

RELEASED

RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations, a record of which is kept by the Distribution Section, Publications Branch, OAS



REPORT TO THE COMMITTEE  
ON APPROPRIATIONS  
HOUSE OF REPRESENTATIVES

21  
3.4.29  
092525

20

Observations On Operations  
Research/Systems Analysis Studies  
Under Level-Of-Effort Contracts B-163074

Department of Defense

BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

~~904279~~

092525

OCT. 27, 1972



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-163074

*cl + R*  
Dear Mr. Chairman:

In accordance with your request dated July 27, 1970, we inquired into selected aspects of computer-oriented war gaming, simulations, and contract studies in the Department of Defense. Our initial report was issued on February 23, 1971.

At that time, we advised your office of our plans to do follow-on reviews in selected areas. This report presents our observations on operations research/systems analysis studies under level-of-effort contracts.

Formal comments on our observations have not been obtained from the Department of Defense. We plan to make no further distribution of this report unless copies are specifically requested, and then we shall make distribution only after your agreement has been obtained or public announcement has been made by you concerning the contents of the report.

Sincerely yours,

Comptroller General  
of the United States

*cl + R*  
The Honorable George H. Mahon  
Chairman, Committee on Appropriations  
House of Representatives

C o n t e n t s

	<u>Page</u>
DIGEST	1
CHAPTER	
1 INTRODUCTION	3
2 VARIOUS APPROACHES TO ACQUISITION OF OPERATIONS RESEARCH/SYSTEMS ANALYSIS SUPPORT UNDER LEVEL-OF-EFFORT CONTRACTS	5
Origin of individual studies	5
Review and approval of studies	6
Identification of study priorities	7
Contractor influence over study programs	7
3 STUDIES HAVING QUESTIONABLE RELATIONSHIP TO DEFENSE OR MILITARY MATTERS	9
Studies questioned by DCAA	10
Conclusions	11
4 SIMILARITY IN STUDIES PERFORMED UNDER STUDY PROGRAMS OF DEFENSE ACTIVITIES	12
Similarity in foreign affairs studies	12
Reporting new study efforts	16
Conclusions	16
Similarity of contract studies and Army in-house research on dissent	17
Conclusions	19
5 FEASIBILITY OF JOINT OR COOPERATIVE RESEARCH	21
Advocacy efforts	21
Feasibility of joint or cooperative research--an approach	22
6 MATTERS FOR CONSIDERATION BY THE COMMITTEE	25
7 SCOPE OF REVIEW	26
APPENDIX	
I Letter dated September 24, 1969, from the Chairman, Committee on Appropriations, House of Representatives	27

- II Letter dated July 27, 1970, from the  
Chairman, Committee on Appropriations,  
House of Representatives

29

ABBREVIATIONS

AFAG	Air Force Advisory Group
ANSER	Analytic Services, Inc.
CNA	Center for Naval Analyses
DCAA	Defense Contract Audit Agency
DDC	Defense Documentation Center
DOD	Department of Defense
DDR&E	Director of Defense Research and Engineering
FCRC	Federal Contract Research Center
GAO	General Accounting Office
G&A	general and administrative
IDA	Institute for Defense Analyses
JCS	Joint Chiefs of Staff
OASD(ISA)	Office of the Assistant Secretary of Defense (International Security Affairs)
OSD	Office of the Secretary of Defense
RAND	The RAND Corporation
RAC	Research Analysis Corporation
WSEG	Weapons Systems Evaluation Group

D I G E S T

WHY THE REVIEW WAS MADE

At the request of the Chairman, Committee on Appropriations, House of Representatives, the General Accounting Office (GAO) previously inquired into various aspects of computer-oriented war gaming, computer simulation, and contract studies of the Department of Defense (DOD). In the resulting report (B-163074, Feb. 23, 1971), GAO said that it would inquire further into the possibility of duplicate studies and the use of level-of-effort type of contracts.

Level-of-effort contracts are awarded each year to the same non-profit Federal Contract Research Centers--such as The RAND Corporation or the Institute for Defense Analyses--which supplement or complement DOD's in-house expertise. The contracts call for professional services which are expressed in man-months or man-years at an estimated price per period. The contracts are usually a cost-plus-fixed-fee type.

In this report GAO

- examines the operating procedures used by DOD and the military services in originating, reviewing, and approving studies proposed under this type of contract;
- identifies areas in which similar effort appeared to exist; and
- advises the Committee of matters--particularly sponsor-contractor

relationships--that may warrant the Committee's attention.

GAO reviewed contracts with five of the Centers which provided operations research/systems analysis type of services. Formal comments have not been requested from DOD.

FINDINGS AND CONCLUSIONS

Operating procedures

DOD and the military services administer level-of-effort contracts with the Centers in various ways. There are differences in

- how the topics to be studied are chosen (see p. 5.)
- how proposed subjects are reviewed and approved (see p. 6.)
- how priorities between studies are made (see p. 7.)
- how much influence the contractor has over what is studied (see p. 7.)

The various approaches have evolved, in GAO's opinion, over many years of close, continuous support from the same contractor. Consequently, some contracts have developed distinct characteristics. (See p. 5.)

Questionable relationship to defense matters

Many studies conducted by the

OCT. 27, 1972

Institute for Defense Analyses had no apparent relationship to defense or military matters. GAO believes that only the cost of defense-related work conducted as Central Research should be borne by DOD. Furthermore, the Defense Contract Audit Agency (DCAA) has questioned amounts spent under this program for similar non-defense-related projects since fiscal year 1964. (See p. 9.)

The Office of the Director of Defense Research and Engineering and other contracting activities have delayed in deciding whether to approve about \$875,000 in costs for Central Research projects performed by the Institute. (See p. 10.)

Possible duplication of effort

There is some similarity and overlap in studies performed in the foreign affairs area by level-of-effort contractors for different DOD activities. (See p. 12.) A substantial portion of a project on youth dissent to be conducted by the recently established Army Motivation and Training Laboratory appears to have already been covered under studies made under level-of-effort Army contracts. (See p. 17.)

The Centers are conducting many studies in areas in which two or more of the military services share interests. Much can be gained from some joint or cooperative study of problem areas that cut across service lines. (See p. 21.)

MATTERS FOR CONSIDERATION  
BY THE COMMITTEE

The Committee may wish to explore the following matters with DOD officials.

- Make sure that DOD bears only the cost of defense-related Central Research study projects and that the projects are reviewed and approved before they are begun.
- Make sure that questions raised by DCAA on study projects are promptly resolved.
- How the project on youth dissent proposed by the Army Motivation and Training Laboratory differs from other studies on this subject.
- How to obtain joint or cooperative efforts in areas in which the military services share a mutual interest. (See p. 25.)

## CHAPTER 1

### INTRODUCTION

At the request of the Chairman, Committee on Appropriations, House of Representatives, the General Accounting Office (GAO) previously inquired into various aspects of computer-oriented war gaming, computer simulation, and contract studies of the Department of Defense (DOD). These aspects were discussed in our report to the Committee entitled "Computer Simulations, War Gaming, and Contract Studies" (B-163074, Feb. 23, 1971). In that report we informed the Committee of our intention to inquire into the possibility of similarity and duplication of effort in contract studies and the use of level-of-effort type of contracts for the studies area.

The objectives of this review were to (1) examine the operating procedures used by DOD and the military services in originating, reviewing, and approving studies proposed under this type of contract, (2) identify those areas in which similar effort appeared to exist, and (3) advise the Committee of any matters or any sponsor-contractor relationships that may warrant the Committee's attention.

DOD obtains studies and analyses under level-of-effort contracts that call for professional services--such as operations research/systems analysis support--which are expressed in man-months or man-years at an estimated price per period. The contracts are usually a cost-plus-fixed-fee type.

The scope of the contract work is expressed in general terms. When the procuring activity defines specific study areas, an annual work or study program is submitted or separate study projects are submitted on an individual basis.

Level-of-effort contracts are used extensively for studies performed by the nonprofit Federal Contract Research Centers (FCRCs) which were originated to supplement or complement DOD's in-house expertise. We reviewed contracts for studies performed for various defense organizations by five FCRCs. Following are the fiscal year 1971 costs of the level-of-effort contracts included in our review.

<u>Organization</u>	<u>Contractor</u>	<u>Cost of contract</u>
Army	Research Analysis Corporation	\$ 7,600,000
Navy	Center for Naval Analyses	6,474,000
Marine Corps	Center for Naval Analyses	897,000
Air Force	RAND Corporation	11,000,000
	Analytic Services, Inc.	1,795,000
 <u>Office of the Secretary of Defense</u>		
International Security Affairs	Institute for Defense Analyses	146,200
Systems Analyses	Institute for Defense Analyses	130,000
Weapons Systems Evaluation Group	Institute for Defense Analyses	<u>3,850,000</u>
 Total		 <u>\$31,892,200</u>

The average cost of a man-year of effort on studies conducted by the above FCRCs differs considerably, as illustrated in the table below. This is partly due to the differences in the skills employed by FCRCs to meet the requirements of their prime sponsors.

<u>Organization</u>	<u>Contractor</u>	<u>Average cost of a man-year of effort</u>
Army	Research Analysis Corporation	\$60,000 <sup>a</sup>
Navy	Center for Naval Analyses	50,000 <sup>b</sup>
Marine Corps	Center for Naval Analyses	50,000 <sup>c</sup>
Air Force	RAND Corporation	66,000
	Analytic Services, Inc.	37,000
 <u>Office of the Secretary of Defense</u>		
International Security Affairs	Institute for Defense Analyses	36,000
Systems Analyses	Institute for Defense Analyses	44,000
Weapons Systems Evaluation Group	Institute for Defense Analyses	48,000

<sup>a</sup>For fiscal year 1971 the cost was \$50,000; Army now considers the cost to be \$60,000.

<sup>b</sup>Rule-of-thumb figure used by the Navy.

<sup>c</sup>Cost can range from \$40,000 to \$50,000, depending on the type of talent to be used.



## CHAPTER 2

### VARIOUS APPROACHES TO ACQUISITION OF OPERATIONS RESEARCH/SYSTEMS ANALYSIS SUPPORT UNDER LEVEL-OF-EFFORT CONTRACTS

The ways in which the various activities of DOD acquire and administer study support under these contracts differ substantially. There are differences in (1) the origin of individual studies, (2) the identification of priority areas, (3) the study review and approval processes, and (4) the extent of contractor influence on the work to be done.

The various approaches to the specific study needs and programs of the contract sponsors have evolved, in our opinion, from the many years of close, continuous support from the same contractor. Consequently, some support contracts have developed distinct characteristics, which are discussed in the following sections.

#### ORIGIN OF INDIVIDUAL STUDIES

For the most part study programs or tasks originate within many organizations of the defense activities and military services, except for the Air Force Project RAND program. In the Army, Navy, and Marine Corps, studies originate in the various commands and staff offices of the contract sponsors.

The Joint Chiefs of Staff (JCS) and the Director of Defense Research and Engineering (DDR&E) initiate their own study projects through the Weapons Systems Evaluation Group (WSEG) which contracts annually for a specified level of effort from the Institute for Defense Analyses (IDA). Other activities within the Office of the Secretary of Defense (OSD) also award annual contracts to IDA for study tasks originated by these activities.

Project RAND is unique among the study programs. The Air Force advises the RAND Corporation of the major issues that should form the thrust of RAND's study program. RAND

then proposes individual studies to the Air Force as the annual Project RAND. The proposed studies are subject to change, review, approval, and monitoring by the Air Force office which has primary interest in the subject area. Also the Air Force may originate special assistance and liaison studies with RAND.

The Air Force contracts annually with Analytic Services, Inc. (ANSER), for special studies that originate within two organizations in the Office of the Deputy Chief of Staff for Research and Development. These studies are assigned to ANSER as the need arises.

#### REVIEW AND APPROVAL OF STUDIES

The Army has the most extensive review and approval process of all the services or of other defense-contracting activities. The Army's Research Analysis Corporation (RAC) program is part of the overall annual Army Study Program which includes study contracts that are awarded to other contractor activities. Proposed studies are subject to a formal and extensive review and approval process by many organizations at different levels of command. Final approval of RAC studies is the responsibility of the Assistant Secretary of the Army (Research and Development) if the study's estimated cost is more than \$100,000 or by the Chief of Research and Development if the estimated cost is \$100,000 or less.

The Navy and the Marine Corps also have formal annual study programs. Their review and approval processes are similar to, but not as extensive as, the Army's in that fewer organizations participate.

On the other hand the process OSD activities follow in reviewing and approving studies assigned to IDA is very informal. This responsibility is vested in a few organizations within the sponsoring activity, except for WSEG. In WSEG, this responsibility is assigned to only one group-- the planning group.

The Air Force's approach, unlike the other services' approaches, is somewhat similar to those of the OSD activities. Broad supervisory and policy guidance of the RAND

program is the responsibility of one group of senior air staff officers known as the Air Force Advisory Group (AFAG). The RAND program is reviewed, revised if necessary, and approved at an annual meeting between AFAG and RAND management. Under the ANSER contract, study requests are evaluated, reviewed, and approved within the Air Force-sponsoring activities before they are assigned to ANSER for accomplishment.

#### IDENTIFICATION OF STUDY PRIORITIES

Some services and activities have formal systems to identify study priorities whereas others do not. Priority identification is made on the basis of the major issues, broad problem areas, and/or the subject matter of individual studies.

The Army and the Navy systems identify priorities on broad problem areas, as well as on individual studies. The Marine Corps and the OSD activities identify priorities only on individual studies.

WSEG officials believe that, in the WSEG contract with IDA, there is no need for a formal priority identification system because of the small number of users (JCS and DDR&E). Discussions are held with the users to determine the most needed studies.

As mentioned earlier, the Air Force advises RAND of the major priority issues that are to be addressed by the study program. The Air Force has no formal procedures, however, for identifying the priority of studies for the ANSER study program because the mission of the ANSER program is to address pressing problems as they arise.

#### CONTRACTOR INFLUENCE OVER STUDY PROGRAMS

Contractors seem to have from very little to considerable influence on study programs or tasks. Often the contractors can and do recommend studies for inclusion in the study programs. In all cases, however, the sponsoring activity must accept these proposals before they are included in the final study program.

There are various ways in which the contractors can influence the content of the study programs. RAND appears to have broad latitude and potential for influencing the content of its program. Under an umbrella of major issues which the Air Force identifies annually, RAND originates individual study tasks which it proposes to the Air Force as Project RAND. However, the Air Force has final review and approval on the proposed studies.

The Navy compiles its own study projects to be accomplished by CNA and its in-house activities. Before these programs are finalized, CNA may object to, or suggest improvements in, the programs to the Navy.

The Army staff agencies and commands originate the individual studies that make up the Army Study Program and sometimes ask the professional staff at RAC to assist them in developing their proposed studies. In such instances, RAC exercises considerable influence; however, the Army believes that RAC has no direct influence on the Army planners who are ultimately responsible for determining the nature of the RAC study program. The Army contends that RAC contributes considerably to the planning effort but that RAC is not in a position to determine its outcome.

### CHAPTER 3

#### STUDIES HAVING QUESTIONABLE RELATIONSHIP

##### TO DEFENSE OR MILITARY MATTERS

Studies costing over \$124,000 conducted under IDA's Central Research program for fiscal year 1970 had no apparent relationship to defense or military matters. This program is substantially DOD funded. The contractor originated these tasks which covered such diverse topics as agricultural cost benefits, travel expenditures, balance of payments, and flood controls as a guide to handling environmental problems. Furthermore, since fiscal year 1964, the Defense Contract Audit Agency (DCAA) has been questioning the amounts IDA expended for central research for similar non-defense-related projects.

Under several of the FCRC contracts, the contractors can conduct a certain amount of independent research in areas of their own choosing. This is to encourage wide-ranging research in areas of potential interest to DOD. In most instances defense and military activities pay for these research efforts, provided that the work is related or oriented to current or future defense or military needs or interests.

Independent research under level-of-effort contracts affords the contractor an opportunity to explore areas which are not specific tasks of the study program. Some contractors, however, use their independent research to supplement or complement their specifically assigned tasks. Generally this effort is intended to further the growth, development, and retention of a highly qualified research staff and to maintain capabilities in the areas selected for study. Of the five FCRCs reviewed, three (IDA, RAC, and CNA) were provided funds specifically for an independent research program. Although RAND and ANSER do a certain amount of independent research, the Air Force neither sponsors nor pays for it directly.

Under the RAC and CNA contracts, the Army and Navy, respectively, require that the studies be related to interests of the sponsoring service. Moreover, the Army and the Navy decide whether the studies are relevant before they are

performed. On the other hand IDA's Central Research had no such specific guidance. Its Central Research studies are not approved until they are completed. Then it is decided whether it would be proper to pay the contractor for the work performed.

IDA's Central Research costs for the year are included in its general and administrative (G&A) expenses which are later distributed to contracts worked on during that year. This distribution is made through the application of the ratio of G&A expenses to other costs for the same year.

Using this method, we determined that contracts awarded by non-DOD agencies for the fiscal year reviewed absorbed charges of \$67,980 for Central Research. However, the cost of studies directed to non-DOD matters which were conducted under Central Research approximated \$124,000; therefore, in effect, DOD subsidized almost 50 percent of these non-DOD study efforts.

After our review, the Armed Services Procurement Regulation was changed to broaden the provisions of how independent research is to be allocated. Under this change, the contracting officer may approve use of a different method where the allocation of independent research through the G&A expenses does not provide for equitable cost allocation.

#### STUDIES QUESTIONED BY DCAA

Since fiscal year 1964 DCAA has questioned IDA expenditures for Central Research projects. A total of \$2,550,700 was expended during fiscal years 1964 through 1970. DCAA disapproved \$1,158,100 of these costs primarily because the projects were not related to DOD interests or because the result of the study was the compilation and/or publication of a book or books.

Projects disapproved for fiscal years 1964 through 1967 cost \$177,800. For this period the administrative contracting officer reinstated the full amount disapproved. For fiscal year 1968 costs of \$105,800 were disapproved. The administrative contracting officer is still reviewing IDA's appeal of these costs.

In its review, completed in June 1970, of the fiscal years 1969 and 1970 Central Research programs, DCAA questioned costs of about \$875,000. IDA stated that attempts to withhold payment of this amount would adversely affect its existence.

On August 28, 1970, the Director of DCAA, the Principal Deputy Assistant Secretary of Defense (Comptroller), members of DDR&E, and the contracting officer agreed that attempts by DCAA to withhold the fiscal years 1969 and 1970 costs would be deferred pending a review by DDR&E to determine whether the projects related to DOD interests. We were informed that DDR&E examined the projects and suggested to the contracting officer that the costs be allowed. As of June 1972, however, this matter still had not been settled.

We discussed our observations with an appropriate DDR&E official, and he concurred in our conclusions on the relevancy of studies to defense or military matters, as well as the determination of relevancy before the work is started. He stated, however, that other non-DOD agencies having IDA contracts also contributed to the Central Research program costs and that non-DOD studies absorbed some of these costs.

### CONCLUSIONS

Independent research portions of the Army and Navy contracts that we reviewed require that studies conducted be related to the sponsoring activity's interests. Both these services determine whether the studies are related to their interests before they are performed. The Central Research Program under the IDA contract had no such requirements. Although the program is substantially funded by DOD, many studies are performed on nondefense matters. During fiscal year 1970 the costs charged to non-defense-related studies represented, in effect, a subsidizing by DOD of approximately 50 percent of the costs incurred.

We believe that OSD should require that DOD bear only the cost of defense-related work conducted under Central Research and that the proposed studies be reviewed and approved before the work is undertaken. We believe also that OSD should act promptly to resolve and settle questions raised by DCAA on Central Research projects.

## CHAPTER 4

### SIMILARITY IN STUDIES PERFORMED UNDER

#### STUDY PROGRAMS OF DEFENSE ACTIVITIES

Similarity and overlap was found among 10 studies costing more than \$876,000 that were conducted by six different contractor and military organizations. Six of the studies were in foreign affairs areas. The others were directed to youth dissent in the Army.

#### SIMILARITY IN FOREIGN AFFAIRS STUDIES

Six studies on Japanese defense posture and policy dealt with certain points covered in one or more of the other studies. These studies were initiated or completed in fiscal years 1969 through 1972. Four of the studies analyzed internal forces which have an influence on Japan's defense policy; four discussed Japan's nuclear policy; and all six discussed the implications of Japan's defense policy for the United States. The following table illustrates the overlap.



Comparison of Studies on Japan

Broad Areas	Titles of studies on Japan					
	Japanese Attitudes toward Rearmament	Japanese National Security Policy Implications for the U.S.	Japanese Defense Policy and the U.S. Military Role in Asia	Japanese Security Posture and Policy 1970-80	Possibility of Uranium Enrichment in Japan	U.S. Defense Posture in Asia
	by The Hoover Institution for OASD (ISA) <sup>a</sup>	by The RAND Corporation for OASD (ISA)	by Research Analysis Corporation for U.S. Army	by Stanford Research Institute for U.S. Air Force	by The RAND Corporation for U.S. Air Force	by Institute for Defense Analysis for OASD (ISA)
	\$38,692 March 1972 <sup>b</sup>	\$66,800 June 1972 <sup>b</sup>	\$106,100 August 1971 <sup>b</sup>	\$190,000 August 1971 <sup>b</sup>	Cost Unknown <sup>b</sup> April 1970 <sup>b</sup>	\$47,500 March 1971 <sup>b</sup>
Rearmament	X					X
Nuclear Policy	X		X	X		X
Defense Policy	X	X	X	X	X	X
Internal Influence	X	X		X		X
External Influence	X		X	X		X

<sup>a</sup>Office of the Assistant Secretary of Defense (International Security Affairs).

<sup>b</sup>Approximate date of completion.

The above studies were in various stages of completion. We therefore made our judgment regarding overlap and similarity on the basis of the work already performed, study plans, summary sheet write-ups, and statements of work. Some of the study material presented or being reviewed and analyzed, in our opinion, covered a number of the same points. This overlap or similarity is identified by the studies' tasks or objectives.

To illustrate, several studies covered the internal influence on Japanese defense policy.

One of the tasks of the study entitled "Japanese Security Posture and Policy, 1970-1980" is to describe the major forces currently promoting change and those

attempting to perpetuate the status quo in post-World War II Japan and to assess relevant internal trends having an impact on military policy. The study entitled "Japanese Attitudes Toward Rearmament" examines the attitudes of specific groups in Japan concerning military preparedness and the use of Japanese military force outside Japanese territory.

The study entitled "Japanese National Security Policy Implications for the U.S." examines new trends in Japanese military security and their implications for the United States, with emphasis on internal forces entering into the decisionmaking process.

We discussed the numerous studies on Japan with OASD (ISA) personnel. They stated that, occasionally, similar studies were performed by several agencies. They believed that this approach could provide several viewpoints, alternatives, and conclusions on the subject area.

We identified several articles, in addition to these studies on Japan, in journals that were published in approximately the same time frame as the studies reviewed. These articles are as follows:

1. "Japan Beyond 1970," Foreign Affairs, April 1969.
2. "Japan: Eye on 1970," Foreign Affairs, January 1969.
3. "Toward the Politics of Complexity," Interplay, December 1969/January 1970.
4. "Japan and America--A Special Relationship?" Interplay, December 1969/January 1970.
5. "Japan: 'Same Bed, Different Dreams,'" Interplay, August 1970.

These articles discussed substantial information on topics that apply to the broad areas of the above chart. Some of the topics were:

- Japan's military strength.
- A new trend of military policy.
- Public opinion and production of nuclear weapons.
- Rearmament.
- American bases.
- Internal disturbances.
- Constitutional reforms.
- External alliances.
- Internal forces.
- External influence in Asia.
- Article 9 of the Constitution (The so-called no-war clause).

It is our opinion, after reviewing these articles, that much of the information that was called for in the contract studies was also available in the articles.

## REPORTING NEW STUDY EFFORTS

There are formal and informal procedures in DOD that are intended to eliminate undesirable overlap of study effort. Under Department of Defense Instruction 7720.13, defense activities are required to notify the Defense Documentation Center (DDC) when new study efforts are begun to enable managers to "coordinate programs easily with other DOD components and other agencies to eliminate undesirable overlap of effort \*\*\*." In this way studies involving work that may duplicate other study efforts can be identified.

Three of the aforementioned studies on Japan were not reported to DDC although required by DOD instructions. These studies were conducted for OASD (ISA). This office informed us that its general policy is not to contact DDC when new studies are initiated. Instead, it relies on informal procedures to insure that new studies do not duplicate completed or ongoing efforts.

One of these studies was initiated and completed before the Army and Air Force began studies costing about \$296,100. It is conceivable that, had this study been reported and had the Army and Air Force been aware of it, these services could have possibly eliminated, or at least reduced the extent of, their efforts.

## CONCLUSIONS

In our opinion, DOD can avoid similarity and overlap if proposed and completed studies are reported as required by present instructions. We believe that, had at least one of the above studies been reported, some of the similarity and overlap in the Japan area studies might have been avoided.

SIMILARITY OF CONTRACT STUDIES AND  
ARMY IN-HOUSE RESEARCH ON DISSENT

RAC has performed a number of studies on personnel dissent in the Army for various organizations. These studies cost approximately \$327,200. In late 1971 the Army established a new component of the U.S. Army Manpower Resources Research and Development Center called the Motivation and Training Laboratory to research various areas of personnel motivation, training, and morale.

During fiscal years 1972 and 1973 hearings before the House Committee on Appropriations, the Army requested \$900,000 to fund a laboratory project entitled "Applied Research on Dissent in the Army." In fiscal year 1972, as a result of a reduction in the appropriations, only \$100,000 was programmed for this effort. We examined the specific objectives of the RAC studies and the Army's project on dissent, and we believe that RAC had already covered a substantial portion of the in-house program. The following comparative table illustrates this.

Comparison of Studies on Dissent in the Army

	<u>Contracted Studies</u>			<u>Proposed Studies</u>	
	<u>Determination of the potential for dissidence in the U.S. Army</u>	<u>Future impact of dissident elements within the Army on the enforcement of discipline, law, and order</u>	<u>Value conflicts between civil society and military institutions</u>	<u>Applied research on dissent in the Army</u>	<u>Applied research on social changes affecting the Army</u>
<b>Specific objectives</b>	<p>To determine the nature of dissent activities in the U.S. Army and the characteristics of known dissidents.</p> <p>To develop indicators that may be useful in helping commanders to be aware of potential dissident behavior.</p> <p>To suggest possible changes in military procedures and practices that could serve to reduce dissent.</p>	<p>To determine the extent and nature of dissidence in the Army.</p> <p>To determine the factors that contribute to the actions of dissident elements.</p> <p>To estimate the trend in the various types of dissident activities for the next two to four years.</p> <p>To determine the effect of dissident activities on the enforcement of discipline, law, and order.</p> <p>To determine the adequacy of military police procedures for dealing with dissidence.</p> <p>To determine Army-wide measures which could serve to reduce dissidence.</p>	<p>To describe significant points of value difference between the social value system in civilian life as contrasted with that of Army personnel, with emphasis on the values of the nation's youth.</p> <p>To determine the feasibility of change in those Army institutional practices, policies, and traditions which appear to be causes of value differences and which will accommodate the societal values without compromising the Army's effectiveness.</p>	<p>To learn about the nature and extent of youth dissent against the military.</p> <p>To develop Commander's guidelines for handling dissent.</p> <p>To gain knowledge about why one organizational unit has more dissent than another.</p> <p>To learn about the way one soldier influences another in the process of developing dissent.</p> <p>To determine the extent to which current military discipline creates dissent.</p>	<p>Measurement of attitudes, values, and social behaviors of soldiers.</p> <p>Determination of the part played by military personnel administration and management, leadership, discipline, socialization processes, and other factors in the social changes occurring in the Army.</p> <p>Experimentation with ways to gain youth acceptance of necessary Army standards.</p>
<b>Conducted by</b>	RAC	RAC	RAC	Motivation and Training Laboratory	Motivation and Training Laboratory
<b>Estimated cost</b>	\$109,571	\$111,355	\$106,267	\$900,000 (fiscal year 1972) <sup>a</sup>	\$900,000 (fiscal year 1973)
<b>Date of report or date of conduct of study</b>	Vol. I, Mar. 1971 Vol. II, May 1971	Jan. 1972	Feb. 1972	Fiscal year 1972	Fiscal year 1973

<sup>a</sup>Due to funding cuts, only \$100,000 was programed.

In a discussion in February 1972, Laboratory officials indicated that the original objectives--as set forth during fiscal year 1972 appropriations hearings--still applied. At that time the project had just started and was being staffed.

In a June 1972 discussion, however, Laboratory officials informed us that the original objectives no longer applied. The project title had been changed to "Applied Research on Social Changes Affecting the Army," and the Laboratory planned a comprehensive research program for fiscal year 1973. To support the project in fiscal year 1973, the

Army again requested funds of \$900,000. Because of the difficulties in acquiring personnel to staff the project and the desire to get the work underway, the Laboratory expects to obtain competitive bids for contractor support. This support may have to be continued into subsequent fiscal years.

Laboratory officials are aware of the RAC studies on dissent, but they believe their research project is dissimilar. These officials stated that they would develop a new and, in their opinion, better approach to study dissent or social changes in the Army.

We reviewed the RAC studies and the planned objectives of the proposed project. It is our opinion that, although the wording differs, the essence of the work planned by the Laboratory for fiscal year 1973 is similar to the RAC studies. For example, one of the objectives of the Laboratory's proposed study was identified in its presentation to the House Committee on Appropriations as the "measurement of attitudes, values, and social behaviors of soldiers." According to the Laboratory's Research and Development Planning Summary, a variety of approaches would be used, including surveys, personal interviews, and traditional experimental procedures.

One of the objectives of the completed RAC study entitled "Value Conflicts Between Civil Society and Military Institutions" was:

"To describe significant points of value difference between the social value system in civilian life as contrasted with that of Army personnel, with emphasis on the values of the nation's youth."

RAC obtained the data used in this study from surveys and questionnaires. This data was analyzed through the usual acceptable techniques.

### CONCLUSIONS

RAC has completed a number of studies dealing with various aspects of dissent in the Army and with the differences

between the social value system in civilian life contrasted with that of Army personnel. The recently established Motivation and Training Laboratory proposes to research social changes in the Army (previously identified as research on dissent in the Army), primarily through contracts awarded to outside sources. In our opinion, the objectives, approaches, and techniques accomplished by RAC and proposed by the Motivation and Training Laboratory appear to be substantially similar.



## CHAPTER 5

### FEASIBILITY OF JOINT OR COOPERATIVE RESEARCH

During our review we noted that the FCRCs were conducting many studies in areas in which two or more of the military services share a mutual interest. Some of these areas were strategic offensive and defensive systems, close air support, air superiority, general purpose forces, and foreign affairs.

Numerous studies in the above areas have been, and will continue to be, performed by FCRCs. There are dozens of studies in the strategic area alone involving many man-years of effort and, in some cases, employing complex computer models.

Each service has a direct and competitive interest in these areas. Admittedly, there are basic differences of opinions on how, by whom, and the extent to which certain missions should be accomplished. As a result, two or more FCRCs are simultaneously conducting studies for their sponsors in similar areas.

For example, RAND and CNA are continually studying strategic force mixes for the Air Force and the Navy, respectively, while IDA is examining strategic force mixes for JCS and DDR&E.

In another area, RAND is planning to consider the trade-offs between sea-based and land-based tactical aircraft with emphasis on the vulnerability and deterrence contributions of carriers, while the Navy's CNA is studying the tactical air situation with emphasis on the carrier concept.

### ADVOCACY EFFORTS

Some of these studies appear to support advocacy efforts. In one instance the Army wanted its FCRC to conduct an analytical study to determine trade-offs among General Purpose Force elements of the four services. The need for this effort was expressed in an early meeting of the Study

Advisory Group which was responsible for monitoring the study. At that time, it was recognized that, during the previous year's force-level determinations, the Army did not have a strong enough position to deal adequately with Air Force and Navy General Purpose Force levels.

In another instance, RAND indicated in its semiannual status report to the Air Force that some studies planned to be conducted in the tactical area may be able to support the case for preference of fixed-wing, rather than rotary-wing, aircraft in the close-support role. It should be noted that the Air Force does not use rotary-wing aircraft in close air support.

Studies by ANSER were conducted for the express purpose of providing analytical support for the B-1 weapon system. In a letter to ANSER the Air Force stated that, without a doubt, the support provided played a vital role in the continued success of its advocacy efforts for the B-1 program.

#### FEASIBILITY OF JOINT OR COOPERATIVE RESEARCH-- AN APPROACH

We believe that the services should consider some joint or cooperative study of problem areas that cut across service lines. Most of the studies generally use similar input data and consider similar elements. For example, the following elements usually are considered in a strategic weapons study: offensive and defensive weapons, targets, assumptions, threat, scenarios, strategies, etc. Information on types, numbers, and characteristics of U.S. strategic offensive and defensive weapons is reasonably defined and known within relatively narrow limits. This would also apply to target information.

We do recognize that judgment is involved in determining assumptions, threat, strategies, scenarios, and assignment of target values and that significant differences occur in these judgments. We have found from other reviews that a case can be supported for almost any weapon system or force mix by tailoring the assumptions and scenarios. This is all the more reason, at least in some instances, for bringing these disparate judgments, along with the relevant facts, under one analytical roof.

This could be accomplished, we believe, if the services would agree on an analytical framework having common or alternative sets of assumptions, models, threats, and other essential elements. As an illustration, a study effort using this approach may proceed as follows:

1. Investigate the cost effectiveness of competing weapon systems against common sets of targets on the basis of sets of scenarios.
2. Identify and narrow the ranges of differences between service approaches.
3. Avoid discussion of which target/scenario combinations proposed by each service is the correct assessment of the situation.
4. Conduct the effectiveness study on the basis of a range of performance variables since performance of the proposed systems is not firmly established.

One or more FCRCs could then conduct the study (or studies). Assuming one FCRC represented one service and the other FCRC represented another service, each would study its weapon system against the combined set of threats, scenarios, targets, etc., developed from discussions by the study participants. The results of the study (or studies) would be reported to the decisionmakers of all concerned services.

We believe that the advantages of this approach are that (1) decisionmakers would be better able to compare service positions on key issues, (2) the study results could be more directly tied into program decisionmaking, and (3) monetary savings would result from fewer study efforts by fewer contractors.

In its report on the Department of Defense, the Blue Ribbon Defense Panel noted that it would be highly desirable to provide flexibility whereby an FCRC sponsor (defense activity) could, on occasion, have research done by another FCRC. The Panel recommended that DOD study the collective use of FCRCs. We believe our proposal is in line with the spirit and the intent of the Panel's recommendation.

We discussed our proposal with an official of the office of DDR&E. He agreed that cases exist in which the services conduct concurrent studies in areas that cut across service lines. He also agreed that in some cases studies are conducted to support an advocacy position and that this is a problem area. He felt that our proposal on joint or cooperative research had merit. It was his opinion, however, that such an effort at present OSD staffing and budgetary constraints would not be feasible.

## CHAPTER 6

### MATTERS FOR CONSIDERATION BY THE COMMITTEE

In view of the Committee's interest in FCRCs and in other contract and in-house study activity, the Committee may wish to explore the following matters with DOD officials.

1. The need to insure that DOD bears only the cost of defense-related Central Research study projects and that the projects are reviewed and approved before they are begun. (See ch. 3.)
2. The need to insure that questions raised by DCAA on study projects are promptly resolved. (See pp. 10 and 11.)
3. The manner in which and the extent that the project proposed by the Army Motivation and Training Laboratory differs from past studies; specifically, the problems or questions that the Laboratory proposes to answer and the techniques it proposes to use which differ significantly from those used in the RAC studies. (See pp. 17 to 20.)
4. The need for some joint or cooperative efforts on studies that cut across service lines or are in areas in which the military services share a mutual interest. (See pp. 22 to 24.)

## CHAPTER 7

### SCOPE OF REVIEW

We conducted our review at military and defense activities responsible for administering the study programs under the level-of-effort contracts with selected FCRCs. These FCRCs are listed in the introduction of this report.

At the Secretary of Defense level, we visited offices directed by the Assistant Secretary (International Security Affairs), the Assistant Secretary (Systems Analysis), and the Director of Defense Research and Engineering. In our examination of the Army study program, we visited offices under the Chief of Research and Development and the Combat Developments Command. In the Navy we visited offices under the cognizance of the Chief of Naval Operations. In the Marine Corps our review was conducted at offices under the Deputy Chief of Staff (Research, Development, and Studies). Our review of the Air Force study programs was conducted at appropriate offices under the direction of the Deputy Chief of Staff, Research and Development.

Our review was confined to those level-of-effort contracts for operations research/systems analysis type of services. We specifically directed our efforts toward the operating procedures used by DOD and the military services to originate, review, and approve proposed studies; we also analyzed individual study efforts for need, similarity, and use. Formal comments on our observations have not been requested from DOD. Some of the observations were discussed with agency officials.

MAJORITY MEMBERS  
**GEORGE H. MAHON, TEX.**  
 CHAIRMAN

MICHAEL J. KIRWAN, OHIO  
 JAMIE L. WHITTEN, MISS.  
 GEORGE W. ANDREWS, ALA.  
 JOHN J. ROONEY, N.Y.  
 ROBERT L. F. SIKES, FLA.  
 OTTO E. PASSMAN, LA.  
 JOE L. EVINS, TENN.  
 EDWARD P. BOLAND, MASS.  
 WILLIAM H. MATCHER, KY.  
 DANIEL J. FLOOD, PA.  
 TOM STEED, OKLA.  
 GEORGE E. SHIPLEY, ILL.  
 JOHN M. SLACK, JR., W. VA.  
 JOHN J. FLYNT, JR., GA.  
 NEAL SMITH, IOWA  
 ROBERT N. GIAMMO, CONN.  
 JULIA BUTLER HANSEN, WASH.  
 CHARLES E. JOELSON, N.J.  
 JOSEPH P. ADDARDO, N.Y.  
 JOHN J. MC FALL, CALIF.  
 W. R. HULL, JR., MD.  
 JEFFERY COHELAN, CALIF.  
 EDWARD J. PATTEN, N.J.  
 CLARENCE D. LONG, MD.  
 JOHN O. MARSH, JR., VA.  
 SIDNEY R. YATES, ILL.  
 BOB CASEY, TEX.  
 DAVID PRYOR, ARK.  
 FRANK E. EVANS, COLO.

**Congress of the United States**  
**House of Representatives**  
**Committee on Appropriations**  
 Washington, D.C. 20515

September 24, 1969

MINORITY MEMBERS

FRANK T. BOW, OHIO  
 CHARLES R. JONES, N.C.  
 ELFORD A. CEDERBERG, MICH.  
 GLENARD P. LIPSCOMB, CALIF.  
 JOHN J. RHODES, ARIZ.  
 WILLIAM E. MINSHALL, OHIO  
 ROBERT H. MICHEL, ILL.  
 SILVIO O. CONTE, MASS.  
 ODIN LANSER, MINN.  
 BEN REIFEL, S. DAK.  
 GLENN R. DAVIS, WIS.  
 HOWARD W. ROBISON, N.Y.  
 GARNER E. SHRIVER, KANS.  
 JOSEPH M. MC DADE, PA.  
 MARK ANDREWS, N. DAK.  
 LOUIS C. WYMAN, N.H.  
 BURT L. TALCOTT, CALIF.  
 CHARLOTTE T. REID, ILL.  
 DONALD W. RIEGLE, JR., MICH.  
 WENDELL WYATT, OREG.  
 JACK EDWARDS, ALA.

CLERK AND STAFF DIRECTOR

KENNETH SPRANKLE

CLERK AND STAFF DIRECTOR

AUL M. WILSON

TELEPHONE:

CAPITOL 43121

EXT. 271

OR

225-2711

Honorable Elmer B. Staats  
 Comptroller General of the United States  
 U. S. General Accounting Office  
 Washington, D. C. 20458

Dear Mr. Staats:

The Committee hearings on the Department of Defense Operation and Maintenance budget requests for 1970 contain discussions of several new Automatic Data Processing (ADP) systems planned for installation in fiscal year 1970 and future years. Such systems as the Army "Conarc Class One Automatic System (COCOAS)," the Navy "Integrated Command/Management Information System (NICOMIS)," and the Air Force "Advanced Logistics System (ALS-X)" are actively under development.

It would be most helpful if the General Accounting Office maintained a direct effort in the area of development, installation, and operation of automatic data processing systems with periodic reporting of the results of its reviews. The guidelines established in earlier, related, Committee letters of November 28, 1967 and August 6, 1968 adequately state the scope of the work to be undertaken. Reports such as yours of March 13, 1968 and January 16, 1969 are of the type in which the Committee is interested.

The Committee would also be interested in an opinion as to the effectiveness of the directive of the Deputy Secretary of Defense, dated June 7, 1968, which places the responsibility for the management of automatic data processing functions under the control of the Office of the Assistant Secretary of Defense, Comptroller.

**BEST DOCUMENT AVAILABLE**