REPORT OF THE

DEFENSE SCIENCE BOARD

TASK FORCE

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THE ROLE OF FEDERALLY FUNDED RESEARCH & DEVELOPMENT CENTERS IN THE MISSION OF THE DEPARTMENT OF DEFENSE

APRIL 1995

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FOR ACQUISITION & TECHNOLOGY
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DEFENSE SCIENCE BOARD

26 APR 1995

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (ACQUISITION & TECHNOLOGY)

SUBJECT: Report of the DSB Task Force on the Role of Federally Funded Research and Development Centers in the Mission of the Department of Defense

In response to your request, this Task Force was formed to;

- Review the applicable Federal and Defense Acquisition Regulations (FAR/DAR) regarding the management and use of FFRDC's;
- Review the DoD plan for the management of FFRDC's and recommend changes to improve or strengthen it;
- Review the process and procedures used by each sponsor and contracting activity to procure FFRDC support and make recommendations, where necessary, to improve compliance with the FAR and the Defense Supplement and DoD management plan.
- Analyze FFRDC capabilities and identify those which are unique or have national security consequences and how they can be retained; and
- Examine and comment on the procedures used to determine compensation levels for trustees and for high level technical and management employees of the FFRDCs.

The applicable Federal and Defense regulations, the DoD management plan, and the procedures for allocating work to the FFRDCs were reviewed by the Task Force. They assessed the FFRDC capabilities and the issues concerning compensation levels for FFRDC management and trustees. They also listened carefully to the views of the DoD sponsors, FFRDC management and the for-profit professional services sector.

From this experience the Task Force concluded that the DoD FFRDCs are valuable and the basic concept should be retained, but steps should be taken to increase trust in the fairness of their use and to ensure the continued quality of the FFRDCs. We make the following recommendations for the Department of Defense:

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1. Establish a partnership relationship with the parent corporations of the current FFRDCs that will ensure that the focus of these enterprises will be primarily the purposes of the FFRDCs. Diversification beyond these objectives should only be approved by the DoD when it judges that it is in the best interest of the country. This relationship will not, in our judgment, be effective unless the DoD can secure the elimination of the financial caps now artificially placed on the FFRDCs.
2. Establish an independent, outside review panel that systematically reviews and advises the Department on its management, use and oversight of FFRDCs. The purpose of this panel is to provide full visibility and credibility to the use of the FFRDCs by the Department. It is the judgment of the Task Force that, unless this objective is fulfilled, the concept will fail and the Department will have lost an important capability.

Craig Fields
Chairman

OFFICE OF THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-3140

DEFENSE SCIENCE
BOARD

25 APR 1995

MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Report of the DSB Task Force on the Role of Federally Funded Research and Development Centers in the Mission of the Department of Defense

Attached is the final report of the Defense Science Board Task Force on the Role of Federally Funded Research and Development Centers (FFRDCs). This report summarizes the current situation with regard to DoD's FFRDCs and conveys the difficulty that the Task Force had in achieving a consensus on the correct course of action by DoD. The proper role for FFRDCs is a subject of great controversy. The Task Force achieved consensus on the desirability of continuing the DoD FFRDCs with the addition of new mechanisms designed to increase the public trust in DoD's management of its FFRDCs. The Task Force is convinced that the current FFRDCs provide critical support to the Department and was reluctant to recommend steps that, in its judgment, would place this support at risk.

The Task Force believes there will be an enduring public trust issue with regard to the DoD FFRDCs. The recommendations of the Task Force were crafted to increase the public visibility into the government decision process and to help with the public trust issue over time.

Bob Hermann

Dr. Robert Hermann
Task Force Chairman

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Defense Science Board Task Force on the Role of Federally Funded R&D Centers in the Department of Defense Mission

I. INTRODUCTION

Over the past several years, the Department of Defense (DoD) has been criticized by the Congress over the management and use of its Federally Funded Research and Development Centers (FFRDCs). The unique role and value of these special organizations has been questioned and the Congress directed that the Secretary of Defense require the Defense Science Board (DSB) to perform a study of the role of Federally Funded Research and Development Centers (FFRDCs) in the mission of the Department of Defense:

> *The Secretary of Defense shall require the Defense Science Board to conduct a study of the role of federally funded research and development centers in the mission of the Department of Defense. The study shall include an analysis of how the centers fit into the mission of the Department of Defense, which capabilities of the centers are unique and have national security consequences, and how these capabilities can be retained. The study also shall review the extent to which activities performed by such centers could be obtained through in-house capabilities of the Department of Defense or through competitive procedures with for-profit and nonprofit organizations. The Secretary shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the study not later than May 1, 1995.*

In response to this charge, the Undersecretary of Defense for Acquisition and Technology requested that the Defense Science Board form a Task Force with the objective of making recommendations on improving the DoD's management and use of FFRDCs. In the course of this study, the Task Force was tasked to:

- Review the applicable Federal and Defense Acquisition Regulations (FAR/DAR) regarding the management and use of FFRDC's;
- Review the DoD plan for the management of FFRDC's and recommend changes to improve or strengthen it;
- Review the process and procedures used by each sponsor and contracting activity to procure FFRDC support and make recommendations, where necessary, to improve compliance with the FAR and the Defense Supplement and DoD management plan.
- Analyze FFRDC capabilities and identify those which are unique or have national security consequences and how they can be retained; and
- Examine and comment on the procedures used to determine compensation levels for trustees and for high level technical and management employees of the FFRDC's.

The Terms of Reference and the list of Task Force members can be found in Appendix A and Appendix B respectively.

II. EXECUTIVE SUMMARY

The unanimous conclusions of this Task Force are summarized below.

First, DoD continues to have a need for FFRDC-like organizations with special relationships with the Department which include the following characteristics:

- have unique competence and quality,
- are closely integrated with their sponsor,
- adhere to strict constraints to minimize conflicts of interest, to promote objectivity and to ensure independence from interests that may conflict with sponsor interests, and
- maintain continuity of relationship sufficient to establish "corporate memory" in topics of critical interest to the sponsor.

Secondly, the set of organizations now designated as DoD FFRDCs are judged to be high quality, as viewed by their sponsors, other private sector organizations and this Task Force. However, the Congressionally mandated salary constraints that are unique to FFRDCs are inappropriate and will lead to a significant degradation in the competence and quality of the individuals and the organizations if left in place.

Third, there is a "core" work effort at each FFRDC which requires the special relationships described above and the Task Force does not have confidence that this work could be offered for full and open competition without losing some of the essence and value of the service. Conversely, there are other, "non-core" efforts at some of the FFRDCs that do not demand the special FFRDC relationship and should be offered for open commercial competition. Today's private sector, professional services industries are robust and quite capable of performing this work.

Finally, there is a trust problem with the DoD use of their FFRDCs that has translated into a serious management and political issue. Even though there is a high degree of trust in the quality of the FFRDCs work, there is significant distrust of DoD's management, use and oversight of its FFRDCs. The concern is that the FFRDCs gain unfair advantage through their special relationship which results in work being sourced to them that could as effectively and more appropriately have been openly competed. Further, the internal government decision process that allocates this work is not accessible for review by those who feel the inequity of the outcome. The Task Force heard testimony that abuses do occur and believes that this issue needs to be addressed by DoD.

To address this trust issue and still retain the highly valued intimacy of FFRDCs with the government, the Task Force believes some new management tools need to be put in place to provide public visibility to the DoD decision process. At minimum, this Task Force recommends that an independent review panel involving highly respected personnel from outside of DoD be established to systematically review and advise the Department on its management, use and oversight of its FFRDCs.

The Task Force concluded that three basic options are available to the DoD for improving its acquisition of FFRDC-like services:

- Option 1 is to work harder at preserving the original concept. The DoD would further define and refine the scope of work to assure that it fits the "core" criteria of work for the FFRDCs, redouble its internal effort to limit sole sourcing to the FFRDCs to that criteria and augment the internal process with the independent review panel noted above. Diversification of effort by the FFRDC or its parent to work outside of its core domain would be approved only if in the best interests of the country. With these conditions in place, the congressionally mandated ceilings

would be lifted to allow for a level of effort which corresponds to the needs of the government and the capabilities of the FFRDCs.

- Option 2 would allow the non-profit parent of an FFRDC activity to contain a clearly separated non-FFRDC segment that would be free to compete for work outside of the FFRDC domain, so long as the effort did not violate the conflict of interest requirements of the FFRDC activity.
- Option 3 would terminate the use of the FFRDC designation in the DoD and make all of this work eligible for competition. Long term, intimate relationships would still be sought with private sector organizations, but the mechanism for achieving such relationships would be the terms and conditions of long term (up to 15-year) contracts rather than the conditions defined by the FAR for FFRDCs.

The Task Force unanimously recommends Option 1 for the Laboratory and Studies and Analyses FFRDCs. In this case, the argument for special relationships is strong, the risk of the competitive process for their functions high, and the controversial work content of these FFRDCs low. For Aerospace and MITRE, the judgment was more difficult. The nature of the work is similar to that which for-profit companies are capable of doing, the amount of work is substantial and it is the center of the current controversy.

After extensive debate, the Task Force achieved consensus on the desirability of Option 1 for Aerospace and MITRE as well. The critical value of the special relationship was judged to be paramount. Both Option 2 and 3 would risk the loss of those relationships beyond the value gained from adopting either of them.

In summary, the Task Force believes that the FFRDCs should be retained on the strength of their quality and the special relationships they have with their sponsors on matters which are of great importance to the Department of Defense. To remain focused on that mission and not jeopardize those special relationships, we believe that the diversification of either the FFRDC or its parent into areas of work outside its core domain should be limited to that which DoD judges to be in the best interest of the country. However, the Task Force believes that this solution will not be effective so long as an artificial cap exists on the FFRDC work which does not represent the natural need of the Department for these capabilities and the ability of the FFRDCs to serve that need. In some measure, the pressure for diversification is derived from the artificial cap. To augment the Department's organic effort to create trust that it is using these special relationships fairly, the Task Force recommends the establishment of a standing, independent panel from outside of DoD to systematically review and advise the Department on its management, use and oversight of FFRDCs.

III. BACKGROUND

A. *Background on the DoD Federally Funded Research and Development Centers*

DoD's FFRDCs are research and engineering centers operated by universities or not-for-profit, private sector corporations. These private sector organizations are chartered under the laws of various states in the same manner as any other private sector company. The parent organizations running FFRDCs differ from other private sector corporations in that they accept a special set of terms and conditions to provide for a "special relationship" with their DoD sponsors. That special relationship allows FFRDCs to perform research, development, and analytic tasks that are integral to the mission and operation of the sponsoring agency, but are not inherently governmental functions (see Appendix C for a definition of inherently governmental functions).

The FFRDCs exist because of a desire to capitalize on the private sector in a way that provides for continuity of effort in key defense areas. Certain characteristics of the private sector which are attractive to DoD and are not obtainable from in-house organizations are: specialized skills not available within civil service, more flexible personnel policies (hiring/firing, salary and benefits), links with world class research universities and personnel that other wise would not be available to DoD, access to available world-class facilities, the need for non-proprietary organization that can have access to proprietary data which can be accepted by commercial companies and the need for organizations that do not have financial ties to other portions of the private sector and, in this way, can be more objective in their evaluations and assessments.

Using the private sector terminology, FFRDC relationships are a form of "strategic partnership" between DoD (acting as "primes") and the FFRDC (acting as "suppliers") with the goal of providing world class, highly sophisticated services. The initial selection of an FFRDC has typically been based on ideas, capabilities (both technical or industrial capability) and cost-performance and the renegotiation has been based on the maintenance of very high quality and the continuing need for that service. These "partnerships" are subject to continual re-evaluation between partners, including exchange of personnel and cooperative education and training programs. DoD strives to keep the best people working on critical defense issues and technologies.

In carrying out their work, FFRDCs have long-term, broad access to Government and industry information, and they attempt to minimize pressure to conform to the institutional positions of their sponsors. The organizations running FFRDCs are private entities, and they are staffed, managed, and overseen by private sector employees and Trustees, rather than Government officials. FFRDCs maintain high-quality technical staffs, with depth and continuity of expertise in areas needed by their sponsors. They are dedicated to the public interest and do not face the competing requirements of commercial or shareholder interests. Thus, FFRDCs provide independent, "outsider" perspectives on issues important to DoD, with "insider" access and focus on the public interest, rather than financial profit.

FFRDCs do:	FFRDCs do not:
• Use a wide variety of sensitive and proprietary information to develop and analyze policy, strategy, system, and technology options, including analytic support for acquisition planning.	• Determine policies or decide which systems are to be acquired.
• Assist in evaluating other contractors' performance, provide technical evaluations of contract proposals, support source selection boards, and require access to sensitive source selection data to carry out these tasks.	• Perform contracting functions or select contractors.
• Help analyze program and budget options, including supporting modeling, cost analyses and cost-effectiveness studies.	• Approve or administer budgets, or make decisions on program priorities.
• Assist in reorganization and planning activities.	• Direct or command government organizations.
• Help analyze and develop Government regulations, standards and policies.	• Decide or administer regulations or determine regulatory policies.
• Help evaluate options related to DoD interests in US international agreements, policies and programs.	• Conduct foreign relations or determine foreign policies.
• Assist in defining technology needs and approaches, demonstrating proof-of-concept solutions, and supporting advanced technology developments.	• Determine DoD technology program priorities and funding.

There are currently 39 FFRDCs Government-wide, of which eleven are sponsored by DoD. Only one of the ten was formed originally as an FFRDC. The remainder grew out of individual organizational and contracting arrangements designed to fill individual needs of various DoD agencies and offices. The common denominator is that a DoD sponsor established each one because their needs could not be met adequately within the Government or through other contracting arrangements. DoD FFRDCs are classified into three categories -- studies and analyses centers, systems engineering and integration centers, and laboratories. They differ in size, mission, and technical and analytic focus. A brief description will provide perspective on the type of work performed by each category.

- Studies and Analysis: The Institute for Defense Analyses (IDA), the Logistics Management Institute (LMI), the Center for Naval Analysis (CNA), RAND (three separate FFRDCs: Project Air Force, the Arroyo Center, and the National Defense Research Institute)
- Systems Engineering: The MITRE Corporation C3I Division, the Aerospace Corporation
- R&D Laboratories: Lincoln Laboratories, Software Engineering Institute (SEI), IDA C3I Laboratory

Several DoD FFRDCs have been terminated or changed status based on decisions by their sponsors. Since 1968, DoD has determined that another 15 FFRDCs were no longer needed. For example:

- The Research Analysis Corporation changed from FFRDC to a for-profit corporation (General Research Corporation)
- The Analytical Services Corporation changed from an FFRDC to a non-profit corporation (ANSER Corporation)
- The Johns Hopkins University Applied Physics Laboratory (APL), the Penn State Applied Research Laboratory and the University of Washington Applied Physics Laboratory were removed from FFRDC status and remained university-based, non-profit institutes supporting the DoD

The studies and analyses centers represent a total of about 15% of projected FY 95 DoD funding for FFRDCs. They are typically no more than a few hundred members of technical staff (MTS) in size. These centers serve primarily Office of the Secretary of Defense (OSD), the Joint Staff, Defense Agencies and Service Headquarters and Commands. They focus on policy, strategy, operational, system and technology issues. Their research programs address concerns of DoD's leadership.

The system engineering and integration centers represent 58% of FFRDC funding. They are industrially funded, and their overall program size is determined by the current technical needs of the system acquisition program offices and agencies they serve. They assist in developing system concepts, specifying technical requirements, and formulating, initiating and evaluating programs undertaken by for-profit firms. These centers help ensure the technical continuity of acquisition programs within their areas of expertise. These programs may span decades from conception to operational status. Aerospace concentrates on national security space systems. MITRE focuses on C3I systems across the Services and agencies.

The FFRDC laboratories (MIT's Lincoln Laboratories, Carnegie Mellon's SEI, and IDA's NSA support) represent about 27% of DoD's FFRDC funding and are dominated in size by Lincoln Laboratories with its roughly 1,000 MTS. The FFRDC laboratories conduct basic and applied research in important technology areas, carry out feasibility demonstrations, and assist in transferring new technologies to the private sector. Lincoln Laboratories and SEI have diverse sponsor bases across DoD, while IDA's center serves a single sponsor with unique needs.

FFRDCs operate under stringent constraints. These constraints help to ensure that FFRDCs do not do what DoD can and must do internally, or what for-profit companies can do as effectively. Thus, the special relationship embodies elements of access and privilege, as well as a variety of constraints to limit FFRDC activities to those deemed appropriate by DoD. This relationship is codified in Government regulations, in FFRDC sponsoring agreements, and in FFRDC contracts.

Recent trends among FFRDCs follow a similar direction to that of other Defense organizations:

- Although they grew dramatically in the 1980s, they now are being reduced in size commensurate with the DoD budget decline. Appendix D summarizes actual obligations at DoD's FFRDCs between FY 1984 and 1995.
- They are increasingly controlled through legislation (ceilings in funding; statutory constraints on salaries and benefits).
- They have come under closer management oversight by DDR&E as well as the sponsoring DoD organization. Such oversight has been redefined through the recent re-issuance of a DoD-wide management oversight plan (see Appendix E). A wide variety of quality and performance reviews are mandated, including five year reviews of whether each FFRDC should remain an FFRDC, and cost audits by the Defense Contract Audit Agency similar to that of other private sector organizations.

B. Background on Other Sources of DoD Technical and Analytical Support

There are a number of FFRDC-like organizations that are not exempt from competitive processes under the FAR. These organizations have characteristics similar to those listed above, but typically receive long term contracts that are either justified as sole source or are competed. In either case, new procurement actions occur every 5 to 10 years with visibility in *Commerce Business Daily*. Many such non-FFRDC organizations have maintained long term continuity of effort (>20 years). Several examples are listed below:

- Johns Hopkins University Applied Physics Laboratory
- Penn State Applied Research Laboratory
- University Of Washington Applied Physics Laboratory
- Analytic Services Corporation (ANSER)
- TRW Ballistic Missile Support Office
- Lockheed Submarine Ballistic Missile Organization
- TASC/ESL Sunnyvale Organization
- Logicon/RDA systems engineering and technical assistance (SETA) contract effort for the Defense Nuclear Agency

C. Regulations and Procedures for Awarding Work to Various Private Sector Sources

The *Federal Acquisition Regulation* (FAR) and other policy documents specify procedures for establishing new FFRDCs and for disestablishing FFRDCs when they are no longer needed. Of the eleven current DoD FFRDCs, the most recent addition was the Software Engineering Institute in 1984. Under current law, no new FFRDCs can be established using FY 95 DoD funds. Some former DoD FFRDCs continue to operate. For example, APL, a former DoD FFRDC, now operates as a non-profit

organization administered by Johns Hopkins University. ANSER, another former FFRDC, now operates as an independent, non-profit corporation.

FFRDCs are created through an exception to the requirement for full and open competition (see Appendix F for an extract from the *Federal Acquisition Regulation*).

Government policies and regulations describe the terms and conditions of the special relationship that make it possible for FFRDCs to perform tasks integral to the mission and operation of the sponsoring agency. The regulations codified and provided a policy framework for those relationships. The terms and conditions that the Government and FFRDCs mutually agree to are specified in the Office of Federal Procurement Policy (OFPP) Policy Letter 84-1, the Federal Acquisition Regulations, the DoD Management Plan for FFRDCs, individual sponsoring agreements, and legislation. Key terms and conditions and their consequences follow:

- The FFRDC meets some special research or development need that cannot be met as effectively by existing in-house or contractor resources. Work placed at the FFRDC must be within the purpose, mission, general scope of effort or special competency of the FFRDC.
- The FFRDC is operated as an autonomous organization or as an identifiable separate operating unit of a parent organization, and the FFRDC must conduct its business with objectivity and independence, free from organizational conflicts of interest.
- The sponsor and the FFRDC commit to a long-term relationship.
- The FFRDC has broad access, beyond that which is common to the normal contractual relationship, to Government and/or supplier data, employees, and facilities needed to discharge its responsibilities, whether the data is sensitive/proprietary or not.
- The FFRDC agrees to full disclosure of its affairs to the sponsoring agency.
- Work from other than a sponsoring agency is undertaken only to the extent permitted by the sponsoring agency.
- The FFRDC will not compete with any non-FFRDC concern in response to a Federal Agency formal Request for Proposal for other than the operation of an FFRDC, nor will it use its privileged information or access to facilities to compete with the for-profit private sector. FFRDCs will not perform quantity production and manufacturing work.

Some features of the relationship between DoD and the FFRDCs serving DoD are considerably more "special" than others. It is important to separate the terms and conditions of the special relationship that are necessary and unique to FFRDCs from those that are merely different from some concept of a "standard" relationship between the government and defense contractors.

Contracting Practices. Two features of the Government - FFRDC relationship that seem to cause the most controversy -- organizational contracting practices and procedures for assigning work -- are not unique to FFRDCs. Over the years, the Government has formed a wide variety of organizational and contracting relationships with the private sector to meet needs that could not be met as effectively within Government or through "standard" arrangements with contractors. For example, to meet some needs for continuous support by the same organization, the Government has established arrangements with for-profit corporations. Examples are TRW with the Air Force's BMO, Lockheed with the Navy's SSPO, and SAIC with JSTPS and now the Strategic Command. DoD has also established long-term arrangements with a variety of government-owned, contractor operated (GOCO) laboratories and other facilities. Special arrangements have also been established with other non-profits such as Johns Hopkins APL. When such long-term relationships were no longer needed, or when the existing contractors did not

provide the high-value support desired, the Government has changed the contracting arrangements -- with FFRDCs as well as with other organizational entities. Since 1968, 57 FFRDCs have been de-certified (15 by DoD), and the management arrangements changed at others.

Assigning Work. Placing work at FFRDCs typically involves the preparation of a study plan approved at the Under Secretary of Defense, Assistant Secretary of Defense or Agency Director level. Senior sponsors review the FFRDC's program to ensure the work is consistent with sponsor priorities and appropriate for the FFRDC. Research priority decisions by senior sponsors allocate funding to FFRDCs and to work performed by other organizations.

Oversight and Review. The requirements for oversight and review of FFRDCs are very stringent. Individual sponsors are required to continually evaluate the FFRDC's work. In considering contract renewal, the Government conducts a comprehensive review of the FFRDC to evaluate the continuing need for FFRDC support, to consider alternative sources, and to assess management efficiency and effectiveness. Additionally, there is an annual review of performance by the collection of sponsors served by the FFRDC. There are also numerous special reviews directed by Congress, intense attention by the DoD Inspector General in a variety of issues, and a host of special and routine audits.

Determining Funding Levels. As with other private sector organizations, FFRDCs are not guaranteed an annual funding level, nor do they have a fixed share of an agency's budget. Funding for FFRDC work competes within the resource priority processes used by sponsors, either at an overall level for FFRDCs supported in whole or part by budget line item, or at a program or project level for FFRDCs that are task or industrially funded (over 90% of FFRDC funding). In each case, sponsors decide to use FFRDCs or alternative sources, based on current needs and the costs and capabilities of the performing organizations. Almost 96% of the professional services work procured by DoD is obtained from organizations other than FFRDCs. FFRDC sponsors are familiar with the products and costs of other private sector alternatives, and they use them regularly for work that these private sector alternatives can perform as effectively as FFRDCs.

IV. THE ROLE OF THE FFRDCS

A. Sponsor Perspectives

The Task Force received extensive briefings and written material from the primary sponsors of the FFRDCs. Without exception, the sponsors testified that the current FFRDCs are providing high-value technical and analytic support that is essential to the sponsors' missions. In the view of these senior sponsors, the FFRDCs have made significant past contributions to national security, increasing the combat capabilities of US military forces and improving the efficiency of DoD management. FFRDCs have helped DoD make better, more informed decisions on policy, programming, systems acquisition and technology issues. Their work has increased operational performance, reduced technological risks in new systems, and saved the Government money.

The sponsors also believe the need for FFRDCs remains high today. Several sponsors emphasized that the objective, timely work provided by FFRDCs is even more important now, due to the rapidly changing national security environment, the downsizing of US military forces and supporting infrastructure, and the pace of technological change. As evidence of continuing need, the sponsors pointed out that DoD's demand for work from most of the FFRDCs exceeds the externally-imposed fiscal ceilings on these organizations, despite the increased administrative hurdles required to place work at FFRDCs.

Sponsors do not see a need to change fundamentally the nature of their special relationships with FFRDCs, which they believe are working well and to the benefit of the Government. The Task Force

asked sponsors to describe the most important characteristics of FFRDCs, to assess whether some work now performed by FFRDCs could be carried out inside the Government or by for-profit contractors, and to provide comments on the current management oversight of FFRDCs. The sponsors' perspectives on these issues are summarized below.

Objective, high-quality work and staffs that are exceptionally competent. In general, the sponsors require the studies and analyses FFRDCs to maintain a mix of technical and analytic skills across a wide range of technology, policy and management areas; the systems engineering centers to maintain broad and deep technical knowledge of specific systems and classes of systems; and the laboratories to maintain an exceptional understanding and depth of knowledge in specific technologies and their applications. High-quality work and high-quality work forces are required of all FFRDCs, as is a comprehensive understanding of DoD's problems in their areas of focus.

Freedom from real or perceived conflicts of interest. DoD sponsors believe that it is important for FFRDCs to be free from potential conflicts of interest, and to be perceived as being so by Congress and the public. Thus, FFRDCs must be nonprofit activities working in the public interest rather than for shareholder or corporate interests. FFRDCs must not engage in production activities to ensure their advice on research and development efforts is not influenced by prospective profits from long-run production. FFRDCs must not compete with for-profit firms in response to Federal RFPs to ensure that their advice to DoD is not influenced by competitive considerations and to prevent FFRDCs from competing unfairly with the for-profit sector. FFRDCs can work for organizations other than the DoD sponsoring agency only to the extent permitted by the sponsoring agency. In this way, the sponsors ensure that the FFRDCs' work is not influenced by financial ties to corporations or other entities with vested interests in the outcome. For example, the systems engineering centers often advise the Government on source selection efforts, and thus they must remain free from commercial interests that could lead to the perception of bias. In another instance, the working relationships between two FFRDCs and individual Military Departments are constrained to ensure they remain free from institutional conflicts even within DoD. At the insistence of Congress, one FFRDC activity must be conducted by an organization that does not have financial ties to the Services and by people whose prior professional activities do not raise conflicts of interest issues. It is clear that freedom from conflicts of interest, in the eyes of DoD sponsors and in the eyes of others in the national security community, is an important characteristic of FFRDCs.

Access to proprietary industry and sensitive DoD information. Work required of FFRDCs often requires widespread access to sensitive Government and proprietary contractor information. DoD sponsors provide such access to ensure the FFRDCs' work is fully informed by the best available information inside the Government and throughout defense industry. Such access would only be possible with organizations that accept the FFRDC constraints discussed in the paragraph above. DoD must be assured that the FFRDCs have no institutional interests that could lead to misuse of sensitive information or cause contractor reluctance to provide proprietary data.

Long-term relationships. The current FFRDCs have been working for their DoD sponsors for many years. They have developed long-term perspectives on issues of importance to sponsors, providing continuity on technical, program, and policy matters. Such long-term relationships allow FFRDCs: to become thoroughly familiar with sponsor problems and needs; to attract and retain high-quality personnel with the needed level of experience; to provide corporate memory on long-term and recurring issues; and to provide a quick-response capability. The long-term relationships allow DoD sponsors to become familiar with the FFRDCs and their staffs, resulting in close, effective working relationships.

Alternative Sources. DoD sponsors were not optimistic about the prospects of making greater use of in-house resources or for-profit contractors to perform work now carried out by FFRDCs. The sponsors indicated that these options were already considered before work was placed at FFRDCs. In

fact, work contracted with for-profit firms exceeds that at FFRDCs by more than an order of magnitude, and in-house resources are used on a priority basis when it is feasible and appropriate to do so. Sponsors acknowledge they may be wrong occasionally, sending a few tasks to FFRDCs that could have been competed. On the other hand, given the reduced FFRDC budgets and the extensive review processes that are now in place for FFRDC taskings, sponsors believe the vast majority of the work assigned to FFRDCs is appropriate and should not be competed among for-profit firms. And not surprisingly, sponsors who feel well served by FFRDCs are not eager to change. They see little prospective gain, and significant risks of lower performance and loss of continuity, coming at a turbulent time for defense planners.

With respect to in-house options, most sponsors believe it would be impractical to expand or to create new Government organizations to take over a significant amount of the work now done by FFRDCs. The sponsors believe it would be very difficult and costly, and probably impossible under current regulations, for DoD to attract and retain sufficient numbers of people with the breadth and depth of experience and technical knowledge to carry out FFRDC work. The long-term focus and personnel policies needed to build and sustain FFRDC-like capabilities would be hard to duplicate inside DoD. Moreover, the DoD work force is shrinking. For example, between FY 1995 and 2001, the Air Force's acquisition work force will decline by about one-third. DoD is looking for ways to get more work done outside the Government, not to bring inside the Government the technical work now performed effectively by the private sector.

Some sponsors questioned whether the in-house option would be desirable, even if it could be staffed with FFRDC-like professionals. The reason is that in-house organizations can become biased by current doctrine, assumptions and traditions. They can also be subject to institutional or command pressures on controversial issues. Being private sector organizations, FFRDCs are better insulated from these biases and pressures.

With respect to the greater use of for-profit companies, the views of sponsors varied somewhat across the categories of FFRDCs. Sponsors of laboratory FFRDCs were not aware of any realistic alternatives among existing for-profit companies. The for-profit trade associations -- which have actively challenged the other FFRDCs -- have not been concerned with the laboratories. It is reasonable to assume that the laboratories haven't been challenged because none of the companies represented by these trade associations believes it could plausibly compete for laboratory work. Although the laboratories are not under attack by for-profit firms, the laboratories have shared the increased oversight and constraints applied to all FFRDCs in recent years.

The sponsors of studies and analyses FFRDCs take a somewhat different view. They agree that for-profit companies could carry out some specific tasks performed by the FFRDCs, although they doubt whether the work could be done as effectively. However, the sponsors also believe that for-profit firms are not structured or staffed to carry out the basic missions of the studies and analyses FFRDCs over the long term. In their view, for-profit companies, without the characteristics and constraints that define the FFRDC special relationship, do not meet their needs for FFRDC work. If for-profit companies accepted the constraints that FFRDCs work under, then these for-profits could evolve over time into FFRDC-like organizations. But the sponsors don't see any reason to move away from the current FFRDCs, as long as they are performing well.

The work programs for the studies and analyses FFRDCs address issues of high priority to the sponsoring offices and generally involve active top-down planning by senior sponsors. The specific task assignments respond to these priorities, while also maintaining capabilities at the FFRDCs consistent with the sponsors' long run analytic needs and available resources. Currently, the sponsors believe they have more work that is clearly appropriate for the studies and analyses FFRDCs than can fit within their fiscal ceilings. Under these conditions, the sponsors do not think it would be productive to increase the

scrutiny given to individual FFRDC tasks, in hopes of finding a few that could be competed. Such an ad hoc approach would run the risk of reducing or eliminating needed FFRDC core capabilities.

The sponsors of the large systems engineering FFRDCs share many of the perspectives of the studies and analyses sponsors. The systems engineering sponsors agree that some FFRDC work could be carried out by for-profit firms, but they too question the relative performance of the for-profit alternatives. The systems engineering sponsors also believe that the for-profit alternatives lack the full capabilities and constraints of the current FFRDCs.

The size and content of the work programs carried out by systems engineering FFRDCs represent the sum of individual judgments of program offices and other OSD, Service and Defense Agency sponsors. Although the FFRDCs' program could be subjected to additional scrutiny to check for work that might be competed, the sponsors are concerned with the resulting potential for disrupting ongoing development programs and for diminishing needed FFRDC capabilities over the long term. The sponsors point out that there has already been a significant reduction in work at the systems engineering FFRDCs due to recent Congressionally-imposed fiscal ceilings, and they question the wisdom of further cuts.

Management Oversight The sponsors believe that FFRDCs represent one of the most highly regulated and overseen parts of the defense industrial base. FFRDCs are subject to the normal audits and oversight imposed on other defense contractors, and they accept additional oversight as a condition for being an FFRDC. These provisions are described in Government policies and regulations (OFPP 84-1, FAR, and DFAR), in the DoD Management Plan for FFRDCs and in FFRDC sponsoring agreements and contracts. In recent years, Congress has directed further oversight and constraints in the form of fiscal ceilings and a variety of other limitations on FFRDCs and their sponsors. Congress has also directed various reports and audits of FFRDCs by Government oversight agencies. In response to this Congressional interest, DoD has further strengthened its processes for reviewing the work assigned to FFRDCs and for evaluating FFRDC performance.

The sponsors question whether the current attention given to FFRDCs -- which account for less than 4% of DoD's RDT&E budget -- is in balance with the significance of the fiscal issue. In discussions with the Task Force, sponsors suggested various measures to reduce the micromanagement of FFRDCs. Among them were eliminating the externally imposed fiscal ceilings and reducing the burdensome review of individual FFRDC tasks.

B. FFRDC Perspectives

The Task Force received an overview briefing prepared by the FFRDCs jointly, and individual briefings and written material from the CEOs of the corporations running FFRDCs. In addition, at the Task Force's request, the FFRDCs prepared a paper describing the nature of the special relationship between DoD and FFRDCs.

The FFRDCs point out that most of the current organizations serving DoD predate the formal definition of an FFRDC and the subsequent establishment of today's common policy and regulatory environment for FFRDCs. They were formed to meet special needs of various DoD offices and agencies that could not be met adequately within the Government or through standard contracting arrangements. Subsequent DoD reviews have reaffirmed the continued need for these particular FFRDCs, while others have been dropped over time.

The FFRDCs vary widely in corporate structure, purpose, mission, size and composition of staff, and working relationships with sponsoring offices. They share some common features with each other that are quite different than other Defense contractors. Most importantly, they have a special relationship with DoD sponsors. The character of this special relationship is described below, followed by some additional points made by the FFRDCs.

The Special Relationship Between DoD and FFRDCs The organizations running DoD's FFRDCs are private entities, and they are staffed, managed and overseen by private sector employees and Trustees, rather than Government officials. These organizations differ from other private sector corporations in that they accept a special set of terms and conditions to provide for a special relationship with their DoD sponsors.

The overall purpose of the special relationship between DoD and its FFRDCs is to provide objective and independent technical and analytic support: (a) that addresses issues integral to the mission and operations of the sponsoring agency but stops short of performing inherently governmental functions; (b) that is fully informed by access to sensitive and proprietary Government and industry information; (c) that is conducted by an organization without real or perceived pressures to conform to the institutional positions of either Government or industry; and (d) that is focused solely on the public interest, without competing pressures of commercial or shareholder interests. Thus, FFRDCs provide independent, "outsider" perspectives on issues important to DoD, with "insider" access and focus on the public interest rather than financial profit.

FFRDCs maintain high-quality technical staffs, with depth and continuity of expertise in areas needed by their sponsors. DoD requires a long-term relationship to exploit the benefits of continuity, and of the broad and deep FFRDC involvement in its chartered areas of expertise.

To ensure freedom from agendas and interests that could be in conflict with DoD's interests, FFRDCs operate under stringent constraints beyond those commonly applied to other corporations contracting with the Government. These constraints ensure FFRDCs do not do what DoD can and must do internally, or what for-profit companies can do as effectively. Thus, the special relationship embodies elements of access and privilege, as well as a variety of constraints to limit FFRDC activities to those deemed appropriate by DoD. This relationship is codified in Government regulations, in the DoD Management Plan, in FFRDC sponsoring agreements, and in FFRDC contracts.

Why Can't Other Organizations Do the Work of FFRDCs? The work performed by FFRDCs requires the Government and other contractors be able to freely exchange information and views with FFRDC personnel, without fear of organizational conflicts of interest or compromise of the decision making process. Also, to be useful to DoD, FFRDC products must be objective and of high quality. They must also be widely recognized as such throughout DoD, the Military Departments, the Joint Staff and Commands, and in Congress. Regardless of the high level of integrity in organizations that do not operate under the terms and conditions accepted by FFRDCs, these organizations rarely, if ever, offer the needed assurance of freedom from conflicts of interest. Diverse business relationships with companies or organizations with a stake in the Government's decisions create built-in, perceived conflicts of interest. This is particularly true with for-profit firms, where shareholder interests may be in conflict with DoD's interests.

It is sometimes argued that for-profit companies could do much of the work now done by FFRDCs and that open competition could be used to determine which company to use for each task. Both assertions are based on a misunderstanding of the FFRDC role. While FFRDCs have unique technical and analytic skills, it is the special relationship with DoD that is truly unique. DoD turns to FFRDCs to conduct work that requires one or more of the elements of the special relationship. When the work does not require these features, DoD can and does use for-profit firms. However, for-profit companies cannot simply be substituted for FFRDCs on an ad hoc, task-by-task basis and effectively carry out work that demands the special relationship.

Assigning Work to FFRDCs The procedures for placing work at FFRDCs are often more rigorous than those used for placing work under non-FFRDC contracting arrangements. Placing work at a for-profit firm can be as simple as the contracting officer adding tasks to an omnibus contract. This can

include tasks that differ substantially from those envisioned when the contract was initiated. At the same time, placing work at FFRDCs typically involves the preparation of a study plan approved at the Under Secretary, Assistant Secretary, or Agency Director level. Senior sponsors review the FFRDC's program to ensure the work is consistent with sponsor priorities and appropriate for the FFRDC. Research priority decisions by senior sponsors allocate funding to FFRDCs and to work performed by other organizations. For most FFRDCs, specific tasks must go through additional review and justification processes.

The FFRDCs echo the concerns of their sponsors regarding the time-consuming, detailed reviews now used to determine the appropriateness of individual tasks assigned to FFRDCs. They would prefer a less paperwork intensive system, placing a higher degree of trust in the judgments of sponsoring officials.

Oversight and Review The requirements for oversight and review of FFRDCs are at least as stringent as those used with for-profit defense contractors. Individual sponsors continually evaluate the FFRDC's work. Additionally, there is an annual review of performance by the collection of sponsors served by the FFRDC. There are also numerous special reviews directed by Congress, intense attention by the DoD Inspector General in a variety of issues, and a host of special and routine audits.

In considering contract renewal, the Government conducts a comprehensive review of the FFRDC to evaluate the continuing need for FFRDC support, to consider alternative sources, and to assess management efficiency and effectiveness. These reviews have become at least as thorough as those done for contracting purposes with for-profit firms. If DoD sponsors are not getting the high-value work desired, they can discontinue the arrangement with the FFRDC. Thus, under current policies and regulations, DoD has the flexibility to terminate or restructure arrangements with FFRDCs that are no longer needed or that are not working out. Since 1968, 57 FFRDCs have been de-certified Government-wide (15 by DoD), and the management arrangements changed at others. The need for the current DoD FFRDCs have been periodically reviewed and reaffirmed by the sponsoring agencies, most within the past few years.

As a condition of being an FFRDC, each FFRDC agrees to more intrusive oversight by the Government than do for-profit defense contractors. In recent years, however, the degree and frequency of Government oversight has increased substantially. Similar to their DoD sponsors, the FFRDCs question the value of this additional attention.

Determining Funding Levels FFRDCs are not guaranteed an annual funding level, and they do not have a fixed share of an agency's budget. Funding for FFRDC work competes within the resource priority processes used by sponsors, either at an overall level for FFRDCs supported in whole or in part by budget line items (less than 10% of DoD's FFRDC funding), or at a program or project level for FFRDCs that are task or industrially funded (over 90% of FFRDC funding). In each case, sponsors decide to use FFRDCs, or alternative sources, based on current needs and the cost and capabilities of the performing organizations. FFRDC sponsors are familiar with the products and costs of for-profit alternatives, and they use them regularly for work that the for-profits can perform as effectively as FFRDCs. In the view of the FFRDCs and their sponsors, it is simply not true -- as sometimes implied by for-profit companies -- that DoD sponsors are unaware of the capabilities for-profit alternatives.

In recent years, the funding processes have been driven increasingly by the fiscal ceilings for each FFRDC, which in turn are derived from the artificial total ceilings set by Congress. These steadily declining fiscal levels have resulted in DoD sponsors not being able to accomplish as much work at FFRDCs as they needed. From the FFRDCs' perspective, the fiscal ceilings and other externally imposed oversight constraints are beginning to undermine the FFRDCs' abilities to attract and retain the high quality people that are essential to effective support of DoD. The FFRDCs question the wisdom

of public policies aimed at denying DoD the ability to take full advantage of the high-quality technical and analytic resources that DoD developed specifically to meet its needs.

Summary of FFRDC Views FFRDCs serve the public interest and support the long-term needs of the Government because of their unique attributes. They provide objective technical and analytic capability, independence, and a long-term understanding of defense problems and the sponsors' special concerns. They perform these functions by maintaining a professional research staff and employing the management flexibility of a private sector organization, including the flexibility to reorient missions or to cease being FFRDCs should the Government no longer need their services. At the same time, they submit to special constraints and a rigorous oversight and monitoring system by the Government to ensure the public interest is being served efficiently. The combination of these elements in a single organization is the defining characteristic of the FFRDC. This is a combination that the Government continues to require and that cannot be duplicated either within the Government itself or in the for-profit sector. If other private sector entities would adopt charters requiring them to serve exclusively in the public interest; would agree to operate under the same special demands and constraints as FFRDCs; and would eventually establish a similar special relationship with DoD; then those private sector entities would become FFRDCs by whatever name. That is how most of the current DoD FFRDCs came into being.

C. *The Professional Services Perspectives*

FFRDCs were created as private nonprofit corporations nearly 50 years ago to fill a gap between needed and existing capabilities in the federal government that were not then available in private industry. FFRDCs originally operated in limited niches and, because the government was their only market, were protected and nurtured to ensure viability.

During the 1950s and 1960s, a professional services industry grew to fill the need for high-technology services with diverse capabilities, objectivity and freedom from conflicts of interest. As early as 1961, a Kennedy administration blue-ribbon study group, headed by Budget Bureau Director David Bell, noted that while nonprofit organizations like RAND and MITRE dominated in the early years, a substantial private-sector capability was growing in the 1960s. Today, private industry has a robust capability for providing studies and analysis, systems-engineering and system-integration services, rendering obsolete the original rationale for establishing services FFRDCs.

Over the last several decades, major changes in public policy, DoD acquisition strategies and the federal procurement system have dramatically reshaped the way the government acquires goods and services from private industry, while the status of FFRDCs and similar nonprofits has been virtually untouched. American laws and regulations require a preference for private-sector performance of work, recognizing that competitive market discipline improves effectiveness and reduces costs.

However, even though private industry can provide the services that FFRDCs provide, it is not allowed to compete for this work. Not only are these noncompetitive markets not opening to competition, but FFRDCs are expanding into private industry's traditional markets. Conflicts of interest have developed as FFRDCs become intimate planners with the government customer, planning their own role into federal programs. The procurement convenience of sole-source contracting has moved the government away from the benefits of competition. And the special contracting relationship lets FFRDCs create non-FFRDCs divisions that posture themselves as de facto FFRDCs and secure sole-source contracts elsewhere in government.

Basic Role for FFRDCs. Government should do those functions that are inherently governmental (e.g., OFPP policy letter) and leave other functions to the private sector. In a perfect world this would be the operative approach. However, inflexibility in the acquisition process and the difficulty the government

faces in hiring and retaining quality technical people provide the underlying rationale for the FFRDC network.

Areas Where FFRDCs Play a Unique Role. Specialized analytic areas where very long term collection and retention of key information is needed. The best example is military recruiting and compensation data (e.g., survey data and recruiting statistics) together with the related analytic capabilities. Another example is the operations analysis capability provided to the fleet and deployed Marines. There is no inherent reason a for-profit company could not do these things, but the way CICA impacts acquisition, it would be difficult to provide the needed continuity. Areas where sensitive, proprietary data are required and industry would be reluctant to release such data to a for-profit entity. For-profit SETA contractors can play a role, but as the responsibilities overlap those of government staff (i.e., get close to roles inherently governmental), an FFRDC may be more appropriate.

Areas Where FFRDCs Should Not Play a Unique Role. The above charter for FFRDCs is narrow, and in practice they play a far broader role. In these areas, FFRDCs do not provide a unique role, and their continued participation should be questioned. Several examples follow:

- Conflict of Interest (COI) Avoidance Many high technology companies should perform this function without a COI problem. When SDIO (now BMDO) was blocked from creating an FFRDC, they shifted to the use of SETA contractors. The teams exclude hardware vendors and have a variety of members who provide a broad range of technical skills as well as enough choice to eliminate COI problems.
- Acquisition Flexibility As the acquisition process has become more complex and slower, government officials have frequently turned to FFRDCs to get critical work done quickly. The broad use of task order contracts by many agencies provides a way to get quick access to deep technical capability.
- Institutional Continuity/Unique Skills In some selected cases, FFRDCs play a unique role related to specialized data analysis and collection. But in general FFRDCs do not have unique skills or experience. With today's technology it is relatively easy to access data bases, do sophisticated analytic work, and perform various systems engineering tasks. In general, continuity of effort can be maintained through competition in the systems engineering world. The FFRDC role may be more unique at times with respect to studies and analyses and R&D laboratory FFRDCs.

Industry capability is not being surveyed. Policies and regulations governing FFRDCs require that FFRDC work be limited to tasks that cannot be performed as effectively by the government or other private sector sources, and prohibit FFRDCs from competing with the private sector. The DoD IG found that such certifications often are signed without proper market research, and that certifications often are very broad.

Procurement or budget convenience is used rather than a capability test. Procurement convenience occurs through sole-source with FFRDCs, avoiding the competitive procurement process. Budget convenience occurs when the real user of an FFRDC's services receives this service using the FFRDC sponsor's budget rather than his/her own.

FFRDCs have moved into services previously performed by industry. Given that private industry has developed significant capability to perform special studies and analyses and system-engineering and integration work, it seems logical that FFRDCs would have been phased down. FFRDCs are growing in part by moving into civilian agency and international markets (e.g., Federal Aviation Administration, Federal Bureau of Investigation, Department of Transportation, National Oceanic and Atmospheric Administration, and Department of Health and Human Resources).

The private sector can perform free from conflict of interest. The private sector has the ability to provide services rendered by FFRDCs objectively and without organizational conflict of interest (OCI). Many private-sector organizations meet as high or higher a standard of objectivity and freedom from bias as FFRDCs. All services companies routinely sign and abide by OCI contract clauses that have proven highly successful.

Further, FFRDCs and nonprofits are not free from conflicts of interest. FFRDCs and non-profit corporations pose unique OCI problems. As a result of their special status, FFRDCs have unusual and sometimes broad access to government information, plans, data, employees and facilities. They often influence what work is assigned to them and what work is competed in private industry.

D. The Task Force Perspectives

The Task Force considered these issues and arguments and came to a collective agreement on several points:

- DoD continues to have a need for FFRDC-like organizations with special relationships with the Department which include the following characteristics:
  - have unique competence and quality,
  - are closely integrated with their sponsor,
  - adhere to strict constraints to minimize conflicts of interest, to promote objectivity and to ensure independence from interests that may conflict with sponsor interests, and
  - maintain continuity of relationship sufficient to establish "corporate memory" in topics of critical interest to the sponsor.
- The set of organizations now designated as DoD FFRDCs are judged to be high quality, as viewed by their sponsors, other private sector organizations and this Task Force.
- The Congressionally mandated salary constraints that are unique to FFRDCs are inappropriate and will lead to a significant degradation in the competence and quality of the individuals and the organizations if left in place.
- There is a "core" work effort at each FFRDC which requires the special relationships described above and the Task Force does not have confidence that this work could be offered for full and open competition without losing the essence and value of the service.
- Conversely, the Task Force believes there are other, "non-core" efforts at some of the FFRDCs that do not demand the special FFRDC relationship and should be offered for open commercial competition. Today's private sector, professional services industries are robust and quite capable of performing this work.
- Finally, there is a trust problem with the DoD use of their FFRDCs that has translated into a serious management and political issue. Even though there is a high degree of trust in the quality of the FFRDCs work, there is significant distrust of DoD's management, use and oversight of its FFRDCs. The concern is that the FFRDCs gain unfair advantage through their special relationship which results in work being sourced to them that could as effectively and more appropriately have been openly competed. Further, the internal government decision process that allocates this work is not accessible for review by those who feel the inequity of the outcome. The Task Force believes that the opportunity for abuse does exist and needs to be addressed.
- To address this trust issue and still retain the highly valued intimacy of FFRDCs with the government, the Task Force believes some new management tools need to be put in place to provide public visibility to the DoD decision process. At minimum, this Task Force recommends that an independent review

panel involving highly respected personnel from outside of DoD be established to systematically review and advise the Department on its management, use and oversight of its FFRDCs. The table below outlines the functions of such an independent review panel.

	Recommended Functions
Independent Review Panel	• Review the FFRDC mission • Review the FFRDC management and oversight mechanisms • Assess the appropriate FFRDC level of effort in relation to its core expertise • Assess the quality of FFRDC personnel and performance in "core" areas • Review the need for the FFRDC in today's context • Provides specific recommendations for use by DDR&E and the primary sponsor of the FFRDC

The Task Force discussed more fundamental options for change in the DoD-FFRDC relationship. The Task Force concluded that three basic concept options are available to the DoD for improving its acquisition of FFRDC-like services:

- Option 1 is to work harder at preserving the original concept. The DoD would further define and refine the scope of work to assure that it fits the "core" criteria of work for the FFRDCs, redouble its internal effort to limit sole sourcing to the FFRDCs to that criteria and augment the internal process with the independent review panel noted above. Diversification of effort by the FFRDC or its parent to work outside of its core domain would be approved only if in the best interests of the country. With these conditions in place, the congressionally mandated ceilings would be lifted to allow for a level of effort which corresponds to the needs of the government and the capabilities of the FFRDCs.
- Option 2 would allow the non-profit parent of an FFRDC activity to contain a clearly separated non-FFRDC segment that would be free to compete for work outside of the FFRDC domain, so long as the effort did not violate the conflict of interest requirements of the FFRDC activity.
- Option 3 would terminate the use of the FFRDC designation in the DOD and make all of this work eligible for competition. Long term, intimate relationships would still be sought with private sector organizations, but the mechanism for achieving such relationships would be the terms and conditions of long term (up to 15-year) contracts rather than the conditions defined by the FAR for FFRDCS.

A brief summary of the Task Force assessment of each of the options is provided here.

Option 1 comes closest to maintaining the original concept of FFRDCs. It retains the full measure of special relationship while instituting stronger oversight mechanisms including the identification of "core" competencies at each FFRDC with the intent of limiting their DoD work primarily to those areas. It also institutes a DoD review of the diversification activities of FFRDCs and the parent corporations running FFRDCs, thus strengthening DoD's oversight of these efforts. This option also establishes a standing panel of outside experts to help create public confidence in DoD's management process.

The members of the Task Force were uncertain about whether these actions would resolve the issue in today's political environment, particularly for the systems engineering FFRDCS. In addition, the current and expected artificial ceilings on FFRDC work make the current system undesirable both for the DoD sponsors and the FFRDCs, and thus Option 1 will likely work only if these externally-imposed ceilings are eliminated. Further, the bureaucratic gauntlet for justifying sole source work for FFRDCs appears to the Task Force to be both costly and ineffective at producing the trust in DoD's management it is supposed to provide.

The Task Force believes that the review of "core" work, the restrictions on diversification, and the outside review panel outlined above will be valuable and effective over time, but it is uncertain that the combination of the external review panel and the internal DoD constraints, by themselves, will be enough to quiet the current controversy.

Option 2 addresses many of the Task Force concerns. It retains the ability for the government to access intimate, long term, quality support while providing a legitimate outlet for the non profit, FFRDC parent to fulfill its public service charter without the distorting influence of the non-compete constraint. The Task Force believes this will reduce the pressure on the parent to secure sole-source work and will open the opportunity for government agencies to include the parent in competitive offerings whereas the current constraints force them to either provide the work on a sole source basis or not have the option of their participation.

However, this option also raises many concerns. The DOD sponsor will be concerned because the intimacy of the special relationship with its FFRDC might be spoiled by the competitive position of the parent. The sponsor will also be concerned by the diversion of talent and management attention outside of sponsor interests although this could be offset to some extent by the strength added by the diversification. The for-profit competitors will be concerned because they see the parent as competition from a government assured base of work, a subsidized management and asset base and the halo effect of having a special relationship with the DoD. Finally, there is also no confidence that this approach will resolve the issue either.

Option 3 outlines a major change in the way these services would be acquired. The intent is to satisfy the trust issue by subjecting every thing to publicly visible competition. For many of the studies and analysis organizations and the Laboratories, the Task Force believes that the for-profit sector would NOT wish to offer competition given the stringent conflict of interest constraints. For the system engineering FFRDCs however, the Task Force believes such competitions could occur, but that it would be a substantial perturbation.

The intent is to retain as much of the valuable special relationship as is practical by defining stringent conflict of interest conditions, clear and definitive specification of quality, competence and experience, and contracts of 15-year duration with five-year renewal decision points.

There are, however, substantial concerns with this option. Several on the Task Force are skeptical that the current process for securing quality service support through competitive bids could achieve this purpose. They fear that choosing this option runs the high probability risk of losing the very valuable structure that has been built up over several decades. They believe the risk is overwhelming compared to the advantages. These members of the Task Force and DoD sponsors will agree that this option will weaken the nature of the valuable, long-term, and special relationship between the sponsor and the supplier. It would be a competitive environment with all of its disadvantages as well as its advantages. From the sponsors perspective, Option 3 may resolve the current controversy while putting at risk the high-quality support provided by these organizations.

The table on the next page lists the Task Force's assessment of the strengths and weaknesses of each of these options.

The Task Force found it relatively easy to recommend that Option 1 be applied to the Laboratory and Studies and Analyses FFRDCs. It believes that the argument for special relationships is strong for these cases, the risk of the competitive process for their functions high, and the controversial work content of these FFRDCs low.

For Aerospace and MITRE, the Task Force was initially divided between Option 1 and Option 3. Part of the Task Force favored putting these organizations on a fully competitive basis. These Task Force

members believe that, in the long run, the trust issue can only be resolved by resorting to visible competitive processes and that the DoD should begin now with a transition period that could be completed over a period of two to three years. Other members of the Task Force strongly felt that the best interests of the government result by maintaining a viable set of FFRDCs focused on their primary purposes, augmented by stronger oversight measures. They were very concerned over the risks associated with the transition from the current state to a fully competitive state. They believe Option 1 comes closest to achieving that objective.

	STRENGTHS	WEAKNESSES
Option 1: Strengthen DoD Oversight and Establish External Review	• Retains the value of the "special relationship" • Provides for an independent assessment of the process • Increases FFRDC focus on mission • Provides a mechanism for assessing outside work • Provides more open access to the process • Provides a mechanism for spreading lessons learned across FFRDCs • Provides control of other work	• May not satisfy immediate political concerns • Adds another layer of review • Adds cost
Option 2: Allow Separated, Non-FFRDC Segment	• Retains sponsor access to intimate, long term, quality support • Provides outlet for non-profit FFRDC parent to fulfill public service charter • Reduces amount of non-core, sole source work	• Reduces sponsor and industry trust • Damages ongoing relationship • Difficult to create credible competition • Reduces focus on specific mission • Diverts resources to conduct competitions • Reduces Congressional trust in the work • Restricts the broad special relationship
Option 3: Terminate Use of FFRDC Designation	• Highest public trust • Removes bureaucratic limits (salary caps, funding ceilings) • Frees FFRDCs from "restrictions" • Competition enhances performance (government policy) • Provides a new look at defense problems • Satisfies immediate political concerns • Less painful to FFRDCs than current adverse environment	• Reduces sponsor and industry trust • Damages ongoing relationship • Difficult to create credible competition • Reduces focus on specific mission • Risk associated with change (work force, data bases, continuity, historical value) • Diverts resources to conduct competition • Reduces Congressional trust in the work • Restricts the broad special relationship

After considerable debate, the Task Force achieved consensus on the desirability of Option 1. The Task Force is convinced that the current FFRDCs provide critical support to the Department and was reluctant to recommend steps that, in its judgment, would place this support at risk.

The Task Force believes there will be an enduring public trust issue but that the creation of the independent review panel will increase the public visibility into the government decision process and will help with the public trust issue over time. However, the members were unable to assess whether this approach will be adequate to resolve the current controversy.

V. CONCLUSIONS AND RECOMMENDATIONS

The applicable Federal and Defense regulations, the DoD management plan, and the procedures for allocating work to the FFRDCs were reviewed by the Task Force. The Task Force assessed the FFRDC capabilities and the issues concerning compensation levels for FFRDC management and trustees. It also listened carefully to the views of the DoD sponsors, FFRDC management and the for-profit professional services sector.

From this experience, the Task Force concluded that the DoD FFRDCs are valuable and the basic concept should be retained but steps should be taken to increase trust in the fairness of their use and to assure the continued quality of the FFRDCs. The Task Force makes the following recommendations for the Department of Defense:

- Establish a partnership relationship with the parent corporations of the current FFRDCs which will assure that the focus of these enterprises will primarily be on the needs of the FFRDC sponsor. Diversification beyond these objectives should only be approved by the DoD when it judges that it is in the best interest of the country. This relationship will not, in the judgment of the Task Force, be effective unless the DoD can secure the elimination of the financial caps now artificially placed on the FFRDCs.
- Establish an independent, outside review panel that will systematically review and advise the Department on the management, use and oversight of its FFRDCs. The purpose of this panel is to provide full visibility and credibility to the use of the FFRDCs by the Department. It is the judgment of the Task Force that, unless this objective is fulfilled, the concept will fail and the Department will lose an important capability.

Appendix A.
Terms of Reference

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND
TECHNOLOGY

OCT 21 1994

MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference -- Defense Science Board Task Force on the Role of Federally Funded Research and Development Centers in the Mission of the Department of Defense.

You are requested to establish a Defense Science Board Task Force to analyze the role of Federally Funded Research and Development Centers (FFRDC's) in the mission of the Department of Defense (DoD). FFRDC's conduct specialized studies and analyses, systems engineering efforts, and laboratory research for the Department when in-house alternatives, commercial contractors, or other non-FFRDC facilities cannot meet the needs as effectively. The objective of this Task Force is to make recommendations on improving the DoD management and use of FFRDC's.

This study should:

1) Review the applicable Federal and Defense Acquisition Regulations (FAR/DAR) regarding the management and use of FFRDC's;

2) Review the DoD plan for the management of FFRDC's and recommend changes to improve or strengthen it;

3) Review the process and procedures used by each sponsor and contracting activity to procure FFRDC support and make recommendations, where necessary, to improve compliance with the FAR/DAR and DoD management plan. FFRDC's currently perform work under contract to one or more sponsors. In some cases (e.g., RAND Project Air Force, RAND Arroyo Center, and the Center for Naval Analyses), the contracting and the bulk of the funding are provided by one sponsoring Service. In others (e.g., MIT Lincoln Laboratory and MITRE), the contracting is with one or more DoD Agency, but funds are provided by a large and diverse number of DoD users.

4) Analyze FFRDC capabilities and identify those which are unique or have national security consequences and how they can be retained. Also, address the ability of DoD to obtain these capabilities in-house or through competitive profit and non-profit organizations;

5) Examine and comment on the procedures used to determine compensation levels for trustees and for high level technical and management employees of the FFRDC's.

The Task Force should submit its final report by March 1, 1995. The Task Force should include an assessment of the potential impact on military readiness for those recommendations where such an assessment is appropriate.

The Director, Defense Research and Engineering will sponsor this Task Force and provide support as may be necessary. Mr. Robert J. Hermann will serve as its Chair. Mr. Robert Nemetz will serve as the Task Force Executive Secretary and CDR Robert C. Hardee, USN will serve as the Defense Science Board Secretariat representative. It is not anticipated that this Task Force will need to go into any "particular matters" within the meaning of section 209 of Title 18, United States Code, nor will it cause any member to be placed in the position of acting as a procurement official.

Paul G Kaminski

Paul G. Kaminski

Appendix B.
Task Force Membership

Appendix B.

Task Force Membership

Members

Dr. Robert J. Hermann, Chair

ADM (Ret) Lee Baggett, Jr., USN

Mr. Edwin Biggers

Dr. H. Kent Bowen

Gen (Ret) Bernard P. Randolph, USAF

Mr. A. Thomas Young

Executive Secretary

Mr. Robert Nemetz, Executive Secretary

DSB Secretariat Representative

CDR Robert Hardee, USN, DSB Representative

Special Board Advisors

Mr. Philip Odeen

Gen (Ret) Larry Welch, USAF

Government Advisors

Dr. Jules Bellaschi, OPA&E

Maj Brent Wildasin, OPA&E

Mr. Jack Bachkosky, ODDR&E

Mr. Irv Blickstein, OUSD(A&T)

Mr. Blaise Durante, OASAF/AQX

LtCol Brian P. Harrington, OASAF/AQX

LCDR Jerri Busch, OPNAV (N811D)

Mr. Anthony Valletta, OASD (C3I)

Mr. Dennis Litchfield, OASD (C3I)

Appendix C.
Inherently Government Functions

Appendix C.

Inherently Government Functions

OFPP Policy Letter 92-1, Inherently Governmental Functions, dated September 23, 1992, provides guidance on what constitutes an Inherently Government Function. (But FAR Case 92-51 has proposed some changes to the FAR which will set forth the definition of inherently governmental functions and establish requirements for management controls to ensure proper management of functions which are close to being inherently governmental in nature.) The Policy Letter defines an inherently governmental function as follows:

> *"As a matter of policy, an Inherently Governmental Function is a function that is so intimately related to the public interest as to mandate performance by government employees. These functions include those activities that require either the exercise of discretion in applying Government authority or the making of value judgments in making decisions for the Government."*

The following is what we mean by the phrase "inherently governmental role" in acquisition. It refers to those tasks and functions that only the government can perform and are integral to its mission and operation. However, to adequately perform this role, the Government may require specialized talents that cannot be met as effectively by existing in-house or contractor resources. An FFRDC, with its unique blend of state-of-the-art technical expertise and non-competitive status was designed to provide this long-time support.

The Government must have the capability to be a "smart buyer" in its acquisition role. This concept requires the government have skills necessary to: maintain the technical "corporate memory", conduct program and/or project management; provide a quick reaction capability; exploit new technological opportunities; avoid technological surprises by others; evaluate contractor proposals, pass technical judgment; monitor contractor performance; perform RDT&E in areas of limited or no private sector interest; provide options for future systems; provide for mobilization requirements and provide for the management of RDT&E. Maintaining these capabilities within the government has often proven impossible due to the limitations of budget and personnel policy. A special relationship with industry was needed. The FFRDC concept grew out of this long-term need for research, development, and analytic expertise and counsel provided in an unbiased manner (an honest broker). They are required by contract to operate in the public interest with objectivity and independence, to be free from organizational conflicts of interest, and to have full disclosure of its affairs. Normal competitive contract support cannot fulfill this need.

Decision making is the key function in the Government's "inherently governmental role." It cannot be contracted out or abrogated. What is necessary is a smart buyer/honest broker paradigm, represented by fact-based decisions resulting from reliable, objective analytical capability based on current, high quality, technical knowledge. Analytical support by an FFRDC meets this need without introducing any potential for conflict of interest which could impair the honest broker relationship with industry.

Appendix D.
Actual Obligations at DoD FFRDCs

FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS

FY 1984-1995 FUNDING DATA

FFRDC	FY 84 Actual Obligations ($M)	FY 85 Actual Obligations ($M)	FY 86 Actual Obligations ($M)	FY 87 Actual Obligations ($M)	FY 88 Actual Obligations ($M)	FY 89 Actual Obligations ($M)	FY 90 Actual Obligations ($M)	FY 91 Actual Obligations ($M)	FY 92 Actual Obligations ($M)	FY 93 Actual Obligations ($M)	FY 94 Actual Obligations ($M)	FY 95 Allocation (Estimate) ($M)
Study and Analyses Centers												
RAND ARROYO CENTER	--	$3.2	$10.9	$16.1	$16.7	$19.6	$25.5	$25.2	$23.5	$21.8	$20.4	$20.1
RAND PROJECT AIR FORCE	$18.6	$18.3	$17.7	$20.2	$19.2	$24.9	$25.2	$24.8	$24.5	$24.0	$24.0	$24.0
RAND NATIONAL DEFENSE RESEARCH INSTITUTE	--	$15.6	$17.4	$19.3	$24.1	$26.4	$28.8	$25.4	$25.2	$24.1	$24.8	$22.9
CENTER FOR NAVAL ANALYSES	$20.2	$26.9	$33.1	$36.0	$38.2	$39.3	$40.5	$49.2	$48.6	$48.2	$49.4	$45.9
INSTITUTE FOR DEFENSE ANALYSES (S&A)	$21.6	$37.3	$45.5	$47.6	$43.1	$49.1	$46.2	$55.4	$55.5	$57.6	$58.7	$53.6
LOGISTICS MANAGEMENT INSTITUTE	$6.5	$11.1	$13.2	$13.8	$15.6	$17.9	$17.9	$23.1	$26.5	$28.6	$29.7	$27.2
TOTAL - Studies and Analyses	**$66.9**	**$112.4**	**$137.8**	**$153.0**	**$156.9**	**$177.2**	**$184.1**	**$203.1**	**$203.8**	**$204.3**	**$207.0**	**$193.7**
Systems Engineering/Integration Centers												
AEROSPACE	$265.8	$292.4	$311.1	$336.8	$364.9	$387.7	$407.3	$391.0	$387.0	$409.5	$365.5	$335.0
INSTITUTE FOR DEFENSE ANALYSES (OT&E)	$0.3	$3.5	$5.9	$4.1	$5.8	$5.8	$10.9	$14.6	$13.3	$14.2	$13.3	$12.9
MITRE (C3I)	$227.3	$253.3	$290.1	$328.2	$357.4	$384.2	$408.6	$425.8	$420.2	$428.2	$402.9	$373.8
TOTAL - Systems Engineering	**$493.4**	**$549.2**	**$607.1**	**$669.1**	**$728.1**	**$777.7**	**$826.8**	**$831.4**	**$820.5**	**$851.9**	**$781.7**	**$721.7**
Research and Development Laboratories												
INSTITUTE FOR DEFENSE ANALYSES (C3I)	$7.2	$9.0	$15.0	$18.6	$23.8	$29.1	$30.9	$32.6	$35.0	$34.8	$34.1	$33.6
MIT LINCOLN LABS	$235.0	$322.9	$322.7	$374.2	$367.7	$379.4	$403.5	$422.0	$330.0	$315.0	$268.1	$274.0
SOFTWARE ENGINEERING INSTITUTE	--	$5.5	$10.7	$16.5	$21.4	$23.3	$25.9	$37.6	$34.9	$31.9	$30.5	$29.6
INSTITUTE FOR ADVANCED TECHNOLOGY	--	--	--	--	--	--	$1.0	$2.0	$6.5	$7.8	--	--
TOTAL - Laboratory	**$242.2**	**$337.4**	**$348.4**	**$409.3**	**$412.9**	**$431.8**	**$461.3**	**$494.2**	**$406.3**	**$389.5**	**$332.7**	**$337.2**
TOTAL	**$802.5**	**$999.0**	**$1,093.3**	**$1,231.4**	**$1,297.9**	**$1,386.7**	**$1,472.2**	**$1,528.7**	**$1,430.6**	**$1,445.7**	**$1,321.4**	**$1,252.6**

Appendix E.
DoD Management Plan for FFRDCs

DEPARTMENT OF DEFENSE
FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER (FFRDC)
MANAGEMENT PLAN

INTRODUCTION

DoD-sponsored Federally Funded Research and Development Centers (FFRDCs) represent a long-term Government investment in a unique resource for research, systems development, and analysis. Over the years FFRDCs have been essential contributors to maintaining the superiority of United States forces. FFRDCs perform work that is (1) crucial to the mission and operation of their sponsoring organizations and (2) cannot be performed as effectively by existing in-house, other non-profit, or for-profit contractor resources.

Because of the importance and unique status of FFRDCs, the DoD must ensure that their use is appropriate and that DoD has effective policies and procedures for their management.

PURPOSE

This plan defines DoD policies and procedures for the establishment, management, use, and termination of DoD-sponsored FFRDCs. It also provides guidelines and procedures for ensuring compliance with the Government-wide policies set forth in Office of Federal Procurement Policy (OFPP) Policy Letter 84-1, and Federal Acquisition Regulation, Part 35.017.

BACKGROUND

DoD FFRDCs are currently operated by universities or privately organized, non-profit corporations under long-term Government contract. Their mission is to provide the high-quality technical work and analysis, required by their sponsors. They are outside of the Government to permit the management flexibility necessary to attract and retain quality scientists, engineers, and managers. The common goals for these centers are to: (1) provide a stable long-term relationship and in-depth knowledge of their sponsors programs and operations; (2) maintain continuity and currency in their special fields of expertise; (3) maintain objectivity and a high degree of competency in their staff and work; and, (4) provide the ability to respond to the emerging needs of their sponsors. FFRDCs provide both long-term and immediate, short-term assistance to help sponsors meet urgent and high priority requirements. They are granted privileged access to

Government and contractor information, and as such, bear a special responsibility to avoid conflicts of interest and have accepted stringent restrictions to their scope and method of operation.

The DoD currently sponsors 10 FFRDCs managed by eight parent organizations (see Appendix A). The ten FFRDCs fall under one of the three categories of FFRDCs defined by the National Science Foundation. This management plan recognizes the different purposes and contributions by organizations in each category. The distinctions between categories of FFRDCs are an important consideration in the management approach that should be applied to each of them. The three categories as represented in the DoD are:

(1) Studies and Analyses (S&A) Centers: S&A centers were created and exist to deliver independent and objective analyses and to advise in "core" areas important to their sponsors in support of policy development, decisionmaking, alternative approaches, and new ideas on major defense issues.

(2) Systems Engineering and Integration (SE&I) Centers: SE&I centers were created and exist to provide required support not available from sponsor's in-house technical and engineering capabilities to ensure that complex systems will meet operational requirements. The centers assist with the creation and choice of system concepts and architectures, the specification of technical system and subsystem requirements and interfaces, the development and acquisition of system hardware and software, the testing and verification of performance, the integration of new capabilities and continuous improvement of system operations and logistics. They often play a critical role in assisting their sponsors in technically formulating, initiating, and evaluating programs and activities undertaken by firms in the for-profit sector.

(3) Research & Development (R&D) Laboratories: R&D laboratories were created and exist to fill voids where in-house and private sector research and development centers were/are unable to meet DoD needs. Specific objectives for these FFRDCs are to: (1) maintain over the long-term a competency in technology areas where the Government cannot rely on in-house or private sector capabilities, and/or (2) develop and transfer important new technology to the private sector so the Government can benefit from a wider, broader base of expertise. R&D laboratories engage in

research programs that emphasize the evolution and demonstration of advanced concepts and technology, and the transfer or transition of technology.

RESPONSIBILITIES

The Director of Defense Research and Engineering (DDR&E), consistent with the provisions of this plan, is responsible to the Deputy Secretary of Defense through the Under Secretary of Defense for Acquisition and Technology to:

- Ensure that funding ceilings established for each of the FFRDCs are consistent with overall DoD requirements and strategy.

- Monitor the mechanisms used by FFRDC sponsors to ensure the appropriateness and value of FFRDC efforts and activities.

- Oversee implementation and execution to ensure compliance with this management plan by each FFRDC sponsor.

The head of the sponsoring agency for each FFRDC will be responsible for ensuring that each FFRDC is being used only for the intended purposes, the costs of the goods and services it provides are reasonable, that it produces high-quality work, and that recipient organizations make appropriate use of that work. The sponsoring agency is also responsible for reviewing descriptions of work proposed to be done by the FFRDC and ensuring that the work assigned is consistent with the mission of the FFRDC. FFRDC sponsors will assure the DDR&E that these provisions are being satisfied by making a specific statement in the Annual Review Assessment required in accordance with Appendix C.

MANAGEMENT AND USE

Primary sponsors of FFRDCs shall maintain sponsoring agreements and/or operating instructions that establish policies and procedures for the management and operation of the FFRDC. The specific content of these documents may vary depending on the nature of the relationship between the sponsor and the FFRDC. However, at a minimum the following must be included in either the sponsoring agreement or sponsoring agency's operating policies and procedures:

1) A statement of the purpose for establishing the FFRDC, along with a description of its mission, general scope of effort, and the role the FFRDC has in accomplishing the sponsoring agency's mission. This statement must be specific enough to permit a discrimination between work that is within the scope of effort for which the FFRDC was established and work that should be performed by a non-FFRDC.

2) Provisions for the orderly termination or nonrenewal of the contract, disposal of assets, and settlement of liabilities. The responsibility for capitalization of the FFRDC must be defined in such a manner that ownership of assets may be readily and equitably determined upon termination of the FFRDC's relationship with its sponsor(s).

3) A prohibition against the FFRDC's competing with any non-FFRDC concern in response to a Federal agency request for proposal for other than the operation of an FFRDC. This prohibition is not required to be applied to any parent organization in its non-FFRDC operations. Moreover, responses to requests for information, qualifications, or capabilities are not prohibited unless the sponsor chooses to make such a restriction. Also, this prohibition is not intended to preclude laboratory FFRDCs from participation in dual-use technology transfer when appropriate and authorized in their sponsoring agreement.

4) A determination of whether the FFRDC may accept work from other than the sponsor(s). If nonsponsor work can be accepted, a description of the procedures to be followed will be included, along with any limitations as to the nonsponsors from which work can be accepted (e.g., other Federal agencies, State, local or foreign governments, nonprofit or profit organizations).

5) A description of the procedures used to make an annual assessment to evaluate performance in the areas of technical quality, responsiveness, value, cost and timeliness. Also required is a description of the mechanism used to provide feedback to the FFRDC in order to identify and resolve any perceived or real problems.

6) Other requirements as appropriate (for example):

- When cost-type contracts are used, the sponsor(s) should identify any cost elements that require advance agreement and/or approval. Such items include, but are not limited to, personnel compensation, depreciation, various indirect costs such as Independent Research and Development, or others as deemed appropriate by the sponsor(s).
- Where fees are determined by the sponsor(s) to be appropriate, considerations affecting their negotiations should be identified. In establishing fee objectives, evaluation should be made of the sources of capital reserves (e.g., fees, depreciation, facilities capital cost of money, borrowing, etc.) and the application of funds (e.g., capital acquisitions, non-reimbursable costs ordinary and necessary for the operation of the FFRDC, etc.). Working capital needs should be evaluated to assure that balances are sufficient, but not excessive, for the operation of the FFRDC.

FFRDC FUNDING

The overall funding level for DoD FFRDCs is approved by the DDR&E based upon several factors, e.g., sponsor-submitted requirements, established guidelines for determining workload requirements for each category of FFRDC, and the overall DoD funding strategy and budget limitations.

The DDR&E will establish funding ceilings for each FFRDC annually and will ensure that the combined FFRDC funding is within the total authorized for all FFRDCs. The ceilings will apply to FFRDC funding obligations for a given fiscal year. Obligations are defined as DoD funds actually obligated on the FFRDC contract, including offsetting de-obligations.

Requests to the DDR&E for deviations from or exceptions to established ceilings for any specific FFRDC will be presented by the sponsor with appropriate justification.

The guidelines to be used by FFRDC sponsors in projecting workloads and funding requirements for each of the FFRDC categories are:

- Studies and Analyses Centers (S&A). (1) maintain a critical mass of staff capability in major subject areas important to their sponsors, (2) maintain a relatively stable annual level-of-effort to avoid major changes in funding and staff levels, and (3)

focus on the kinds of work that cannot be effectively performed inside the DoD or by profit-making firms. The funding levels for this category of FFRDC should not be based solely on the merits of individual projects/tasks because that may preclude the maintenance of "core" capabilities and the ability to privide short term response capabilities. The "core" represents technical staff-years to respond to the sponsor's most important requirements appropriate to each S&A FFRDC. (Appendix B contains the standard definitions of MTS and work year to be used for computing MTS requirements.)

- Systems Engineering and Integration Centers (SE&I). (1) maintain a long-term, stable core capability when the sponsor has determined that no in-house or competitive private for-profit capability exists to perform the requirement as effectively, and (2) respond to changes in workload and funding consistent with the trend in the most relevant portions of the DoD budget (research and development and/or procurement) supporting the types of programs/systems within the FFRDC mission area.

- Research and Development (R&D) Laboratories. Maintain the technical expertise and related capabilities necessary to address the requirements, priorities and objectives of the FFRDC sponsors, the applicable DoD advisory and oversight committees and the DDR&E.

FFRDC REPORTING REQUIREMENTS

The Office of the DDR&E requires specified and ad hoc reports in order to comply with Congressional reporting requirements and to perform its necessary oversight functions and responsibilities. The schedule and content of reports and other submissions currently required are shown at Appendix C.

FFRDC COMPREHENSIVE REVIEWS

Prior to renewal of the FFRDC contract, the sponsor shall conduct a comprehensive review of the continuing use of and need for the FFRDC. This review must be performed in accordance with the Federal Acquisition Regulation, Part 35.017. The resulting determination to approve continuation or termination of the sponsorship shall be made by the head of the sponsoring

agency, with the concurrence of the DDR&E, prior to the anticipated contract renewal date. Also, the sponsor shall advise the DDR&E upon the initiation of a required review and the expected date of its completion. At that time, the DDR&E will have the opportunity to advise the sponsor of any special interest items or requirements to be addressed during the review.

Appendix D contains guidelines for the conduct of comprehensive reviews. Sponsors are expected to implement the guidelines to ensure consistency and thoroughness in the review process within the DoD.

APPENDIX A

DoD FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS

STUDY AND ANALYSIS CENTERS

CENTER FOR NAVAL ANALYSES, Alexandria, VA SPONSOR: NAVY

CNA's work for the Navy and Marine Corps encompasses tactics development and evaluation, operational testing of new systems, assessment of current capabilities; logistics and readiness; manpower and training; space and electronic warfare; cost and operational effectiveness analysis, assessment of advanced technology, force planning, and strategic implications of political-military developments. Twenty percent of CNA's analysts are assigned to fleet and field commands on two-year tours.

RAND PROJECT AIR FORCE, Santa Monica, CA SPONSOR: USAF

Conducts a continuous and interrelated program of objective analyses on major cross-cutting policy and management issues of enduring concern to the Air Force, including studies on preferred means of developing and employing aerospace power; national security threats and strategies; Air Force missions, capabilities, and organizations; strategic and tactical force operations; and technology, support, and resource management.

INSTITUTE FOR DEFENSE ANALYSES (IDA), Alexandria, VA SPONSOR: OSD

Performs studies and analyses for the Office of the Secretary of Defense, Joint Staff, Unified Commands and Defense Agencies in the areas of defense systems, science and technology, strategy and forces, resource analysis, advanced computing and information processing, training, simulation, acquisition process, and the industrial base.

RAND NATIONAL DEFENSE RESEARCH INSTITUTE, Santa Monica, CA
SPONSOR: OSD

Conducts a wide range of research and analyses in the areas of international security and economic policy; threat assessment; defense strategy and force employment options; applied science and technology; information processing systems; systems acquisition, readiness and support systems; and active-duty and reserve manpower, personnel, and training for the Office of the Secretary of Defense, Joint Staff , Unified Commands, and Defense Agencies.

LOGISTICS MANAGEMENT INSTITUTE, McLean, VA SPONSOR: OSD

Conducts research, studies and analyses for the Office of the Secretary of Defense, Military Departments, Defense Agencies, Joint Staff, and Unified Commands in its mission areas: material management, acquisition, installations, environment, operational logistics, international programs, force management, and information science.

RAND ARROYO CENTER, Santa Monica, CA SPONSOR: ARMY

Conducts a wide range of research, studies and analyses in the areas of strategy, force design and operations; readiness and support infrastructure; applied science and technology; manpower and training; threat assessment, and Army doctrine.

SYSTEMS ENGINEERING/INTEGRATION CENTERS

AEROSPACE CORPORATION, Los Angeles, CA SPONSOR: USAF

Performs general systems engineering and integration for DoD space systems. Provides planning, systems definition and technical specification support; analyzes design and design altrnatives, interoperability, manufacturing and quality control; and assist with test and evaluation, launch support, flight tests, and orbital operations. Appraises the technical performance of contractors.

MITRE C3I DIVISION, Bedford, MA and McLean, VA SPONSOR: OSD

Performs general systems engineering and integration for the DoD Command, Control, Communications, and Intelligence (C3I) community. Provides direct support through program definition; specification of technical requirements; system integration; analyses of design and design alternatives; hardware and software review; and test and evaluation. Appraises contractors' technical performance.

IDA OPERATIONAL TEST AND EVALUATION CENTER, Alexandria, VA
SPONSOR: OSD

Provides test and evaluation support to OSD. Provides analyses of test plans, operational assessment and test results for weapons and other systems, including new and proposed equipment of all types. Addresses a range of considerations to include the proposed equipment of all types, and the relationship of effectiveness to technical characteristics, required support, and deployability.

RESEARCH AND DEVELOPMENT LABORATORIES

SOFTWARE ENGINEERING INSTITUTE, Pittsburgh, PA SPONSOR: ARPA

SEI is charged with bringing technology to bear on rapid improvement of the quality of operational software in software intensive systems; with accelerating the reduction to practice of modern software engineering technology and promulgating the use of this technology throughout the software community; and with fostering standards of excellence for improving software engineering practice.

MIT LINCOLN LABORATORY, Lexington, MA SPONSOR: USAF

The laboratory carries out a program of research and development in a number of technologies. Program activities extend from fundamental investigations through design, development, and field test of prototype systems using new technologies.

IDA C3I LABORATORY, Bowie, MD; Princeton, NJ; LaJolla, CA
SPONSOR: OSD/NSA

Conducts fundamental research for the NSA in (1) cryptology, including the creation and analysis of complex enciperment algorithms, as well as in speech and signal analyses; and (2) various technologies associated with supercomputing and parallel processing including new architectures, hardware, and software (including prototypes), as well as parallel processing algorithms and applications.

APPENDIX B

MEMBER OF TECHNICAL STAFF (MTS)

A MTS applies to direct professional and consultant labor, performed by researchers, mathematicians, programmers, analysts, economists, scientists, engineers, and others who perform professional-level technical work primarily in the fields of studies and analyses; system engineering and integration; systems planning; program and policy planning and analysis; and basic and applied research.

Educational requirements for MTS employees and consultants are a bachelor degree from an accredited college or university. In rare instances, nondegree personnel may be included, but only if they possess the equivalent of a bachelor degree in education and experience, and are performing work of the same type and level as that performed by degreed MTS.

For cost and ceiling purposes a MTS work year is defined to be 1,810 hours of full time employee or consultant effort (subcontracting dollars and subcontracting labor excluded). The 1,810 hour figure is derived as follows for full time employees:

Total paid hours in a work year	2,080
Less Holidays	(80)
Vacations	(120)
Sick Leave	(60)
Other Paid Absences	(10)
Total available hour/year	1,810

If cost per MTS work year must be calculated, FFRDC funding, excluding subcontracting to others by the FFRDC, is divided by the number of MTS work years performed by full or part-time employees and consultants.

APPENDIX D

COMPREHENSIVE REVIEW GUIDELINES FOR DoD SPONSORED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS

PURPOSE: The purpose of the comprehensive review is to formally analyze the use and need for the FFRDC in order to assist the head of the sponsoring agency with determining whether to continue sponsorship of the FFRDC.

This appendix provides the guidelines for reporting the results of FFRDC comprehensive reviews in accordance with this management plan, OFPP Policy Letter 84-1, and the FAR.

- Identify the FFRDC, its primary sponsor and contracting activity. Include the date and term of the FFRDC's current sponsoring agreement.

- Provide a detailed examination of the sponsor's special technical needs and mission requirements that are being performed by the FFRDC to determine, if and at what level, they should continue to exist (FAR 32.017-4 (c)(1)).

  Identify requirements for FFRDC support including known specific programs involved, the level of effort required and the types of tasks to be performed.

- Consideration of alternative sources (FAR 35.107-4(c)(2)):

  Specify the special research, systems development, or analytical needs, skills, and/or capabilities involved in accomplishing FFRDC tasks.

  Explain why the capabilities cannot be provided by in-house personnel, private sector contractors, university-affiliated organizations, or another existing FFRDC. Include statements on the alternatives to the FFRDC that were considered and the rational for not selecting each of them.

- Provide a detailed assessment of the efficiency and effectiveness of the FFRDC in meeting a sponsor's/user's needs including the FFRDC's ability to maintain its objectivity, independence, quick response capability, currency in its field(s) of expertise, and familiarity with the needs of its sponsor (FAR 35.017-4(c)(3)).

Include a summary of FFRDC accomplishments and their effectiveness in meeting user needs since the last comprehensive review. As a minimum, the quality and timeliness of the work produced, the number and dollar value of projects and programs assessed, and performance based on the user evaluations should be addressed. A summary of the results of the most recent annual reviews should be included. All users should participate in this portion of the comprehensive review. Discuss any criticisms or concerns that the users had with FFRDC performance and the steps taken to resolve those issues.

- Conduct an assessment of the FFRDC management controls to ensure cost-effective operation (FAR 35.017-4(c)(4)).

  Discuss accounting and purchasing systems; overhead costs and management fees; oversight actions taken to verify cost-effective operations; and other management issues as deemed appropriate.

- Provide a determination that the criteria for establishing the FFRDC is satisfied and that the sponsoring agreement is in compliance with FAR 35.017, FAR 35.017-2, and the DoD Management Plan. Include a statement addressing each of the criteria. Provide a certification that the current sponsoring agreement accurately reflects the mission of the FFRDC.

  Discuss agreements between the Government and the FFRDC. These agreements may cover such items as authorization of management fees, provision of Government facilities and equipment, distribution of residual assets of settlement of liabilities in event of dissolution, maintenance of specific cash reserves, and waivers to accounting policies or regulatory requirements.

- The comprehensive review should provide a recommended course of action and be signed by the head of both the sponsoring and contracting agency(ies). DDR&E concurrence with the results of the comprehensive review is required prior to renewal of the contract or termination of the FFRDC.

Appendix F.
Extract from
Federal Acquisition Regulation

35.017 Federally Funded Research and Development Centers.

(a) *Policy.*

(1) This section sets forth Federal policy regarding the establishment, use, review, and termination of Federally Funded Research and Development Centers (FFRDC's) and related sponsoring agreements.

(2) An FFRDC meets some special long-term research or development need which cannot be met as effectively by existing in-house or contractor resources. FFRDC's enable agencies to use private sector resources to accomplish tasks that are integral to the mission and operation of the sponsoring agency. An FFRDC, in order to discharge its responsibilities to the sponsoring agency, has access, beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to employees and facilities. The FFRDC is required to conduct its business in a manner befitting its special relationship with the Government, to operate in the public interest with objectivity and independence, to be free from organizational conflicts of interest, and to have full disclosure of its affairs to the sponsoring agency. It is not the Government's intent that an FFRDC use its privileged information or access to facilities to compete with the private sector. However, an FFRDC may perform work for other than the sponsoring agency under the Economy Act, or other applicable legislation, when the work is not otherwise available from the private sector.

(3) FFRDC's are operated, managed, and/or administered by either a university or consortium of universities, other not-for-profit or nonprofit organization, or an industrial firm, as an autonomous organization or as an identifiable separate operating unit of a parent organization.

(4) Long-term relationships between the Government and FFRDC's are encouraged in order to provide the continuity that will attract high-quality personnel to the FFRDC. This relationship should be of a type to encourage the FFRDC to maintain currency in its field(s) of expertise, maintain its objectivity and independence, preserve its familiarity with the needs of its sponsor(s), and provide a quick response capability.

(b) *Definitions.*

"Nonsponsor," as used in this section, means any other organization, in or outside of the Federal Government, which funds specific work to be performed by the FFRDC and is not a party to the sponsoring agreement.

"Primary sponsor," as used in this section, means the lead agency responsible for managing, administering, or monitoring overall use of the FFRDC under a multiple sponsorship agreement.

"Special competency," as used in this section, means a special or unique capability, including qualitative aspects, developed incidental to the primary functions of the FFRDC to meet some special need.

"Sponsor" means the executive agency which manages, administers, monitors, funds, and is responsible for the overall use of an FFRDC. Multiple agency sponsorship is possible as long as one agency agrees to act as the "primary sponsor." In the event of multiple sponsors, "sponsor" refers to the primary sponsor.

35.017-1 Sponsoring agreements.

(a) In order to facilitate a long-term relationship between the Government and an FFRDC, establish the FFRDC's mission, and ensure a periodic reevaluation of the FFRDC, a written agreement of sponsorship between the Government and the FFRDC shall be prepared when the FFRDC is established. The sponsoring agreement may take various forms; it may be included in a contract between the Government and the FFRDC, or in another legal instrument under which an FFRDC accomplishes effort, or it may be in a separate written agreement. Notwithstanding its form, the sponsoring agreement shall be clearly designated as such by the sponsor.

(b) While the specific content of any sponsoring agreement will vary depending on the situation, the agreement shall contain, as a minimum, the requirements of paragraph (c) of this subsection. The requirements for, and the contents of, sponsoring agreements may be as further specified in sponsoring agencies' policies and procedures.

(c) As a minimum, the following requirements must be addressed in either a sponsoring agreement or sponsoring agencies' policies and procedures:

(1) A statement of the purpose and mission of the FFRDC.

(2) Provisions for the orderly termination or nonrenewal of the agreement, disposal of assets, and settlement of liabilities. The responsibility for capitalization of an FFRDC must be defined in such a manner that ownership of assets may be readily and equitably determined upon termination of the FFRDC's relationship with its sponsor(s).

(3) A provision for the identification of retained earnings (reserves) and the development of a plan for their use and disposition.

(4) A prohibition against the FFRDC competing with any non-FFRDC concern in response to a Federal agency request for proposal for other than the operation of an FFRDC. This prohibition is not required to be applied to any parent organization or other subsidiary of the parent organization in its non-FFRDC operations. Requests for information, qualifications or capabilities can be answered unless otherwise restricted by the sponsor.

(5) A delineation of whether or not the FFRDC may accept work from other than the sponsor(s). If nonsponsor work can be accepted, a delineation of the procedures to be followed, along with any limitations as to the nonsponsors from which work can be accepted (other Federal agencies, State or local governments, nonprofit or profit organizations, etc.).

(d) The sponsoring agreement or sponsoring agencies' policies and procedures may also contain, as appropriate, other provisions, such as identification of—

(1) Any cost elements which will require advance agreement if cost-type contracts are used; and

(2) Considerations which will affect negotiation of fees where payment of fees is determined by the sponsor(s) to be appropriate.

(e) The term of the agreement will not exceed 5 years, but can be renewed, as a result of periodic review, in increments not to exceed 5 years.

35.017-2 Establishing or changing an FFRDC.

To establish an FFRDC, or change its basic purpose and mission, the sponsor shall ensure the following:

(a) Existing alternative sources for satisfying agency requirements cannot effectively meet the special research or development needs.

(b) The notices required for publication (see 5.205(b)) are placed as required.

(c) There is sufficient Government expertise available to adequately and objectively evaluate the work to be performed by the FFRDC.

(d) The Executive Office of the President, Office of Science and Technology Policy, Washington, DC 20506, is notified.

(e) Controls are established to ensure that the costs of the services being provided to the Government are reasonable.

(f) The basic purpose and mission of the FFRDC is stated clearly enough to enable differentiation between work which should be performed by the FFRDC and that which should be performed by non-FFRDC's.

(g) A reasonable continuity in the level of support to the FFRDC is maintained, consistent with the agency's need for the FFRDC and the terms of the sponsoring agreement.

(h) The FFRDC is operated, managed, or administered by an autonomous organization or as an identifiably separate operating unit of a parent organization, and is required to operate in the public interest, free from organizational conflict of interest, and to disclose its affairs (as an FFRDC) to the primary sponsor.

(i) OMB Circular A-120 is complied with when applicable, and quantity production or manufacturing is not performed unless authorized by legislation.

(j) Approval is received from the head of the sponsoring agency.

35.017-3 Using an FFRDC.

(a) All work placed with the FFRDC must be within the purpose, mission, general scope of effort, or special competency of the FFRDC.

(b) Where the use of the FFRDC by a nonsponsor is permitted by the sponsor, the sponsor shall be responsible for compliance with paragraph (a) of this subsection. The nonsponsoring agency is responsible for making the determination required by 17.502 and providing the documentation required by 17.504(e). When permitted by the sponsor, a Federal agency may contract directly with the FFRDC in which case that Federal agency is responsible for compliance with Part 6.

35.017-4 Reviewing FFRDC's.

(a) The sponsor, prior to extending the contract or agreement with an FFRDC, shall conduct a comprehensive review of the use and need for the FFRDC. The review will be coordinated with any co-sponsors and may be performed in conjunction with the budget process. If the sponsor determines that its sponsorship is no longer appropriate, it shall apprise other agencies which use the FFRDC of the determination and afford them an opportunity to assume sponsorship.

(b) Approval to continue or terminate the sponsorship shall rest with the head of the sponsoring agency. This determination shall be based upon the results of the review conducted in accordance with paragraph (c) of this subsection.

(c) An FFRDC review should include the following:

(1) An examination of the sponsor's special technical needs and mission requirements that are performed by the FFRDC to determine if and at what level they continue to exist.

(2) Consideration of alternative sources to meet the sponsor's needs.

(3) An assessment of the efficiency and effectiveness of the FFRDC in meeting the sponsor's needs, including the FFRDC's ability to maintain its objectivity, independence, quick response capability, currency in its field(s) of expertise, and familiarity with the needs of its sponsor.

(4) An assessment of the adequacy of the FFRDC management in ensuring a cost-effective operation.

(5) A determination that the criteria for establishing the FFRDC continue to be satisfied and that the sponsoring agreement is in compliance with 35.017-1.

35.017-5 Terminating an FFRDC.

When a sponsor's need for the FFRDC no longer exists, the sponsorship may be transferred to one or more Government agencies, if appropriately justified. If the FFRDC is not transferred to another Government agency, it shall be phased out.

35.017-6 Master list of FFRDC's.

The National Science Foundation (NSF) maintains a master Government list of FFRDC's. Primary sponsors will provide information on each FFRDC, including sponsoring agreements, mission statements, funding data, and type of R&D being performed, to the NSF upon its request for such information.

35.017-7 Limitation on the creation of new FFRDC's.

Pursuant to 10 U.S.C. 2367, the Secretary of Defense, the Secretary of the Army, the Secretary of the Navy, the Secretary of the Air Force, the Secretary of Transportation, and the Administrator of the National Aeronautics and Space Administration may not obligate or expend amounts appropriated to the Department of Defense for purposes of operating an FFRDC that was not in existence before June 2, 1986, until (a) the head of the agency submits to Congress a report with respect to such center that describes the purpose, mission, and general scope of effort of the center; and (b) a period of 60 days, beginning on the date such report is received by Congress, has elapsed.

Appendix G.
OFPP Policy on FFRDCs

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

OFFICE OF FEDERAL
PROCUREMENT
POLICY

APR 4 1984

OFPP POLICY LETTER 84-1

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Federally Funded Research and Development Centers

1. Purpose. This policy letter establishes Government-wide policies for the establishment, use, periodic review, and termination of the sponsorship of Federally Funded Research and Development Centers (FFRDCs).

2. Supersession. Memorandum from the Chairman to the Members of the Federal Council for Science and Technology, dated November 1, 1967, which set forth criteria for identification of FFRDCs and the requirement for a master Government listing of these centers, is superseded by this policy letter.

3. Authority. This policy letter is being issued pursuant to Sections 6(a), 6(d)(1) and 6(d)(8) of the Office of Federal Procurement Policy Act, as amended, 41 U.S.C. 405 (a), (d)(1) and (d)(8), which empower the Administrator of OFPP to prescribe Government-wide procurement policies and to complete action on the recommendations of the Commission on Government Procurement.

4. Background. The Departments of Energy, Defense, Health and Human Services, the National Aeronautics and Space Administration and the National Science Foundation currently sponsor a total of 34 FFRDCs. Non-sponsoring departments and agencies also utilize these FFRDCs. Federal funding of FFRDC's currently exceeds 4 billion dollars per year.

In 1967, a Government-wide policy for the identification and maintenance of a master listing of these FFRDCs was issued (reference paragraph 2 - Supersession). In 1972, the Commission on Government Procurement recommended that the Federal Government keep open the option to organize and use FFRDCs to satisfy needs that cannot be satisfied effectively by other organizational resources. The Commission also recommended that agency heads periodically review the continuing need for existing FFRDCs and approve any proposal for new FFRDCs, with specific attention paid to the method of ultimate termination of sponsorship. This policy letter is based on the executive branch consideration of the Commission's recommendations.

5. Definitions

a. Primary Sponsor -- The executive agency which manages, administers or monitors overall use of the FFRDC.

b. Sponsor means an executive agency which funds and monitors specific work of a continuing nature with an FFRDC and is party to a sponsoring agreement. Multiple sponsorship of an FFRDC is possible so long as one agency agrees to act as the primary sponsor for administrative purposes.

c. Federally Funded Research and Development Center (FFRDC).

(1) FFRDCs do not have a prescribed organizational structure. They can range from the traditional contractor-owned/contractor-operated or Government-owned/contractor-operated (GOCO) organizational structures to various degrees of contractor/Government control and ownership. In general, however, all of the following criteria should be met before an activity is identified as an FFRDC:

(a) Performs, analyzes, integrates, supports (non-financial) and/or manages basic research, applied research, and/or development. (Activities primarily engaged in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination, even though otherwise meeting the requirements of paragraph 5.c., are specifically excluded from FFRDC designation).

(b) Performance of the functions in 5.c.(1)(a) is either upon the direct request of the Government or under a broad charter from the Government, but in either case the results are directly monitored by the Government. However, the monitoring shall not be such as to create a personal services relationship, or to cause disruptions that are detrimental to the productivity and/or quality of the FFRDC's work.

(c) The majority of the activity's financial support (70% or more) is received from the Government with a single agency usually predominating in that financial support.

(d) In general, most or all of the facilities are owned by the Government or funded, under contract, by the Government.

(e) The activity is operated, managed and/or administered by either a university or consortium of universities, other non-profit organization or industrial firm as an autonomous organization or as an identifiable separate operating unit of a parent organization.

(f) A long term relationship evidenced by specific agreement exists or is expected to exist between the operator, manager, or administrator of the activity and its primary sponsor.

(2) In addition to the above criteria, the relationship between the activity and the Government should exhibit the following characteristics in order to qualify for FFRDC identification:

(a) The activity (organization and/or facilities) is brought into existence at the initiative of a Government agency or bureau to meet some special research or development need which, at the time, cannot be met as effectively by existing in-house or contractor resources.

(b) Work from other than a sponsoring agency is undertaken only to the extent permitted by the sponsoring agency and in accordance with the procedures of the sponsoring agency.

c) The activity, whether the operator of its own or a Government-owned facility, has access, beyond that which is common to the normal contractual relationship, to Government and/or supplier data, employees, and facilities needed to discharge its responsibilities efficiently and effectively, whether the data is sensitive/proprietary or not.

d) The primary sponsor undertakes the responsibility to assure a reasonable continuity in the level of support to the activity consistent with the agency's need for the activity and the terms of the sponsoring agreement.

e) The activity is required to conduct its business in a responsible manner befitting its special relationship with the Government, to operate in the public interest free from organizational conflict of interest, and to disclose its affairs (as an FFRDC) to the primary sponsor.

6. Policy.

a. General. Agencies will rely, to the extent practicable, on existing in-house and contractor sources for satisfying their special research or development needs consistent with established procedures under The Economy Act of 1932 (31 USC 1535), other statutory authority or procurement/assistance regulations. A thorough assessment of existing alternative sources for meeting these needs is especially important prior to establishing an FFRDC. This Policy Letter does not apply to the performance of commercial activities. Performance of commercial activities is governed by OMB Circular No. A-76.

b. Establishment of an FFRDC. In establishing an FFRDC, the sponsoring agency shall ensure that:

(1) Existing alternative sources for satisfying agency requirements cannot effectively meet the special research or development needs (6.a).

(2) At least three notices are placed over a 90-day period in the Commerce Business Daily and The Federal Register indicating the agency's intention to sponsor an FFRDC and the scope and nature of the effort to be performed by the FFRDC.

(3) There is sufficient Government expertise available to adequately and objectively evaluate the work to be performed by the FFRDC.

(4) Controls are established to ensure that the costs of the services being provided to the Government are reasonable.

(5) The responsibility for capitalization of the FFRDC has been defined in such a manner that ownership of assets may be readily and equitably determined upon termination of the FFRDC relationship with its sponsor(s).

(6) The purpose, mission and general scope of effort of the FFRDC is stated clearly enough to enable differentiation between work which should be performed by the FFRDC and that which should be performed by a non-FFRDC.

c. Sponsoring Agreements. When FFRDCs are established, long-term Government relationships are encouraged in order to provide the continuity that will attract high quality personnel to the FFRDC. This relationship should be of a type to encourage the FFRDC to maintain currency in its field(s) of expertise, maintain its objectivity and independence, preserve its familiarity with the needs of its sponsor(s), and provide a quick response capability. A contract is the generally preferred instrument under which an FFRDC accomplishes effort for its sponsor(s). However, there may be instances where other legal instruments may be appropriate. A written agreement of sponsorship between the FFRDC and its sponsor or primary sponsor where more than one sponsor is involved may be used in addition to the contract or other legal instrument under which an FFRDC accomplishes effort. The specific content of a sponsoring agreement will vary depending on the situation. However, there are certain areas common to all situations that must be addressed. The following requirements must be addressed in either a contract, a sponsoring agreement or sponsoring agency's policies and procedures.

(1) Mandatory Requirements

(a) A delineation of the purpose for which the FFRDC is being brought into being along with a description of its mission, general scope of effort envisioned to be performed, and the role the FFRDC is to have in accomplishment of the sponsoring agency's mission. This delineation must be consistent with the definition of an FFRDC set forth in paragraph 5.c(1)(a) and will be sufficiently descriptive so that work to be performed by the FFRDC can be determined to be within the purpose, mission and general scope of effort for which the FFRDC was established and differentiated from work which should be performed by a non-FFRDC. This delineation shall constitute the base against which changes in an existing FFRDC's purpose, mission or general scope of effort will be measured.

(b) Provisions for the orderly termination or nonrenewal of the agreement, disposal of assets and settlement of liabilities. The term of the sponsorsing agreement will not exceed five years but can be renewed, as a result of periodic review, in not to exceed five year increments.

(c) A prohibition against the FFRDC competing with any non-FFRDC concern in response to a Federal agency formal Request For Proposal for other than the operation of an FFRDC. This prohibition is not required to be applied to any parent organization or other subsidiary of the parent organization in its non-FFRDC operations. However, sponsoring agencies may expand this prohibition as they determine necessary and appropriate.

(d) A delineation of whether or not the FFRDC may accept work from other than the sponsor(s). If non-sponsor work can be accepted, a delineation of the procedures to be followed along with any limitations as to the clients (other Federal agencies, State or local governments, non-profit or profit organizations, etc.) from which work may be accepted. Limitations and procedures with respect to responding to requests for information as to an FFRDC's capabilities or qualifications are inherently a part of the "work for others" question and will be addressed by the sponsoring agency.

(2) Other Requirements As Appropriate

(a) When cost type contracts are used, the sponsor(s) should identify any cost elements which will require advance agreement. Such items may be, but are not necessarily limited to, salary structure, depreciation, various indirect costs such as independent research and development or others as determined appropriate by the sponsor(s).

(b) Where fees are determined by the sponsor(s) to be appropriate, considerations which will affect their negotiation should be identified. Such considerations may be, but are not necessarily limited to, weighted guidelines, risks, use of Government furnished property and facilities, needs or others as determined appropriate by the sponsor(s).

(c) Other provisions as determined appropriate by the sponsor(s).

d. Changing the Basic Scope of an Existing FFRDC's Sponsoring Agreement. In changing the purpose, mission and general scope of effort to be performed or role of an existing FFRDC as set forth in its sponsoring agreement (see 6.c.(1)(a)), the sponsoring agency shall make such changes consistent with its statutory authority and the requirements for establishing a new FFRDC as set forth in paragraph 6.b.

e. Use of the FFRDC by the Sponsor or Primary Sponsor in the Case of Multiple Agency Sponsorship. The sponsor, or primary sponsor in the case of multiple sponsorship, will ensure that all work it places with its FFRDC(s) is within the purpose, mission, and general scope of effort of the FFRDC (paragraph 6.c.) and in accordance with this Policy Letter. This includes work a sponsoring agency agrees to accept from a non-sponsoring Federal agency under the provisions of The Economy Act of 1932 (31 USC 1535) or other statutory authority. Sponsoring agencies must comply with applicable procurement or assistance statutes, policies and regulations for non-competitive actions before placing work which is outside the scope of the sponsor's contractual or sponsoring agreement with an FFRDC.

f. Use of an Existing FFRDC by a Non-Sponsoring Federal Agency. Non-sponsoring Federal agencies may use an FFRDC only if the terms of the FFRDC's sponsoring agreement or contract permit work from other than a sponsoring agency. Where use by a non-sponsor is permitted by the Sponsoring Agreement, the work must require the special relationship of an FFRDC as defined in paragraph 5.c. and either be treated as a direct procurement (action) or processed under The Economy Act of 1932 (31 USC 1535) or other statutory authority. Work processed under The Economy Act of 1932 (31 USC 1535) or other statutory authority must clearly fall within the purpose, mission and general scope of effort established by the sponsoring agency for the FFRDC (paragraph 6.c.). Processing under the Economy Act or other statutory authority is subject to agreement by the receiving agency. Non-sponsoring agencies must fully comply with procurement or assistance statutes, policies and regulations for non-competitive actions prior to placing work directly with a specific FFRDC. The FFRDC must comply with the procedures established by the sponsoring agency (paragraph 6.c.(1)(d)) before accepting work from a non-sponsoring Federal agency.

g. Use of an Existing FFRDC by Other Than a Federal Agency. Work from other than a Federal agency may be accepted only to the extent permitted by the sponsoring agency. The FFRDC must comply with the procedures established by the sponsoring agency (paragraph 6.c.(1)(d)) before accepting work from other than a Federal agency.

h. Consulting Services. Agencies sponsoring FFRDC work which constitutes consulting services, as defined by OMB Circular No. A-120, will comply with the provisions of that Circular.

i. Production/Manufacturing. FFRDCs will not be asked to perform quantity production and manufacturing work unless authorized by legislation. Such activities as breadboarding, modeling or other tasks inherent to R&D are permissible.

j. Periodic Review. Prior to renewal of a sponsoring agreement, agencies shall conduct a comprehensive review of their use and need for each FFRDC that they sponsor. Where multiple agency sponsorship exists this review will be a coordinated interagency effort. When the funding for an FFRDC is a specific line item within the sponsoring agency's budget, the comprehensive review may be done in conjunction with the budget process or the review may be done separately. The sponsoring agency(s) shall apprise other agencies who use the FFRDC of the scheduled review and afford them an opportunity to assume sponsorship in the event the current sponsorship is determined no longer appropriate. Final approval to continue or terminate an agency's sponsorship arrangement with a given FFRDC as a result of this review shall rest with the head of that sponsoring agency. The results of this review will be formally documented. The periodic review should include:

(1) An examination of the agency's special technical needs and mission requirements to determine if and at what level they continue to exist.

(2) Consideration of alternative sources to meet the agency's needs. Such consideration will include compliance with the Notice and Publication requirements of P.L. 98-72 (15 USC 637(e)) prior to renewal of the contract or Sponsoring Agreement unless otherwise exempted.

(3) An assessment of the efficiency and effectiveness of the FFRDC in meeting the agency's needs.

(4) An assessment of the adequacy of the FFRDC management in assuring a cost effective operation.

(5) A determination that the guidelines of section 6 are being satisfied.

k. Termination or nonrenewal of an FFRDC Relationship. When a sponsor's need for the FFRDC no longer exists, the sponsorship may be transferred to one or more Government agencies, if appropriately justified. Otherwise it shall be phased out, the assets disposed of and all liabilities settled as provided by the terms and conditions of the sponsoring agreement.

7. Action Requirements.

a. Not later than September 30, 1984, each agency currently sponsoring an FFRDC will review the terms of its existing agreements with the FFRDCs for compliance with this policy letter. Where existing agreements do not comply with this policy letter the primary sponsor will develop a schedule to bring the agreements into compliance not later than the next contract renewal or five years from the effective date of this policy letter, whichever comes first.

b. Where the review required by 7.a. reveals that a clear statement of the purpose, mission and general scope of effort, as described in paragraph 6.b.(6) and 6.c.(1)(a), does not exist, the sponsoring agency shall ensure such a statement is developed not later than September 30, 1984.

c. The primary sponsor will notify the Office of Science and Technology Policy prior to designating any new organization as an FFRDC (paragraph 6.b.), changing the basic scope of effort of an existing FFRDC (paragraph 6.d.) or changing the status of an existing FFRDC (paragraph 6.k.).

d. The National Science Foundation will maintain a master Government list of FFRDCs based upon the definition in this Policy Letter.

e. FFRDCs will be identified by their primary sponsors who will provide information, including funding data, on the type of R&D being performed by the FFRDCs to the National Science Foundation upon their request for such information.

f. Each agency head is responsible for ensuring that the provisions of this policy are followed.

8. Effective Date. The Policy Letter is effective (60 days after publication in the Federal Register).

9. Implementation. Aspects of this policy letter requiring implementation will be covered by the Department of Defense, the General Services Administration and the National Aeronautics and Space Administration in the Federal Acquisition Regulation not later than 180 days from the date of this policy letter. Implementation will be written so as to be compatible with the requirements, as of the date of this policy letter, of FAR 17.6 "Management and Operating Contracts" when the arrangement with an FFRDC constitutes a management and operating contract.

10. Information Contact. All questions or inquiries about this policy letter should be submitted to the Office of Management and Budget, Office of Federal Procurement Policy, telephone (202) 395-6810.

11. Sunset Review Date. This policy letter will be reviewed no later than six years after its effective date for extension, modification, or rescission.

Donald E. Sowle
Administrator

Appendix H.
Acronyms

Appendix H.

Acronyms

A&T	*Acquisition and Technology*
ANSER	*Analytical Services Corporation*
APL	*Applied Physics Laboratory*
BMDO	*Ballistic Missile Defense Organization*
BMO	*Ballistic Missile Office*
CEO	*Corporate Executive Officer*
CICA	*Competition in Contracting Act*
CNA	*Center for Naval Analyses*
COI	*Conflict of Interest*
DAR	*Defense Acquisition Regulations*
DDR&E	*Director of Defense Research and Engineering*
DFAR	*Defense Supplement to Federal Acquisition Regulations*
DoD	*Department of Defense*
DoD IG	*Department of Defense Inspector General*
DSB	*Defense Science Board*
FAR	*Federal Acquisition Regulation*
FFRDCs	*Federally Funded Research and Development Centers*
FY	*Fiscal Year*
GOCO	*Government-Owned, Contractor Operated*
GRC	*General Research Corporation*
IDA	*The Institute for Defense Analysis*
JSTPS	*Joint Strategic Target Planning System*
LL	*Lincoln Laboratory*
LMI	*Logistics Management Institute*
MIT	*Massachusetts Institute of Technology*
MTS	*Members of Technical Staff*
NDRI	*National Defense Research Institute*
NSA	*National Security Agency*
OCI	*Organizational Conflict of Interest*
OFPP	*Office of Federal Procurement Policy*
OSD	*Office of the Secretary of Defense*
R&D	*Research and Development*
RAC	*Research Analysis Corporation*
RDA	*Research Development and Acquisition*
RDT&E	*Research Development Test and Evaluation*
RFP	*Request for Proposal*
SAIC	*Science Applications International Corporation*
SDIO	*Strategic Defense Initiative Organization*
SEI	*Software Engineering Institute*
SETA	*Systems Engineering and Technical Assistance*
SSPO	*Strategic Systems Project Officer (Navy)*
TASC	*The Analytical Sciences Corporation*