) When accommodations, subsistence, or services in kind are furnished to DoD personnel by private sources, consistent with paragraph (j) of this section, appropriate deductions shall be reported and made in the travel, per diem, and other allowances otherwise payable.


(8) Procedures with respect to ROTC Staff Members are set forth in DoD Directive 1215.8, "Policies Relating to Senior Reserve Officers' Training Corps (ROTC) Programs," May 1, 1974. 1/

(9) After the effective date of this Part, DoD personnel who receive gratuities or have gratuities received for them in circumstances not in conformance with the standards of this Part shall promptly take one of the following steps concerning them.

(i) Return them to the originating parties to the extent feasible.

(ii) Provide them to the officer designated for collection and disposition for the component or unit.

(iii) Report to the appropriate Standards of Conduct Counsellor the circumstances of the receipt and handling of the gratuity up to the present time.

(k) Prohibition of Contributions or Presents to Superiors

DoD personnel shall not solicit a contribution from other officers
or employees for a gift to an official superior, make a donation or a
gift to an official superior, or accept a gift from an officer or
employee receiving less pay than themselves. However, a voluntary gift
or donation of nominal value made on a special occasion such as marriage,
ilness, transfer, or retirement is not prohibited.

(1) Use of Government Facilities, Property, and Manpower
DoD personnel shall not directly or indirectly use, or allow the
use of, government property or facilities of any kind, including property
leased to the government, for other than officially approved activities.
Government facilities, property, and manpower, such as stationery,
stenographic and typing assistance, mimeograph, and chauffeur services,
shall be used only for official government business. DoD personnel have
a positive duty to protect and conserve government property, including
equipment and supplies entrusted to them. This paragraph does not
preclude the use of government facilities for approved activities in
furtherance of DoD-community relations provided they do not interfere
with military missions.

(m) Use of Civilian and Military Titles or Positions in Connection
With Commercial Enterprises

(1) All civilian personnel, and military personnel on active duty,
are prohibited from using their civilian and military titles or positions
in connection with any commercial enterprises or in endorsing any commercial
product. This does not preclude such author identification for material
published in accordance with DoD procedures.

(2) All retired military personnel and all members of reserve
components, not on active duty, are permitted to use their military titles
in connection with commercial enterprises provided that they indicate their inactive reserve or retired status. However, if such use of military titles in any way casts discredit on the military services or the DoD or gives the appearance of sponsorship, sanction, endorsement, or approval by the military services or the DoD, it is prohibited. In addition, the military departments may restrict retired personnel and members of reserve components, not on active duty, from using their military titles in overseas areas.

(n) **Outside Employment of DoD Personnel**

(1) DoD personnel shall not engage in outside employment or other outside activity, with or without compensation, which:

   (i) Interferes with, or is not compatible with, the performance of their Government duties;

   (ii) May reasonably be expected to bring discredit on the Government or the DoD agency concerned; or

   (iii) Is otherwise inconsistent with the requirements of this Part, including the requirements to avoid actions and situations which reasonably can be expected to create the appearance of conflicts of interests.

(2) No enlisted member of the armed forces on active duty may be ordered or authorized to leave his post to engage in a personal, business, or professional activity if it would interfere with the customary or regular employment of local civilians in their art, trade, or profession.

(3) Off-duty employment of military personnel by an organization involved in a strike is permissible if the member was on the payroll of
such organization prior to the commencement of the strike and if the employment is otherwise in conformance with the provisions of this Part. No military member may accept employment by an organization at a location where that organization is involved in a strike after commencement and during the course of such a strike. Members who are engaged in off-duty civilian employment which does not meet the above policy are required to terminate such employment.

(4) An active duty officer of the regular Navy or Marine Corps may not be employed by any person furnishing Naval supplies or war materials to the United States and continue to receive his service pay.

(5) DoD personnel are encouraged to engage in teaching, public speaking, and writing. However, an employee shall not, either for or without compensation, engage in teaching, lecturing, or writing that is dependent on information obtained as a result of his Government employment, except when that information has been published or is generally available to the public, or when the agency head gives written authorization for the use of non-public information on the basis that the use is in the public interest and when it will be made generally available to the public.

(6) An employee who is a civilian Presidential appointee shall not receive compensation or anything of monetary value for any consultation, lecture, discussion, writing, or appearance, the subject matter of which is devoted substantially to the responsibilities, programs, or operations of his agency or which draws substantially on official material which has not become part of the body of public information.

(6) Gambling, Betting, and Lotteries

DoD personnel shall not participate, while on Government-owned, leased, or controlled property, or otherwise while on official duty for
the Government, in any gambling activity, including for example, a
lottery or pool, any game for money or property, and the sale or purchase
of a number slip or ticket. The only exceptions are for official activi-
ties which have specific agency approval.

(p) **Indebtedness**

DoD personnel shall pay their just financial obligations, particularly
those imposed by law such as federal, state, and local taxes, so that their
indebtedness does not adversely affect the Government as their employer.
DoD Components are not required to determine the validity or amount
of disputed debts.

§ 40.5 **Information to Personnel**

All DoD personnel, including those appointed by the President, shall,
in fact, be given a copy of this Part or implementing DoD Component
regulation and an oral standards of conduct briefing preceding employment
or assumption of duties and will be reminded at least semi-annually of
their duty to comply with the required standards of conduct. Each reci-
ipient of such a briefing shall attest in writing to his attendance at
such a briefing, the fact that he has read this Part, and his comprehension
of the requirements imposed by its standards.

§ 40.6 **Standards of Conduct Counsellors**

(a) The Secretary of each Military Department and the Director of
each Defense Agency shall designate a Standards of Conduct Counsellor
and one or more Deputy Counsellors. Those designated shall be responsible
for providing advice and assistance to their departments or agencies
and to personnel of those departments and agencies on all questions
arising from the operation and implementation of this Part. They shall also be responsible for the proper coordination and disposition of all standards of conduct problems.

(b) The General Counsel of the DoD, or his designee, shall provide legal guidance to the Standards of Conduct Counsellors throughout the Department of Defense.

(c) The General Counsel shall represent the DoD to the Civil Service Commission. The General Counsel shall assist the Deputy Assistant Secretary of Defense (Administration), Office of the Assistant Secretary of Defense (Comptroller), or his designee, who shall perform the role of Standards of Conduct Counsellor for the Office of the Secretary of Defense.

§ 40.7 Reporting Suspected Violations

DoD personnel who have information which causes them to believe that there has been a violation of a statute or standard of conduct required by this Part shall promptly report such information to their immediate superiors or, if those persons' conduct is at issue, to the next higher superiors. If the person to whom the report is made believes there has been a violation, he shall report the matter to the appropriate Standards of Conduct Counsellor for action.

§ 40.8 Resolving Violations

The resolution of standards of conduct problems shall be accomplished promptly by one or more measures, such as divestment of conflicting interests, disqualification for particular assignments, changes in assigned duties, termination, or other appropriate action, as provided by
Statute or administrative procedures. Disciplinary actions shall be in accordance with established personnel procedures.

§ 40.9 Statements of Affiliations and Financial Interests

The following DoD personnel are required to submit annual and updating Statements of Affiliations and Financial Interests, Form 1555, unless they are expressly exempted. (See § 40.12 for details on applicability and requirements.)

(a) All civilian officers and employees paid at the level of grades GS-16 to 18 or the Executive Schedule.

(b) All officers of flag or general rank.

(c) Commanders and Deputy Commanders of major installations, activities, and operations as determined by the respective Secretaries of the Military Departments and the Directors of the Defense Agencies.

(d) Board members of the Armed Service Board of Contract Appeals.

(e) DoD personnel classified at GS-13 or above, or at a comparable pay level under other authority, and members of the military in the rank of Lieutenant Colonel, Commander, or above when the responsibilities of such personnel require the exercise of judgment in making a Government decision or in taking Government action in regard to activities in which the final decision or action may have a significant economic impact on the interests of any non-Federal entity.

(f) Special Government employees.

(g) Other DoD personnel who are requested, with Civil Service Commission approval, to file such Statements.

2/ Filed as part of original. Copies available from Office of General Counsel, Rm 3E977, Pentagon, Washington, D.C. 20301.
§ 40.10 Nondisqualifying Financial Interest

A full-time officer or employee need not disqualify himself under section 40.12 (m) if his financial holdings are in shares of a widely-held, diversified mutual fund or regulated investment company.

The indirect interests in business entities of holders of shares in a widely-held, diversified mutual fund or regulated investment company are hereby exempted from the provisions of 18 U.S.C. 208a. This determination is in accordance with the provisions of 18 U.S.C. 208b(2) as being too remote or inconsequential to affect the integrity of Government officers' or employees' services.

§ 40.11 Required Statement of Employment

(a) Each regular retired officer of the armed forces shall file with the military department in which he holds a retired status a Statement of Employment (DD Form 1357). Each regular officer retiring hereafter shall file this Statement within thirty days after retirement. Whenever the information in the Statement is no longer accurate, each such officer shall file a new DD Form 1357.

(b) The military departments shall appropriately review the Statements of Employment to assure compliance with applicable statutes and regulations.

§ 40.12 Requirements for Submission of Statements of Affiliations and Financial Interests

(a) DoD Personnel Required to Submit Statements

DoD personnel required to file Statements of Affiliations and Financial Interests (DD Form 1555) are those indicated in Section 40.9 of this Part.
(b) **Review of Positions**

Each DoD component shall include in the description of each position indicated in Section 40.9 of this Part, a statement that the incumbent of the position must file a Statement of Affiliations and Financial Interests as required by this Part.

All positions shall be reviewed at least annually to determine those which require Statements. Any individual may request a review of the decision requiring him to file a Statement through the established grievance or complaint procedures of the component.

(c) **Exclusion of Positions**

The Secretary of the Military Department or Director of the Defense Agency concerned, or their designees, may determine that the submission of a Statement is not necessary for certain positions because of the remoteness of any impairment of the integrity of the Government and the degree of supervision and review of the incumbents' work.

(d) **Manner of Submission of Statements**

(1) The Secretary of Defense is required to submit his Statement to the Chairman of the Civil Service Commission in accordance with the provisions of Section 401 of Executive Order 11222.

(2) All Defense civilian Presidential appointees shall submit their Statements to the Department of Defense General Counsel.

(3) Office of the Secretary of Defense (OSD) personnel and Directors of the Defense agencies shall submit their Statements through their superiors for review and forwarding to the OSD Standards of Conduct Counsellor.
(4) Military Department and Defense Agency personnel shall submit their Statements through their supervisors for review and forwarding to officials of the Military Departments or Defense Agencies designated in the regulations of those departments and agencies.

(5) Commanders of Unified Commands shall submit their Statements directly to the OSD Standards of Conduct Counsellor. Other personnel of Unified Commands shall submit their Statements through their supervisors to the Deputy Command Counsellor in the Office of the Legal Advisor to the Unified Command.

(6) All statements shall be reviewed and approved by the appropriate Standards of Conduct Counsellor prior to the commencement of service and annually thereafter as prescribed in g. of this section. Designees to positions requiring the approval of the Secretary of Defense or the Secretary of a Military Department shall execute the Statement in advance of nomination so that it may be thoroughly reviewed and evaluated prior to appointment.

(7) In order that DoD Components may maintain cognizance of Statements of their personnel who are assigned to other DoD Components or Government agencies which receive and review such Statements, the other Defense Component or Government agency shall, within 60 days, forward to the parent DoD Component's Standards of Conduct Counsellor a notification of the date of the Statement, whether it is an initial or annual Statement, and the disposition of any conflict or apparent conflict of interests indicated.

(e) **Excusable Delay.**

When required by reason of duty assignment, a superior may grant an extension of time with the concurrence of the Standards of Conduct...
Counsellor or his designee. Any extension in excess of 30 days requires the concurrence of the Head of the Military Department or Defense Agency concerned or his designee. Any late Statement shall include appropriate notation of any extension of time granted hereunder.

(f) Special Government Employees (as defined in § 40.3(d))

(1) Each special Government employee shall, prior to appointment, file a Statement of Affiliations and Financial Interests.

(2) The following are exempted categories of special Government employees who are not required to file a Statement unless specifically requested to do so:

(i) Physicians, dentists, and allied medical specialists engaged only in providing service to patients.

(ii) Veterinarians providing only veterinary services.

(iii) Lecturers participating in educational activities.

(iv) Chaplains performing religious services.

(v) Individuals in the motion picture and television fields who are utilized as narrators or actors in DoD productions.

(vi) Members of selection panels for NROTC candidates.

(vii) A special Government employee who is not a "consultant" or "expert" as those terms are defined in the Federal Personnel Manual, Chapter 304.

(3) The Secretary or a Deputy Secretary of Defense or the Secretary of a Military Department may grant an exemption to an appointee from the requirement of filing a Statement upon a determination that such information is not relevant in light of the duties the appointee is to perform.
(e) Annual Statements

DD Form 1555 Statements shall be filed by October 31st of each year for all affiliations and financial interests as of September 30th of that year. Even though no changes occur, a complete Statement is required.

(f) Interests of Employee’s Relatives

The interest of a spouse or minor child, or of any member of an employee's immediate household who is dependent for more than 50 percent of his support upon the DoD employee, is to be reported in the same manner as an interest of the employee.

(i) Information Not Known By Employees

For required information not known to the employee but known to another person, the employee shall request its submission on his behalf. The submission may be made with a request for confidentiality that will be honored even if it includes a limitation on disclosure of particular details to the employee himself.

(j) Information Not Required to be Submitted

An employee is not required to submit on a Statement any information relating to the employee's connection with, or interest in, a professional society or a charitable, religious, social, fraternal, recreational, public service, civic, or political organization or a similar organization not conducted as a business for profit. For the purpose of this paragraph educational and other institutions doing research and development or related work involving grants of money from or contracts with the Government are deemed to be businesses for profit and are to be included in an employee’s Statement.
§ 40.13 Effective Date

This Part shall become effective on the date it is adopted by the Secretary of Defense.

MAURICE W. ROCHE, Director
Correspondence and Directives
OASD (Comptroller)
DIGEST OF CONFLICT OF INTEREST LAWS

LAWS APPLICABLE TO FULL-TIME AND SPECIAL OFFICERS

AND EMPLOYEES

I. 18 U.S.C. 203

Subsection (a) prohibitions are encompassed by prohibitions in 18 U.S.C. 205 below. Subsection (b) makes it unlawful to offer or pay compensation for the solicitation or receipt of which is barred by subsection (a).

II. 18 U.S.C. 205

This section prohibits Government personnel from action as agent or attorney for anyone else before a department, agency or court in connection with any particular matter in which the United States is a party or has a direct and substantial interest.

Exemptions:

Section 205 does not prevent a Government officer or employee from giving testimony under oath or making statements required to be made under penalty for perjury or contempt or from representing another person, without compensation, in a disciplinary, loyalty, or other personnel matter.

Section 205 also authorizes a limited waiver of its restrictions and those of section 203 for the benefit of an officer or employee, including a special Government employee, who represents his own parents, spouse, or child, or a person or estate he serves as a fiduciary. The waiver is available only if approved by the official making appointments to the position. In no event does the waiver extend to his representation of any such person in matters in which he has participated personally and substantially or which, even in the absence of such participation, are the subject of his official responsibility.

Finally, section 205 gives the head of a department or agency the authority to allow a special Government employee to represent his regular employer or other outside organization in the performance of work under a Government grant or contract, if the department or agency head's certification that the national interest requires such representation is published in The Federal Register.

III. 18 U.S.C. 208

Subsection (a) requires executive branch personnel to refrain from participating as Government personnel in any matter in which they, their spouses, minor children, or partners have financial interests or in which businesses or nonprofit organizations with which such personnel are connected or are seeking employment have financial interests. A "particular matter" may be less concrete than an actual
contract, but is something more specific than rule making or abstract scientific principles. The test is whether the individual might reasonably anticipate that his Government action, or the decision in which he participates or with respect to which he advises, will have a direct and predictable effect upon such financial interests.

Subsection (b) permits agencies to grant an ad hoc exemption from subsection (a) if the outside financial interest is deemed not substantial enough to affect the integrity of Government services. Financial interests of this kind may also be made nondisqualifying by a general regulation published in *The Federal Register*.

IV. 18 U.S.C. 209

Subsection (a) prevents executive branch personnel from receiving, and anyone from paying them, any salary or supplementation of salary from a private source as compensation for Government service. Subsection (b) permits participation in a bona fide pension plan or other employee welfare or benefit plan maintained by a former employer. Subsection (c) exempts special Government employees and anyone serving the Government without compensation. Subsection (d) provides that the section does not prohibit the payment or acceptance of contributions, awards, or other expenses under the Government Employees Training Act (5 U.S.C. 2301-2319).

V. APPLICABLE TO REGULAR NAVY AND MARINE CORPS OFFICERS, 37 U.S.C. 801 (a), Formerly 10 U.S.C. 6112 (a)

A Regular Navy or Regular Marine Corps officer on active duty may not be employed by anyone furnishing Naval supplies or war materials to the United States. If such an officer is so employed he is not entitled to any payment from the United States during that employment.
Subsection (a) permanently prohibits former DoD personnel from acting as agent or attorney for anyone other than the United States in connection with matters involving a specific party or parties in which the United States has a direct and substantial interest and in which the former personnel participated personally and substantially while holding a Government position.

Subsection (b) sets forth a one-year post-employment prohibition with respect to matters within the area of official responsibility of former personnel at any time during the last year of service but in which they did not participate personally and substantially. More particularly, the prohibition of subsection (b) prevents his personal appearance in such matters before a court or a department or agency of the Government as agent or attorney for anyone other than the United States. The period of his post-employment ineligibility as to matters in a particular area ends one year after his responsibility for that area ends.

Past participation in or official responsibility for general rule-making, the formulation of general policy or standards, or other similar matters does not disqualify former personnel. Similarly, in the scientific field past participation in discussions of scientific or engineering concepts, the feasibility of scientific or technical accomplishments, or proposed Government programs in early stages prior to the formulation of contract or a contract proposal where specific parties become involved in a matter, does not disqualify the former personnel from representation with respect to a contract entered into at a later time even though the same general scientific matters may be involved in such a contract.

Neither subsection precludes post-employment activities which are no more than aiding or assisting another. An individual who has left the department to accept private employment may, for example, immediately perform technical work in his company's plant in relation to a contract for which he had official responsibility—or, for that matter, in relation to one he helped the agency negotiate. On the other hand, he is forbidden for a year, in the first case, to appear personally before the department as the agent or attorney of his company in connection with a dispute over the terms of the contract. He may at no time appear personally before the department or otherwise act as agent or attorney for his company in such dispute if he helped negotiate the contract.
SUMMARY OF LAWS PARTICULARLY APPLICABLE TO RETIRED REGULAR OFFICERS NOT ON ACTIVE DUTY

I. PROHIBITED ACTIVITIES.

A. Claims. A retired regular officer of the armed forces may not, within two years of his retirement, act as agent or attorney for prosecuting any claim against the Government, or assist in the prosecution of such a claim or receive any gratuity or any share of or interest in such claim in consideration for having assisted in the prosecution of such a claim, if such claim involves the department in whose service he holds a retired status. Nor may a regular retired officer at any time act as an agent or attorney for prosecuting any claim against the Government or assist in prosecution of such claim, or receive any gratuity or any share of or interest in such claim in consideration for having assisted in the prosecution of such claim, if such claim involves any subject matter with which he was directly connected while on active duty (See 18 U.S.C. 283).

B. Selling.

1. A retired regular officer is prohibited, at all times, from representing any person in the sale of anything to the Government through the department in whose service he holds a retired status (See 18 U.S.C. 281).

2. 37 U.S.C. 801(c) as amended October 9, 1962, P.L. 87-777, formerly 5 U.S.C. 59(c) provides:

"(c) Payment may not be made from any appropriation, for a period of three years after his name is placed on that list, to an officer on a retired list of the Regular Army, the Regular Navy, the Regular Air Force, the Regular Marine Corps, the Regular Coast Guard, the Environmental Science Services Administration, or the Public Health Service, who is engaged for himself or others in selling, or contracting or negotiating to sell, supplies or war materials to an agency of the Department of Defense, the Coast Guard, the Environmental Science Services Administration, or the Public Health Service." (Note: The Environmental Science Services Administration was abolished on 3 October 1970 and its functions were transferred to the National Oceanic and Atmospheric Administration.)
For the purpose of this statute, "selling" means:

a. Signing a bid, proposal, or contract;

b. Negotiating a contract;

c. Contacting an officer or employee of any of the foregoing departments or agencies for the purpose of:

   (1) Obtaining or negotiating contracts,

   (2) Negotiating or discussing changes in specifications, price, cost allowances, or other terms of a contract, or

   (3) Settling disputes concerning performance of a contract; or

d. Any other liaison activity with a view toward the ultimate consummation of a sale although the actual contact therefor is subsequently negotiated by another person.

Neither these statutes nor this Directive preclude a retired regular officer from accepting employment with private industry solely because his employer is a contractor with the Government.

II. EXEMPTIONS FROM LAW APPLYING TO OFFICERS ON ACTIVE DUTY

A retired regular officer continues to be an "officer" of the United States for purposes of many statutes. However, the laws applying to DoD personnel listed in Inclosure 1-A do not normally apply to retired regular officers not on active duty. 18 U.S.C. 206 specifically provides that 18 U.S.C. 203 and 205 do not apply to a retired officer while not on active duty who is not otherwise an officer or employee of the United States. 18 U.S.C. 208 and 209 do not apply to a retired officer not on active duty who is not performing services for the Government.
The following activities may subject present and former DoD personnel to penalties:

A. Aiding, abetting, counseling, commanding, inducing, or procuring another to commit a crime under any criminal statute (see 18 U.S.C. 201).

B. Concealing or failing to report to proper authorities the commission of a felony under any criminal statute if such personnel knew of the actual commission of the crime (see 18 U.S.C. 4).

C. Conspiring with one or more persons to commit a crime under any criminal statute or to defraud the United States, if any party to the conspiracy does any act to effect the object of the conspiracy (see 18 U.S.C. 371).

D. Lobbying with appropriated funds (see 18 U.S.C. 1913).


F. The employment of a member of a Communist organization (see 50 U.S.C. 784).


H. Habitual use of intoxicants to excess (see 5 U.S.C. 7352).

I. Misuse of a Government vehicle (see 31 U.S.C. 638a(c)(2)).

J. Misuse of the franking privilege (see 18 U.S.C. 1719).

K. Use of deceit in an examination or personnel action in connection with Government employment (see 18 U.S.C. 1917).

L. Committing fraud or making false statements in a Government matter (see 18 U.S.C. 1001).

M. Mutilating or destroying a public record (see 18 U.S.C. 2071).

N. Counterfeiting and forging transportation requests (see 18 U.S.C. 508).

O. Embezzlement of Government money or property (18 U.S.C. 641); failing to account for public money (18 U.S.C. 643); and embezzlement of the money or property of another person in the possession of an employee by reason of his Government employment. (see 18 U.S.C. 654).

P. Unauthorized use of documents relating to claims from or by the Government (18 U.S.C. 285).

Q. Political activities in subchapter III of Chapter 73, of Title 5, United States Code (see 5 U.S.C. 7321-7327) and 18 U.S.C. 602, 603, 607, and 608. These statutes apply to civilian employees; regulations govern military personnel.

R. An employee (including a special Government employee) who is required to register under the Foreign Agents Registration Act of 1938 (see 18 U.S.C. 219) may not serve the Government. The section does not apply to (1) reserves who are not on active duty or who are on active duty for training, or (2) a special Government employee in any case in which the department head certifies to the Attorney General that his employment by the United States Government is in the national interest.

S. Soliciting contributions for gifts or giving gifts to superiors, or accepting gifts from subordinates (see 5 U.S.C. 7351).

CONFLICT OF INTEREST FORM—FEDERAL

Department of Defense

(INCLUDING SPECIAL GOVERNMENT EMPLOYEES)

SECTION 1—IDENTIFICATION OF PERSON

1. NAME (Last, first, middle initial)

2. TITLE OF POSITION

3. DATE OF APPOINTMENT IN PRESENT POSITION

4. AGENCY AND MAJOR ORGANIZATIONAL SEGMENT

PART I. TO BE COMPLETED BY THOSE DOD PERSONNEL INDICATED IN
PART X. OF DOD DIRECTIVE 5500.7

5. NON-FEDERAL AFFILIATIONS AND FINANCIAL INTERESTS:
The interests of a spouse or minor child, or of other
persons in your immediate household dependent
upon you for more than 50 percent of their support
shall be reported in this Statement in the same
manner as your interests. List the names of all
corporations, companies, firms, partnerships, or
other business enterprises, nonprofit organizations,
and educational, or other institutions: (a) with
which you are or since last filing were connected
as an employee, officer, owner, director, member,
trustee, partner, adviser, agent, representative,
or consultant, or as a person on leave from or
having any understanding or plan for future
affiliation or (b) in which you have ongoing
financial interests, such as through a
pension or retirement plan, shared income,
continuing termination payments, or other arrange-
ment as a result of any current or prior employ-
ment or business or professional association; or
(c) in which you have any financial interest
through the legal or beneficial ownership of stock,
stock options, bonds, securities, or other arrange-
ments including trusts. If none, write NONE.

<table>
<thead>
<tr>
<th>NAME AND KIND OF ORGANIZATION</th>
<th>ADDRESS</th>
<th>POSITION OR AFFILIATION (Present or Intended)</th>
<th>NATURE OF FINANCIAL INTEREST (e.g., Stock, Prior business income, pension, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. CREDITORs. List all creditors other than those
providing arms-length, conventional loans, on customary commercial terms. If none, write
NONE.

<table>
<thead>
<tr>
<th>NAME AND ADDRESS OF CREDITOR</th>
<th>NATURE OF DEBT (e.g., personal loan, note, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. INTERESTS IN REAL PROPERTY. List your interests in real property other than personal residence you
occupy. Note any DOD contractor relationship, present or prospective, regarding acquisition or present
status. If none, write NONE.

<table>
<thead>
<tr>
<th>NATURE OF INTEREST (e.g., ownership, mortgage, lien, investment trust, etc.)</th>
<th>TYPE OF PROPERTY (e.g., residence, hotel, apartment, farm, undeveloped land, etc.)</th>
<th>ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. INFORMATION REQUESTED FROM OTHER PERSONS.
If any information is to be supplied by other
persons, e.g., trustee, attorney, relative, indicate name and address of such persons,
date on which you requested it, and subject
matter involved. If none, write NONE.

| NAME AND ADDRESS | DATE OF REQUEST | SUBJECT MATTER |
PART II. ADDITIONAL INFORMATION TO BE FURNISHED ONLY BY "SPECIAL GOVERNMENT EMPLOYEES"

9. ESTIMATE THE NUMBER OF DAYS ON WHICH SERVICES ARE EXPECTED TO BE PERFORMED.

a. With Employing DoD Agency
b. With Other Federal Agencies

c. Sum of a and b

d. Number of days worked for DoD during the 365 days preceding date of current appointment.

10. FEDERAL GOVERNMENT EMPLOYMENT. List all other Federal agencies and other organizational segments of this Agency in which you are presently employed. If none, write NONE.

<table>
<thead>
<tr>
<th>AGENCY AND LOCATION</th>
<th>TITLE OR KIND OF POSITION</th>
<th>APPOINTMENT PERIOD</th>
<th>ESTIMATED NUMBER OF DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>From</td>
<td>To</td>
</tr>
</tbody>
</table>

I certify that the statements I have made are true, complete, and correct to the best of my knowledge and belief, and that I have read and understand the contents of DoD Directive 5500.7, as implemented by the applicable component's regulation.

DATE: ___________________________

SIGNATURE _______________________

PRIVACY ACT STATEMENT

AUTHORITY: Information is solicited in this Statement under the authority of Executive Order 11222.

PRINCIPAL PURPOSE: Information is required from categories of DoD personnel specified in DoD Directive 5500.7, Part X., to enable supervisors and other responsible DoD officials to determine whether there are actual or apparent conflicts of interests between the individual's present and prospective official duties and non-Government affiliations or private financial interests.

ROUTINE USES: This information shall be treated as confidential except as determined by the component head concerned or the Civil Service Commission.

DISCLOSURE VOLUNTARY: Filing is voluntary, however, the refusal to provide requested information may result in suspension or consideration for appointment, reassignment of duties or termination.
SUPERVISOR'S EVALUATION
(See Enclosure 2 of DoD Dir. 5500.7)

I have reviewed the attached Statement in light of the present and prospective duties of the individual to ensure that both actual and apparent conflicts of interests are avoided. My evaluation is:

( ) No affiliation/financial interests reported.

( ) Reported affiliation/financial interests are unrelated to assigned or prospective duties, and no conflicts appear to exist.

( ) Assigned duties require participation in matters involving or which may involve the following reported affiliation/financial interests. This conflict or apparent conflict will be resolved by: Change in assigned duties ( ); Divestiture of the interests and relief of incumbent from all related duties pending divestiture ( ); Disqualification ( ); Other (explain) ( ).

A copy of my advice and action is attached.

( ) The following reported affiliation/financial interests are related to assigned or prospective duties, but have been determined by the appropriate appointing official to be not so substantial as to affect the integrity of the individual's services:

A copy of that formal determination and rationale is attached.

( ) The prospective employee's duties will require participation in matters involving the following reported affiliation/financial interests, and the appointment cannot be consummated until divestiture of these interests is completed:

__________________________                    _________________
Signature of Supervisor                   Date

_______________________________
Print Name and Title

STANDARDS OF CONDUCT COUNSELLOR/DEPUTY COUNSELLOR REVIEW
(See Enclosure 2 of DoD Dir. 5500.7)

As a duly designated Counsellor (or Deputy Counsellor), I have examined the foregoing Statement and Evaluation.

( ) I concur with the supervisor's evaluation.

( ) I do not concur with the supervisor's evaluation and recommend the following action:

__________________________                    _________________
Signature                   Date

DD Form 1555-A
<table>
<thead>
<tr>
<th>TITLE OF FORM</th>
<th>DATA REQUIRED BY THE PRIVACY ACT OF 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Employment (Regular Retired Officers)</td>
<td>PRESCRIBING DIRECTIVE DoD Dir. 5500.7</td>
</tr>
</tbody>
</table>

1. AUTHORITY

37 U.S.C. 801 (c) and 5 U.S.C. 5532

2. PRINCIPAL PURPOSE(S)

The two statutes prohibit certain selling activities by retired regular officers and require the Department of Defense to monitor its activities in relation to those officers in order to preclude any violation of these laws. The information required on this form is used to monitor the selling activities of retired regular officers.

3. ROUTINE USES

The information supplied on this form is forwarded to the military department in which the individual holds a retired status and is appropriately reviewed to assure compliance with applicable statutes and regulations.

4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION

Disclosure of the requested information is voluntary. The information requested by this form is required to enable the Department of Defense to implement 37 U.S.C. 801 (c) and 5 U.S.C. 5532. If the information is not provided, further investigation will ensue which may lead to the withholding of retired pay and the referral of the matter to the Department of Justice.
STATEMENT OF EMPLOYMENT

1. I am a regular retired officer of the ______________________ and was retired on ____________.

2. I ☐ am ☐ am not employed. (If employed, or self-employed, complete the rest of this item; if more than one employer, list complete information for each employer on a separate sheet).
   a. My employer's name and address is

   b. My employer sells, or offers for sale, to agencies (including nonappropriated fund activities) of the Department of Defense, the Coast Guard, the Coast and Geodetic Survey, or the Public Health Service, the following types of products or services:

   c. My position title is

   d. My duties are, briefly (a complete description of your job, a copy of your employment contract, or any other pertinent information, may be attached):

   e. My duties do not involve selling to the Government in violation of the statutes and policies cited in the regulation received.

3. I have received a copy of DOD Directive 5500.7, or the regulation issued by my department implementing that Directive.

4. I will promptly file a new Statement of Employment whenever the information in this Statement is no longer accurate.

<table>
<thead>
<tr>
<th>SIGNATURE</th>
<th>DATE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NAME (Typed or Printed)</th>
<th>FILE/SERVICE NUMBER</th>
</tr>
</thead>
</table>
The following chart presents the statistics as of November 2, 1976 for military deserters and draft evaders who enrolled with the Selective Service System.

<table>
<thead>
<tr>
<th>Status</th>
<th>Totals</th>
<th>DOD(1)</th>
<th>DOJ(2)</th>
<th>Total PCB</th>
<th>CAG(3)</th>
<th>AMOL(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled</td>
<td>8,464</td>
<td>4,545</td>
<td>704</td>
<td>3,215</td>
<td>144</td>
<td>3,071</td>
</tr>
<tr>
<td>Completed</td>
<td>1,579</td>
<td>396</td>
<td>174</td>
<td>1,009</td>
<td>85</td>
<td>924</td>
</tr>
<tr>
<td>At Work</td>
<td>1,239</td>
<td>611</td>
<td>293</td>
<td>335</td>
<td>18</td>
<td>317</td>
</tr>
<tr>
<td>To Be Placed</td>
<td>420</td>
<td>85</td>
<td>51</td>
<td>284</td>
<td>7</td>
<td>277</td>
</tr>
<tr>
<td>Terminated</td>
<td>5,226</td>
<td>3,453</td>
<td>186</td>
<td>1,587</td>
<td>34</td>
<td>1,553</td>
</tr>
</tbody>
</table>

(1) - Military deserters
(2) - Indicted draft evaders
(3) - Convicted draft offenders
(4) - Discharged AMOL offenders

The Selective Service System's responsibility in support of President Ford's clemency program began when a deserter or evader enrolled in the program. In the case of the evader the System enrolled a total of 848 persons, of which 216 have completed their alternate service obligation; 311 are currently at work; 58 are awaiting placement on a job; and 220 enrollees have terminated from the program.
Issue: Status of outstanding programs to reintegrate Vietnam draft evaders/deserters in U.S. society including DoD estimates of the number of persons in each category.

Programs Involved:
- President's Clemency Program (PCB) for the return of Vietnam-era (Aug. 4, 1964 to Mar. 28, 1973) draft evaders and military deserters.

Status:
- Military justice and administrative procedures involve on-going individual case-by-case review.
  - Upon advice of an attorney, returned deserters may request an administrative separation in lieu of trial by court-martial. If approved, the deserter receives an undesirable discharge. Otherwise, the deserter is usually tried by court-martial.
- President's Clemency Program:
  - DoD portion - processed at-large military deserters. Completed (Tab A).
  - PCB - processed convicted draft evaders and discharged military deserters -- Completed.
  - DoJ Portion - processed unconvicted draft evaders. Completed except for residual follow-up actions of the PCB.
  - Selective Service Portion - established, implemented and administered the program of alternative service -- Continuing (Tab B).

Categories and estimate of number of persons involved:

<table>
<thead>
<tr>
<th>Applicants</th>
<th>Responsible Agency</th>
<th>Number Eligible</th>
<th>Number Applying</th>
<th>Percent Applying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fugitive military deserter</td>
<td>DoD</td>
<td>10,115</td>
<td>5,555</td>
<td>55%</td>
</tr>
<tr>
<td>Fugitive draft offender</td>
<td>DoJ</td>
<td>4,522</td>
<td>700</td>
<td>16%</td>
</tr>
<tr>
<td>Discharged AWOL offender</td>
<td>PCB</td>
<td>83,135</td>
<td>13,589</td>
<td>16%</td>
</tr>
<tr>
<td>Convicted draft offender</td>
<td>PCB</td>
<td>8,700</td>
<td>1,879</td>
<td>22%</td>
</tr>
</tbody>
</table>

OASD(M&RA)(MPP)
3 December 1976
President Ford, by Proclamation 4313, established a program for the return of Vietnam-era draft evaders and military deserters on September 16, 1974. The objective of the program was to permit individuals to return to American society without risking criminal prosecution or incarceration for qualifying offenses if they acknowledged their allegiance to the United States and pledged to serve a period of alternative civilian service.

To be eligible for participation in the DoD portion of the program, the deserter's absence offense had to occur between August 4, 1964 (Gulf of Tonkin Resolution) and March 28, 1973 (date of withdrawal). The individuals could not have had other military charges pending against them and the individual must have reported to military authorities not later than March 31, 1975.

The Secretary of Defense directed uniform procedures be established to respond to all inquiries concerning eligibility for the Clemency Program. All participants were processed at Fort Benjamin Harrison, Indiana. An attorney explained the legal consequences of participation in the program, and other alternatives under their circumstances. If the individual desired to continue in the program, he requested a discharge for the good of the Service, reaffirmed his allegiance, and pledged to complete alternative service as assigned by a Joint Alternate Service Board. Upon completion of the alternative service certified by the Selective Service System, the individual became eligible for a Clemency Discharge Certificate.

The clemency discharge was established as tangible public testimonial to an individual's return to the mainstream of U.S. society. It does not represent a change in the characterization of other than honorable service, nor was it intended to affect entitlement to Veterans Administration benefits.

**DoD Clemency Program Statistics for Fugitive Military Deserters***

<table>
<thead>
<tr>
<th>No. Eligible</th>
<th>No. Eligibles Applying</th>
<th>Percent Applying</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,115</td>
<td>5,555</td>
<td>55%</td>
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</table>

*The Presidential Clemency Board processed discharged AWOL offenders and draft offenders. Some statistics regarding the Board follow:

<table>
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<tr>
<th>No. AWOL Offenders Eligible</th>
<th>No. Eligibles Applying</th>
<th>Percent Applying</th>
</tr>
</thead>
<tbody>
<tr>
<td>83,135</td>
<td>13,589</td>
<td>16%</td>
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MEMORANDUM FOR THE SPECIAL ASSISTANT

SUBJECT: Transition Team - Request for Information - November 27, 1976

Supplementing my memorandum of 7 December 1976, the remaining three items requested in the Transition Team memorandum of 27 November 1976, are attached as follows:

Attachment 1: "Statutes or directives which place command of the NMCC and the Defense Communications Agency under the JCS."

Attachment 2: "Legal restraint on the Secretary of Defense to terminate or reassign civilian/military employees of DoD."

Attachment 3: "What the Secretary and Presidential appointees should know regarding the application of the Freedom of Information Act to DoD."

(Signed) Richard A. Wiley

Richard A. Wiley

Attachments
SUBJECT: National Command Authorities--Control of the National Military Command System

The National Command Authorities (NCA), which are the President and the Secretary of Defense, can direct the national military forces through the Joint Chiefs of Staff. That direction is exercised through the National Military Command System (NMCS), a system designed to support the National Command Authorities in the performance of their responsibilities. One facility within that system is the National Military Command Center (NMCC) located in the Pentagon. A supporting agency is the Defense Communications Agency (DCA) which provides technical communication support to the National Military Command System. Neither the National Military Command Center nor the Defense Communications Agency is a command function. They provide support to the National Command Authorities. The following discussion outlines the functions and authorities of the National Military Command System and the responsibilities of the Defense Communications Agency within that system.

Congress, in Section 2 of the National Security Act of 1947, as amended, (50 U.S.C. 401), described the basic policy embodied in the Act, including the control by the Secretary of Defense over the Department of Defense and the efficient control of combatant operations using the following language:

"In enacting this legislation, it is the intent of Congress to provide a comprehensive program for the future security of the United States; to provide for the establishment of integrated policies and procedures for the departments, agencies, and functions of the Government relating to the national security; to provide a Department of Defense, including the three military departments of the Army, Navy (including naval aviation and the United States Marine Corps), and the Air Force under the direction, authority, and control of the Secretary of Defense; ... and ... to provide for the establishment of unified or specified combatant commands, and a clear and direct line of command to such commands; ... but not to establish a single Chief of Staff over the armed forces nor an overall armed forces General Staff."
All functions in the Department of Defense and its component agencies are performed under the direction, authority, and control of the Secretary of Defense. The President, through the Secretary of Defense, and with the advice and assistance of the Joint Chiefs of Staff establishes unified and specified commands, the combatant forces of the national military structures (10 U.S.C. 124(a)(Tab A)). The chain of command runs from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the Commanders of unified and specified commands (see 10 U.S.C. 124(c)). The channel of communication for execution of the Single Integrated Operational Plan (SIOP) and other time-sensitive operations is from the National Command Authority through the Chairman of the Joint Chiefs of Staff, representing the Joint Chiefs of Staff, to the executing commanders. Orders to such commanders are issued by the President or the Secretary of Defense, or by the Joint Chiefs of Staff by authority and direction of the Secretary of Defense. These commanders have full operational command over the forces assigned to them (DoD Directive 5100.1, "Functions of the Department of Defense and Its Major Components," Dec. 31, 1968 (Tab B)).

The World-Wide Military Command Control System (WWMCCS) established by DoD Directive 5100.30, "World-Wide Military Command and Control System," Dec. 2, 1971 (Tab C), provides the means for operational direction and technical administrative support involved in the function of command and control of U.S. Military Forces. The National Military Command System is the priority component of the World-Wide Military Command Control System. It provides the National Command Authorities with the means essential for accurate and timely decisions, including the communications required for reliable transmission of those decisions, with a minimum of delay, for the direction of the armed forces through the military chain of command under all conditions, in peace or war.

Under the direction of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff operates, for the Secretary of Defense, the National Military Command System to meet the needs of the National Command Authorities. On a day to day basis the Joint Chiefs of Staff are the principal users of the facilities of the National Military Command System. The National Military Command System is organized, equipped, and staffed to provide for the immediate needs of the Joint Chiefs of Staff to fulfill their responsibilities as the principal military advisors to the President and the Secretary of Defense. (10 U.S.C. 141, Tab D.)
It is from the National Military Command System that operational military situations of national interest are perceived, and the National Military Command System provides appropriate information for the Joint Chiefs of Staff to advise the Secretary of Defense and the President with evaluations of situations of immediate national concern.

The Defense Communications Agency is responsible, within the National Military Command System, for systems engineering and technical supervision of the implementation of technical support to the National Military Command System (S-5100.44, June 9, 1964, "Master Plan for the National Military Command System") (Secret directive. Copy available from the Joint Chiefs of Staff.) It provides the facilities needed by the President for continuous communications with the elements of the National Military Command System and provides appropriate communications to legal Presidential successors, the Secretary of Defense, and the Joint Chiefs of Staff.

The Joint Chiefs of Staff do not command the Defense Communications Agency. However, the chain of command runs from the Secretary of Defense through the Joint Chiefs of Staff to the Director, Defense Communications Agency. Guidance to the Director, Defense Communications Agency, is furnished by the Secretary of Defense or by the Joint Chiefs of Staff by authority and direction of the Secretary of Defense.

The Defense Communications Agency exercises operational and management direction over the Defense Communications System which includes the communications supporting the National Military Command System. In this regard, the Defense National Communications Control Center provides for operational direction of the Defense Communications System on a 24-hour basis in support of communications needed by National Command Authorities for the direction of the armed forces and to serve essential needs of the President in his capacity as Head of the Government.

Enclosures
Tabs A - D
10 § 123  GENERAL MILITARY LAW Subt. A

the grades of officers of the regular component of the armed force concerned.


Historical and Revision Notes

Revised Section Source (U. S. Code)
123 50:1199 (less applicability to National Guard)
Source (Statutes at Large)

Explanatory Notes

In subsection (b), the words "the same as" are substituted for the word "comparable", since any necessary differences in the recommended legislation between Reserves and Regulars are fully taken account of in the words "so far as practicable".

References In Text. Sections 2547, 6370 and 8947, referred to in subsec. (a), were repealed by Pub.L. 90-130, § 1(1)(A), Nov. 8, 1967, 81 Stat. 378, 382.


1949 Amendment. Subsec. (c). Pub.L. 85-559 added references to sections 321, 3353 and 5333 and eliminated references to sections 3241, 3342, 3415, 8941, 6442 and 8349.

Library References


§ 124. Combatant commands: establishment; composition; functions; administration and support

(a) With the advice and assistance of the Joint Chiefs of Staff, the President, through the Secretary of Defense, shall—

(1) establish unified combatant commands or specified combatant commands to perform military missions; and

(2) shall prescribe the force structure of those commands.

(b) The military departments shall assign forces to combatant commands established under this section to perform the missions of...
those commands. A force so assigned is under the full operational command of the commander of the command to which it is assigned. It may be transferred from the command to which it is assigned only by authority of the Secretary and under procedures prescribed by the Secretary with the approval of the President. A force not so assigned remains, for all purposes, in the military department concerned.

(c) Combatant commands established under this section are responsible to the President and to the Secretary for such military missions as may be assigned to them by the Secretary with the approval of the President.

(d) Subject to the authority, direction, and control of the Secretary, each military department is responsible for the administration of forces assigned by that department to combatant commands established under this section. The Secretary shall assign the responsibility for the support of forces assigned to those commands to one or more of the military departments.


### Historical Note


### Cross References

Air Force Chief of Staff, supervision over members and organizations of Air Force, see section 302(a) of this title.
Army Chief of Staff, supervision over members and organizations of Army, see section 300(b) of this title.
Chief of Naval Operations, supervision over members and organizations of Navy and Marine Corps, see section 5001 of this title.
Commandant of Marine Corps, supervision over members and organizations of Marine Corps and Navy, see section 5001 of this title.

### Library References

Armed Services 244
C.J.S. Army and Navy 11 1, 4 et seq.

§ 125. Functions, powers, and duties: transfer, reassignment, consolidation, or abolition

1 Subject to section 501 of title 50, the Secretary of Defense shall take appropriate action (including the transfer, reassignment, consolidation, or abolition of any function, power, or duty) to provide more effective, efficient, and economical administration and operation, and to eliminate duplication, in the Department of Defense. However, except as provided by subsections (b) and (c), a function, power, or duty vested in the Department of Defense, or an officer, official, or agency thereof, by law may not be substantially transferred, reassigned, consolidated, or abolished unless the Secretary reports the details of the proposed transfer, reassignment, consoli-
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>DISTRIBUTION</th>
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<td>June 17, 1969</td>
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**ATTACHMENTS**

Reprint of DoD Directive 5100.1, 12/31/58

**INSTRUCTIONS FOR RECIPIENTS**

Attached is a REPRINT of DoD Directive 5100.1, "Functions of the Department of Defense and its Major Components," dated December 31, 1958, incorporating authorized changes to pages 1, 3, 4, 6 and 13, which are indicated by marginal asterisks. Previous changes to pages 4, 12 and 13 have been incorporated.

The reprint should be substituted for copies of the Directive originally distributed.

[Signature]

MAURICE W. ROCHE
Director, Correspondence and Directives Division
OASD(Administration)
Department of Defense Directive

SUBJECT  Functions of the Department of Defense and its Major Components

Refs.: (a) DoD Directive 5100.1, "Functions of the Armed Forces and the Joint Chiefs of Staff," March 16, 1954 (hereby cancelled)
(b) DoD Directive 5158.1, "Organization of the Joint Chiefs of Staff and Relationships with the Office of the Secretary of Defense," December 31, 1958
(c) SecDef multi-addressee memorandum, "Logistics Responsibilities of the JCS," June 20, 1964 (hereby cancelled)

INTRODUCTION

Congress, in Section 2 of the National Security Act of 1947, as amended (50 U.S.C. 401), has described the basic policy embodied in the Act in the following terms:

"In enacting this legislation, it is the intent of Congress to provide a comprehensive program for the future security of the United States; to provide for the establishment of integrated policies and procedures for the departments, agencies, and functions of the Government relating to the national security; to provide a Department of Defense, including the three military departments of the Army, the Navy (including naval aviation and the United States Marine Corps), and the Air Force under the direction, authority, and control of the Secretary of Defense; to provide that each military department shall be separately organized under its own Secretary and shall function under the direction, authority, and control of the Secretary of Defense; to provide for the unified direction under civilian control of the Secretary of Defense but not to merge these departments or services; to provide for the establishment of unified or specified combatant commands, and a clear and direct line of command to such commands; to eliminate unnecessary duplication in the Department of Defense, and particularly in the field of research and engineering by vesting its overall direction and control in the Secretary of Defense; to provide more effective, efficient, and economical administration in the Department of Defense; to provide
for the unified strategic direction of the combatant forces, for
their operation under unified command, and for their integration
into an efficient team of land, naval, and air forces but not to
establish a single Chief of Staff over the armed forces nor an
overall armed forces general staff."

To provide guidance in accordance with the policy declared by
Congress, the Secretary of Defense, with the approval of the President,
hereby promulgates the following statement of the functions of the
Department of Defense and its major components.

II. ORGANIZATIONAL RELATIONSHIPS IN THE DEPARTMENT OF
DEFENSE

1. All functions in the Department of Defense and its component
agencies are performed under the direction, authority, and control of
the Secretary of Defense.

2. The Department of Defense includes the Office of the Secretary
of Defense and the Joint Chiefs of Staff, the military departments and
the military Services within those departments, the unified and specified
commands, and such other agencies as the Secretary of Defense estab-
ishes to meet specific requirements.

a. In providing immediate staff assistance and advice to the
Secretary of Defense, the Office of the Secretary of Defense and the
Joint Chiefs of Staff, though separately identified and organized, function
in full coordination and cooperation in accordance with Reference (b).

(1) The Office of the Secretary of Defense includes the
offices of the Director of Defense Research and Engineering, the
Assistant Secretaries of Defense, and the General Counsel and such
other staff offices as the Secretary of Defense establishes to assist
him in carrying out his duties and responsibilities. The functions of
the heads of these offices shall be as assigned by the Secretary of
Defense in accordance with existing laws.

(2) The Joint Chiefs of Staff, as a group, are directly
responsible to the Secretary of Defense for the functions assigned to
them. Each member of the Joint Chiefs of Staff, other than the Chairman,
is responsible for keeping the Secretary of his military department fully
informed on matters considered or acted upon by the Joint Chiefs of
Staff.
b. Each military department (the Department of the Navy to include naval aviation and the United States Marine Corps) shall be separately organized under its own Secretary and shall function under the direction, authority, and control of the Secretary of Defense. The Secretary of a military department shall be responsible to the Secretary of Defense for the operation of such department as well as its efficiency. Orders to the military departments will be issued through the Secretaries of these departments, or their designees, by the Secretary of Defense or under authority specifically delegated in writing by the Secretary of Defense or provided by law.

c. Commanders of unified and specified commands are responsible to the President and the Secretary of Defense for the accomplishment of the military missions assigned to them. The chain of command runs from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the commanders of unified and specified commands. Orders to such commanders will be issued by the President or the Secretary of Defense, or by the Joint Chiefs of Staff by authority and direction of the Secretary of Defense. These commanders shall have full operational command over the forces assigned to them and shall perform such functions as are prescribed by the Unified Command Plan and other directives issued by competent authority.

3. The functions assigned hereinafter may be transferred, reassigned, abolished, or consolidated by the Secretary of Defense in accordance with the procedures established and the authorities provided in the National Security Act of 1947, as amended (10 U. S. C. 125).

III. FUNCTIONS OF THE DEPARTMENT OF DEFENSE

As prescribed by higher authority, the Department of Defense shall maintain and employ armed forces:

1. To support and defend the Constitution of the United States against all enemies, foreign and domestic.

2. To insure, by timely and effective military action, the security of the United States, its possessions, and areas vital to its interest.

3. To uphold and advance the national policies and interests of the United States.

4. To safeguard the internal security of the United States.

*First amendment (Ch 2, 6/17/69)
IV. FUNCTIONS OF THE JOINT CHIEFS OF STAFF

The Joint Chiefs of Staff, consisting of the Chairman; the Chief of Staff, U.S. Army; the Chief of Naval Operations; and the Chief of Staff, U.S. Air Force, and supported by the Organization of the Joint Chiefs of Staff, constitute the immediate military staff of the Secretary of Defense. The Joint Chiefs of Staff are the principal military advisers to the President, the National Security Council, and the Secretary of Defense. The Commandant of the U.S. Marine Corps has coequal status with the members of the Joint Chiefs of Staff on matters which directly concern the Marine Corps. In performance of their functions of advising and assisting the Secretary of Defense, and subject to the authority and direction of the President and the Secretary of Defense, it shall be the duty of the Joint Chiefs of Staff:

1. To serve as advisers and as military staff in the chain of operational command with respect to unified and specified commands, to provide a channel of communications from the President and Secretary of Defense to unified and specified commands, and to coordinate all communications in matters of joint interest addressed to the commanders of the unified or specified commands by other authority.

2. To prepare strategic plans and provide for the strategic direction of the armed forces, including the direction of operations conducted by commanders of unified and specified commands and the discharge of any other function of command for such commands directed by the Secretary of Defense.

3. To prepare joint logistic plans and assign logistic responsibilities to the military services and the Defense Supply Agency in accordance with those plans; ascertain the logistic support available to execute the general war and contingency plans of the commanders of the unified and specified commands; review and recommend to the Secretary of Defense appropriate logistic guidance for the military services which, if implemented, will result in logistic readiness consistent with the approved strategic plans.

4. To prepare integrated plans for military mobilization.

5. To provide adequate, timely, and reliable joint intelligence for use within the Department of Defense.

6. To review major personnel, materiel, and logistic requirements of the armed forces in relation to strategic and logistic plans.

7. To review the plans and programs of commanders of unified and specified commands to determine their adequacy, feasibility, and suitability for the performance of assigned missions.
8. To provide military guidance for use by the military departments, the armed forces, and the defense agencies as needed in the preparation of their respective detailed plans.

9. To participate, as directed, in the preparation of combined plans for military action in conjunction with the armed forces of other nations.

10. To recommend to the Secretary of Defense the establishment and force structure of unified and specified commands in strategic areas.

11. To determine the headquarters support, such as facilities, personnel, and communications, required by commanders of unified and specified commands and to recommend the assignment to the military departments of the responsibilities for providing such support.

12. To establish doctrines for (a) unified operations and training and (b) coordination of the military education of members of the armed forces.

13. To recommend to the Secretary of Defense the assignment of primary responsibility for any function of the armed forces requiring such determination and the transfer, reassignment, abolition, or consolidation of such functions.

14. To prepare and submit to the Secretary of Defense, for information and consideration in connection with the preparation of budgets, statements of military requirements based upon United States strategic considerations, current national security policy, and strategic war plans. These statements of requirements shall include tasks, priority of tasks, force requirements, and general strategic guidance for the development of military installations and bases and for equipping and maintaining military forces.

15. To advise and assist the Secretary of Defense in research and engineering matters by preparing: (a) statements of broad strategic guidance to be used in the preparation of an integrated Department of Defense program; (b) statements of overall military requirements; (c) statements of the relative military importance of development activities to meet the needs of the unified and specified commanders; and (d) recommendations for the assignment of specific new weapons to the armed forces.

16. To prepare and submit to the Secretary of Defense for information and consideration general strategic guidance for the development of industrial mobilization programs.

17. To prepare and submit to the Secretary of Defense military guidance for use in the development of military aid programs and other actions relating to foreign military forces, including recommendations for allied military
force, material, and facilities requirements related to United States strategic objectives, current national security policy, strategic war plans, and the implementation of approved programs; and to make recommendations to the Secretary of Defense, as necessary, for keeping the Military Assistance Program in consonance with agreed strategic concepts.

18. To provide United States representation on the Military Staff Committee of the United Nations, in accordance with the provisions of the Charter of the United Nations, and representation on other properly authorized military staffs, boards, councils, and missions.

19. To perform such other duties as the President or the Secretary of Defense may prescribe.

V. FUNCTIONS OF THE MILITARY DEPARTMENTS AND THE MILITARY SERVICES

The chain of command for purposes other than the operational direction of unified and specified commands runs from the President to the Secretary of Defense to the Secretaries of the military departments.

The military departments, under their respective Secretaries and in accordance with Sections II and IV, shall:

1. Prepare forces and establish reserves of equipment and supplies for the effective prosecution of war, and plan for the expansion of peacetime components to meet the needs of war.

2. Maintain in readiness mobile reserve forces, properly organised, trained, and equipped for employment in emergency.

3. Provide adequate, timely, and reliable departmental intelligence for use within the Department of Defense.

4. Organize, train, and equip forces for assignment to unified or specified commands.

5. Recommend to the Secretary of Defense appropriate logistic guidance for their respective military departments which, if implemented, will result in logistic readiness consistent with the approved strategic guidance, and verify the continuing adequacy of the approved logistic guidance and the resources available to their respective military departments.

6. Prepare and submit to the Secretary of Defense budgets for their respective departments; justify before the Congress budget requests as approved by the Secretary of Defense; and administer the funds made
available for maintaining, equipping, and training the forces of their respective departments, including those assigned to unified and specified commands. The budget submissions to the Secretary of Defense by the military departments shall be prepared on the basis, among other things, of the advice of commanders of forces assigned to unified and specified commands; such advice, in the case of component commanders of unified commands, will be in agreement with the plans and programs of the respective unified commanders.

7. Conduct research, develop tactics, techniques, and organization, and develop and procure weapons, equipment, and supplies essential to the fulfillment of the functions hereinafter assigned.

8. Develop, garrison, supply, equip, and maintain bases and other installations, including lines of communication, and provide administrative and logistical support for all forces and bases.

9. Provide, as directed, such forces, military missions, and detachments for service in foreign countries as may be required to support the national interest of the United States.

10. Assist in training and equipping the military forces of foreign nations.

11. Assist each other in the accomplishment of their respective functions, including the provision of personnel, intelligence, training, facilities, equipment, supplies, and services.

The forces developed and trained to perform the primary functions set forth hereinafter shall be employed to support and supplement the other Services in carrying out their primary functions, where and whenever such participation will result in increased effectiveness and will contribute to the accomplishment of the overall military objectives. As for collateral functions, while the assignment of such functions may establish further justification for stated force requirements, such assignment shall not be used as the basis for establishing additional force requirements.

A. Functions of the Department of the Army

The Department of the Army is responsible for the preparation of land forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war.

The Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein.
1. **Primary Functions of the Army**

   a. To organize, train, and equip Army forces for the conduct of prompt and sustained combat operations on land — specifically, forces to defeat enemy land forces and to seize, occupy, and defend land area.

   b. To organize, train and equip Army air defense units, including the provision of Army forces as required for the defense of the United States against air attack, in accordance with doctrines established by the Joint Chiefs of Staff.

   c. To organize and equip, in coordination with the other Services, and to provide Army forces for joint amphibious and airborne operations, and to provide for the training of such forces, in accordance with doctrines established by the Joint Chiefs of Staff.

      (1) To develop, in coordination with the other Services, doctrines, tactics, techniques, and equipment of interest to the Army for amphibious operations and not provided for in Section V, paragraph B1b (3) and paragraph B1d.

      (2) To develop, in coordination with the other Services, the doctrines, procedures, and equipment employed by Army and Marine Forces in airborne operations. The Army shall have primary interest in the development of those airborne doctrines, procedures, and equipment which are of common interest to the Army and the Marine Corps.

   d. To provide an organization capable of furnishing adequate, timely, and reliable intelligence for the Army.

   e. To provide forces for the occupations of territories abroad, to include initial establishment of military government pending transfer of this responsibility to other authority.

   f. To formulate doctrines and procedures for the organizing, equipping, training, and employment of forces operating on land, except that the formulation of doctrines and procedures for the organization, equipping, training, and employment of Marine Corps units for amphibious operations shall be a function of the Department of the Navy, coordinating as required by Section V, paragraph B1b (3).

   g. To conduct the following activities:

      (1) The administration and operation of the Panama Canal.
(2) The authorized civil works program, including projects for improvement of navigation, flood control, beach erosion control, and other water resource developments in the United States, its territories, and its possessions.

(3) Certain other civil activities prescribed by law.

2. Collateral Functions of the Army -- To train forces:
   a. To interdict enemy sea and air power and communications through operations on or from land.

B. Functions of the Department of the Navy

The Department of the Navy is responsible for the preparation of Navy and Marine Corps forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Navy and Marine Corps to meet the needs of war.

Within the Department of the Navy, the Navy includes naval combat and service forces and such aviation as may be organic therein, and the Marine Corps includes not less than three combat divisions and three air wings and such other land combat, aviation, and other services as may be organic therein.

1. Primary Functions of the Navy and the Marine Corps
   a. To organize, train, and equip Navy and Marine Corps forces for the conduct of prompt and sustained combat operations at sea, including operations of sea-based aircraft and land-based naval air components -- specifically, forces to seek out and destroy enemy naval forces and to suppress enemy sea commerce, to gain and maintain general naval supremacy, to control vital sea areas and to protect vital sea lines of communication, to establish and maintain local superiority (including air) in an area of naval operations, to seize and defend advanced naval bases, and to conduct such land and air operations as may be essential to the prosecution of a naval campaign.

   b. To maintain the Marine Corps, having the following specific functions:
      (1) To provide Fleet Marine Forces of combined arms, together with supporting air components, for service with the Fleet in the seizure or defense of advanced naval bases and for the
conduct of such land operations as may be essential to the prosecution of a naval campaign. These functions do not contemplate the creation of a second land Army.

(2) To provide detachments and organizations for service on armed vessels of the Navy, and security detachments for the protection of naval property at naval stations and bases.

(3) To develop, in coordination with the other Services, the doctrines, tactics, techniques, and equipment employed by landing forces in amphibious operations. The Marine Corps shall have primary interest in the development of those landing force doctrines, tactics, techniques, and equipment which are of common interest to the Army and the Marine Corps.

(4) To train and equip, as required, Marine Forces for airborne operations, in coordination with the other Services and in accordance with doctrines established by the Joint Chiefs of Staff.

(5) To develop, in coordination with the other Services, doctrines, procedures, and equipment of interest to the Marine Corps for airborne operations and not provided for in Section V, paragraph A 1 c (2).

c. To organise and equip, in coordination with the other Services, and to provide naval forces, including naval close air-support forces, for the conduct of joint amphibious operations, and to be responsible for the amphibious training of all forces assigned to joint amphibious operations in accordance with doctrines established by the Joint Chiefs of Staff.

d. To develop, in coordination with the other Services, the doctrines, procedures, and equipment of naval forces for amphibious operations, and the doctrines and procedures for joint amphibious operations.

e. To furnish adequate, timely, and reliable intelligence for the Navy and Marine Corps.

f. To organise, train, and equip naval forces for naval reconnaissance, antisubmarine warfare, and protection of shipping, and mine laying, including the air aspects thereof, and controlled mine field operations.

g. To provide air support essential for naval operations.
h. To provide sea-based air defense and the sea-based means for coordinating control for defense against air attack, coordinating with the other Services in matters of joint concern.

i. To provide naval (including naval air) forces as required for the defense of the United States against air attack, in accordance with doctrines established by the Joint Chiefs of Staff.

j. To furnish aerial photography as necessary for Navy and Marine Corps operations.

2. Collateral Functions of the Navy and the Marine Corps

   -- To train forces:

   a. To interdict enemy land and air power and communications through operations at sea.

   b. To conduct close air and naval support for land operations.

   c. To furnish aerial photography for cartographic purposes.

   d. To be prepared to participate in the overall air effort as directed.

   e. To establish military government, as directed, pending transfer of this responsibility to other authority.

C. Functions of the Department of the Air Force

The Department of the Air Force is responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilisation plans, for the expansion of the peacetime components of the Air Force to meet the needs of war.

The Air Force, within the Department of the Air Force, includes aviation forces, both combat and service, not otherwise assigned

1. Primary Functions of the Air Force

   a. To organise, train, and equip Air Force forces for the conduct of prompt and sustained combat operations in the air -- specifically, forces to defend the United States against air attack in
accordance with doctrines established by the Joint Chiefs of Staff, to
gain and maintain general air supremacy, to defeat enemy air forces,
to control vital air areas, and to establish local air superiority except
as otherwise assigned herein.

b. To develop doctrines and procedures, in coordination
with the other Services, for the unified defense of the United States
against air attack.

c. To organise, train, and equip Air Force forces for
strategic air warfare.

d. To organise and equip Air Force forces for joint
amphibious and airborne operations, in coordination with the other
Services, and to provide for their training in accordance with doctrines
established by the Joint Chiefs of Staff.

e. To furnish close combat and logistical air support to
the Army, to include air lift, support, and resupply of airborne opera-
tions, aerial photography, tactical reconnaissance, and interdiction of
enemy land power and communications.

f. To provide air transport for the armed forces, except
as otherwise assigned.

g. To develop, in coordination with the other Services,
doctrines, procedures, and equipment for air defense from land areas,
including the continental United States.

h. To formulate doctrines and procedures for the
organising, equipping, training, and employment of Air Force forces.

i. To provide an organization capable of furnishing
adequate, timely, and reliable intelligence for the Air Force.

j. To furnish aerial photography for cartographic
purposes.

k. To develop, in coordination with the other Services,
tactics, techniques, and equipment of interest to the Air Force for
amphibious operations and not provided for in Section V, paragraph
B 1 b (3) and paragraph B 1 d.

l. To develop, in coordination with the other Services,
doctrines, procedures, and equipment employed by Air Force forces
in airborne operations.

# First amendment (Ch 1, 6/17/66)
2. Collateral Functions of the Air Force -- To train forces:
   a. To interdict enemy sea power through air operations.
   b. To conduct antisubmarine warfare and to protect shipping.
   c. To conduct aerial mine-laying operations.

VI. FUNCTIONS OF DEPARTMENT OF DEFENSE AGENCIES


VII. CANCELLATION

References (a) and (c) are hereby cancelled.

VIII. EFFECTIVE DATE

This Directive is effective immediately.

[Signature]
Secretary of Defense

#Second amendment (Ch 2, 6/17/69)
Department of Defense Directive

SUBJECT
World-Wide Military Command and Control System (WWMCCS)


I. PURPOSE
The purpose of this directive is to define the functional, organizational, and operational relationships between all elements of the Worldwide Military Command and Control System (WWMCCS) and to provide policy guidance and establish responsibilities for the management, development, acquisition and operation of the WWMCCS.

II. APPLICABILITY AND SCOPE
This directive applies to the Military Departments, Joint Chiefs of Staff, Office of the Secretary of Defense, Unified and Specified Commands, and Department of Defense Agencies (hereinafter referred to as DoD Components) involved in the development, acquisition and operation and support of the WWMCCS.

III. DEFINITIONS
A. National Command Authorities (NCA). The NCA consists only of the President and the Secretary of Defense or their duly deputised alternates or successors. The chain of command runs from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the
commanders of Unified and Specified Commands. The channel of communication for execution of the Single Integrated Operational Plan (SIOP) and other time-sensitive operations shall be from the NCA through the Chairman of the Joint Chiefs of Staff, representing the Joint Chiefs of Staff, to the executing commanders. 1

B. Command and Control. For purposes of this directive, command and control is the exercise of authority and direction by duly designated authorities. These functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures, which are employed in planning, directing, coordinating, and controlling operational activities of US Military Forces.

C. Worldwide Military Command and Control System (WWMCCS). The WWMCCS is the world-wide command and control system that provides the means for operational direction and technical administrative support involved in the function of command and control of US Military Forces.

D. National Military Command System (NMCS). The NMCS is the priority component of the WWMCCS designed to support the National Command Authorities in the exercise of their responsibilities. It also supports the Joint Chiefs of Staff in the exercise of their responsibilities.

IV. GENERAL CONCEPTS

A. The WWMCCS serves two functions, listed below in their order of priority and emphasis:

1. Support of the NCA is the primary mission. The NMCS provides the means by which the President and the Secretary of Defense can: receive warning and intelligence upon which accurate and timely decisions can be made; apply the resources of the Military Departments; and assign military missions and provide direction to the Unified and Specified Commands. The NMCS must

1 The expression, "Chairman of the Joint Chiefs of Staff", as used in this directive includes the officer appointed to this position and the officer serving in this position in the appointee's absence.
be capable of providing information so that appropriate and timely responses may be selected and directed by the NCA and implemented. In addition, the NMCS supports the Joint Chiefs of Staff in carrying out their responsibilities.

2. Support of the command and control systems of the Unified and Specified Commands and the WWMCCS related management/information systems of other DoD Components is the second mission. This function will be supported by the WWMCCS subordinate to and on the basis of non-interference with the primary mission.

B. Guidelines for Design and Operation of the WWMCCS.

1. Both the communication of warning and intelligence from all sources and the communication of decisions and commands to the Military Forces require that the NMCS be the most responsive, reliable, and survivable system that can be provided with the resources available. This requires that the command and control systems of all other DoD Components be configured and operated for effective support of the NMCS as well as their specific missions. Interfaces must be compatible, communication links must provide direct connection or real time relay whenever necessary, computerized data formats must be common and all details of system configuration and operation must be as efficient as possible in terms of both effectiveness and in utilization of resources.

2. The WWMCCS will be exercised frequently under the most realistic conditions possible in order to insure readiness and to identify deficiencies. Exercises will be used to evaluate the effectiveness of standard operating procedures, changes to these procedures, the effectiveness of installed and deployed command and control equipment, equipment changes, and to assist in validating the need for and characteristics of hardware and software proposed to correct identified deficiencies.

3. These guidelines apply to all DoD Components and to the utilization of all other Department of Defense resources in support of the WWMCCS and its prime mission.

4. The effective operation of the WWMCCS rests upon the understanding of its concepts and objectives and its innovative support by those charged with its design and operation. Every effort must be made to assure this understanding and encourage this support.
V. COMPOSITION OF THE WWMCCS

A. National Military Command System (NMCS).

1. Since survival of the command and control capability of NMCS is fundamental to continuity of operations, a composite command structure with survivable communications is required. This includes the National Military Command Center (NMCC), the Alternate National Military Command Center (ANMCC), the National Emergency Airborne Command Post (NEACP), and such other command centers as may be designated by the Secretary of Defense. These centers must be linked by reliable communications, supported by warning and intelligence systems, and continuously manned and ready for use. Special capabilities must be provided for communication with strategic offensive and defensive forces and for other forces which may be required for quick reaction in crises. In this case, the communications will be designated and operated to assure minimum elapsed time for the transmission of orders to the operating units of these forces. The NMCS also includes communications connecting its facilities with primary and alternate command facilities of the:

   a. Headquarters of the Unified and Specified Commands.
   b. Service headquarters of the Military Departments.
   c. Other designated DoD Components which provide support through the WWMCCS.

2. Support of the NMCS will be the priority function of all primary and alternate command facilities.

B. Command and Control Systems of the Unified and Specified Commands.

1. The command and control systems of the Unified and Specified Commands provide the means through which Unified/Specified Commanders receive information and exercise operational command of assigned forces.

2. The command and control system of a unified command includes the command and control systems of subordinate
unified commands and joint task forces when such organizations are established and assigned. Further, the Unified/Specified Commander must provide guidance to his Component Commands to assure interoperability of the command-wide; command, control, and intelligence support systems necessary to his operational functions.

C. WWMCCS-Related Management/Information Systems of the Headquarters of the Military Departments. This consists of the facilities, equipment, communications, procedures, and personnel which provide the means through which the headquarters of the Military Departments carry out their assigned functions in support of the WWMCCS.

D. Command and Control Systems of the Headquarters of the Service Component Commands. These systems provide the means through which the commanders send and receive information and exercise command over their forces.

E. Command and Control Support Systems of Department of Defense Agencies. These systems provide the means through which the Directors accomplish the missions of their Agencies in support of the command and control function.

F. Command and Control Systems described in paragraphs B, C, D, and E will be configured and operated generally to meet the requirements of the commands being served. However, the priority requirement will be as defined in subparagraph IV. A. 1. All communications facilities of these commands will be designed not only to interface with main NMCS communications, but for information to flow through and to and from points within each command as may be appropriate.

G. Non-Department of Defense Systems.

1. Effective coordination and liaison must be established and maintained with those activities of the U.S. Government outside the Department of Defense which have functions associated with the NMCS, e.g., White House Situation Room, State Department Operations Center, Central Intelligence Agency Indications Office, U.S. Intelligence Board National Indications Center, U.N. Military Mission, Office of Emergency Preparedness National Warning Center, the U.S. Coast Guard Operations Center, the FAA Executive Communications Control Center, and such other agencies, activities, or centers as may be designated.
2. Appropriate military information will be provided to these associated systems through the NMCS, utilizing timely, secure, and reliable communications systems. Conversely, political, intelligence, diplomatic, and economic information input to the NMCS will be provided by these same systems. The WWMCCS may also be required to interface with such multi-national elements as NATO. In addition, the NMCS should provide communications and space to support representatives of the White House and other Government activities who may use the NMCS in a politico-military situation concerning strategic direction of U.S. Military Forces. The Joint Chiefs of Staff will provide for lateral coordination with U.S. Government activities external to the Department of Defense to insure necessary interchange of data to and from the NMCS.

VI. RESPONSIBILITIES

A. Subject to the authority and direction of the President and the Secretary of Defense, the Joint Chiefs of Staff have the responsibility:

1. To prepare strategic plans and provide for the strategic direction of the armed forces, including the direction of operations conducted by Commanders of Unified and Specified Commands and the discharge of any other function of command for such commands directed by the Secretary of Defense.

2. To serve as advisers and as military staff in the chain of operational command with respect to Unified and Specified Commands, to provide a channel of communications from the President and Secretary of Defense to Unified and Specified Commands, and to coordinate all communications in matters of joint interest addressed to the Commanders of the Unified or Specified Commands by other authority.

3. To advise on the effectiveness of the WWMCCS.

B. Under the direction of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff will:

1. Operate, for the Secretary of Defense, the NMCS to meet the needs of the NCA. He will establish
operational policies and procedures for all components of the NMCS and assure their implementation.

2. Define the scope and components of the NMCS.

3. Develop and validate requirements for the NMCS, make recommendations on the design, development, and procurement of systems and prepare, with appropriate DoD Component assistance, appropriate planning, programming, and budgeting documents for the NMCS.

4. Maintain cognizance of all WWMCCS programs and capabilities. Validate WWMCCS requirements of the Unified/Specified Commanders. Develop an overall WWMCCS Objectives Plan.

5. Make recommendations to the Secretary of Defense to insure responsiveness, functional interoperability, and standardization of the WWMCCS. Make recommendations for changes to the WWMCCS that will increase the effectiveness of the NMCS.

6. Implement decisions of the Secretary of Defense concerning requisite capabilities of the NMCS pertaining to subparagraph V. F.

C. The Assistant to the Secretary of Defense (Telecommunications) will have primary staff responsibility in the Office of the Secretary of Defense for the WWMCCS, NMCS, and WWMCCS-related systems. This responsibility includes review and advice to the Secretary of Defense on all matters, except those assigned in paragraphs VI. D. and VI. E., below, relating to the design, development, procurement, and performance of equipment, systems, and technical procedures involved in the WWMCCS, including recommendations made by or through the Chairman, Joint Chiefs of Staff.

D. The Assistant Secretary of Defense (Intelligence) will have primary staff responsibility in the Office of the Secretary of Defense for intelligence collection and reporting systems.
This responsibility includes review and advice to the Secretary of Defense on all matters involving warning and intelligence relating to the design, development, procurement (other than ADP procurement), and performance of equipment, systems and technical procedures involved in the WWMCCS, including recommendations made by or through the Chairman, Joint Chiefs of Staff.

E. The Assistant Secretary of Defense (Comptroller) will maintain central focal point cognizance of ADP procurement, reporting, and reutilization.

F. Non-NMCS elements of the WWMCCS will continue to be administered by their responsible DoD Components.

VII. WORLD-WIDE MILITARY COMMAND AND CONTROL SYSTEM (WWMCCS) COUNCIL

There is hereby established a WWMCCS Council, which will be chaired by the Deputy Secretary of Defense and will have as additional members the Chairman of the Joint Chiefs of Staff, the Assistant Secretary of Defense (Intelligence), and the Assistant to the Secretary of Defense (Telecommunications). The Council will provide policy guidance for the development and operation of the WWMCCS and evaluate its overall performance. In particular, it will review and evaluate for the Secretary of Defense the exercises specified under IV. B. It will also review and make recommendations to the Secretary of Defense on the planning, programming, and budgeting of the WWMCCS.

VIII. CANCELLATION

Reference (a) is hereby superseded and cancelled.

IX. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective upon publication. In the event of conflict between this Directive and previous directives and
instructions, the provisions of this Directive will govern. All DoD Components will review their existing directives, instructions, and regulations for conformance with this Directive; advise the Secretary of Defense and the Chairman of the Joint Chiefs of Staff of the results of this review within 30 days and implement any necessary changes within 90 days of publication of this Directive.

[Signature]
Deputy Secretary of Defense
The following pen change to DoD Directive 5100.30, "World-Wide Military Command and Control System (WWMCCS)," dated December 2, 1971, has been authorized:

PEN CHANGE

Page 7 - Section VI C. Delete: "Assistant Secretary of Defense (Telecommunications)"

Insert: "Director, Telecommunications and Command and Control Systems (DTACCS)"

EFFECTIVE DATE

This change is effective immediately.

MAURICE W. ROCHE, Director
Correspondence and Directives
OASD(Comptroller)
NOTICE OF DECLASSIFICATION AND REDESIGNATION


All recipients retaining copies of this cancelled document should delete the classification "SECRET" from the top and bottom of each page, and change the number of the document from "S-5100.30" to "5100.30".

This Transmittal may be used as the authority for downgrading and declassifying this Directive.

MAURICE W. ROCHE
MAURICE W. ROCHE, Director
Correspondence and Directives
OASD(Comptroller)
CHAPTER 5.—JOINT CHIEFS OF STAFF

§ 141. Composition; functions

(a) There are in the Department of Defense the Joint Chiefs of Staff consisting of—

(1) a Chairman;
(2) the Chief of Staff of the Army;
(3) the Chief of Naval Operations; and
(4) the Chief of Staff of the Air Force.

(b) The Joint Chiefs of Staff are the principal military advisers to the President, the National Security Council, and the Secretary of Defense.

(c) The Commandant of the Marine Corps shall indicate to the Chairman any matter scheduled for consideration by the Joint Chiefs that directly concerns the Marine Corps. Unless, upon request of the Chairman for a determination, the Secretary of Defense determines that such a matter does not concern the Marine Corps, the Commandant shall meet with the Joint Chiefs of Staff when that matter is under consideration. While the matter is under consideration and with respect to it, the Commandant has co-equal status with the members of the Joint Chiefs of Staff.

(d) Subject to the authority and direction of the President and the Secretary of Defense, the Joint Chiefs of Staff shall—

(1) prepare strategic plans and provide for the strategic direction of the armed forces;
(2) prepare joint logistic plans and assign logistic responsibilities to the armed forces in accordance with those plans;
(3) establish unified commands in strategic areas;
(4) review the major material and personnel requirements of the armed forces in accordance with strategic and logistic plans;
(5) formulate policies for the joint training of the armed forces;
(6) formulate policies for coordinating the military education of members of the armed forces;

(7) provide for representation of the United States on the Military Staff Committee of the United Nations in accordance with the Charter of the United Nations; and

§ 142. Chairman

(a) The Chairman, by the President, is...
(8) perform such other duties as the President or the Secretary of Defense may prescribe.

(c) After first informing the Secretary of Defense, a member of the Joint Chiefs of Staff may make such recommendations to Congress relating to the Department of Defense as he may consider appropriate.


**Historical and Revision Notes**

Revised Section Source (U. S. Code)
111(a) 5377(h)(a) (1st par., less 20th through 26th words of 1st sentence, and less last sentence) Source (Statutes at Large)
111(b) 5377(h)(a) (last sentence of 1st par.)
111(c) 5377(h)(a) (less 1st par.)
111(d) 5377(h)(b)

In subsection (c), the words "the matter is under consideration" are substituted for the words "on such occasion".

In subsection (b), the words "armed forces" are substituted for the words "military forces" and "military services".

### Explanatory Notes

In subsection (a), the word "are" is substituted for the words "is established", to make explicit the continuing authority of the organization established by the source statute.

### Cross References

Chief of Naval Operations, generally, see section 201 et seq. of this title.
Chief of Staff of Army or Air Force, appointment and duties, see sections 201 et seq. of this title.
Commandant of Marine Corps, appointment, term and emoluments, see section 201 et seq. of this title.
Navy, officers to assist Secretary, see section 201 of this title.
National Security Council, establishment and functions, see section 302 of Title 50, War and National Defense.
Chair of Joint Chiefs of Staff, see section 311 of this title.
Joint Chiefs of Staff.
Chief of staff, pay, allowances and nonuniformed service, see section 311 of Title 37, Pay and Allowances of Uniformed Services.
Representative, see section 317 of Title 22, Foreign Relations and Intercourse.

### Library References

§ 142. Chairman

The Chairman of the Joint Chiefs of Staff shall be appointed by the President, by and with the advice and consent of the Senate.
SUBJECT: Legal Restraints on the Secretary of Defense in Terminating or Reassigning Department of Defense (DoD) Civilian and Military Personnel (Information for Transition Team)

I. General Authority of Secretary of Defense Over DoD Personnel

Under the National Security Act, the Secretary of Defense has authority to run the affairs of the Department of Defense (DoD) and all its organizations and components subject to the direction of the President. The following limitations are the only pertinent restraints on the exercise of this power:

(1) The Secretary of Defense may not exercise his power to transfer, reassign, abolish, or consolidate the combatant functions of the military services unless he first reports his intended action to the Armed Services Committees of Congress; even if he does report it, Congress may reject it (10 U.S.C. §125); although the basis for rejection is stated in section 125(a) to be that the plan proposes transfer, etc. of a "major combatant function," and section 125(d) excludes from that term a "supply or service activity common to more than one military department," the proposed transfer, etc., of such a "supply or service activity" must still be reported, if it is "vested... by law;"

(2) He may not indirectly accomplish what is forbidden above by either (a) detailing or assigning personnel or (b) directing the expenditure of funds;

(3) He cannot merge the three military departments or deprive the Secretaries of those departments of their legal right to administer their organizations subject to his power and authority; and

(4) He may not transfer, reassign, abolish, or consolidate a specific function assigned by law to another officer or organizational component of DoD unless he first reports his intended action to the Armed Services Committees of Congress. In cases other than those covered in subparagraph (1) above, for example, a transfer of noncombatant functions vested by law in an official, e.g., from one of certain Assistant Secretaries of Defense to another Assistant Secretary of Defense, a report to the Congress would be required. Although the Armed Services Committee or either of the two houses of Congress could not find that a "major combatant function" was involved (as in subparagraph (1) above), they certainly could make known their disapproval even to the extent of passing legislation prohibiting the proposed action.
As a corollary to his general authority, the Secretary of Defense can direct the exercise of specific powers vested in subordinate officers of the DoD, including the Secretaries of the military departments. Conversely, the Secretary of Defense may not legally order a subordinate officer of DoD to take action in that subordinate's capacity when the subordinate lacks the authority under law to so act.

II. Restraints Concerning Military Personnel

A. Reassignment of Military Personnel

The authority of the Secretary of Defense to direct the Secretaries of the military departments to transfer and reassign military personnel is generally unfettered, although, as a matter of practice, assignments are made by the Secretaries of the military departments. Of course, there are a number of officers who hold specific positions by virtue of Presidential appointment, e.g., the Chief of Staff of the Army and the Chief of Naval Operations. The Secretary has no authority to direct a reassignment of personnel in this category. However, all such officers, even though confirmed in their positions by the Senate, serve only at the pleasure of the President.

In addition, section 716 of Title 10, United States Code, authorized the inter-service transfer of a commissioned officer by the President only when the officer has consented to the transfer.

B. Termination of Military Personnel

In the military personnel context, "termination" can be taken to mean a release from active duty or a complete separation from military status. Both circumstances are treated below.

1. Reserve Personnel

As a general rule, officers and enlisted members of Reserve components may be released from active duty at any time, 10 U.S.C. § 681(a). In time of war or national emergency declared by Congress or the President after January 1, 1953, however, certain procedures must be followed prior to a release. 10 U.S.C. § 681(b). This exception does not apply during a period of demobilization or reduction in strength.
A Reserve commissioned officer may be discharged at the pleasure of the President. 10 U.S.C. §1162. An exception exists when he has at least three years of service as a commissioned officer. In the latter circumstance, he may not be discharged without his consent except under an approved recommendation of a board of officers convened by an authority designated by the Secretary of the concerned military department or approved sentence of court-martial. 10 U.S.C. §1163. Normally, an approved recommendation by a board of officers would be based upon substandard performance of duty, moral or professional dereliction, or in the interests of national security, i.e., good cause.

A Reserve noncommissioned officer or enlisted member may be discharged under regulations prescribed by the Secretary of the concerned military department. (It is noteworthy that the Secretary of Defense has issued regulations governing the discharge of Reserve and Regular enlisted members.)

2. Regular Personnel

Generally, a Regular commissioned officer may not be discharged other than for good cause, failure of promotion, or mandatory retirement if he has three years or more of continuous service as a commissioned officer in the military department in which he is serving. Absent special legislation, the same rule applies to the release from active duty of Regular commissioned officers, whether or not during a reduction in force. E.g. 10 U.S.C. §3314a.

Similar rules pertain to Regular warrant officers. After reaching three years of active service from his original permanent appointment as a Regular warrant officer, such an officer generally may not be discharged other than for good cause, i.e., unfitness or unsatisfactory performance. See 10 U.S.C. §1165 and 1166. Again, the same rule governs the release from active duty of Regular warrant officers.
A regular enlisted member may not be discharged before his term of service expires except: (1) as prescribed by the Secretary of the concerned military department; (2) by sentence of special or general court-martial; or (3) as otherwise provided by law. 10 U.S.C. §1169. Although the statutory language concerning the discharge of Regular enlisted members varies from that applicable to enlisted members of Reserve components, the same standards which govern the discharge of Reserve enlisted members apply to the discharge of Regular enlisted members as well, because the Secretary of Defense has issued the same regulations for both.

As part of his general authority to issue regulations governing the discharge of Regular enlisted members, the Secretary of Defense may authorize their discharge pursuant to a reduction in force.

III. Restraints Concerning Civilian Personnel

By statute, the United States Civil Service Commission is charged with the responsibility of overseeing Federal civilian employees, including those in the Department of Defense. 5 U.S.C. §1301. Among other activities, the Commission issues regulations governing personnel matters throughout the Federal Government. 5 U.S.C. §§1302 and 3301. Consequently, the Secretary of Defense is not at liberty to devise his own regulatory scheme for dealing with the civilian workforce; rather, he must comply with the rules and regulations of the Commission.

While there are numerous categories into which civilian employees may fall, the two which comprise the civil service are the "competitive service" and the "excepted service." 5 U.S.C. §§2102 and 2103. A further complication is the class of employees designated as "preference eligibles," made up generally of veterans, unmarried widows and widowers of veterans, and spouses of disabled veterans. 5 U.S.C. §2108. "Preference eligibles" belong to both the competitive and excepted services and enjoy a privileged status respecting hiring, transfer, removal, demotion, suspension, and retention.
By statute and regulation, an employee of the competitive service may be required to serve a probationary or trial period, generally for the period of one year. 5 U.S.C. §3321. Upon completion of this period, specific regulatory, statutory, and constitutional protections apply when removal, demotion, or suspension of the employee is attempted.

A. Reassignment of Civilian Personnel

There are general and specific limitations on the Secretary of Defense's authority to transfer, detail, and reassign DoD personnel.

Among the specific limitations are the following: (1) employees who are required by law to be exclusively engaged on some specific work may not be detailed among the bureaus and offices of the military departments or the DoD (5 U.S.C. §3341(a)); (2) when employees may be detailed, it may be done only by written order of the head of the department and may not be for more than 120 days, although details may be renewed by written order (5 U.S.C. §3341(b)); (3) the head of an agency may not detail an employee of his agency to an international organization for more than five years (5 U.S.C. §3343); and (4) when it is determined appropriate, the head of an agency may assign an employee of his department to a State or local government, but not for more than two years. However, he may extend the assignment for not more than two additional years. 5 U.S.C. §3372.

When a function is transferred from one agency to another, each preference eligible employed in the function shall be transferred to the receiving agency for employment in a position for which he is qualified before the receiving agency may make an appointment from another source to that position. 5 U.S.C. §3503(a). Similarly, when one agency is replaced by another, each preference eligible employed in the agency to be replaced shall be transferred to the replacing agency for employment in a position for which he is qualified before the replacing agency may make an appointment from another source. 5 U.S.C. §3503(b).
As a matter of management, the Secretary of Defense may reassign competitive and excepted service employees within the departments according to his judgment. However, preference-eligible and competitive service employees must not suffer in pay, grade, or rank as a result of the reassignment. If a reassignment does constitute a reduction in pay, grade, or rank, there must be a basis for the adverse action if the employee is a competitive service employee or if he is a preference eligible, unless he is still serving during his probationary or trial period. 5 U.S.C. §§7501 and 7511. The same rules apply to transfers from one agency within DoD to another.

B. Termination of Civilian Personnel

All competitive and excepted service personnel are subject to being terminated during a reduction in force. However, an order of retention is established by law. Preference eligibles have first priority. 5 U.S.C. §3502(b). Thereafter, the elements which must be taken into account are tenure of employment, length of service, and efficiency of performance ratings. 5 U.S.C. §3502(a). It is noteworthy that competitive service personnel are reduced separately from excepted service personnel and that competitive service personnel may displace other competitive personnel lower on the order of retention. Excepted service personnel do not enjoy the "bumping" privilege.

After an employee has completed his probationary or trial period, he accrues certain rights. Before a nonprobationary, competitive service employee or a preference eligible may be removed, suspended, or furloughed without pay, certain procedures must be followed, including an appeal right to the Civil Service Commission. 5 Code of Federal Regulations Part 752. The basis for such adverse action must promote the efficiency of the service. The sufficiency of the reasons for the adverse action is subject to judicial review.

With regard to nonpreference eligible, excepted service employees, the general rule is that the same statutory and regulatory protections governing competitive service employees and preference eligibles do not apply. (There are exceptions, but they are beyond the scope of this paper.)
I. The Freedom of Information Act

The Freedom of Information Act (FOIA) (5 U.S.C. 552) requires each agency to make available any record requested by any person, unless the record falls within one of nine exemptions. (See Enclosure I for the nine exemptions).

Each agency, upon any request for records under the Act, is required to answer that request within 10 working days after receipt. An appeal from an initial denial of that request must be answered within 20 working days of receipt. In unusual circumstances, either time limit may be extended by a maximum of 10 additional working days upon written notice of the reasons therefore to the requester.

If the agency declines to provide the requested record in whole or in part or fails to respond within the time limits of the Act, the requester may file a complaint in a U.S. District Court to enjoin the agency from withholding the record. If the requester substantially prevails, the Court may award attorney's fees and court costs to the requester, and may make a written finding that agency personnel acted arbitrarily and capriciously in withholding the record. Such a finding must be investigated by the Civil Service Commission to determine whether disciplinary action is warranted against the person primarily responsible for the withholding. It should be noted, however, that this disciplinary procedure is not applicable to Presidential appointees or to military personnel.

II. DoD Organization and Procedures for Processing Freedom of Information Act Requests

The Assistant Secretary of Defense (Public Affairs) (ASD(PA)) is responsible for the overall Department-wide implementation of the FOIA program. Under that official there is the Directorate for Freedom of Information, which, in addition to monitoring compliance with the FOIA program requirements in all elements of DoD, is the office that staffs the Freedom of Information Act (FOIA) requests received by the Office of the Secretary of Defense (OSD). In 1975, approximately 44,000 FOIA initial requests and 372 appeals were answered throughout the Defense Department, with 1,165 initial requests and 21 appeals involving OSD records.
The Military Departments are considered to be separate agencies for purposes of responding to FOIA requests. Accordingly, any request received by OSD which includes records that are under the jurisdiction of a military department is forwarded to that department for action. Additionally, most Defense Department Agencies such as the Defense Intelligence Agency and National Security Agency also handle their own FOIA requests. A list of all of the OSD offices is attached at Enclosure 2. At Enclosure 3 is a list of the DoD components considered to be separate agencies for purposes of responding to FOIA requests.

Within OSD, the head of each organizational entity (e.g. the ASD(Comptroller)) is responsible for making the determination of whether any requested records originated or maintained by his office must be released or withheld under the FOIA, and for assuring that this determination is made within the time limits established by the Act. It is also the responsibility of the head of each OSD entity to consult with the Assistant General Counsel serving his area, before making a denial of any document or portion thereof requested under the FOIA. Additionally, the head of each OSD component must provide to OASD(PA) a written justification for the denial, including a reference to the exemption of the Act which is being used as authority to withhold the record. This responsibility includes a duty to consult with any other OSD and DoD components that may have a significant interest in the document.

A red cover sheet (SD Form 466) and accompanying forms (SD Form 472 and 467) are attached to each FOIA request to alert the office to which action is assigned that this is a priority item that must be expedited. (Copies attached at Enclosure 4). The suspense date is typed on the red cover sheet for each request.

The requester has the right under the Act to appeal the initial denial of any record requested under the FOIA to the head of the agency. In OSD, all such appeals must be sent to the ASD(PA), as the designee of the Secretary of Defense, for a review of the initial determination.

The following rules should be kept in mind when determining an appropriate response to a request:
1. The Act requires the requester to "reasonably describe" the records he seeks. If the request is so vague or broad that an official familiar with the relevant files cannot determine what records are sought, the agency is permitted to decline to make a search and instead contact the requester, asking that he give more specific information about the type of records he is requesting.

2. If the requester asks for a record which does not exist, there is no requirement to create a record in order to respond to the request. Only existing records are subject to the Act, not information in any other form.

3. If the request is for a record which originated in another agency, in Congress, or in the private sector, but which is contained in DoD files, there is an obligation to consider it a DoD record and make the determination with regard to its releasability (normally after consultation with the originating agency). The only exceptions to this rule are a document which was classified by another agency, an FBI record on loan, or a Civil Service Commission record on loan. In that case, the document is considered to be a record of the agency that classified or originated it. Hence, the request may be transferred to one of those agencies to answer the inquiry with respect to that particular document.

4. The FOIA does not apply to requests from Congress or its Committees, but it does apply to a request from an individual Member of Congress who seeks a record on his own or a constituent's behalf. Requests for records from Congress are governed by DoD Directive 5400.4 (Feb. 20, 1971) (Enclosure 5). This means that the exemptions of the FOIA can be used to justify the withholding of documents from Congress only when the individual Member is acting without color of Legislative Branch authority. Similar rules apply to the GAO (see Enclosure 6).

III. Determinations Under the Freedom of Information Act

A. General

The purpose of the FOIA is to make as much Government information as possible available to the public. The burden is on the Government either to release the record or prove that a denial of the record is authorized under one of the exemptions in the Act.
Additionally, it is not sufficient merely to state that the requested record falls within one of the exemptions of the Act. The denying official must also state in writing the "legitimate and significant governmental purpose" (DoD Directive 5400.7 - Enclosure 7) that will be served by withholding the record. If a document falls within one of the exemptions but no harm will result from releasing it, the record must be made available.

B. Reasonable Segregation of Exempt Portions of a Record

It is rarely permissible to withhold an entire document from a requester. This is because of the rule in the Act that "any reasonably segregable portion of a record shall be provided to any person requesting such record after deletion of the portions which are exempt ..." Applying this rule to classified documents, for example, the appropriate OSD entity must make a paragraph-by-paragraph declassification review of each document and must release any paragraphs which are not in and, of themselves currently and properly classified.

C. The Exemptions

The nine exemptions that authorize the withholding of certain categories of records are listed in Enclosure 1. Certain of those require special explanation. All classified documents requested, for example, must be put through a declassification review to determine if they are currently and properly classified. This is because the Act permits the withholding only of those documents which are "in fact properly classified" pursuant to an Executive order. The Act also authorizes the Courts to examine classified documents in camera to determine whether they are properly classified.

Exemption (5) often presents problems because of the rule described above that "reasonably segregable" portions of documents must be released. The Courts have held that only the policy advice and recommendations contained in an internal memorandum may be withheld - not the facts. This means that any facts contained in an inter- or intra-agency memorandum that reasonably can be segregated must be released, and that only the policy advice and recommendation portions of such a memorandum may be withheld. Accordingly, if a request for any particular document is anticipated, such document should be organized in a fashion to separate factual matter from the exempted policy advice and recommendations.
D. The Privacy Act

The Privacy Act (5 U.S.C. 552a) is often also applicable to records requested under the FOIA, since it applies to any record about an individual that is maintained by his name, social security number, or other personal identifier. The component assigned action on a request from an individual seeking access to records about himself must therefore determine whether any Privacy Act type of records are covered by the request. If so, the individual is entitled to the access required by that Act. If, however, the record is one which under the FOIA must be released, the Privacy Act may not be used as a justification to withhold the record from the individual. Accordingly, the basic rule that applies when an individual requests records about himself is that if the information is required to be released under either Act, it must be released to the requester.

A more difficult issue is presented when a third party (often the press) requests, under the FOIA, private information about an individual contained in a system of personnel records subject to the Privacy Act. Exemption (6) of the FOIA (see Enclosure 1) prohibits release of "personnel files ... the disclosure of which would constitute a clearly unwarranted invasion of personal privacy ..." The component responding to the request is required first to apply a balancing test to weigh the interest of the public or the requester in gaining access to the information against the privacy interests of the individual. If the component concludes that the interests of the public or of that particular requester outweigh the potential harm to the privacy of the individual, the record must be released and the Privacy Act may not be used to justify withholding the information. Only if the component concludes that the interest in protecting the individual's privacy is greater than the need for the public to have access to the information can the component look to the Privacy Act to determine if its provisions prohibit the record from being released to third parties.

Because the determinations of whether it is legally permissible to withhold a document under either FOIA or the Privacy Act are often complex and sometimes affected by recent litigation, coordination with assigned counsel is required on any proposed initial denial of a document. The ASD(PA) likewise must coordinate with the General Counsel on appeals of initial denials before making a final denial of a record on behalf of the Secretary of Defense under the FOIA.
IV. Relevant DoD Directives

DoD Directives 5400.7 (Enclosure 7) and 5400.10 (Enclosure 8), which govern the policies and procedures of the DoD Freedom of Information Program, are attached for your guidance. Also attached is DoD Directive 5400.4 (Enclosure 5), which governs requests for information from the Congress.
(b) This section does not apply to matters that are:

(1) (A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified pursuant to such Executive order;

(2) related solely to the internal personnel rules and practices of an agency;

(3) specifically exempted from disclosure by statute;

(4) trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency;

(6) personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) investigatory records compiled for law enforcement purposes, but only to the extent that the production of such records would (A) interfere with enforcement proceedings, (B) deprive a person of a right to a fair trial or an impartial adjudication, (C) constitute an unwarranted invasion of personal privacy, (D) disclose the identity of a confidential source and, in the case of a record compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, confidential information furnished only by the confidential source, (E) disclose investigative techniques and procedures, or (F) endanger the life or physical safety of law enforcement personnel;

(8) contained in or related to examination, operating, or condition reports prepared by, or on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions;

(9) geological and geophysical information and data, including maps, concerning wells.

Any reasonably segregable portion of a record shall be provided to any person requesting such record after deletion of the portions which are exempt under this subsection.
Offices and Agencies Whose FOIA Requests are Staffed by OASD(PA)

All Offices Which Are Part of OSD
Joint Chiefs of Staff
All Assistant Secretaries of Defense
Office of General Counsel
Defense Systems Management School
Defense Advanced Research Projects Agency
Defense Security Assistance Agency
Uniformed Services University of the Health Sciences
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<td>JCS</td>
<td>Mr. E. F. Lowry, Jr.</td>
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<td>CDR David Kirchner</td>
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<td>*</td>
<td>MajGen John G. Albert</td>
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<tr>
<td>3D(HA)</td>
<td>CPT David R. Pitts</td>
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<td>SD(I&amp;L)</td>
<td>Mr. Wm. J. Sharkey</td>
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<td>Major Nibbelin</td>
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<td>Mr. J. E. Coon</td>
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<td>Mr. Edward C. Aldridge, Jr.</td>
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<tr>
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<td>Col S. R. Harrick</td>
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<td>70792</td>
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<tr>
<td>DR&amp;E</td>
<td>Mr. Howard Stadermann</td>
<td>73459</td>
<td>3D1025</td>
<td>Mr. S. E. Clements</td>
<td>56556</td>
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<td>JN COUNSEL</td>
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<td>3E963</td>
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<td>CAPT J. J. Kristof</td>
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<tr>
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<td>Mr. Fred Koether</td>
<td>45919</td>
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<td>Mr. Donald J. Looft</td>
<td>41139</td>
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<tr>
<td>JSAA/TC</td>
<td>Mr. Dale Jensen</td>
<td>78231</td>
<td>4B732</td>
<td>Mr. Walter B. Ligon</td>
<td>57013</td>
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<tr>
<td>Jfc.Dep.Educ.</td>
<td>Dr. A. Cardinale</td>
<td>325-0188</td>
<td>***</td>
<td>Dr. A. Cardinale</td>
<td>325-0085</td>
<td>***</td>
</tr>
<tr>
<td>JSUHS</td>
<td>Ms. Bumbak</td>
<td>227-1980</td>
<td>****</td>
<td>Mr. A. R. Curreri</td>
<td>227-1986</td>
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</tr>
</tbody>
</table>

*Defense Systems Management School
Fort Belvoir, VA 22060

**Defense Advanced Research Projects Agency
Room 637, Architect Building
1400 Wilson Boulevard
Arlington, VA 22209

***Office Overseas Dependents Education
Department of Defense
Hoffman Building, 2461 Eisenhower Avenue
Alexandria, VA 22331

****President, Uniformed Services University of the
Health Sciences
ATTN: Ms. Vera Bumbak
6917 Arlington Road
Bethesda, MD 20014
MR FORCE:
Records Management Division
Office of The Adjutant General
Attn: DAAG-AMR
Room GA076, Forrestal Bldg, Washington, D.C. 20314

NAVY:
Naval Records Management Division
OP-09B1
Room 5E613, Pentagon
Washington, D.C. 20350

MARINE CORPS:
Division of Information (Code PA)
HQMC, Room 1129
Washington, D.C. 20380

DCAA:
Defense Contract Audit Agency (DCAA)
Cameron Station
Alexandria, VA 22314

DIA:
Defense Intelligence Agency—DS4A
Room 0300 Arlington Hall Station
Washington, D.C. 20301

DIS:
Defense Investigative Service (D0020)
Attn: LTC Dale Hartig
Room 2H063, Forrestal Building
Washington, D.C. 20314

DSC:
Defense Supply Agency
HQ DSAH-XA
Cameron Station
Alexandria, VA 22314

DMA:
Defense Mapping Agency
Naval Observatory, Building 56
34 Massachusetts Avenue, N.W.
Washington, D.C. 20306

NSA:
National Security Agency
Attn: D4 FOIA Office
Fort George G. Meade, Md. 20755

DCA:
Defense Communications Agency
Code 105
Washington, D.C. 20305

DNA:
Defense Nuclear Agency
Public Affairs Office
Washington, D.C. 20303

DCPA:
Defense Civil Preparedness Agency
Attn: ADM
Washington, D.C. 20301

OSD(PA)
Office of the Assistant Secretary of Defense (Public Affairs)
Directorate for Freedom of Information and Security Review
Room 2C757, Pentagon
Washington, D.C. 20301

Ms. Norma Cook, 697-1160
Respond NLT [blank] Under Provisions of
HOUR AND DATE
The Freedom of Information Act (5 USC 552) and
DoD Directive 5400.7

READ & FOLLOW THESE SPECIAL INSTRUCTIONS

1. Handle this material as a package. Do not break it up or allow it to become separated from this cover.

2. Read FOIA Information Sheet. If there is anything you do not fully understand or need clarified, phone DIRECTORATE, FREEDOM OF INFORMATION STAFF OFFICER [blank] EXT [blank].

3. Do not place in Distribution Courier Service. Call for Pickup or Deliver Directly to Room 2C757.
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### SD Form 472, 1 Feb 76
REMARKS (Con't)

RECORD ABSTRACT (Con't)

ACTION TAKEN/DISPOSITION (Con't)

INSTRUCTIONS

GENERAL. This sheet is used to record specific information on each Freedom of Information request processed under DOD Directive 5400.10. It serves the dual function of creating permanent administrative documentation, authority and control as well as providing source data for an automated support system used to generate a historical, management and report data. Therefore, entries must be concise but not to the point of loss in clarity. One original copy is provided each action office who in turn completes Section II (see below) and returns it to DFOISR.

SECTION I. Completed by DFOISR per internal instructions establishing control data and recording factual information.

SECTION II. The Action Office (component) will complete the following blocks, as appropriate in Section II, based upon the dictates of each case and that which is involved in making a decision on the request.

DOCUMENT STATUS: A mark in the appropriate block establishes the record availability to the public.

RECORD ABSTRACT: This block should be used to amplify the record description used in the RECORD REQUESTED block (Section I) by inserting exact or commonly used title(s), as well as a brief of what the record holds if the title does not adequately reflect the subject matter. Emphasis in this regard should be placed on using "key words" that denote general reference or typical index areas. These words will then be "searchable" by the computer to assist in future records actions.

ACTION TAKEN/DISPOSITION: The primary use of this block should be devoted to declassification action and/or an unclassified description of the portion (an attachment, number of pages, etc.) of a document being withheld on a partial denial. Classified comments, if required to clearly record rationale, will be placed on a separate memorandum to DFOISR.) Also, include pertinent facts which have a bearing on the determination reached and if applicable, a statement that reasonably aggregates portions of the denied record(s) or part of record(s) cannot be provided.

FOIA EXEMPTION(S): When PARTIAL or DENIED is marked as status, the exemption(s) under P.L. 93-502 must be cited. Enter Section 552(b) followed by the number, and where applicable, the letter of the allowable exemption(s). In the case of Section 552(b)(3) add the specific statute description.

COORDINATIONS: Reflect all parties which reviewed the case in the course of arriving at or passing on the determination. At a minimum, include other components having similar interest and the component's General Counsel representative on non-routine cases.

ACTION OFFICER: Identification of the action officer allows direct contact on any subsequent matters arising from the component action. Please include office symbol and telephone number.

APPROVAL/DENIAL AUTHORITY: The specifically appointed component approval/denial authority is encouraged to review action on all requests. His name and title will be entered in this block in all cases. The authority's signature, in addition to name and title, denotes personal review. Signature is mandatory on requests being wholly or partially denied. Component approval/denial authorities are identified in the DOD's annual report to Congress and that report reflects all adverse actions on requests which include instances when the component determines no record exists.

DATE: The day action office evaluation, determination and review are completed.

SECTION III. Completed by DFOISR per internal instructions reflecting data to complete request and processing action.
RECORD OF FOI CASE PROCESSING COSTS

INSTRUCTIONS: Complete this form to establish the direct search and copying charges associated with this request (Enclosure 2, DOD Directive 5400.7), and/or to establish the additional processing costs to the government reportable under RCS: DD-PA(Q&A)1355. Record the time in manhours rounded to the limits indicated, of all actions taken in processing this request. Computer search requires exact reporting. Waiver of fees or denial action have no bearing on completing this cost record.

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(Minimum Fee $2.75)

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*Collectable from requester.

**The division of grades is not to be used for other report or manpower purposes.

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SD FORM 467               EDITION OF 1 JUN 75 IS OBSOLETE.
Department of Defense Directive

SUBJECT  Provision of Information to Congress

Refs:  (a) DoD Directive 5122.5, "Assistant Secretary of Defense (Public Affairs)," July 10, 1961
(g) DoD Directive 5148.5, "Assistant to the Secretary of Defense (Legislative Affairs)," November 13, 1961
(h) DoD Directive 5025.9, "Control and Protection of 'For Official Use Only' Information," February 1, 1968
(i) DoD Directive 5400.4, subject as above, December 24, 1966 (hereby cancelled)

I. REISSUANCE AND PURPOSE

This Directive reissues reference (i) to incorporate provisions of reference (j) and update Department of Defense policies and procedures governing furnishing information, both classified and unclassified, to Congress. References (i) and (j) are hereby superseded and cancelled.
II. APPLICABILITY AND SCOPE

A. The provisions of this Directive apply to the Military Departments, the Defense Agencies, the Organization of the Joint Chiefs of Staff, the Unified and Specified Commands, and the Office of the Secretary of Defense (hereinafter referred to collectively as "DoD Components.")

B. Its provisions do not cover processing of legislation covered by DoD Directive 5500.1 (reference (f)), nor matters relating to appropriations which fall under the cognizance of the ASD (Comptroller), except as described in IV. B. 1 and V. C., below.

III. POLICY.

It is essential to the proper functioning of the United States Government that Congress receive adequate information concerning all Government programs and operations.

A. In accordance with the DoD policy of making maximum information concerning its operations and activities available to both Government officials and the public in general, all DoD Components will:

1. make maximum information available promptly to, and cooperate fully with Members of Congress and Congressional Committees and their staffs; and

2. answer constituents' letters to Members of Congress as fully as possible, subject to the following limitations and provision of subsection IV. C., below:

a. classification of official information in the interests of national defense, pursuant to Executive Order 10501 and the Atomic Energy Act, as amended (references (b) and (e)); and

b. restrictions on official information which, in the best interests of the public as a whole, should not be given general circulation (see DoD Directive 5400.7 and 5015.1 (references (c) and (d)).

B. Information not available to the public (see paragraph III. A. 2., above) will be made available to Congress, in accordance with paragraph IV. B. 2., below.
C. In no instance will information be furnished to Members of Congress regarding the identity or location of companies or persons receiving contract awards prior to public announcement of such information.

IV. FURNISHING INFORMATION TO CONGRESS

A. General

1. DoD personnel testifying as witnesses before Congressional Committees, or handling requests from Congress shall bear in mind the need to protect certain types of information from public disclosure (reference (b), (c), (d) and (e)).

   a. If the testimony is to be submitted in writing, it should contain an over-all classification to designate the security protection necessary (reference (e)).

   b. If the testimony is to be given orally, the Congressional Committee concerned shall be advised, in advance, of the security classification and the need for protecting the sensitive portions from public disclosure.

2. Procedures of Congressional Committees with respect to preparation and delivery of prepared statements shall be complied with to the maximum extent possible. When a written statement is used by a DoD witness the statement will be submitted to the Committee in advance of the appearance as provided for by the rules of that Committee.

B. Security Procedures

1. To insure military security, testimony concerning classified information requiring security protection shall be given only in closed sessions. Transcripts of such testimony may be released for publication only after they have been reviewed and cleared by the Assistant Secretary of Defense (Public Affairs) or his designee and approved for release by the Chairman of the Congressional Committee which held the hearing.

   a. All such transcripts shall be reviewed for security, proof read, and corrected by the witness prior to being forwarded to the OASD(PA).
b. Written statements prepared for formal presentation, budget justification books, and other material provided Congressional Committees which may be made a part of the published record of Congressional hearings, also require review by OASD(PA).

c. Supplementary, backup, and reference material provided to the Committees, which will not be made a part of the published record, or prepared for use by witnesses in responding to Members' questions, will not normally be submitted for review.

d. All DoD Components shall, on request, provide prompt and full guidance and assistance to the OASD(PA) in the review of material related to their spheres of responsibility.

e. Procedures for the security review of Congressional testimony are prescribed in enclosure 1.

2. In the rare case where there is a question as to whether particular information may be furnished to a Member or Committee of Congress, even in confidence, it will normally be possible to satisfy the request through some alternate means acceptable to both the requester and the DoD. In the event that an alternate reply is not acceptable, no final refusal to furnish such information to a Member of Congress shall be made, except with the express approval of the Head of the DoD Component concerned, or of the Secretary of Defense. The Assistant to the Secretary of Defense (Legislative Affairs) shall be informed of any such submissions to the Head of a DoD Component or to the Secretary of Defense. A final refusal to a Committee of Congress may be made only with the concurrence of the Assistant to the Secretary of Defense (Legislative Affairs), who shall be responsible for insuring compliance with all procedural requirements imposed by the President or pursuant to his direction.

C. Information Requested for Constituents. Information requested by Members of Congress for their constituents shall be tested for limitations on dissemination (see paragraph III. A.2., above) and handled in the same manner as if the constituent himself had written directly to the DoD; if it
develops that the information cannot be released the Member requesting the information shall be advised promptly of that fact and of the reasons for the determination.

D. Congressional Investigations

1. The Assistant to the Secretary of Defense (Legislative Affairs) has been assigned over-all responsibility (reference (g)) for assuring compliance with the policies and procedures governing legislative investigations of DoD activities, including liaison with Congress, and, in connection therewith, keeping appropriate DoD personnel currently informed on the status of such investigations (except for those affecting budgets and appropriations, and related to financial matters).

2. DoD Components shall furnish information copies of all direct written communications to and from Congress with respect to such investigations to the ATSD(LA).

V. HANDLING OF CONGRESSIONAL REQUESTS

A. General

1. Replies to all Congressional inquiries and requests shall be completely responsive and handled as expeditiously as possible. Should it become evident that a response to a request will be unduly delayed an interim reply should be made. The interim reply will indicate the anticipated date of completion and the steps being taken to obtain the information requested.

2. To facilitate prompt and adequate response to Congressional requests, it is preferred that the requests be written and specify in detail the particular information or documents desired. However, oral requests which are sufficiently specific to permit prompt and adequate response should be accepted.

3. A Congressional request for correspondence between the Department of Defense and a Congressman shall be referred to the concerned member or Committee.

B. Written Requests Addressed to the Secretary of Defense or Deputy Secretary of Defense. Complete replies to Congressional correspondence addressed to the Secretary of Defense or Deputy Secretary of Defense shall be provided within five (5) working days of their receipt whenever possible; those
of an urgent nature shall be answered more expeditiously, as appropriate.

1. If the information requested is not readily accessible or of such volume or complexity as to prohibit preparation of a complete reply within the five-day time limit, the requester shall be advised, via an immediate interim reply, of a date by which the information will be supplied.

2. The Assistant Secretary of Defense (Administration), or his designee for the purpose shall be provided with the estimated completion date and an adequate explanation of the delay.

C. Public Releases. Replies to Congressional inquiries or requests or other transmittals which may result in release of information of significant public affairs implication will be coordinated in advance with OASD(PA) as required by DoD Directive 5122.5 (reference (a)).

VI. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective immediately. Two (2) copies of implementing documents shall be forwarded to the Assistant Secretary of Defense (Public Affairs) and Assistant to the Secretary of Defense (Legislative Affairs) within sixty (60) days.

Enclosure - 1

Procedures for Security Review of Congressional Testimony
PROCEDURES FOR
SECURITY REVIEW OF CONGRESSIONAL TESTIMONY

I. GENERAL

The following uniform procedures supplement guidance outlined in IV. B. of the basic Directive governing the review of prepared statements and budget justification material to be presented to Congressional Committees, transcripts of testimony given in executive session before such Committees, and supplemental information prepared for insertion in the hearing record.

II. DEFINITIONS

As used in this Directive, the following definitions apply:

A. Prepared Statement. A statement, including supplemental material, prepared by a DoD witness for presentation to a Congressional Committee in open or executive session.

B. Executive Session Testimony. Testimony taken in closed Congressional hearings, transcripts of which may contain information requiring the protection of a security classification.

C. Inserts. Amplifying and/or supplemental information prepared by DoD and intended for inclusion in the record of Congressional hearings.

D. Budget Justification Books. Material prepared by DoD at the direction of and in the format prescribed by Congressional Committees to explain and justify in detail the estimates contained in DoD budgets. This material includes: (1) justification books for each appropriation title (Justification of Estimates for FY ); (2) Supporting Data for FY _ Budget Estimates - Exhibit P-1; (3) Supporting Data for FY _ Budget Estimates - Descriptive Summaries; (4) Supporting Data for FY _ Budget Estimates - Major Programs; (5) other material as prescribed for submission by Congressional Committees prior to commencement of hearings.
III. PROCEDURES

A. Prepared Statements. Prepared statements will be submitted in quadruplicate to the Directorate for Security Review, OASD(PA), as far in advance of the required date of transmittal to a Congressional Committee as possible, normally five (5) or more working days prior to the date clearance is desired. While there will be cases in which this time limit cannot be met, exceptions must be limited to true emergencies. DD Form 1790 (Attachment 1) will be used to forward statements for review. The form will be signed by an official authorized by the Secretaries of the military departments or the heads of OSD offices and Defense agencies to certify to the security and policy positions presented.

B. Transcripts. Following testimony by DoD witnesses before a Congressional Committee in executive session, the Committee will normally provide appropriate DoD Component offices with a stenographic transcript of the testimony to permit (a) incorporation of necessary editorial corrections, (b) insertion of requested additional information as inserts to the record, and (c) deletion of security information if open publication is contemplated. Such transcripts are generally furnished to the Assistant Secretary of Defense (Comptroller), the Assistant to the Secretary of Defense (Legislative Affairs), the Assistant Secretary of Defense (International Security Affairs) or the appropriate military department, depending on the Congressional Committee and the organizational affiliation of the witness. Strict time limits are normally imposed for return of the transcripts. Expeditious handling of transcripts will be accomplished as follows:

1. Monitoring

a. The Office of the Assistant Secretary of Defense (Comptroller), the Office of the Assistant to the Secretary of Defense (Legislative Affairs), the Office of the Assistant Secretary of Defense (International Security Affairs), or the office delegated this responsibility by the Secretary of a military department, as appropriate, will be responsible for monitoring the status of the transcript during the review process and insuring that suspense dates are met.

b. The monitoring office will complete and attach
DD Form 1587 (Attachment 2) to the transcript, determine suspense dates (alloting two-thirds of the available time for editing and preliminary security review and one-third for final action by the Directorate for Security Review), and forward the transcript to the parent office of the witness for preliminary review.

2. **Editing**

   a. Editing by witnesses will normally involve changes of language or punctuation designed to correct obvious mistakes in facts or numbers.

   b. Material to be deleted for editorial reasons will be lined out rather than bracketed. (Brackets are reserved for security deletions, see 3., below).

   c. Editing will be entered legibly in ordinary black lead pencil.

3. **Security Review**

   a. Information which warrants the protection of a security classification under the provisions of DoD Directive 5200.1 (reference (b)) will be marked for deletion by brackets [ ] with ordinary black lead pencil.

   b. Security deletions must be as specific as possible -- for example, classified numbers will be deleted rather than the sentence or paragraph in which they appear.

   c. If an entire passage is considered to require deletion, the brackets will clearly indicate the extent of the deletion. Information marked for deletion from executive session transcripts must reflect a consistent and defensible security position.

   d. Bridging of deletions with substitute unclassified language is not necessary.

4. **Final Review and Clearance**

   a. Immediately upon completion of editing and preliminary
security review, the monitoring office will insure that the transcript together with two copies of the related DD Form 1587 (Attachment 2) are forwarded to the Directorate for Security Review, Office of the Assistant Secretary of Defense (Public Affairs), for final review and clearance.

b. The Directorate for Security Review will make final security determinations using red pencil markings and return the transcript to the submitting office for processing in accordance with the individual requirements of the Committee concerned, including any required excision of classified material. Some Committees furnish two copies of a transcript, both of which must be returned to the Committees -- one a printer's copy excised of all classified material, the other a Committee file copy with the classified areas indicated with red pencil brackets. Completed transcripts will normally be returned to Committees through appropriate monitoring offices.

C. Inserts. All information prepared for insertion as a part of the official record of open and executive session testimony will be given preliminary review as outlined in subsection III. B. 3., above, and submitted to the Directorate for Security Review for final review.

1. Whenever possible, inserts will be placed in executive session transcripts before submission to the Directorate for Security Review.

2. When inserts are not submitted with transcripts, two (2) copies will be marked to indicate transcript page location and transmitted by DD Form 1790 (Attachment 1) certified as indicated in subsection A., above.

3. Insert material will not be forwarded to a Congressional Committee without review by the Directorate for Security Review.

4. Where required, excising of security material from inserts will be accomplished as prescribed for transcripts in subsection III. B. 4. b., above prior to their delivery to the Committee.
D. Budget Justification Books. Budget justification books prepared for submission to Congressional Committees will be submitted in duplicate to the Directorate for Security Review, OASD(PA), as far as possible in advance of the date clearance is desired, but at least five (5) working days prior to that date. Information which warrants the protection of a security classification will be bracketed by ordinary black lead pencil as indicated in subsection B.3., above. DD Form 1790 (Attachment 1), certified as indicated in subsection A., above, will be used as a transmittal.

E. Designation of "For Official Use Only" Material. Under the provisions of paragraph III, C.3., DoD Directive 5025.9 (reference (h)), the portions of material submitted for review which qualify for the marking "For Official Use Only" must be so designated and accompanied by an explanation of the rationale for such finding in accordance with Section VIII, "Exemptions," of DoD Directive 5400.7 (reference (c)). Following review, the office transmitting such material to Congress will be responsible for providing the recipient with an appropriate explanation as to the significance of the term "For Official Use Only" as specified in DoD Directive 5025.9 (reference (h)).

F. Release of Information. Information presented in hearings may not be released to the public until released by the Congressional Committee or with permission of the Committee. The importance of maintaining the confidence of Congress in this regard cannot be overemphasized.

Attachments - 2
1. DD Form 1790
2. DD Form 1587
The attached document is forwarded for review in accordance with paragraph IV.B.1.b., DoD Directive 5400.4.

**DIRECTOR, SECURITY REVIEW, OASD(PA)**

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**WITNESS**

**COMMITTEE/SUBCOMMITTEE**

**HEARING DATE AND SUBJECT**

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**UPON COMPLETION NOTIFY**

**DIRECT QUESTIONS TO**

**REQUEST CLEARANCE KLT**

**THE ATTACHED MATERIAL**

This document is for classified or unclassified presentation. (Check applicable term)

The attached material has department/agency approval for the purpose specified. Any portions requiring security protection have been appropriately designated.

**ATTACHMENT**

**SIGNATURE**
CONGRESSIONAL TRANSCRIPT REVIEW

The attached transcript of testimony is forwarded for editorial and security review.

To meet committee requirements and allow time for final review by the Directorate for Security Review, OASD (PA), your action must be completed as indicated. Each element in the review process must give cooperative consideration to the final requirements of all elements in meeting due out dates.

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GUIDELINES

I. SECURITY

A. GENERAL - Review must be accomplished by officials competent to judge the security aspects of the subjects involved and to provide a consistent and defensible security position.

B. MARKING

1. Use black lead pencil.
2. Incluse with brackets [ ] information to be deleted.
3. Make deletions as limited as possible, considering whether the total context may contain clues to the information deleted.

II. EDITORIAL

A. GENERAL - Edit to correct inaccuracies.

B. MARKING

1. Use black lead pencil.
2. Line through all words or figures not obliterated substitute language or figures are added. Do not use brackets.
3. Print or write all entries legibly.
4. Use standard proofreaders markings.
5. Do not change statements by Committee members. Note inaccuracies in the margin.

TO: Director
    Security Review, OASD (PA)    FORWARDING CERTIFICATE

Portions of the attached transcript which require deletion in the interests of national defense before publication have been bracketed. This action represents the considered judgment of this office that the information so marked warrants the protection of security classification.

SIGNATURE

OFFICE

DD FORM 1587

REPLACES DD FORM 1587, 1 JAN 76, WHICH IS OBSOLETE.
The following page changes to DoD Directive 5400.4, "Provision of Information to Congress," dated February 20, 1971, have been authorised:

PAGE CHANGES

Remove: Pages 3 and 4
Insert: Attached replacement pages

Amendments appear on page 4 and are indicated by marginal asterisks.

EFFECTIVE DATE AND IMPLEMENTATION

The above change is effective immediately. Two copies of implementing instructions shall be forwarded to Assistant to the Secretary of Defense (Legislative Affairs) within 30 days.

MAURICE W. ROCHE
Director, Correspondence and Directives Division
OASD(Administration)
C. In no instance will information be furnished to Members of Congress regarding the identity or location of companies or persons receiving contract awards prior to public announcement of such information.

IV. FURNISHING INFORMATION TO CONGRESS

A. General

1. DoD personnel testifying as witnesses before Congressional Committees, or handling requests from Congress shall bear in mind the need to protect certain types of information from public disclosure (reference (b), (c), (d) and (e)).

   a. If the testimony is to be submitted in writing, it should contain an over-all classification to designate the security protection necessary (reference (e)).

   b. If the testimony is to be given orally, the Congressional Committee concerned shall be advised, in advance, of the security classification and the need for protecting the sensitive portions from public disclosure.

2. Procedures of Congressional Committees with respect to preparation and delivery of prepared statements shall be complied with to the maximum extent possible. When a written statement is used by a DoD witness the statement will be submitted to the Committee in advance of the appearance as provided for by the rules of that Committee.

B. Security Procedures

1. To insure military security, testimony concerning classified information requiring security protection shall be given only in closed sessions. Transcripts of such testimony may be released for publication only after they have been reviewed and cleared by the Assistant Secretary of Defense (Public Affairs) or his designee and approved for release by the Chairman of the Congressional Committee which held the hearing.

   a. All such transcripts shall be reviewed for security, proof read, and corrected by the witness prior to being forwarded to the OASD(PA).
b. Written statements prepared for formal presentation, budget justification books, and other material provided Congressional Committees which may be made a part of the published record of Congressional hearings, also require review by OASD(PA).

c. Supplementary, backup, and reference material provided to the Committees, which will not be made a part of the published record, or prepared for use by witnesses in responding to Members' questions, will not normally be submitted for review.

d. All DoD Components shall, on request, provide prompt and full guidance and assistance to the OASD(PA) in the review of material related to their spheres of responsibility.

e. Procedures for the security review of Congressional testimony are prescribed in enclosure 1.

2. In the rare case where there is a question as to whether particular information may be furnished to a Member or Committee of Congress, even in confidence, it will normally be possible to satisfy the request through some alternate means acceptable to both the requester and the DoD.

a. In the event that an alternate reply is not acceptable, no final refusal to furnish such information to a Member of Congress shall be made, except with the express approval of the Head of the DoD Component concerned, or of the Secretary of Defense. The Assistant to the Secretary of Defense (Legislative Affairs) shall be informed of any such submissions to the Head of a DoD Component or to the Secretary of Defense.

b. In the event an alternative means of supplying information requested by a Committee of Congress proves unsatisfactory, final refusal to provide the information to the Committee may be made only by the President of the United States. The Assistant to the Secretary of Defense (Legislative Affairs) shall be responsible for insuring compliance with all procedural requirements imposed by the President or pursuant to his direction.

C. Information Requested for Constituents. Information requested by members of Congress for their constituents shall be tested for limitations on dissemination (see paragraph III.A.2., above) and handled in the same manner as if the constituent himself had written directly to the DoD; if it

First amendment (Ch 1, 5/17/72) 4
Department of Defense Directive

SUBJECT Availability to the Public of Department of Defense Information

Refs.: (a) 5 U.S.C. 552, as amended by P.L. 93-502
(b) See Enclosure 1 for references (b) through (t)

I. PURPOSE

This Directive:

A. Implements the Freedom of Information Act (reference (a)) by describing:

1. The kinds of records which must be made available to the public and the procedures which shall be used in making them available by providing an opportunity to inspect and copy them at convenient locations, with current indices (Enclosure 3), and by providing copies.

2. The kinds of records which need not be made available to the public.

B. Prescribes uniform policy for the identification and marking of records which need not be made public through the use of the term "FOR OFFICIAL USE ONLY" (FOUO). This designation will be used to identify records not to be released to the public for reasons other than security classification under reference (c) or under references (h), (n), or (p); and the procedures for release and authentication or certification of official records requested by other governmental bodies, whether executive, legislative, judicial, or regulatory, in making official determinations (Enclosure 8).
C. Provides procedures for review of denials of requests for records to preclude unnecessary or unauthorized withholding, and for responding to court actions taken to compel release of records.

II. CANCELLATION

References (f) and (r), (Enclosure 1), are hereby canceled.

III. APPLICABILITY AND SCOPE

This Directive applies to the Office of the Secretary of Defense (including the organization of the Joint Chiefs of Staff), the military departments, and all other Department of Defense agencies, each hereinafter referred to singularly as a component and collectively as components, and governs all records of the Department of Defense. It provides specifically for making records available to the public when requested under reference (a). Requests from members of Congress are governed by reference (d), from the General Accounting Office by reference (e), and from other agencies and the courts by Enclosure 8, in lieu of reference (f). Receipt of service of process is determined by reference (g). National Security Agency official records and information are exempt from the provisions of this Directive in accordance with reference (h).

IV. POLICY

A. It is the policy of the Department of Defense to make available to the public the maximum amount of information concerning its operations and activities. Exceptions to the general requirement for disclosure shall be made in accordance with the exemptions set forth in Section VI and the release procedures prescribed in Enclosure 5 to this Directive.

B. A record exempt from public disclosure under the exemptions set forth in Section VI should, nevertheless, be made available to the public when its disclosure is not inconsistent with statutory requirements (see Section VI. C. 3), with security classification requirement (reference (c)), or with other requirements of law, and when a component official charged with this responsibility

2
determines that no significant and legitimate governmental purpose would be served by withholding the record. A determination of whether a significant and legitimate governmental purpose is served by withholding a record under the provisions of Section VI is within the discretion of the responsible officials within the component, as designated in accordance with Section VII.

C. A record may be withheld from the public only as authorized by the Freedom of Information Act (reference (a)), this Directive, and other implementing regulations issued pursuant to this Directive. The possibility that release of a record may cause embarrassment by suggesting administrative error or inefficiency may not be considered in determining whether it should be released (reference (i)).

V. AVAILABILITY OF RECORDS

A. Subject to the exemptions set forth in Section VI and the procedural requirements of Enclosure 5, a record of a component shall be made available in response to a request from any person under the authority of reference (a). Other requests for information, including some kinds of records, may be answered promptly in accordance with other established procedures and requirements available to requesters in particular categories (e.g., component personnel seeking access to their personal records), but a request identified as being made pursuant to reference (a), even by requesters in these particular categories, shall be processed in accordance with this Directive. Records which are published in the Federal Register in accordance with reference (k) or made available for inspection and copying in a library, reading room, or other facility (Enclosure 3) should, where practicable, also be copied and forwarded by the component to those who request copies. Requesters may, however, be directed to an established source from which members of the public may obtain the record sought (e.g., the Government Printing Office).

B. In determining whether documentary material qualifies as a "record" consideration should be given to reference (1) which defines the word "records" for records disposal purposes as follows:
"Records include all books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by any agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included."

1. Records are not limited to permanent or historical documents but include current documents as well.

2. The term "records" does not include objects or articles such as structures, furniture, paintings, sculpture, three-dimensional models, vehicles, equipment, etc., whatever their historical value or value as "evidence."

3. The items listed in Section V. B. that are maintained in computers, as well as audiovisual documentary material, are not excluded from the provisions of this Directive.

4. Formulae, designs, drawings, research data, computer programs, technical data packages, and so forth, are not considered "records" within the Congressional intent of reference (a). Because of development costs, utilization, or value, these items are considered exploitable resources to be utilized in the best interest of all the public and not preserved for informational value nor as evidence of agency functions. Requests for copies of such material shall be evaluated in accordance with policies expressly directed to the appropriate dissemination or use of
these resources. Requests to inspect this material to determine its content for informational purposes shall normally be granted, unless inspection is inconsistent with the obligation to protect the property value of the material, as, for example, may be true for certain formulae, or is inconsistent with another significant and legitimate governmental purpose.

C. A request for a record will be granted if:

1. The requester reasonably describes in writing the record sought. This requires sufficient particularity in the description to enable the component to locate the requested record with reasonable effort. The component may require the requester to complete a form to facilitate efforts to locate a record not otherwise reasonably described.

2. The requester is willing and able to pay the cost associated with searching for and duplicating the record sought, as determined by Enclosure 2. Costs attributable to determining the applicability of an exemption under Section VI or whether a significant and legitimate governmental purpose would be served by withholding the record shall not be included in the computation of costs chargeable to the requester. Charges shall be waived in whole or part in accordance with Enclosure 2 when it is determined by a component that release of a requested record primarily benefits the general public and is, therefore, in the public interest.

3. The requester complies with reasonable requirements set forth in the regulations of each component regarding the time, place, and procedure for obtaining a copy of the record.

D. A record must exist at the time of the request to be considered subject to this Directive. A record that is maintained by computer normally is deemed to exist for this purpose only if retrievable in approximately the form requested without substantial reprogramming. There is no obligation to "create" or compile a record for the purpose of satisfying a request for information. When the information requested exists in the form of several records at several locations the applicant
should be referred to these sources if gathering the information would be burdensome.

E. When the record requested was originated by another agency or component, the request normally shall be referred promptly and directly to that agency or component for disposition, and the requester shall be notified of that referral.

1. Coordination prior to transfer of a request for a record is recommended to insure that there is no valid basis for an exception to this normal procedure.

2. The component which receives the request for a record originated by another component or agency may respond directly to that request pursuant to an agreement with the originator.

3. Requests referred from other components or agencies for the records of a component shall be answered in accordance with the time limits applicable to direct requests from the public, and begin to run upon receipt of the referral.

F. The originating component shall, whenever feasible, consult with other agencies or components having a significant interest in the content of a requested record before determining whether to make it available to the requester.

G. Each component shall avoid creating artificial procedural obstacles when internal Department of Defense organizational questions arise, particularly where reorganization or transfer of functions contributes to an improperly directed request. Defense Department personnel shall make reasonable efforts to assist private persons in directing requests for information to the appropriate authorities.

1. This assistance shall include advice to the public in framing requests, either in regulations implementing this Directive or on a case-by-case basis, so as to minimize the burden on the public and on the component.
When literal compliance with a request for a determinable category of voluminous records would be impracticable within any reasonable time, the component should advise the requester of the need to describe more reasonably and particularly the scope or nature of the request. Orderly procedures shall be established to facilitate a determination by the requester of the records of particular interest. Screening records (i.e., locating the requested records by searching and examining a large group of records among which the requested record is located) and transporting records for screening purposes may constitute a search cost payable by the requester, in advance, along with costs of duplication in accordance with Enclosure 2.

2. Exempt portions of a record should be deleted by a component and the remaining reasonably segregable portions of the record released to the requester when the meaning of these portions is not distorted and it can be reasonably assumed that a skillful and knowledgeable person could not reconstruct the exempt information. A system of designating exempt portions at the time a record is originated provides a basis for reasonable segregation, although the continuing validity of the exemption must be reevaluated in response to the request. Paragraph marking of information which is required by reference (c) is an example of such a system and a paragraph so marked may be considered to be a reasonably segregated portion of a record. Reevaluation of the continuing validity of an exemption may be accomplished on the basis of such segregable portions of a record rather than on the basis of individual sentences, phrases and words.

VI. EXEMPTIONS

A. Records which otherwise would have to be published or made available in the Federal Register (reference (k)), in a library or reading room (Enclosure 3), or in response to a request for a record under Section V may be withheld from public disclosure if they come within a specific exemption.
B. Deletion or modification in this section of provisions contained in the earlier version of this Directive (reference (r)) is not necessarily indicative of any change in policy or position regarding the applicability of any exemption. An exempted record or reasonably segregable portion of a record, however, should be made available upon the request of any member of the public when, in the judgment of the releasing component or higher authority, no significant and legitimate governmental purpose would be served by withholding it under an applicable exemption. Consistency with a statutory requirement (e.g., reference (m)), reference (c)), or other requirement of law constitutes a significant and legitimate governmental purpose.

C. The following types of records may be withheld in whole or part from public disclosure unless otherwise prescribed by law:

1. Those properly and currently classified in the interest of national defense or foreign policy, as specifically authorized under the criteria established by Executive Order and implemented by regulations, such as reference (c).

2. Those containing rules, regulations, orders, manuals, directives, and instructions relating to the internal personnel rules or to the internal practices of a component if their release to the public would substantially hinder the effective performance of a significant function of the Department of Defense. Examples include:

   a. Operating rules, guidelines and manuals for Department of Defense investigators, inspectors, auditors, or examiners.

   b. Certain schedules or methods of operation which would reveal:

      (1) Negotiating and bargaining techniques.

      (2) Bargaining limitations and positions.

      (3) Inspection schedules and methods.
(4) Audit schedules and methods.

c. Personnel and other administrative matters such as examination questions and answers used in training courses or in the determination of the qualifications of candidates for employment, entrance to duty, advancement, or promotion.

3. Those containing information which statutes authorize or require be withheld from the public. The authorization or requirement may be found in the terms of the statute itself or in Executive Orders or regulations authorized by, or in implementation of, a statute. Examples include:

a. Reference (m) - For trade, technical, and financial information provided in confidence by businesses.

b. Reference (h) - National Security Agency information.

c. Reference (n) - Any records containing information relating to inventions which are the subject of patent applications on which Patent Secrecy Orders have been issued.

d. Reference (p) - Restricted Data and Formerly Restricted Data.

4. Those containing trade secrets or commercial or financial information which a component receives from a person, with the understanding that it will be retained on a privileged or confidential basis in accordance with customary handling of such records. Such records are those the disclosure of which would cause substantial harm to the competitive position of the person providing the information; impair the Government's ability to obtain necessary information in the future; or impair some other legitimate governmental interest. Examples include records which contain:
a. Commercial or financial information received in confidence in connection with loans, bids, contracts, or proposals, as well as other information received in confidence or privileged, such as trade secrets, inventions and discoveries, or other proprietary data.

b. Statistical data and commercial or financial information concerning contract performance, income, profits, losses and expenditures, if offered and received in confidence from a contractor or potential contractor.

c. Information customarily considered privileged or confidential under the rules of evidence in the Federal courts, such as information coming within the doctor-patient, lawyer-client, and priest-penitent privileges.

d. Personal statements given in the course of inspections, investigations, or audits, where such statements are received in confidence from the individual and retained in confidence because they cover trade secrets or commercial or financial information normally considered confidential or privileged or because they are essential to an effective inspection, investigation, or audit.

e. Data provided in confidence by private employers in connection with locality wage surveys which are used to fix and adjust pay schedules applicable to prevailing rate employees within the Department of Defense

5. Except as provided in subsections (b) through (e) below internal communications within and among agencies (as defined in reference (j)) and components.

a. Examples include:

(1) Staff papers containing staff advice, opinions, or suggestions.

(2) Information received or generated by a component preliminary to a decision or action,
including draft versions of documents, where premature disclosure would interfere with the orderly conduct of government. (Preliminary or draft documents received from other governmental organizations are not Department of Defense records and may not be released by component without the agreement of the organization.)

(3) Advice, suggestions, or reports prepared on behalf of the Department of Defense by boards, committees, councils, groups, panels, conferences, commissions, task forces, or other similar groups that are formed by a component to obtain advice and recommendations, or by individual consultants.

(4) Those portions of component evaluations of contractors and their products which contain recommendations or advice by government employees about the contractor or product.

(5) Advance information on such matters as proposed plans to procure, lease, or otherwise acquire and dispose of materials, real estate, facilities, or functions when such information would provide undue or unfair competitive advantage to private personal interests.

(6) Records which are exchanged among agency personnel or within and among components or agencies preparing for anticipated legal proceedings before any Federal, State, or military court or before any regulatory body.

(7) Reports of inspections, audits, investigations or surveys which pertain to safety, security, or the internal management, administration, or operation of the Department of Defense or one of its components.

b. If any such intra- or inter-agency record, or reasonably segregable portion of such record
would routinely be made available through the discovery process in the course of litigation with the agency (i.e., the process by which litigants obtain information from each other that is relevant to the issues in a trial or hearing), then it should not be withheld from the general public. If, however, the information would only be made available through the discovery process by special order of the court based on the particular needs of a litigant balanced against the interests of the agency in maintaining its confidentiality, then the record or document should not be made available to a member of the general public.

c. Intra- or inter-agency memorandums or letters which are factual, or those reasonably segregable portions which are factual, are routinely made available through discovery, and should, therefore, be made available to a requester unless the factual material is otherwise exempt from release under Section VI.B.

d. A direction or order from a superior to a subordinate, though contained in an internal communication, generally cannot be withheld from a requester if it constitutes policy guidance or a decision, as distinguished from a discussion of preliminary matters that would compromise the decision-making process.

e. An internal communication concerning a decision which subsequently has been made a matter of public record should normally be made available to a requester when it furnishes the best support, explanation, or rationale for the decision.

6. Information in personnel and medical files, as well as information in similar files, that, if disclosed to a member of the public, would result in a clearly unwarranted invasion of personal privacy.
a. Examples of files similar to personnel and medical files include:

(1) Those compiled to evaluate or adjudicate the suitability of candidates for civilian employment and the eligibility of individuals, civilian, military or industrial, for security clearances, or for access to particularly sensitive classified information.

(2) Files containing reports, records, and other material pertaining to personnel matters in which administrative action, including disciplinary action, may be taken.

b. In determining whether the release of information would result in a "clearly unwarranted invasion of personal privacy," consideration should be given to the stated or assumed purpose of the request. When determining whether a release is "clearly unwarranted," the public interest in satisfying this purpose must be balanced against the sensitivity of the privacy interest being threatened.

c. When the only basis for withholding information is protection of the personal privacy of an individual who is the subject of the record, the information should not be withheld from him or from his designated legal representative. A clearly unwarranted invasion of the privacy of others appearing in that record may, however, constitute a basis for deleting reasonably segregable portions of the record even when providing it to the subject of the record.

d. An individual's personnel, medical, or similar file may be withheld from him or from his designated legal representative only to the extent consistent with reference (o) after its effective date of September 27, 1975.

7. Those investigative records compiled for the purpose of enforcing civil, criminal, or military law, including
the implementation of Executive Orders, or regulations validly adopted pursuant to law,

a. But only to the extent that their release would:

(1) interfere with enforcement proceedings;
(2) deprive a person of the right to a fair trial or an impartial adjudication;
(3) constitute an unwarranted invasion of personal privacy;
(4) disclose the identity of a confidential source;
(5) disclose confidential information furnished only from a confidential source obtained by a criminal law enforcement authority in a criminal investigation or by an agency conducting a lawful national security intelligence investigation;
(6) disclose investigative techniques and procedures not already in the public domain and requiring protection against public disclosure to insure their effectiveness;
(7) endanger the life or physical safety of law enforcement personnel.

b. Examples include:

(1) Statements of witnesses and other material developed during the course of the investigation and all materials prepared in connection with related government litigation or adjudicative proceedings.
(2) The identity of firms or individuals suspended from contracting with the Department of Defense or being investigated for alleged irregularities when no indictment has been obtained nor any civil action filed against them by the United States.
(3) Information obtained in confidence, express or implied, in the course of: (a) a criminal investigation by a criminal law enforcement agency or office within a component; or (b) a lawful national security intelligence investigation conducted by an authorized agency or office within a component for the purpose of obtaining: 1. affirmative or counterintelligence information, or 2. background investigation information needed to determine suitability for employment or eligibility for access to classified information.

c. The right of individual litigants to investigative records currently available by law is not diminished.

d. When the subject of an investigative record is the requester of that record, it may be withheld after September 27, 1975, only in accordance with regulations implementing reference (o). After September 27, 1975, the effective date of reference (o), the identity of the source of information obtained in confidence may be withheld in accordance with an implied or express promise of confidentiality given prior to that date and in accordance with an express promise of confidentiality after that date. Information from which the confidential source can be deduced may also be withheld.

8. Those contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of any agency responsible for the regulation or supervision of financial institutions.

9. Those containing geological and geophysical information and data (including maps) concerning wells.

VII. RESPONSIBILITIES

A. The head of each component shall be responsible for:

1. Establishing procedures governing actions on initial and appealed requests for records under this Directive.
2. Establishing procedures in accordance with reference (c) to insure that all holders of copies of records classified by the component are notified when review has resulted in their declassification.

3. Issuing implementing regulations that clearly identify those officials responsible for responding to requests under this Directive for records which are under the jurisdiction of the component.

4. Insuring cooperation with the Assistant Secretary of Defense (Public Affairs) (ASD(PA)) in fulfilling his responsibilities for monitoring the implementation of this Directive.

5. Designating an office or official as the principal point of contact and coordination with the ASD(PA).

6. Advising the ASD(PA) of cases of public interest, particularly those on appeal, when the issues raised are unusual, precedent setting, matters of disagreement among components, of concern to other agencies outside the Department of Defense, or otherwise requiring special attention or guidance.

7. Advising the ASD(PA) concurrent with the denial of a request or an appeal when circumstances suggest a news media interest.

8. Preparing and submitting reports in accordance with Enclosure 7.

9. Establishing, in coordination with the ASD(PA), programs of instruction on the provisions and requirements of this Directive for officials and employees who contribute to the component's implementation of the Freedom of Information Act.

10. Responding to the corrective action recommended by the Civil Service Commission for arbitrary or capricious withholding of records requested pursuant to reference (a) by officers or employees of the component.
B. The Assistant Secretary of Defense (Public Affairs) shall:

1. Direct and administer the Department of Defense Freedom of Information Program through a Deputy Assistant Secretary and a Directorate for Freedom of Information, which are hereby designated and established in accordance with reference(s).

2. Accomplish program overview, in cooperation with the Assistant Secretary of Defense (Comptroller) and the General Counsel, to insure coordinated guidance to components and to provide the means of assessing the overall conduct of the Department's Freedom of Information Program.

3. Provide Department-wide policy guidance to components as pertains to the overall conduct of the Department's Freedom of Information Program.

4. Act upon information provided by components as specified in Section VII.A.6.

5. Direct surveys and studies to facilitate implementation of this Directive and activities related to the Freedom of Information Program.

6. Develop a block of instructions on the provisions and requirements of this Directive and reference (a) for inclusion in the curriculum of the Defense Information School.

7. Evaluate the Freedom of Information education programs of components.

8. Confer with the head of a component on the desirability of reconsidering a final decision to deny a record when that decision becomes a matter of special concern because it involves an issue of great public interest or DoD-wide consequence.

9. Forward a composite annual report to Congress in accordance with Enclosure 7.
10. Modify or supplement, with the concurrence on the General Counsel and the ASD(C), any of the enclosures to this Directive in a manner consistent with the policies set forth in this Directive after such coordination with the military departments and Defense agencies as may be appropriate.

11. Prepare implementing provisions for the Office of the Secretary of Defense, including the organization of the Joint Chiefs of Staff.

C. The General Counsel of the Department of Defense shall insure uniformity in the legal position and interpretation of this Directive by all DoD components and coordination with the Department of Justice, as necessary, on all final denials of requests for records under this Directive that are likely to lead to litigation.

VIII. IMPLEMENTATION

A. Each component of the Department of Defense shall issue and publish in the Federal Register regulations to implement reference (a), unless subject to the implementing regulations of another component. The implementing regulations of Defense agencies may incorporate this Directive by reference as their substantive requirements, and limit their separate publications to a description of component responsibilities and procedures. Processing of requests for the records of Headquarters of Unified, Specified and Subordinate Unified Commands shall be processed under the administrative directives of the military departments indicated in reference (t). Any substantive inconsistencies between this Directive and component regulations shall be reconciled within ninety days of the effective date of this Directive.

1. By mutual agreement, facilities for the examination and copying of documents and records may be shared by more than one component if the public is not unduly inconvenienced by such an arrangement.

2. When the provisions of this Directive, related DoD issuances, or component regulations do not provide guidance adequate to insure consistency among the
components in determining the disposition of requests for particular types of records, the matter shall be brought to the attention of the ASD(PA) with a request for supplementary guidance. Consistency does not preclude the ad hoc release of an individual record generally considered exempt from disclosure, when no significant or legitimate governmental purpose would be served by withholding it.

B. Two copies of implementing regulations shall be submitted to the General Counsel of the Department of Defense no later than March 1, 1975.

IX. EFFECTIVE DATE

This Directive is effective February 19, 1975. Public comments and recommendations received on or before April 18, 1975, however, will be considered in determining the need for modification of the Directive, in conjunction with the reconciliation between component regulations and the Directive.

Deputy Secretary of Defense

Enclosures - 8
1. References
3. Inspection and Copying of Opinions Orders and Manuals
4. Identification and Marking "FOR OFFICIAL USE ONLY"
5. Release Procedures
6. Judicial Action
7. Reporting Requirement
REFERENCES

(b) DoD Directive 5200.20, "Distribution Statements (Other than Security) on Technical Documents," September 24, 1970
(h) Public Law 86-36 (50 U.S.C. 402 note) (National Security Information Exemption)
(j) 5 U.S.C. 551 (Section 2 of the Administrative Procedure Act)
(k) DoD Directive 5400.9, "Publication of Proposed and Adopted Regulations Affecting the Public," December 23, 1974
(m) 18 U.S.C. 1905 (Confidential Trade Information)
(n) 35 U.S.C. 181-188 (Patent Secrecy)
(o) 5 U.S.C. 552a (The Privacy Act of 1974 - Effective on September 27, 1975)
(p) 42 U.S.C. 2161 (Restricted and Formerly Restricted Data)
(q) DoD Instruction 5025.9, "Control and Protection of 'FOR OFFICIAL USE ONLY' Information," February 1, 1968
UNIFORM AGENCY FEES FOR SEARCH AND DUPLICATION UNDER THE FREEDOM OF INFORMATION ACT AMENDMENTS P. L. 93-502

Introduction

This enclosure describes fees for search and duplication. It is not intended to substitute for any schedule of fees or a policy of not to charge a fee established in connection with the issuance of publications or other materials in the routine course of business of a component.

SCHEDULE OF FEES

Duplication

Publications, Forms and Reports

Shelf stock of printed or microfiche medium (requesters may be furnished more than one copy of a publication or form if it does not deplete stock levels below projected planned usage).

<table>
<thead>
<tr>
<th>Minimum fee, per request</th>
<th>$2.00</th>
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<tbody>
<tr>
<td>plus Forms, per copy</td>
<td>.05</td>
</tr>
<tr>
<td>Publications, per printed page</td>
<td>.01</td>
</tr>
<tr>
<td>Microfiche, per fiche</td>
<td>.06</td>
</tr>
<tr>
<td>Reports, per printed page</td>
<td>.05</td>
</tr>
</tbody>
</table>

(Examples: Cost of 20 forms, $3.00; cost of a printed publication with 100 pages, $3.00; cost of a microfiche publication consisting of 10 fiche, $2.60)

Office Copy Reproduction (when shelf stock is not available)

| Minimum charge up to six reproduced pages | $2.00 |
| Minimum charge, first fiche               | 5.00  |
| Each additional page                      | .05   |
| Each additional fiche                     | .10   |

Other Issuances

| Minimum charge up to six pages | $2.00 |
| Each additional page           | .05   |
SEARCH

Clerical search, per hour .............................................. $ 5.50
Minimum charge .......................................................... 2.75
Professional search (includes computer programmer
time and review to determine whether a record
comes within the scope of a request) per hour ................. 11.00
Minimum charge .......................................................... 5.50

Computer Service Charges

Computer service charges will be based on actual computer con-
figuration used and be based on direct costs only of the Central
Processing Unit, plus Input/Output Devices, plus Memory
Capacity. Transportation costs of records and personnel arising
from searches for requesting reports will be charged at actual
cost.

Audiovisual Documentary Material

Service charges for audiovisual documentary materials will include
clerical and professional search fees as listed above as well as the
direct costs of reproducing the photography or tape and shipping or
mailing charges. Audiovisual materials provided to a requester under
provisions of this Directive need not be in reproducible format or
quality.

Waiver of Fees

1. In general, charges shall be waived or reduced when it
is determined that release of a requested record primarily benefits
the general public and, therefore, is in the public interest.
Examples of common situations in which such a determination may
be made include:

   a. The recipient of the benefits is engaged in a nonprofit
      activity designed for public safety, health or welfare;

   b. Payment of the full costs or fee by a state, local
government or nonprofit group would not be in the interest of the
   program;
c. The incremental cost of collecting the fees would be an unduly large part of the receipts from the activity;

d. The request emanates from a representative of the public information media seeking a reasonable number of records.

2. A refusal to waive charges by the official responsible for the initial decision on the request for the record may be appealed to the head of the component or his designee for purposes of final appeal.

Collections

1. Normally, collection of charges and fees will be made in advance of rendering the service. In some instances, it may be more practical to collect charges and fees at the time of conveying the service or property to the recipient, but only in those instances where the request specifically states that whatever cost involved will be acceptable or acceptable up to specified limit that covers anticipated costs.

2. Collection of scheduled fees and charges will normally be deposited to Miscellaneous Receipts of the Treasury.

3. Search fees are assessable even when no records responsive to the request, or no records not exempt from disclosure are found, provided the requester is advised of the requirement at the time the estimated charges are presented to the requester for approval and he agrees to incur the costs of search.
INSPECTION AND COPYING OF OPINIONS, ORDERS, AND MANUALS

A. Subject to the exemptions set forth in Section VI of the Directive, each component shall make available for public inspection and copying in an appropriate facility or facilities in accordance with rules published in the Federal Register the following materials, unless such materials are published and copies offered for sale:

1. All final opinions (including concurring and dissenting opinions) and orders in adjudications (as defined in reference (j)) that may be cited, used, or relied upon as precedents in future adjudications.

2. Statements of policy and interpretations of less than general applicability affecting the public but not published in the Federal Register.

3. Administrative staff manuals and instructions, or portions thereof, which establish Department of Defense policy or interpretations of policy that affect a member of the public. This provision does not apply to instructions for employees on the tactics and techniques to be used in performing their duties, or to instructions relating only to the internal management of the agency. Examples of manuals and instructions not normally made available are:

   a. Those issued for audit and inspection purposes or those which prescribe operational tactics, standards of performance, or criteria for defense, prosecution, or settlement of cases.

   b. Operations and maintenance manuals and technical information concerning munitions, equipment, systems, and foreign intelligence operations.

B. The cost to the component of copying any such opinion, order, or statement of policy or interpretation shall be imposed on the person requesting the copy in accordance with Enclosure 2.
C. When feasible, all material that is published in the Federal Register should be made available for inspection and copying along with any available index of that published material, in the same facility or facilities provided for inspection and copying of opinions, orders and manuals.

D. Identifying details which if revealed would create a clearly unwarranted invasion of personal privacy may be deleted from any final opinion, order, statement of policy, interpretation, staff manual, or instruction, made available for inspection and copying. In every such case, the justification for the deletion must be fully explained in writing. However, a component may publish in the Federal Register a description of the basis upon which it will delete identifying details of particular types of documents in order to avoid clearly unwarranted invasions of privacy. In appropriate cases the component may refer to this description rather than write a separate justification for the deletion.

E. Each component shall maintain, on a current basis, in each facility provided for inspection and copying, an index of material issued, adopted, or promulgated after July 4, 1967, which is made available or published under paragraph A. of this enclosure.

1. The index should be arranged topically or by descriptive words, so that members of the public may be able to locate final opinions, orders, statements of policy, interpretations, staff manuals, or instructions by subject, rather than by case name or by numbering system. Case name and numbering arrangements may, however, also be included in the index for purposes of component convenience.

2. Each component shall promptly publish quarterly or more frequently and distribute (by sale or otherwise) copies of each such index or supplement thereto unless it publishes an order in the Federal Register containing a determination that publication is unnecessary and impracticable. A copy of any index or supplement not published shall be provided to a requester at a cost which does not exceed the direct cost of duplication.
F. No order, opinion, statement of policy, interpretation, staff manual, or instruction issued, promulgated, or adopted after July 4, 1967, which is not indexed and either made available or published, may be relied upon, used, or cited as precedent against any member of the public unless he has actual and timely notice of its terms. If the order, opinion, statement of policy, interpretation, staff manual, or instruction was issued, promulgated, or adopted before July 4, 1967, it need not be indexed but must be made available in accordance with Section V of the Directive.

G. In determining whether an order, opinion, statement of policy, interpretation, staff manual or instruction is likely to be used or relied upon as precedent, the primary test shall be whether it is intended to provide binding guidance for decisions or evaluations by subordinates or for future decisions by the same authority in adjudications of cases affecting the public, where similar facts or issues are presented.
IDENTIFICATION AND MARKING "FOR OFFICIAL USE ONLY"

A. Records which are not classified under reference (c) but which at the time of their origination are authorized by reference (a) to be withheld from general public disclosure under Section VI of this Directive, and which for a significant and legitimate governmental purpose should not be given general circulation shall be considered as being "FOR OFFICIAL USE ONLY" (FOUO). No other record may be considered as being "FOR OFFICIAL USE ONLY."

B. A record that is considered "FOR OFFICIAL USE ONLY" may be marked "FOR OFFICIAL USE ONLY" when such marking is deemed necessary or desirable to ensure that all persons having access to the record are aware that it should not be publicly released and should not be handled indiscriminately. Individual folders, records, and files covering specific kinds of subject matter normally falling within the exemptions of Section VI, such as personnel and medical files, bids, proposals, and the like, which are covered by rules and regulations specifying what may be released publicly, do not require the "FOUO" marking unless handled under circumstances where marking is desirable to ensure protection of the information involved.

1. The marking, if otherwise proper under this Directive, may be applied to information or material which has been declassified.

2. The marking may not be employed as a less stringent security designation under conditions where classification under reference (c) is not warranted.

3. Information contained in a technical document for which a determination has been made that a distribution statement under reference (b) is appropriate shall not be marked "FOUO."

C. Material which is considered as being "FOR OFFICIAL USE ONLY" must be safeguarded from general disclosure irrespective of whether the material is physically marked with the term "FOR OFFICIAL USE ONLY."
D. Whenever necessary to assure proper understanding, or appropriate as a means of facilitating segregation of exempt information in a lengthy record, individual paragraphs which contain FOUO information shall be marked "FOR OFFICIAL USE ONLY." In classified documents, this marking should be applied only to paragraphs which contain FOUO information and do not contain classified information.

E. Instructions regarding marking, safeguarding, and transmitting FOUO materials are set forth in reference (q).
RELEASE PROCEDURES

A. The policy of the Department of Defense is to make the maximum amount of information available to the public. Therefore, when a person requests in writing that a record be made available to him under the Freedom of Information Act that request may be denied only upon a determination that:

1. The record is subject to one or more of the exemptions set forth in Section VI of this Directive, and a significant and legitimate governmental purpose is served by withholding it.

2. Release of the record is inconsistent with a statutory requirement or other requirement of law.

3. The record cannot be found because it has not been described with sufficient particularity to enable the component to locate it with a reasonable amount of effort.

4. The applicant has unreasonably failed to comply with the procedural requirements (including the payment of any required fee) imposed by the implementing regulations of the component concerned. When personally identifiable information in a record is requested by the subject of the record, for example, notarization of the request may be required.

B. The initial determination of whether to make a record available upon request may be made at any suitable level and by any suitable official designated by the component in published regulations for the type of record sought. The marking or absence of the marking "FOR OFFICIAL USE ONLY" does not relieve the designated official of his responsibility to review the requested record for the purpose of determining whether an exemption under Section VI of the Directive is applicable.

C. The official designated by a component to make initial determinations, if not a public affairs officer, should consult with public affairs officers to familiarize himself with subject matter considered to be newsworthy, and advise them of all requests from
news media representatives. In addition, he should inform public affairs officers in advance whenever he intends to release a record containing potentially newsworthy material or to withhold any record when it is likely that the withholding action will be publicly challenged.

D. Initial determinations on whether to release a record shall:

1. Normally be made and the decision reported to the requester within ten (10) working days of the date a request is received by the official designated to respond for the type of record sought, providing the requester indicates a willingness to reimburse the component for any search and duplication costs incurred in providing the record. If the willingness of the requester to reimburse the component for any required search and duplication costs is not expressed in the request, resolution of this issue is appropriate before the time for responding begins to run when these costs are likely to be substantial.

2. When the request is addressed to another official in the component or to the wrong agency or component, it shall normally be forwarded promptly to the designated responsible official, of the appropriate agency or component, with the period for response commencing upon his receipt.

3. When a decision is made to release a record, it should be forwarded promptly to the requester upon receipt of any required payment for search and duplication. Alternatively, the requester may be directed to an established source from which members of the public may obtain the record sought (e.g., the U.S. Government Printing Office).

4. When a request is received for a record which:

   a. Was obtained by the Defense component from a non-U.S. Government source; or

   b. Contains information obtained by the Defense component from non-U.S. Government source;
and, because of the source and the nature of the records or information, there is reason to believe that the source of the information or record may object to release and may have an enforceable right to prevent release, prompt notification of intended release shall be given to the source. Release shall normally be withheld until the source has a reasonable time to comment on the proposed release. Comments received shall be considered in determining the releasability of the document. When the source advises that it is seeking a restraining order or other court action to prevent release, release will normally not be made pending the outcome of the court action.

5. In all cases where the time for response may become an issue, the official responsible for replying should acknowledge to the requester the date of the receipt of the request for purposes of determining time limits.

6. If additional time is needed in unusual circumstances to respond the component should acknowledge the request in writing within the ten (10) day period, briefly cite one of the unusual circumstances requiring delay, and indicate the anticipated date for substantive response which may not exceed ten (10) additional working days. Unusual circumstances that may justify delay are:

   a. The requested record is located in whole or part at places other than the office-processing the request.

   b. The request requires the collection and coordination of a substantial number of records.

   c. Consultation is required with other components or agencies having substantial interest in the subject matter of the requested records to determine whether the records requested in whole or part are exempt from disclosure under Section VI of the Directive or should be released as a matter of discretion.
E. The extension of time for responding to an initial request must be approved on a case by case basis by the final appellate authority for the component or in accordance with regulations of the component which establish guidance governing the circumstances in which such extensions may be granted.

F. When a request for a record or records is denied in whole or part the designated official who has made that determination shall explain to the requester in writing (with at least one additional copy) the basis for the determination and of the opportunity and procedures for appealing that determination to a higher final authority within the component.

1. Inability to process any part of the request within the specified time should be explained to the requester, with notification that he may treat this delay as an initial denial with a right to appeal, or that he may agree to await a substantive response by an anticipated date. It should be made clear that any such agreement does not prejudice the right of the requester to appeal the initial decision after it is made.

2. The explanation of the substantive basis for a denial shall include both specific citation of the statutory exemption applied pursuant to Section VI of the Directive and a discussion of the significant and legitimate governmental purpose served by invoking an exemption. Reference to the marking "FOR OFFICIAL USE ONLY" on the requested record does not constitute a proper citation or explanation of the basis for invoking an exemption.

3. The name and title or position of the official responsible for the denial shall be included in the written response to the requester.

4. When the initial denial is based in whole or part on a security classification pursuant to Section VI.C.1 or VI.C.3 of the Directive, the explanation shall include a summary of the paragraph or paragraphs contained in reference (c) or other authoritative classification guidance which set forth the criteria or rationale for the current classification of the requested record, along with the reasons that demonstrate
the logical relationship between the content of the requested record and the summarized criteria or rationale.

5. Copies of all initial denials shall be maintained by each component in a form suitable for rapid retrieval, periodic statistical compilation, and management evaluation.

G. If the official designated by the component to make initial determinations on requests for records declines to provide a record because he considers it exempt, and its withholding justified for a significant and legitimate governmental purpose, that decision may be appealed by the requester in writing to the head of the component having jurisdiction over the record or his designee for this purpose, along with a copy of the letter denying the initial request. Such appeals should contain the basis for disagreement with the initial refusal. In addition, the component may impose a reasonable time limit of not less than 40 days for filing an appeal.

H. Final determination on appeals shall normally be made within twenty (20) working days of the receipt of the appeal by the official designated to make the decision. Misdirected appeals will be forwarded promptly to the proper appellate authority with the period for response commencing upon his receipt. If additional time is needed to decide the appeal because of unusual circumstances, as described in paragraph D., the final determination may be delayed for the number of working days, not to exceed ten (10), which were not utilized as additional time for responding to the initial request.

I. Final refusal to provide a requested record must be made in writing by the head of the component having jurisdiction over it, or by his designee for that purpose. Such a refusal shall be made in accordance with appeal procedures prescribed in regulations that shall include, as a minimum, the following elements:

1. The basis for the refusal shall be explained to the requester, in writing, both with regard to the applicable statutory exemption invoked pursuant to Section VI of the Directive and the significant and legitimate governmental purpose served by its withholding. More particularly:
a. When the final refusal is based in whole or part on a security classification, pursuant to Section VI. C. 1 of VI. C. 3 of the Directive:

(1) The explanation shall include a determination that the record meets the cited criteria and rationale of reference (c) or other authoritative classification guidance, and that this determination is based on a declassification review, with an explanation of why that review confirmed the continuing validity of the security classification.

(2) The requester shall be advised of his optional right to seek review by the Interagency Classification Review Committee of a final denial by the head of a component or his designee on the basis of continued security classification. This review is in accordance with Executive Order 11652, March 8, 1972, and is in lieu of immediate judicial review.

b. The written final denial shall include the name and title or position of the official responsible for the denial and of the provision for judicial review of the denial as set forth in Enclosure 6.

2. Final refusal ordinarily should not be made without prior consultation with the Office of the General Counsel of the Department of Defense when there is reason to believe that the requester will file a complaint in a U.S. District Court to force release of the refused record.

3. Copies of all final denial letters shall be maintained by each component in a central repository. Whenever a complaint is filed in a U.S. District Court to force release of a record, a copy of the final denial letter from the component shall be forwarded to the General Counsel of the Department of Defense, together with a copy of the requester's complaint, and followed by such portions of the litigation report prepared by the component for the Department of Justice as may be necessary to understand the legal basis for the denial.
4. When the refusal to provide the record is based in whole or part on a security classification, pursuant to Section VI.C.1 or VI.C.3 of the Directive, the litigation report shall include an affidavit from the head of the component or his designee for this purpose, explaining in as much detail as national security interests permit the basis under applicable statute, executive order and regulations for the current security classification of the requested record.

J. The costs of searching for and duplicating a requested record must be paid or waived in accordance with Enclosure 2. The time limits for responding to requests begin to run upon receipt from the requester of clear evidence of willingness to pay any anticipated search and duplication costs under the schedule of fees set forth in Enclosure 2 for providing the requested record. The record need not be forwarded until actual receipt of payment.

K. The time limits for responding to requests for records are, in summary, and subject to the conditions set forth in the previous paragraphs, as follows:

1. Initial Responses - Ten (10) working days.

2. Appeals for Denial - Twenty (20) working days.

3. Extension of time available under certain circumstances for either the initial or final determination, but not both - ten (10) working days.
JUDICIAL ACTION

A. A requester has exhausted his administrative remedy after he has been refused a record by the head of a component or his designee or when the component fails to respond to his request within any of the time limits set forth in Enclosure 5. The requester may then seek an order from a United States District Court (1) in the district in which he resides or has his principal place of business; (2) in the district in which the record is situated to produce the record; or (3) in U.S. District Court for the District of Columbia.

B. The burden is on the component to justify its refusal to produce the record, and its justification will be evaluated de novo by the district court, which may examine any requested record in camera to determine whether the denial of the record, in whole or part, is justified under reference (a).

C. The United States must answer or otherwise plead to the complaint within thirty days. Consideration of such cases by both trial courts and courts of appeal will be expedited in every way, except as to cases the court considers of greater importance.

D. A court may retain jurisdiction and allow a component additional time to complete its review of records to determine their availability to the requester when the component demonstrates due diligence in exceptional circumstances.

E. If the court orders production of a record and the responsible official designated in accordance with Section VII refuses to produce it, the court has statutory authority to punish the official whose decision and order govern the determination of whether to release the record. In addition, the court may assess against the United States reasonable attorney fees and other litigation costs when the requester has substantially prevailed. In such situations the court may also issue a written finding that the circumstances of withholding raise a question of whether agency personnel have acted arbitrarily or capriciously and the Civil Service Commission must determine whether disciplinary action against responsible agency officials, or employees is warranted.
REPORTING REQUIREMENT

A. Each component shall prepare an annual report for the proceeding calendar year on its implementation of reference (a) of the Directive.

B. Six copies of the annual report shall be furnished to the ASD(PA) on or before February 1 of each year for transmittal to the Speaker of the House of Representatives and to the President of the Senate.

C. The annual report shall contain the following:

1. The number and reasons for initial denial of records requested from the component.

2. The number of appeals from initial denials and the disposition of each such appeal; with the reasons for any final denial of records requested from the component.

3. The names and titles or positions of each person primarily responsible for an initial denial or for a final denial on appeal of a request for a record under reference (a) of the Directive, and the number of such denials by each such person.

4. The results of any disciplinary proceeding, including an explanation of a decision not to discipline, that was initiated against an officer or employee because a court determined that a record requested from the component was arbitrarily or capriciously withheld.

5. A copy of current component regulation implementing reference (a) and the directive.

6. A copy of the component fee schedule for search and duplication of requested records, and the total amount collected for this purpose, as accurately as reasonably can be determined.
7. A brief description of every court case brought against the component to force it to release or withhold a record requested under reference (a), including the status of the case; whether attorney fees have been awarded to the private party; and whether the court found that the circumstances of withholding raised questions of arbitrary and capricious personnel conduct.

8. A description of all efforts undertaken by the component or by personnel of the component to instruct and educate employees or the public on the requirements of reference (a) and the Directive.

9. Such data on the costs of processing requests under reference (a) of the Directive as can reasonably be ascertained or estimated.

10. Any other information that demonstrates efforts by the component to implement reference (a) of the Directive, including problems with the implementation and any proposed solutions for those problems.

11. This reporting requirement is assigned Report Control Symbol DD-PA(A) 1365.
RELEASE AND AUTHENTICATION OF COPIES
OF OFFICIAL RECORDS

A. Records available to a person requesting them under Section V of the Directive shall be authenticated with an appropriate seal whenever necessary to fulfill an official governmental or other legal function.

B. Subject to the provisions of reference (c), applicable to classified information, records exempt from release under Section VI of the Directive to a person requesting them may, nevertheless, be authenticated on request and released in accordance with component regulations to local, state, or other Federal governmental bodies, whether legislative, executive, administrative, or judicial, as follows:

1. To the courts; whenever ordered as appropriate to the proper administration of justice.

2. To the Congress; in accordance with reference (d).

3. To local and state legislative bodies; in accordance with the determination of the head of the component or his designee.

4. To other Federal agencies, both executive and administrative, as determined by the head of the agency or his designee, as consistent with efficient administration and in accordance with law, including reference (o), which becomes effective on September 27, 1975.

5. To local and state executive and administrative agencies as determined by the head of the component or his designee.
Department of Defense Directive

SUBJECT Office of the Secretary of Defense/Organization of the Joint Chiefs of Staff Implementation of the DoD Freedom of Information Program

References: (a) Title 5, United States Code, Section 552, as amended by Public Law 93-502
(b) DoD Directive 5400.7, "Availability to the Public of DoD Information," February 14, 1975
(c) DoD Directive 5400.9, "Publication of Proposed and Adopted Regulations Affecting the Public," December 23, 1974
(d) DoD Directive 5400.10, subject as above, February 11, 1975 (hereby cancelled)

I. REISSUANCE AND PURPOSE

This Directive reissues reference (d) to implement the provisions of reference (b), pursuant to reference (a), assign responsibilities, and update procedures for the effective administration of the Freedom of Information Program within the Office of the Secretary of Defense, including the Organization of the Joint Chiefs of Staff. Reference (d) is hereby superseded and cancelled.
II. APPLICABILITY AND SCOPE

A. The provisions of this Directive apply to the Office of the Secretary of Defense (Director, Defense Research and Engineering, Assistant Secretaries of Defense, Assistants to the Secretary of Defense, or equivalent), the Organization of the Joint Chiefs of Staff, and other activities assigned to OSD for administrative support (hereinafter referred to collectively as "OSD Components") or their field activities when designated by the Assistant Secretary of Defense (Public Affairs) with concurrence of the head of the OSD Component involved and pursuant to section IV.A.11. of this Directive.

B. The provisions of this Directive apply to the release of records to the general public and are not applicable to requests from the General Accounting Office, and other Federal, State and local governmental organizations. While requests from Members of Congress generally are governed by the provisions of DoD Directive 5400.4 (reference (f)), the provisions of this Directive will apply to requests for records by individual members of Congress who invoke the Freedom of Information Act.

III. POLICY

A. It is the policy of the Department of Defense, consistent with the letter and spirit of Title 5, USC, Section 552, the Freedom of Information Act (reference (a)), to make available to the public the maximum amount of information concerning its operations and activities.

B. Unclassified information, documents and forms which have heretofore been provided to the public as part of normal service will continue to be made available in accordance with previously established criteria.

C. Authority to deny an initial request for a record resides in the heads of OSD Components.
D. Materials such as current indices, required by the Freedom of Information Act for inspection, will be maintained, published and made available in the public reading room located in Room 2C757, the Pentagon. Fees will not be charged for inspection of these materials. However, fees, in accordance with a schedule contained in enclosure 2 to DoD Directive 5400.7 (reference (b)) and published in the Federal Register, may be charged for furnishing copies of such materials.

IV. RESPONSIBILITIES AND FUNCTIONS

A. The Assistant Secretary of Defense (Public Affairs) shall:

1. Direct and administer the Department of Defense Freedom of Information Program for OSD Components.

2. Establish standards and procedures to assure compliance with and implementation of 5 USC 552 and DoD Directive 5400.7 (references (a) and (b)).

3. Develop and submit the consolidated OSD Component Annual Report as required by references (a) and (b).

4. Serve as the central contact office for the receipt of all requests for records from OSD Components.

5. Forward requests for records from the public to the OSD Component having proprietary responsibility for the record, and maintain records control procedures that ensure action within time limits established in 5 USC 552, as amended by P.L. 93-502 (reference (a)).

6. Respond to requesters and collect for deposit with the Assistant Secretary of Defense (Comptroller) fees entailed in the search and reproduction of records.
7. Establish a facility where the public may inspect and copy records as provided for in DoD Directive 5400.7 (reference (b)).

8. Provide for educational programs on the requirements and implementation of the Freedom of Information Act.

9. Evaluate and decide, in coordination with the General Counsel, appeals from denial of records by OSD Components.

10. Maintain data on Freedom of Information activity in a format that meets the requirements of enclosure 7 of DoD Directive 5400.7 (reference (b)) and in a manner that affords rapid retrieval.

11. Upon a finding that due to such factors as geographical separation from the responsible OSD Component, the letter and spirit of the Freedom of Information Act could be better served by permitting a specific field activity of the OSD Component to receive, process, and grant or initially deny Freedom of Information requests for records for which the sub-element has primary responsibility, the ASD(PA) may, with the concurrence of the head of such OSD Component, so direct. Implementing instructions published pursuant to this paragraph shall be controlling with respect to the procedures to be followed by the designated field activity, the other provisions of this Directive notwithstanding.

B. The Assistant Secretary of Defense (Comptroller) shall:

1. Maintain, publish, and make available for public inspection current OSD Component indices of materials as required by 5 USC 552, as amended by P.L. 93-502 (reference (a)).

2. Coordinate and arrange for information to be published in the Federal Register pursuant to 5 USC 552, DoD Directives 5400.7 and 5400.9 (references (a), (b), and (c)).
C. The General Counsel shall:

1. Coordinate, as appropriate, with the Department of Justice on all final denials of appeals for requests for records when litigation is likely.

2. Provide advice and assistance to the ASD(PA) as may be required in the discharge of his appellate responsibilities.

D. Heads of OSD Components shall:

1. Designate the official authorized to deny initial requests for records and designate an office as the point-of-contact for Freedom of Information matters.

2. Provide to the ASD(PA), when the request for a record is granted, a copy of the record and a statement of search and reproduction charges.

3. Provide to the ASD(PA), when a record is denied in whole or in part, the justification for denial.

4. Provide to the ASD(C) quarterly updates of indices as required by Enclosure 3 of DoD Directive 5400.7 (reference (b)).

5. Coordinate with the Office of the General Counsel on all proposed denials of records.

6. Consult with other OSD and DoD Components which have a significant interest in the requested record prior to a final determination. When consultation with an agency outside DoD is appropriate because of their interest in the requested record, a procedure for effecting that consultation shall be developed.

7. Refer cases to the ASD(PA) for review and evaluation when the issues raised are of unusual significance, precedent setting, or otherwise require special attention or guidance.
8. Provide the record to the ASD(PA), when the initial denial of such record has been appealed by the requester, or at the time of initial denial when appeal seems likely.

9. Establish procedures to mark record copies and notify holders of classified records that have been declassified as a result of review under this program.

10. Instruct employees, who act in Freedom of Information matters, in the provisions of this Directive and DoD Directive 5400.7 (reference (b)).

V. PROCEDURES

A. General. A request for a record under the Freedom of Information Act may be denied only upon determination that:

1. The record is subject to one or more of the exemptions set forth in section VI., reference (b), and a significant and legitimate governmental purpose is served by withholding.

2. The record cannot be found because it has not been described with sufficient particularity to enable a responsible authority to locate it with a reasonable amount of effort.

3. The requester has unreasonably failed to comply with the procedural requirements imposed by this Directive.

B. Instructions to a Requester. A request for a record from an OSD Component can be made in person or in writing.

1. Indices of current records will be made available for public inspection in Room 2C757, the Pentagon, between 9 a.m. and 4 p.m., except weekends and Government holidays. Persons not authorized access to the Pentagon will be escorted to the public reading room and will not be permitted to visit other areas of the building.
2. Copies of records which are listed in these indices will be provided upon payment of any search and copying fees. A copy of the standard schedule of fees previously published in the Federal Register will be posted in the public reading room. Checks are payable to the Treasury of the United States.

3. A written request for a record should be addressed to: Directorate for Freedom of Information, Office of the Assistant Secretary of Defense (Public Affairs), Room 2C757, Pentagon, Washington, D. C. 20301. The record should be described as completely as possible to facilitate its retrieval from the gross file of Defense Department records and to reduce search fees, which may be borne by the requester.

4. A requester will state his intention to pay fees that may be charged for search and reproduction of a record. Time spent to assure willingness to pay fees will be in addition to the time allotted to provide a record.

5. A record will not be released prior to receipt of fees. Failure to pay fees may be cause not to accept a subsequent request for a record from the same person.

6. Normally, no more than 10 working days after a request has been received, the requester will be notified that his request has been granted or denied. In unusual circumstances, however, such notification may convey that additional time, not to exceed 10 working days, is required to make a determination.

7. When a requester is asked to provide additional information necessary to complete action on his request (clearer description of record sought, proof of identity, assurance of willingness to pay fees, etc.) or has been asked to pay fees prior to release of records requested, such information or fees shall be forwarded in accordance with B.3., above, to arrive at the Directorate no later than 30 working days after the date of
receipt of the Directorate's request for additional information or fees. If the requester fails to respond within the prescribed time limit, the case will be considered closed, and any records held in abeyance may be returned to file or destroyed. The case will be reopened if either information or fees are received after expiration of the 30-working-day period. However, the requester may be required to pay additional fees pursuant to again locating and copying the requested records.

8. Notification of denial shall (a) cite the exemption under which the request was denied, (b) detail the supporting reasons, (c) identify the denial authority, and (d) set forth the course of action to be followed for an administrative appeal.

9. Administrative appeals of initial denials should be addressed to: Assistant Secretary of Defense (Public Affairs), Pentagon, Washington, D. C. 20301, and should be clearly marked "Freedom of Information Appeal" on the front of the envelope. Such appeals should offer justification for reversal of the initial denial and be received by the Office of the Assistant Secretary (Public Affairs) no later than 45 working days after the date that the requester receives either notification that his request is denied completely or notification that he has received all records to be released in response to his request in the case of a partial denial.

10. Normally no more than 20 working days after notification that an administrative appeal has been accepted, the requester will be notified of the action taken on his appeal. In unusual circumstances, the final determination may be delayed for the number of working days, not to exceed 10, which were not utilized as additional time for responding to the initial request.

11. Notification of a final denial will cite supporting reasons, will set forth a course of action that may be followed to seek judicial relief, and will be signed by the official exercising final denial authority.
C. Instructions to OSD Components. The Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs), hereinafter referred to as the Directorate, will be the office of record and point of contact for OSD Components in matters pertaining to the Freedom of Information Act.

1. The Directorate will deliver a request for a record to the OSD Component having proprietary responsibility. Any request for a record that originates from a source other than the Directorate shall be redirected without delay.

2. A request for a record will be delivered to the office of contact, together with a letter of instruction and a cover sheet. The cover sheet, of distinctive design and overprinted with instructions vital to Freedom of Information requests, will not be separated from the request packet to which it is attached.

3. A request for a record from the Directorate may not be declined, except that when proprietary responsibility is challenged, it may be returned by a memorandum signed by the denial authority which fixes the proprietary responsibility with a specific OSD Component or other agency of the Government. A lack of specificity by the requester that suggests records of other components or agencies may also fit the broad category of the request will not be sufficient cause to challenge proprietary responsibility.

4. A suspense will be assigned to each request that must be met by either a decision to grant the request in whole or in part, a decision to deny, or by a petition from the denial authority stating the specific number of additional days required and the reason, provided such petition is made to the Directorate 3 working days prior to the suspense. Extension of time will be granted on a case-by-case basis depending upon the ability to justify "unusual circumstances," and will normally not exceed 5 working days.
5. When a request is granted, a copy of the record, a completed FOIA Request Information Sheet and a completed Record of FOI Case Processing Costs, SD Form 467, will be delivered to the Directorate. When a copy of the record cannot be made available by the Component suspense date, a statement explaining the delay and establishing the date of its availability will be provided in lieu of the record.

6. When a request is denied in part, an excised copy of the record and a memorandum explaining the reasons for the denial and summarizing the coordination/consultation history will be delivered to the Directorate, together with completed Record of FOI Case Processing Costs and FOIA Request Information Sheet. When denial is based on classification in the interest of national defense or foreign policy, the explanation shall convey that a current review of the record supports continued classification according to the criteria and rationale of DoD Regulation 5200.1-R (reference (e)). The explanation will also contain specific rationale that logically supports continued classification in the context of the record being denied. The initial denial authority will sign the memorandum of explanation.

7. When a record is denied in its entirety, all procedures set forth in paragraph V.C.6. apply, except a copy of the record is not provided and the memorandum of explanation will specifically convey that it is not possible to reasonably segregate portions of the record which could be provided to the requester.

8. Cases referred to the Directorate in accordance with paragraph IV.D.7., will be transmitted by memorandum establishing the unusual or precedent-setting conditions. Unless notified to the contrary, Public Affairs review and evaluation action will not relieve the OSD Component of any responsibility to reach an initial decision in the time originally allotted. Public Affairs action will, however, be accomplished so as to provide timely recommendation and guidance.
9. OSD Components are urged to communicate directly with the OSD Component offices which focus on Freedom of Information matters and with similar offices in other Government agencies. Problems requiring intervention by the Director, Freedom of Information and Security Review, should be presented to the Directorate as early as possible in the time allotted for staffing, due to the statutory time limits.

VI. EFFECTIVE DATE

This Directive is effective immediately.

[Signature]
Deputy Secretary of Defense
Department of Defense Directive

SUBJECT: General Accounting Office Comprehensive Audits


(b) DoD Directive 5400.1, "Provision of Information to the Congress"

I. PURPOSE

To explain the General Accounting Office comprehensive audit program and to prescribe policy for the guidance of representatives of the Department of Defense and components thereof in their relationships with General Accounting Office representatives engaged in carrying out the statutory audit responsibilities of the Comptroller General.

II. GENERAL ACCOUNTING OFFICE COMPREHENSIVE AUDIT PROGRAM

A. General Scope

The General Accounting Office has broad authority for conducting audits and investigations in the executive departments and agencies. The purpose of this authority is to enable the Comptroller General, as an agent of the Congress, to determine how each agency under audit discharges its financial responsibilities. In this connection, the financial responsibilities of an agency are to be construed as including the expenditure of funds and the utilization of property and personnel in the furtherance only of authorized programs or activities in an effective, efficient and economical manner. Comprehensive audits will be directed only to the non-tactical operations of the Department of Defense. Primarily, the effort by the General Accounting Office auditors will be for the purpose of evaluating the results of financial management within the Department of Defense and components thereof.
B. Basic Statutory Authority

Section 313 of the Budget and Accounting Act of 1921 (31 USC 54) provides that "All departments and establishments shall furnish to the Comptroller General such information regarding the powers, duties, activities, organization, financial transactions and methods of business of their respective offices as he may from time to time require of them; and the Comptroller General, or any of his assistants or employees, when duly authorized by him, shall, for the purpose of securing such information, have access to and a right to examine any books, documents, papers or records of any such department or establishment . . . . ." 

C. Performance of Comprehensive Audits

The General Accounting Office is performing as many audits as possible at the sites of operations. These audits, which are on a comprehensive basis, are performed by personnel from the various General Accounting Office regional offices, overseas offices, and the Defense Accounting and Auditing Division in Washington, D.C. and Dayton, Ohio. The regional offices are in 19 locations in the United States.

D. Approach to Comprehensive Audits

General Accounting Office audits are designed to provide a comprehensive review of Government agencies and their activities. The extent of detailed examination work in such audits is determined by the adequacy of the management control exercised by the agency under audit. In order to evaluate internal management controls, General Accounting Office personnel examine the history, purpose, authorities, organization, activities, policies, and procedures of an agency and its component activities, and then review the operating results in the light of the intended purpose and authorities. In making an evaluation of internal control, representatives from the General Accounting Office will necessarily perform various audit steps such as reviewing, analyzing, and testing accounting and operating data, property records, data in support of budgetary statements, and other supporting evidence covering the agencies' activities. The results of comprehensive audits will be covered by reports which will be made available to the head of the agency involved.

E. Evaluation of Internal Controls and Internal Review Activities

Section 117(a) of the Accounting and Auditing Act of 1950 (31 USC 67) provides that, in the determination of auditing procedures to be followed and the extent of examination of vouchers and other documents, the Comptroller General shall give consideration to the effectiveness of accounting organizations and systems, internal audit and control, and related administrative practices of the respective agencies. Pursuant to the foregoing, the General Accounting Office audits will be conducted in full recognition of
all internal review activities and will evaluate their effectiveness and eliminate the necessity for duplicating much of their efforts. The General Accounting Office intends, as part of its comprehensive audit procedure, to review the internal audit work accomplished within the Department of Defense. This review will serve to enable the General Accounting Office to evaluate the effectiveness of internal audit and control and thereby minimize its effort devoted to detailed review of installation activities. To the extent that the internal audit program has been the successful and effective aid to management which it is designed to be, a corresponding reduction in the disruption of normal operations at the installation or activity by the General Accounting Office should result.

III. POLICIES AND ACTION

A. Cooperation to be Accorded Representatives of the General Accounting Office

Representatives of the General Accounting Office will inform the agency and installation concerned of any proposed audit and its contemplated scope. Officials of all levels within the Department of Defense and components thereof shall cooperate fully with the General Accounting Office representatives in order to facilitate the audit work. Care should be taken to assure that proper working space and facilities are provided, as well as timely assistance in making necessary information, records and personnel available.

B. Access to Records and Release of Records and Reports

1. In accordance with the provisions of the Budget and Accounting Act of 1921 (see II.B. hereof), authorized representatives of the General Accounting Office shall be given access to, and allowed to examine, such records as are necessary to permit them to carry out their duties and responsibilities.

2. Internal audit reports of the military department audit organizations and associated working papers shall be made available, as requested, to the General Accounting Office representatives by the audit agency where such reports and working papers are maintained and filed. Supplementary data and information with respect to findings and recommendations contained in audit reports, management's position with respect thereto, corrective action to be taken, etc., shall be furnished as requested. Departmental procedures may provide for supplying such supplementary data, when available, concurrent with the release of the audit reports, or as soon thereafter as practicable.

3. Budgets for any future fiscal year will not be released. Report of non-Department of Defense agencies (including FBI reports) shall not be released unless the written consent of such agency
has been obtained. Reports of the Inspectors General and criminal investigation organizations shall not be furnished except upon approval of the appropriate departmental Secretary. Such reports may be summarized and the summaries, upon request, may be furnished with the approval of the appropriate departmental Secretary.

4. When the same considerations exist as raise a question as to whether particular information may be furnished to a member or committee of the Congress, no refusal to furnish such information shall be made until the matter has been submitted to the Secretary of the military department concerned or the Secretary of Defense.

IV. IMPLEMENTATION

Implementing regulations of the respective military departments shall be submitted to the Secretary of Defense for approval within ninety days from the date hereof.

V. EFFECTIVE DATE

This directive is effective immediately.

[Signature]

Secretary of Defense
MEMORANDUM FOR Mr. Stephen E. Herbits, The Special Assistant to the Secretary and Deputy Secretaries

SUBJECT: Transition Team Request--Unionization

In accordance with your 10 December 1976 request we have prepared and attached a briefing paper on the subject of unionization of the Armed Forces. This briefing paper responds to the four aspects of the unionization matter identified by the 9 December 1976 memorandum to you from R. C. Steadman of the Transition Team.

The briefing paper has been coordinated with the Assistant Secretary of Defense (Manpower and Reserve Affairs).

Richard A. Wiley

Attachment


BRIEFING PAPER

SUBJECT: UNIONIZATION OF THE ARMED FORCES

1. The current law.

There are no statutory provisions dealing with the subject of unionization of the Armed Forces and union membership by military personnel. Attached at Tab A is a list of statutory provisions regarding certain unlawful acts by, or directed toward, members of the Armed Forces, which may be relevant to certain activities, involving military personnel, in which organizations or their members might engage.

2. Current Executive Orders regarding unionization of Government Employees (e.g., FBI, CIA).

Executive Order 11491, "Labor Management Relations in the Federal Service", provides the policies which govern officers and agencies of the Executive branch of the Government in all dealings with Federal employees and organizations representing such employees. The permissible subject matter for negotiation in the Federal sector, in accordance with that Executive Order, is very narrow and does not include such matters as wages and benefits. Members of the Armed Forces are not "employees" within the meaning of the Executive Order and are not covered by the Executive Order.

The FBI and the CIA are among those agencies in the Executive branch which are specifically excepted from the coverage of Executive Order 11491 (Sec. 3).

3. Recent Proposals to Amend the law, including discussion of Constitutional constraints.

Legislation.

On 4 March 1976, Senator Thurmond introduced a bill, S. 3079, 94th Congress, which would prohibit union organization in the Armed Forces (Tab B). Companion bills were introduced in the House. No hearings were held on the bills, and all bills died with the 94th Congress. We have learned from discussions with Senator Thurmond's staff, as well as from recent newspaper articles, that Senator Thurmond intends to introduce a bill on the subject early in the 95th Congress. This bill was provided to Senator Thurmond on 26 October 1976, by the DoD, as a drafting service.
Constitutional Issues/Legal Issues.

The Department of Defense, by current law, is neither required to nor precluded from recognizing or bargaining with any organization or individual representing or purporting to represent servicemen. A prohibition on negotiation and bargaining by the DoD could be imposed legally on the DoD, however, and it would seem that any attempt by others than the DoD to engage in bargaining with the DoD also could be rendered illegal by statute.

Any legislation which prohibits membership in an organization could raise a potential Constitutional question. Specifically, viewed from the strictly legal standpoint, in general terms (apart from the military and union contexts in particular), a prohibition on mere membership in an organization may not be consistent with the right of free association which is inferred from the First Amendment to the United States Constitution. The Supreme Court carefully scrutinizes any restriction on First Amendment rights and, it would seem, will only sanction a restriction on those activities that present a clear danger to vital governmental interests, and then only to the minimum extent required to further the compelling governmental interest. Thus, generally (again, apart from the military and union contexts in particular) the right of free association would appear to exist without regard to the activities in which the organization itself may seek to engage now or at some time in the future.

The Supreme Court has stated, however, that, while the Bill of Rights, the first ten amendments to the Constitution, applies to servicemen, nevertheless, governmental employees, and particularly servicemen, do not necessarily enjoy the protections of the Bill of Rights to the same extent as do their civilian counterparts.
4. Options being assessed within DoD, including their pros and cons.

We are actively studying the Department's position and will report back to you.
STATUTORY PROVISIONS
RESTRICTIONS ON UNION ACTIVITIES

Title 18

18 U.S.C. 2337-88
Prohibits private citizen from counseling insubordination, disloyalty, mutiny or refusal to duty.

18 U.S.C. 1381
Enticing desertion.

18 U.S.C. 1918
Prohibits individuals from striking against the government (may not apply to servicemen).

18 U.S.C. § 1382
Prohibits anyone from entering Government property for any purpose prohibited by law or regulation.

UCMJ

Article 82
Solicitation or advise another to desert, mutiny, misbehavior before enemy, sedition.

Article 85
Desertion

Article 86
Absence without leave.

Article 88
Contempt toward officials.

Article 89
Disrespect toward superior commissioned officer.

Article 91
Insubordinate conduct toward warrant officer, NCO or petty officer.

Article 92
Failure to obey order or regulation.

Article 94
Mutiny or sedition.
Article 101
Improper use of countersign.

Article 104
Aiding the enemy.

Article 115
Malingering (feigns illness, physical disablement, etc.)

Article 116
Riot or breach of peace.

Article 117
Revoking speeches or gestures.

Article 134
General Article.
IN THE SENATE OF THE UNITED STATES

MARCH 4, 1976

Mr. THURMOND (for himself, Mr. ALLEN, Mr. BARTLETT, Mr. BROCK, Mr. CHILES, Mr. CURTIS, Mr. DOMENICI, Mr. EASTLAND, Mr. FANNIN, Mr. GARN, Mr. GOLDWATER, Mr. HANSEN, Mr. HELMS, Mr. HEUSKA, Mr. LAXALT, Mr. McCLELLAN, Mr. MCCLURE, Mr. MORGAN, Mr. MOSS, Mr. NUNN, Mr. WILLIAM L. SCOTT, Mr. TAYLOR, Mr. TALMADGE, Mr. TOWER, and Mr. YOUNG) introduced the following bill; which was read twice and referred to the Committee on Armed Services

A BILL

To amend chapter 49 of title 10, United States Code, to prohibit union organization in the armed forces, and for other purposes:

1. "Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

2. That (a) chapter 49 of title 10, United States Code, is amended by adding at the end thereof a new section as follows:

3. "§3075. Union organizing and membership prohibited

4. "(a) As used in this section—

5. "(1) 'Member of the armed forces' means a mem-
member of the armed forces who is (A) serving on active
duty, (B) a member of a Reserve component, or (C) in
a retired status.

(2) "Labor organization" means any organization
of any kind, or any agency or employee (including any
member of the armed forces) representation committee
or plan, in which employees (including members of the
armed forces) participate and which exists for the pur-
pose, in whole or in part, of dealing with employers con-
cerning grievances, labor disputes, wages, rates of pay,
hours of employment, or conditions of work.

(3) "Employer" includes the United States Gov-
ernment.

(b) It shall be unlawful for any individual, group, as-
sociation, organization, or other entity to enroll any member
of the armed forces in, or to solicit or otherwise encourage,
any member of the armed forces to join, any labor organiza-
tion.

(c) It shall be unlawful for any member of the armed
forces to join or to solicit or otherwise encourage any other
member of the armed forces to join any labor organiza-

(d) The provisions of subsections (b) and (c) shall
not apply in any case in which any individual, group, asso-
ciation, organization, or other entity enrolls any member
of the armed forces in, or solicits or otherwise encourages
any member of the armed forces to join, any labor organization, or in any case in which a member of the armed forces joins a labor organization or solicits or otherwise encourages another member of the armed forces to join a labor organization if the activity, purpose, or function of the labor organization with which the member is concerned is unrelated to his membership in the armed forces.

"(e) (1) Any individual violating subsection (b) or (c) shall be punished by imprisonment of not more than five years.

"(2) Any labor organization guilty of violating subsection (b) shall be punished by a fine of not less than $25,000 or more than $50,000."

(b) The table of sections at the beginning of chapter 49 of title 10, United States Code, is amended by adding at the end thereof the following:

"975. Union organizing and membership prohibited."
December 22, 1976

MEMORANDUM FOR MR. STEPHEN HERBITS, SPECIAL ASSISTANT

SUBJECT: Transition Notebook - Pending Business - OGC

Attached is the original and one copy of the "Pending Business" portion of the transition notebook as originally sent to you.

The attached reflects all the substantive changes suggested by your office in the original submission.

Mr. Woolsey has already called on this. If the attached are in satisfactory form will you please pass his copy onto him.

(Signed) Richard A. Wiley

Richard A. Wiley

Enclosure
MEMORANDUM FOR FILE

SUBJECT: Pending Business -- Office of the General Counsel

In general, the Office of the General Counsel is a service organization and not a program office. The attorneys, however, are grouped according to specialty and participate in the program decisions of their clients. In some specialty fields, the General Counsel has "program" responsibility simply because the subject matter either does not fit into one of the policy areas, or has not been assigned.

The following items have been receiving attention in this office and should continue to receive attention:

1. **Conflicts of Interests and Gratuities.** A comprehensive review of policies and procedures has been underway for sometime. A new directive should have been issued prior to the close of CY 1976, but there may be problems of interpretation and adjustment. Major problems arise in the following situations:

   a. **The appointment process.** With respect to all appointees to the Department of Defense, Presidential appointees, regular Civil Service appointees, temporary appointees, and consultants, careful examination of potential conflicts, and education with respect to policy and legal matters at the time of appointment is essential. What
is required is examination of the individual's financial holdings to assure an absence of conflict between his official duties and his financial interests. This must be accomplished before the appointment is completed. In the case of the Presidential appointee, careful attention must be given to consistency between the White House questionnaire, the letter to the Senate Armed Services Committee, and the DoD report of financial interests—the DD Form 1555.

b. A related problem is the temporary recruitment of personnel from private industry. The need for highly specialized skills and training must constantly be weighed against the potential conflict of interest, particularly where the individual comes from a Defense contractor and has an either explicit or implicit arrangement to return, which may or may not appear to influence his official actions in favor of his former and potential future employer. A detailed reporting requirement is involved under the so-called Proxmire Amendment which is designed to provide a record of the entry of personnel into the Government from private industry, and the return of individuals from the Government to private industry.

c. Unresolved, or at least undefined, is the circumstance in which an officer or employee of the Department of Defense might have a re-employment arrangement with private industry. We have observed cases in which an individual was on a leave of absence status with re-employment rights in the following circumstances:
the Department of Defense;

(2) Tenured professor in a university not having Defense contracts;

(3) Tenured professor in a university having Defense contracts;

(4) Re-employment rights in a professional corporation;

(5) Re-employment rights in a private corporation having absolutely no connection with the Department of Defense.

The Deputy Secretary of Defense has established a policy that no one will be permitted employment with the Department of Defense who has an arrangement for re-employment with a Defense contractor. A literal application of this rule to a tenured professor would have a serious impact upon recruitment in the scientific fields. The only acceptable rule would seem to be a case-by-case examination as to the motives of the employee and his private employer, and the extent of benefit to the government.

d. The relationship of Defense personnel and private industry without particular reference to employment. This involves gratuities and other interrelationships which may give the appearance
g. Interaction between the Department of Defense and the Department of Justice. The Attorney General, by a letter dated May 4, 1976, invited the attention of all departments to the requirements of statute, section 535 of title 28, to report to the Attorney General "information, allegations, or complaints obtained during an administrative inquiry" which "may" indicate a violation of title 18. This letter was followed by a letter dated July 12, 1976, from the Assistant Attorney General, Criminal Division, demanding access to DoD investigative files with respect to one specific well-publicized case in the Department of Defense. This Department has taken the position that it is the responsibility of this Department to determine when a referral must be made to the Department of Justice.
The Attorney General's guidelines of May 4, 1976, require information, allegations, or complaints which may indicate a violation of 18 U.S. Code to be reported to the (1) local office of the appropriate investigative agency; (2) the office of the U.S. Attorney or the district in which the alleged violation occurred; and (3) directly to the appropriate division of the Department of Justice. We have yet to assess the practicability of this multiple reporting system, and should examine current operations in the light of the new guidelines.

2. Congressional relations.

a. General. In our opinion, there is a need here for better communication with the Congress, which communication involves the lawyers simply because of the subject matter. The budget presentation for FY 1976, the transition period, and FY 1977, were made to appear somewhat easy because of the campaign attention to national defense. We will be forced to communicate more fully and more openly. The new Congress, including more men of the stature of Senators Culver and Nunn, will impose upon us a higher level of intellectual analysis and managerial effectiveness.

b. Travel Support. An obscure provision of law, 31 U.S.C. 22(a), relating to "examination of estimates of appropriations in the field," provides a legal basis for the Congress to demand travel support from the Department of Defense.
the drawing of per diem from the Congress, the drawing of counterpart funds from foreign countries from the State Department, and the use of contingency funds from the Department of Defense--the so-called black bag funds of the escort officers--are getting severe publicity. The Congress appropriates the funds for their own purposes, which purposes are criticized by the media, and the Department of Defense is in the middle suffering the criticism. A comprehensive treatment of this subject matter must be undertaken with the leadership (as distinct from the staffs) of the Congress.

3. **DSARC Process.** The General Counsel has become increasingly involved in the Defense Systems Acquisition Review Council process. The DSARC process is a management tool designed to ensure high level review of major programs at critical points in the progress of the program through development and into production. At each of these critical points, the program is reviewed to determine whether progress through the prior stage of development is technologically satisfactory and whether the system being developed will still fulfill its intended function at reasonable costs.
4. **Arms Transfer Policy and Security Assistance.** Here again the General Counsel has become involved as chairman of a Review Task Force.

5. **Internal Audit and Inspector General.** The Department of Defense has recently undertaken the creation of a new centralized internal audit agency which is needed in the accounting and financial type audits.

Other departments have IG's, as do the military
departments. The Defense Investigative Service has been largely restricted to background investigations.

6. **Intelligence Activities.** The importance of the management of intelligence activities has been highlighted by the intense congressional scrutiny of the entire intelligence community which in turn forced the President, as an alternative to accepting legislation, and in order to protect and preserve the vital intelligence function, to issue a detailed executive order.

The General Counsel has responded to this need by establishing an Assistant General Counsel for Intelligence Matters.

7. **Manpower Policies and Unions.** There has been increased activity within certain unions to expand their membership to include military personnel. The American Federation of Government Employees, at its September convention, amended its Constitution to permit membership
by military personnel. The AFGE did not, however, approve a proposal for active solicitation of military personnel. In addition, Senator Thurmond introduced a bill (S. 3079, 94th Congress), and companion bills were introduced in the House, to prohibit union membership by military personnel. The DoD position has been that the collective bargaining process is antithetical to an effective military, and that commanders are not authorized to recognize or bargain with any organization which represents military personnel with respect to terms and conditions of military service. The Department of Defense is now actively considering its position with regard to this matter and with regard to any proposed legislation. This one should be watched carefully.

8. Naval Petroleum Reserves. This one is a "sleeper." A "backwater" run by the Navy since the early 1920s has, because of the energy problem, become a multi-billion dollar current business.

9. Important General Officer Nominations.
Additionally, the Senate Armed Services Committee is considering increasing the number of military positions such as Supreme Allied Commander, Europe, which may be made subject to Senate confirmation in addition to Presidential assignment.

One further aspect of senior military officer appointments is receiving attention from the Senate Armed Services Committee. One- and two-star nominations to grade are usually in the form of selection board reports, which are submitted to the Senate en bloc. Three- and four-star nominations are submitted individually for confirmation to grade, rather than to a particular position after which the President assigns or reassigns the officer to "positions of importance and responsibility to carry the grade of general or lieutenant general" (admiral or vice admiral).
10. **Navy Shipbuilding Claims.** The very large backlog of shipbuilding claims has been a continuing concern to top levels of the Department as well as to the Navy. There are a number of causes that have given rise to these claims: design changes, delays due to the Government failure to furnish on time equipment for which it is responsible, faulty specifications, requirements imposed on the contractor which were not a part of the contract (the "constructive change"), to name a few. Unexpected occurrences, such as unusually high rates of inflation or energy shortages which occur during the long period necessary for construction of a ship can turn an expected profit into a loss and motivate a contractor to make claims as a means of recovering the loss.

There have been some sharp differences in the top levels of Navy management over how to deal with these major shipbuilding claims. There are some who want the ship at any cost. Others, personified by Admiral Rickover who considers the contractors incompetent, inefficient, and even dishonest, would hold the contractors' feet to the fire with apparent disregard as to whether or not the Navy would get its ships.
11. **Procurement Policy.** Under Office of Management and Budget Circular No. A-109, each department must have an acquisition executive. This requirement could eventually pull together loose ends floating around between the Director Defense Research and Engineering and the Assistant Secretary of Defense (Installations and Logistics). It should also be a means for improving the DSARC process discussed in item 6 above.

12. **Procurement Policy - Institutional Conflicts.** At the present time, established policies prohibit, in most circumstances, a research contractor from bidding on hardware prescribed by his research effort. A further effort is needed to prevent any study or advisory contractor from having any organizational conflict; e.g., advising the government and an interested contractor with respect to research, test, or evaluation. This office has drafted and submitted to OASD(I&L) a proposed change to the Armed Services Procurement Regulation (ASPR) to establish such a policy.
13. Aircraft and Automobile Use Policy. This subject matter has been developing over a number of years, and it involves the establishment of policy and the consistent adherence thereto. The issues are which senior officials are eligible for the use of government aircraft and vehicles, particularly government aircraft; the use of such aircraft or vehicles by wives and other dependents of senior personnel; eligibility for the use of a dedicated vehicle and driver; and the avoidance of the use of aircraft and vehicles for nonofficial purposes. A proposed new policy has been drafted in this office and is being considered.

14. Anti-Arab Boycott Legislation. The Corps of Engineers and its various construction contractors are playing a major role in the Near East, particularly in Saudi Arabia, in constructing facilities.

This office considers that a special Executive Branch/Interagency Group should be organized to develop a coordinated overall Executive Branch program. Meanwhile, this office has
drafted a proposed program which has been submitted to OASD(ISA) and OASD(I&L) for consideration.

15. **Base-Closure and Community Economic Assistance Program.** The impact of Defense activity upon the nation's economy and regional economic conditions is well illustrated by the various impediments placed by the Congress in the way of base-closures. The alleviation of this political pressure depends upon the Department of Defense effort to assist communities to readjust to non-Defense industry. The machinery is available and working in the installations and logistics area, and needs continuing attention.

16. **Budget Preparation and the Planning/Programming Budget System.** The necessity for advanced planning has long been recognized in the various procedures governing the overall budget process. However, since "mission" budgeting is mandated beginning in FY 1979 by the Impoundment Act, a new look at the whole process is in order. Internal attention to this matter is being provided by a study group under the Director of Defense Program Evaluation and Analysis (Mr. Aldridge).
17. **Civil Disturbances.** This area is the responsibility of the Army as executive agent, working with the Department of Justice. In the immediate area of the Pentagon, the Deputy Assistant Secretary of Defense (Administration) has the responsibility for working with the General Services Administration. The activities directed toward the Pentagon must be viewed in the light of the First Amendment freedom of expression guarantees, although activist groups go beyond the limits of expression by physical invasions.

18. **Freedom of Information Act and Disclosure Policies.**

This area is well handled on an operating basis by the Assistant Secretary of Defense (Public Affairs) with legal advice from the Office of the General Counsel. The program is largely based upon the Freedom of Information Act, and reflects a trend in political thinking toward more and more open government. There is some mischief possible in making available investigative files if they are not, in fact, related to ongoing criminal prosecutions because of the possible hesitancy of people to talk for the record. However, we cannot yet assess the consequences of this. It should be noted that the doctrine of "executive privilege," for the first time, received
clear judicial acknowledgment in the case of Nixon v. U.S. It is, therefore, possible for the President at some time to supersede provisions of the Freedom of Information Act, if he does so on the basis that release of the information will interfere with the performance of his executive duties. By and large, however, it is difficult to win a dispute with the Congress on the availability of information, and sensible policy should be developed here.

19. Bribes. Substantial publicity has been given during 1976 to allegations against Defense Department contractors of bribes, and the payment of "consultant fees" which in some cases appear to be bribes, and in others veil improper political contributions funnelled back into the United States. The Department of Defense is interested in preventing excessive agent's fees and certainly bribes on government-to-government foreign military sales.

20. The Fitzgerald Matter. This is a well publicized series of cases involving an Air Force employee, Ernest A. Fitzgerald. One of the litigation items, however, involves a former Secretary of Defense, Melvin Laird. All allegations stem from a dismissal of Fitzgerald which was overturned by the Civil Service Commission. The first litigation item resulted in an order opening the Civil Service proceeding to a public hearing, thus overturning the Civil Service Commission regulation. A second suit alleging a conspiracy by the
Secretary and other persons in the Air Force, and including former Secretary of Defense Laird, was dismissed on the basis of the statute of limitations. It is on appeal in the Circuit Court of Appeals for the District of Columbia. A third suit resulted in a decision that the Civil Service Commission could award attorney fees. This decision by a District Court is on appeal in the Circuit Court of Appeals in the District of Columbia. A fourth suit involves the question of whether Fitzgerald's restoration to duty was to a position "comparable" to the one from which he was dismissed. The Civil Service Commission denied Fitzgerald's appeal and he is now before the U.S. District Court on this issue. A fifth suit filed on November 15, 1976, claims interest on back pay previously awarded without interest when the dismissal was invalidated.

Although all of these matters relate to the Air Force or the Civil Service Commission, the various legal issues are of government-wide interest.

21. Insane Defendants. Occasionally an individual is acquitted by a military court or a foreign court of a serious criminal offense, upon the ground of insanity. We do not have commitment authority but we are seeking it by legislation. Our only remedy in the present state of the law is to refer the individual to the Veterans Administration, but the Veterans Administration has no compulsory commitment authority.

22. Conscientious Objectors. Although we are in an era of an all-volunteer force, there are still personnel, particularly
medical personnel, who have service obligations. In addition to
assignment to noncombat duty, the Department of Defense directive
provides for discharge of conscientious objectors. In a series of
cases in the Vietnam era, this directive was construed to require
discharge thus permitting many to avoid service on the basis of thin
evidence of true conscientious objection.

23. The Prisoner of War Code of Conduct. The Vietnam
conflict involved some very brutal treatment of prisoners of war
and raised questions as to the behavior of some personnel in prison.
This led to a study aimed at revision of the Code. The major legal
issue involved the question of which principles of the Code are general
standards of behavior and which are legal requirements, the violations
of which could result in court-martial or other disciplinary action.
This study has been completed and has been submitted to the Secretary
of Defense for possible adoption.

24. Vietnam Missing In Action. Continuous efforts are
being made to obtain a precise accounting from North Vietnam of
missing military personnel. In the meantime, a substantial number
of personnel are being carried in the MIA status although all evidence
points to the conclusion that they were killed in action. On the basis of a federal court decision, and in response to various political interests, the status of a MIA is not changed to KIA without the request of the immediate next of kin. Pay and allowance and allotments continue for these personnel.

25. Personal Liability for Official Acts. There has been an erosion of the absolute rule stated by the Supreme Court in two cases: *Barr v. Mateo* and *Howard v. Lyons*, that an officer of the government has absolute immunity to suits for damages if his actions were within the "perimeters" of his official duties. The issue is important at the moment for two reasons: (a) the naming of the Secretary of Defense in his personal capacity in suits for damages; and (2) the question of application of the perimeter-of-official-duty rule to alleged unlawful behavior in a number of the intelligence gathering cases. The issue is being tested in the Circuit Court of Appeals for the District of Columbia in a case originating in Germany and involving the *Berlin Democratic Club* as plaintiff, and a large number of Army personnel as defendants, in their personal capacities. Meanwhile, support for the absolute rule results from a seven to two *en banc* decision of the Third Circuit in the case of *Martinez v. Schrock*, et al. This case involved military doctors and it does not address the exact issue involved in the *Berlin Democratic Club* case because there
is no allegation of unlawful conduct, as distinct from negligent conduct, but it does support the Barr v. Matteo rule.

26. FLITE. This is an acronym for federal legal information through electronics. We have long had a computer bank of federal statutes, Comptroller General decisions, and Federal Court cases. This has been challenged recently by private industry on the ground that the government should not be in this type of computer service, and that the information should be made available to the private companies under the Freedom of Information Act. The issue is being litigated by Mead Data Central Company in a suit against West Publishing Company because some of the material in the case reports is copyrighted. We are not defendants.

27. The Use of Force Directive. The Department has attempted to restrict the quantum of force to be used by guard personnel in a variety of situations ranging from protection of atomic weapons to prevention of the theft of bicycles. The directive is currently under review, is highly controversial, and provides difficult problems of definition.
28. **U.S. v. International Business Machines Corporation.**

This is ongoing antitrust litigation which involves this office in various demands for information, and the communication to the Defense components of court orders for the preservation of data; this data is voluminous and results from the use of a huge number of computers storing volumes of communication intelligence and other data. Defense uses computers for all sorts of activities from storage of intelligence data to determining proximity ranges in artillery warheads and other similar mechanical functions.

29. **The U.S. Administrative Conference.** Although the Conference is largely concerned with rulemaking and adjudication in the regulatory agency sense, the Defense Department participates in the Conference almost in a defensive posture because of the trend to apply formal rulemaking or adjudication procedures to a vast number of functions. The Deputy General Counsel is the nominal Defense representative; the expert is Mr. Gilliat.

30. **Dependent Medical Benefits.** During the past year and a half, there has been a complete review of the Civilian Health and Medical Program for the Uniformed Services (CHAMPUS) which has led to the drafting of the first comprehensive (in excess of 500 pages) set of regulations governing the medical care benefits available to
dependents of military personnel, as well as retired personnel and their dependents. Numerous changes in the traditional benefit package that are included in the new regulations are likely to lead to a significant amount of litigation. These cases will be filed after exhaustion of an entirely new administrative adjudicative system of remedies also set forth in the regulation. This program is currently spending close to 3/4 of a billion dollars per annum.

31. **Administrative Processes Applicable to Military Personnel.**

The Discharge Review Boards and the Boards For The Correction Of Records of all three services are under increasing attack as being in violation of due process requirements as well as various statutory provisions (notably the Administrative Procedure Act) in the evaluation of individual petitions for relief. Similarly, the administrative discharge system and various other personnel and medical evaluation processes are alleged to be guilty of procedural unfairness.
32. **Security Clearances.** Traditional criteria for the evaluation of individuals requiring security clearances for the performance of their duties as civilian employees are being re-examined in the light of the Privacy Act and various judicial interpretations to determine what changes need to be made in the governing Executive Order 10450. In addition, there is a need under the Privacy Act to obtain an Executive Order as authority for continuation of the security clearance process applicable to military personnel. Work is under way.

33. **Lunch.** Each month the Judge Advocates General and Service General Counsels meet with the Defense General Counsel at lunch which is hosted by one of the participants in turn. This provides an informal "get-together" and an opportunity for discussing items of general interest. It is recommended that this tradition be continued.