THE PERCEIVED EFFECTS ON WEAPON SYSTEMS ACQUISITION IN AIR FORCE SYSTEMS COMMAND WHILE OPERATING UNDER A CONTINUING RESOLUTION AUTHORITY

THESIS

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THESIS

Presented to the Faculty of the School of Systems and Logistics of the Air Force Institute of Technology Air University In Partial Fulfillment of the Requirements for the Degree of Master of Science in Systems Management

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Abstract

This research effort reflects the perceived effects of a Continuing Resolution Authority (CRA) on weapon systems acquisition as observed by experienced acquisition personnel. The analysis was accomplished by interviewing military and civilian personnel assigned to Air Force System's Command's Space Division and Aeronautical Systems Division. All interviewees were currently assigned to one of the following areas: program control, contracting, program management, or budget analysis. Many of those interviewed had worked in more than one of the four areas prior to their current assignment.

The analysis reflects the perceived cost, schedule, contracting, and other impacts caused by a CRA. In addition, issues regarding CRA guidelines and suggested changes to CRA policy were addressed. Furthermore, the analysis discusses the inefficiencies caused by a CRA and the adjustments personnel have made and are making to reduce and/or avoid the impacts of a CRA.

The results of this research effort indicate that a CRA has become more the rule than the exception. Consequently, personnel have learned to plan for it and work around it as best as they can. The net effect is an increased administrative burden in all four areas of acquisition that were researched. All interviewees felt a CRA should be the exception versus the rule and that Congress should make changes
to eliminate the conditions which have been causing a CRA year after year. Few felt that changing the fiscal year to coincide with the calendar year would solve the CRA problem. Some felt that changing the fiscal period from one to two years had potential as being a partial solution. Other recommendations are discussed.
THE PERCEIVED EFFECTS ON WEAPON SYSTEMS ACQUISITION IN AIR FORCE SYSTEMS COMMAND WHILE OPERATING UNDER A CONTINUING RESOLUTION AUTHORITY

I. Research Problem

Introduction

A Continuing Resolution Authority is an Act of Congress that allows the Department of Defense (DOD) and other government agencies to continue to operate until the appropriation bill for each agency becomes law. In eight of the past ten fiscal years, the DOD has had to operate under a Continuing Resolution Authority (CRA) until the DOD Appropriation Bill was submitted by Congress to the President of the United States and was signed by the President (2). Since operating under a CRA restricts the level of expenditures, it seems appropriate to ask if there are any adverse effects related to cost, schedule, and/or contracting. One would think that the Congress would be interested in these effects since Congress brings about the situation which causes a CRA by failing to have a proposed appropriation bill ready for the President’s signature prior to the first of October (which is the beginning of the fiscal year). Also, DOD and lower levels in the weapon systems acquisition chain (i.e., Secretary of the Air Force, Headquarters Air Force, Headquarters Air Force Systems
Command, Product Divisions, and System Program Offices) ought to be interested in knowing the ramifications of having to operate with a CRA.

**Problem Statement**

In order to narrow the scope of the issue, the effects of a CRA were researched by specifically looking at its effects on weapon systems acquisition in Air Force Systems Command (AFSC). Therefore, the research objective was to uncover the effects of a CRA, whether the effects were good or bad. The research included impacts of a CRA as perceived by experienced personnel at various Product Divisions who worked in contracting, program control (cost and schedule), budget analysis (costs), and project management (cost and schedule).

**Background**

In order to understand what a Continuing Resolution Authority is, one must first understand how an Air Force program is formulated. The following information provides background information regarding the DOD Planning, Programming, and Budgeting System (PPBS), the four phases of the budget cycle, and a CRA.

**Planning, Programming, and Budgeting System.** The PPBS used in the Department of Defense was introduced by former Secretary of Defense McNamara in the early 1960's (3:19). The system's principal purpose was to institutionalize planning and budgeting functions and to add a new function — programming — to provide a bridge between planning and budgeting. The PPBS is used to provide a Five Year Defense Program (FYDP) which has been logically structured, thoroughly reviewed, and
approved by the Secretary of Defense. The FYDP includes data on appropriation (inputs), DOD components (processors), and major force programs/program elements (outputs). Thus, the FYDP consists of data regarding program forces, personnel, and costs (1:13; 7:III-1).

The basic concept of the PPBS has remained intact over the years. In Air Force Systems Command, direct involvement begins with a budget call to the field in July to commence working on the Program Objective Memorandum. This happens concurrently as higher levels are working on the threat assessment (planning phase of the PPBS). The PPBS ends about one year and six months later with the President's budget submission in January.

The product of the PPBS is a budget. The planning and programming cycles of the PPBS lay the groundwork for the budget. The mechanics of the budget development occur during the budget cycle. Each of the three cycles (planning, programming, and budgeting) of the PPBS are discussed in more detail below.

The Planning Cycle. The planning cycle begins with the development of an assessment of the threats to national security and a proposed strategy to meet those threats. The primary responsibility for military planning is assigned to the Joint Chiefs of Staff. Their plans are reviewed by the Office of the Secretary of Defense (OSD) and lead to the development of programming guidance to the military services. The cycle ends when the Secretary of Defense issues the Defense Guidance to the services. This document "provides fundamental policy, strategy, issues, and rationale underlying the total defense program [4]."
The Programming Cycle. In this cycle, defense objectives are developed and there is a determination of the forces and personnel required to attain the approved objectives. The services develop and submit their program requests which are reviewed and result in OSD decisions in the form of budget guidance. The Program Objective Memorandum is the main document during this phase (3:22).

The Budgeting Cycle. During the budgeting cycle, there is a conversion of forces and projects to monetary terms and a translation of approved programs into time phased money requirements (4). The budget cycle portion of the PPBS involves the development of the service budgets via the final pricing out of the revised Program Objective Memorandum programs (3:22). The service budgets are then submitted and, in their final form, comprise the Defense budget request. In January/February, the President submits his budget to Congress (3:24). This submission of the Unified Federal Budget (more commonly known as the President's Budget) to Congress denotes the end of the budget development phase. This first of four phases in the budget cycle is the last step in the PPBS process. The other three phases of the budget cycle will be discussed next.

The Four Phases of the Budget Cycle. The four phases of the budget cycle are budget development, budget enactment, budget execution, and review and audit.

First Phase: Budget Development. The budget development is the first of the four phases in the budget cycle. It occurs in the PPBS cycle and has already been discussed in the PPBS section of this paper.
TABLE I
Budget Enactment Milestones (1:52-59)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January/February</td>
<td>President presents the Unified Federal Budget to Congress within fifteen days after Congress reconvenes</td>
</tr>
<tr>
<td>15 May</td>
<td>Authorization Bill reported and First Concurrent Resolution made</td>
</tr>
<tr>
<td>7th Day after Labor Day</td>
<td>Passage of Appropriation Bill</td>
</tr>
<tr>
<td>15 September</td>
<td>Second Concurrent Resolution made</td>
</tr>
<tr>
<td>25 September</td>
<td>Reconciliation Bill passed</td>
</tr>
<tr>
<td>1 October</td>
<td>Appropriations are effective for beginning of the fiscal year</td>
</tr>
</tbody>
</table>

Second Phase: Budget Enactment. During the budget enactment phase, "Congress has hearings and debates on the proposed budget and then prepares authorizing and appropriating legislation by 25 September [3:24]." Table I shows the ideal time schedule of the events that occur in this phase of the budget cycle. These events must be completed prior to the beginning of the fiscal year in order to avert the necessity of having a CRA.

Unified Federal Budget. The Unified Federal Budget covers all federal agencies. It is submitted by the President to Congress within fifteen days after Congress reconvenes. This budget submission denotes the end of the budget development phase and the beginning of the budget enactment phase (4).
Authorization Bill. The authorization bill is the legislation authorizing specific government programs to be pursued. The authorization process should be based upon a review of program and management considerations. Where a specific amount is authorized, the amount is generally intended to represent the maximum which the committees and the Congress believe is justifiable to be spent in order to obtain the benefits expected from the legislation. However, no spending authority is provided at this point.

First Concurrent Resolution. Prior to the adoption of this resolution, neither House may consider any revenue, spending, entitlement, or debt legislation (1:55). This resolution provides targets to guide further consideration of budget items. The use of targets, rather than firm ceilings, provides two benefits to the Congressional process. First, targets permit the Congress to have flexible responses to changing circumstances. Second, targets do not downgrade the usefulness of the authorization and appropriation processes.

Passage of Appropriation Bills. These bills mark the completion of action on all regular budget authority and entitlement bills. The timing of the passage of the appropriation bills is critical. These bills are supposed to be passed by the seventh day after Labor Day. The reason for the criticality of the deadline is that there are still two more milestones (the Second Concurrent Resolution and the Reconciliation Bill) of the budget enactment phase to be completed prior to the beginning of the fiscal year. If the appropriation bills are not passed by their deadline, then there is
a high probability that the last two milestones will not be completed by the beginning of the new fiscal year.

Second Concurrent Resolution. This resolution affirms or revises the decisions made in the first resolution. The changes that may be addressed include "rescinding or amending appropriations and other spending legislation, raising or lowering revenues, making adjustments in the debt limit, or any combination of such actions [1:58]." However, if a Second Concurrent Resolution is not passed, the First Concurrent Resolution targets become binding.

Reconciliation Bill. This bill reconciles the appropriation bills to the Second Concurrent Resolution. It denotes the completion of the reconciliation process and the budget enactment process.

Third Phase: Budget Execution. Budget execution begins after the President of the United States signs the DOD Appropriation Bill. Table II summarizes the flow of funds. This table denotes the typical flow of funds. However, in actuality, the Office of Management and Budget has a choice between full apportionment of funds and temporary impoundment of funds. The Budget and Impoundment Control Act of 1974 provides that the executive branch may regulate the rate of spending by deferral or recision of budget authority. Deferrals are temporary withholdings of budget authority. They cannot extend beyond the end of the fiscal year, and they may be overturned by either the House or the Senate at any time. Recisions permanently cancel existing budget authority and must be enacted by the full Congress. "If Congress does
### TABLE II
Flow of Funds (4)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congress</td>
<td>Appropriates a budget authority by an Act of Congress to make payments out of the Treasury for specified purposes.</td>
</tr>
<tr>
<td>President</td>
<td>Signs Appropriation Act</td>
</tr>
<tr>
<td>Treasury</td>
<td>Issues 'Appropriation Warrant' to establish funding program for Air Force</td>
</tr>
<tr>
<td>Office of Management and Budget</td>
<td>Apportions: A determination as to amount of obligations which may be incurred during a specified period. Does not make funds available.</td>
</tr>
<tr>
<td>USAF</td>
<td>Allocates: Making funds available to subordinate organization levels.</td>
</tr>
<tr>
<td>AFSC</td>
<td>Allots: A delegation of obligation authority within the command.</td>
</tr>
<tr>
<td>Division</td>
<td>Redirects program internally or externally to the cognizant procuring activity.</td>
</tr>
</tbody>
</table>
not approve a proposed rescission within 45 days of continuous session, the withheld funds must be made available for obligation [7:III-9]."

**Fourth Phase: Review and Audit.** The fourth and final phase of the budget cycle is the review and audit phase. "This phase is performed continually by OMB, General Accounting Office (GAO), the Defense Audit Service, and other audit agencies [3:24]." Though individual organizations are responsible for assuring that the obligations they incur and the resulting outlays are in accordance with the law and regulations, various audit agencies ensure that this is happening (7:III-9). For example, the OMB reviews program and financial reports. In addition, the GAO, the Defense Contract Audit Agency, and the Air Force Audit Agency regularly audit, evaluate, and report on federal programs such as those programs involving weapon system acquisition in Air Force Systems Command.

**Continuing Resolution Authority.** When the budget enactment phase is not completed by the beginning of the fiscal year, then Congress must pass a Continuing Resolution Authority if the government agency affected is to continue operations.

A CRA is a 'stop-gap' measure intended to provide funds to maintain government operations at a minimum rate necessary for the orderly continuation of activities which were conducted in the previous fiscal year until regular appropriations are enacted [8:20].

If there is no Appropriation Act or a CRA, government operations must cease. The only costs allowed to be incurred in this situation are those to "shut down," i.e., caretaker type costs (8:20).
Historical Perspective. Table III summarizes the dates when the DOD Appropriation Bill has been passed for the last ten fiscal years. Note that in eight of the last ten fiscal years, the appropriation bill has not been passed by the scheduled date. In each of those years, this has resulted in one or more CRA's being passed before the enactment of the Appropriation Act.

Causes. The primary cause of a CRA is that Congress does not meet the budget enactment milestone deadlines. Another factor contributing to the delay of the enactment of the Appropriation Bill is that the President of the United States rarely signs the first proposed DOD Appropriation Bill submitted to him by Congress. The current policy is that the President must approve the whole bill as is and sign it or veto the whole bill. The President does not currently possess the authority for a line item veto (6). Having a line item veto would allow the President to disagree on individual budget line items and sign the Appropriation Bill for only those line items that he approved. However, during President Reagan's State of the Union Address on 26 January 1984, he proposed that there should be an amendment to the constitution giving the President of the United States line item veto authority on the government budget. Mr. Reagan went on to say that 43 of the 50 state governors have line item veto authority. He strongly felt that this was a needed change in the budget process. Perhaps, by giving the President line item veto authority, there might be a reduction in the delay of enactment of an appropriation bill.
TABLE III

Dates of DOD Appropriation Bills (2)

<table>
<thead>
<tr>
<th>Fiscal Year (FY)</th>
<th>Date Bill Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>8 Oct 74 (late)</td>
</tr>
<tr>
<td>1976</td>
<td>9 Feb 76 (late)</td>
</tr>
<tr>
<td>1977*</td>
<td>22 Sep 76 (on time)</td>
</tr>
<tr>
<td>1978</td>
<td>21 Sep 77 (on time)</td>
</tr>
<tr>
<td>1979</td>
<td>13 Oct 78 (late)</td>
</tr>
<tr>
<td>1980</td>
<td>21 Dec 79 (late)</td>
</tr>
<tr>
<td>1981</td>
<td>15 Dec 80 (late)</td>
</tr>
<tr>
<td>1982</td>
<td>29 Dec 81 (late)</td>
</tr>
<tr>
<td>1983</td>
<td>21 Dec 82 (late)</td>
</tr>
<tr>
<td>1984</td>
<td>8 Dec 83 (late)</td>
</tr>
</tbody>
</table>

* Fiscal Year start changed from 1 July to 1 October per the Congressional Budget and Impoundment Control Act of 1974.
Guidelines. The general guidelines while operating under a CRA are as follows (8:20):

1. No new starts can be initiated.
2. No accelerating/increasing the scope of existing programs.
3. Avoid obligating funds where Congressional Committees have expressed criticism or otherwise indicated reductions for specific programs.

On 7 October 1983, Col William F. H. Zersen, the Deputy for the Comptroller at Space Division (one of the product divisions under Headquarters Air Force Systems Command), sent out a policy letter regarding CRA guidelines for FY 84 funds which defined "new starts" as follows:

'no appropriation or funds made available or authority granted pursuant to this subsection shall be used to initiate or resume any project, activity, operation or organization which is defined as any project, subproject, activity, budget activity, program element, and subprogram within a program element, and for investment items is further defined as a P-1 line item in a budget activity within an appropriation account and a R-1 line item [*] which includes a program element and subprogram element within an appropriation account, for which appropriations, funds, or other authority were not available during the fiscal year 1983 [10].'

* P-1 line item: a procurement budget line item for a weapon system program/project that is contained on the P-1 document initiated by Headquarters Air Force.
R-1 line item: a research and development budget line item for a weapon system program/project that is contained on the R-1 document initiated by HQ USAF.
In addition, Col Zersen's letter to the program control offices at Space Division stated that no new multi-year procurements could be initiated (10). Multi-year procurements are those procurements in which the government contracts for more than the current-year buy. Some examples of multi-year procurements are the F-16, B-1B, and RC-10 programs at ASD and the Navstar Global Positioning Satellite program at SD.

The guidelines used in determining CRA funding levels are as follows (9:9):

a. If the appropriation has been passed by both Houses, it is the agreed amount of the two Houses, or if in disagreement, the lower of the two Houses.

b. If the appropriation has been passed by the House, but not by the Senate, it is last year's level or the House level, whichever is lower.

c. If neither House has acted, the funding level is the budget estimate or last year's appropriation level, whichever is lower.

Note that CRA activities are not governed by any government regulations. They are governed by messages and policy letters that are passed down the chain of command. These letters are written to convey Congressional intent.

Justification for Research

In today's society, government funding/spending has come under increased scrutiny by the press and public. Areas such as schedule slippages, cost overruns, delays in starting programs, and contractual activities are being closely watched. One area, cost overruns, seems to be a persistent problem in programming and budgeting for
acquisition. The problem seems to be most persistent at the federal level but is frequently cited at the state and local levels as well (5:118). Cost overruns have been attributed to such things as planning and programming deficiencies, organizational rivalries, premature commitment to production with resulting engineering changes, over-optimism by buyers, buy-in attempts by sellers, changes in program scope, poor estimating, and inflation (5:118). Another contributory factor may be a delay in the enactment and the signing of the appropriation bill, and the consequent late availability of funds.

Hence, the effects of not having the appropriation bill signed by the beginning of the federal government's fiscal year were researched in order to determine if the lack of a signed appropriation bill is a contributing factor to cost overruns, schedule slippages, delays in start of programs, and negative impacts to contractual activities.

Since Air Force Systems Command is the organization responsible for acquiring major weapon systems for the Air Force, the research efforts concentrated on the effects of operating under a Continuing Resolution Authority in this major command.

Scope of Research

Continuing Resolution Authority affects any government agency whose appropriation bill has not been passed by the first of October. In the past ten fiscal years (except for fiscal year 1983), each executive department has had its own Appropriation Bill (2). The scope of this research was to concentrate on passage of the DOD Appropriation Bill. In particular, the research effort focused on recent years when
the DOD Appropriation Bill was not passed by the first of October. In each of those cases, a CRA was passed. Efforts were made to determine the perceived effects on cost, schedule, and/or contracting of weapon systems acquisition while operating under a CRA.

Research Question

What are the perceived effects on weapon systems acquisition in Air Force Systems Command while operating under a Continuing Resolution Authority?
II. Research Methodology

Selection of Approach

Chapter I provided the general background and justification for research on the subject of potential impacts on weapon systems acquisition in Air Force Systems Command (AFSC) while operating under a CRA. In particular, the areas researched were cost, schedule, contracting, and other perceived impacts.

Since CRA guidelines and funding activities change somewhat from year to year, investigation of the various areas of impact seems more appropriate via a purposive, nonprobabilistic sampling versus probabilistic sampling. This type of sampling was chosen because it is more conducive to pilot studies that attempt to ferret out useful information from the data collected in new areas of research. Since the effects of CRA on weapon systems acquisition in Air Force Systems Command has never been researched before, the researcher attempted to be as objective as possible in gathering data pertaining to positive and negative impacts. Those areas with the most negative impacts will be recommended for further research in order to develop and propose guidance to reduce the detrimental effects. The purposive type of nonprobabilistic sampling technique was selected rather than random sampling because it involves collecting data from experts in the field who meet certain criteria. These criteria will be discussed in the next section. Therefore, the purposive nonprobabilistic sampling was performed via personal interviews.
Data Collection

In order to obtain the information sought regarding effects of a CRA, certain experts were interviewed. These experts consisted of military and civilian personnel who currently work at either Space Division (SD) or Aeronautical Systems Division (ASD). The experts worked in either program control, contracting, budget analysis for the Comptroller, or program management for weapon systems programs.

Program Control personnel are defined as those people formally assigned to a program control directorate in a Systems Program Office (SPO). They support the program managers in the technical directorates by providing expertise in scheduling, programming, and budgeting activities. Among other things, they are responsible for budget execution which gets them directly involved with a CRA. This direct involvement occurs as they must decide what the program can and cannot fund at the beginning of the fiscal year. Contracting personnel are those who are assigned to a contracting directorate. These personnel consisted of buyers and Procurement Contracting Officers. Therefore, they are the ones who negotiate contracts and contract modifications with the contractors. They also monitor the government contracts. Budget analysts are those who have staff positions working for the Comptroller in the budget area. They are the personnel who receive the CRA guidelines from Air Force Systems Command and send out their version to the program control personnel. They are also the people that the program controllers call for interpretations of the CRA guidelines. If the budget analysts are not sure how to interpret the guidelines, they in turn call the budget office at the next higher level in the
Thus, they help to determine what the program control people can and cannot fund under a CRA. Lastly, program managers are being defined as the technical personnel who manage a particular part of the program. These are the people who are directly responsible for the program. They are supported by program control and procurement within the SPO. The budget analysts support the program office and primarily interface with program control regarding budget actions and issues. In addition, all those interviewed met the following criteria:

1. Military: at least two years at current job or at least three years in AFSC.

2. Civilian: at least three years at current job or at least four years in AFSC.

The interviews were conducted on a one-on-one basis. In order to give the interviewees time to think about the questions and to collect data to support their positions, the interview questions were mailed to the interviewees in advance. However, it was not the intention of the researcher for the interviewees to write their responses and mail the survey back. The researcher's intentions were to give the interviewees time to think about and prepare for responses to the interviewer's questions. Hopefully, more useful and factual data was collected this way versus not sending the structured survey to the interviewees prior to the interview. These intentions were relayed to each participant. Also, the interviewees were guaranteed anonymity of their responses. This process was intended to encourage the interviewees to be as responsive as possible to the interviewer, leading to the collection of useful data.
The interviews were conducted using the following basic questions:

1. In which of the following areas do you work?
   - Program Control
   - Budget Analysis
   - Procurement
   - Program Management

2. In which of the following areas do you have previous work experience?
   - Program Control
   - Budget Analysis
   - Procurement
   - Program Management
   - Other

3. How many years have you been at your present job?
   - 0-1
   - 1-2
   - 2-3
   - 3-4
   - More than 4

4. How many years have you worked in Air Force Systems Command?
   - 0-1
   - 1-2
   - 2-3
   - 3-4
   - More than 4

5. Do you feel that the CRA has had cost impacts on the program you are currently working on or other major weapon system programs that you are familiar with? Explain.

6. Do you feel that the CRA has had schedule impacts on the program you are currently working on or other major weapon system programs that you are familiar with? Explain.

7. Do you feel that a CRA has affected procurement activities on the program you are currently working on or other major weapon system programs that you are familiar with? Explain.

8. Do you feel that a CRA has had any other impacts (other than cost, schedule, and procurement) on the program you are currently working on or other major weapon system programs that you are familiar with? Explain.

9. Do you feel that the CRA guidelines for this fiscal year were explicit and/or sufficient? Explain.

10. If you could change the current policy while operating under a CRA, what changes would you make?

Upon completion of the interviews, the collection of the observations and opinions were synthesized and are presented later in this text. The emphasis was on finding a broad consensus of the respondents regarding specific impacts that they perceive to be a result of having to operate under a CRA.
Data Analysis

The researcher determined the major positions resulting from the interviews and information discovered during data collection. Each area of perceived impacts (cost, schedule, contracting, and other) will be presented along with the negative and positive perceived effects. Each perceived effect was also analyzed according to its frequency among those interviewed. In addition to impacts, other information obtained from the interviews will be discussed later in this study. This other information will include comments made regarding such things as the CRA guidelines, the techniques used to cushion the effects of a CRA, the inefficiencies caused by a CRA, and a CRA itself.
III. Data

Introduction

The author's goal was to get ten interviews in each of the following four work areas: program control, contracting, budget analysis, and program management. Therefore, the total number of interviews to be attempted was forty. These interviews are divided into the four work areas as indicated in Table IV. In actuality, the total number of interviews given was forty, but some areas fell short of the goal and some exceeded the goal. These differences will be addressed in the next chapter of this text which will contain an analysis of the data collected via the interviews. This chapter will present the actual data that was collected.

The interviews were conducted over a five-week period from the beginning of the first week of June to the end of the first week in July. All interviews were made in person on a one-on-one basis. The researcher took notes during each interview and tape recorded the interviews to have the recordings available for supplementing the notes taken. The interviewees were given the opportunity to disallow the recording of the interview prior to the start of the interview. Of the forty people interviewed, only three of the interviews were not taped. The following text reflects the data gathered. The interview questions used were presented in the second chapter of this paper.
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Note: Procurement has been changed to contracting throughout the text as contracting is the current acceptable term.
Program Control

As indicated in Table IV, fourteen program control personnel were interviewed. Seven of the interviews were given at ASD and seven at SD. Information regarding demographic data, data concerning impacts, data regarding comments about the CRA guidelines, and data addressing proposed changes and general comments regarding a CRA are presented.

Demographic Data. Of the fourteen interviewed, five personnel had only program control experience while working in Air Force Systems Command. The other nine personnel had worked in areas other than program control prior to their current assignment. These other areas included budget analysis in the controller's shop, manufacturing, AFSC intelligence, program management, contracting, and accounting and finance (which is also a staff position in the controller's organization). The experience levels of these personnel varied. The number of years they had worked in their present job ranged from one to nine years. The average number of years worked in their present job was 4.0 years. Only three had less than two years in their present job. However, each of these three had at least four years experience in program control, but not all the experience was on the programs they were currently working on. The total number of years that the research participants had worked in AFSC ranged from 4 to 27. The average number of years worked in AFSC was 12.7 years.

Perceived Impacts Caused by a CRA. Most of the interviewees felt that there had been no significant cost or schedule impacts due to a CRA on any of the programs that they had worked on. Most perceived that there could be significant cost, schedule, and/or contracting
impacts on those programs classified as "new starts." Several different definitions were offered to define the term "new start." One person felt that a new start meant a new program element (PE). Another thought that a new start could mean a new procurement effort, a new program element, or even a new budget program activity code (BPAC). A third program controller considered a new start to be a new program or a long lead effort which occurs prior to a new procurement. Obviously, these definitions are not identical. The inconsistencies in the interpretation of the term "new start" will be addressed in the next chapter.

In addition, most believed that operating under a CRA restricts the funds spent on a program to the level of the previous fiscal year. Several mentioned that this could cause a problem if, for example, the program was in the production phase and the quantities to be produced were much higher than the previous year. One interviewee commented that Research and Development funds (the 3600 appropriation) should not be impacted by a CRA because those funds are incrementally funded anyway. Incremental funding is a technique applicable only to Research and Development efforts financed via the 3600 appropriation. This type of funding consists of financing increments of effort within a fiscal year. On the other hand, full funding pertains to the programs financed via the procurement appropriations (3010, 3020, and 3080 appropriations). This funding technique finances the full cost of specific end items in a given fiscal year's budget even though the effort to produce the items may require more than one fiscal year (7:VII-4).
A few interviewees seemed to think that you cannot really quantify cost impacts due to a CRA because generally, there are other situations that are causing cost and schedule impacts to the program, and these situations would cause the same negative impacts with or without a CRA. For example, when the Space Division program called Satellite Defense System was a new start, there was a delay in starting the program because of problems in the source selection. This delay lasted longer than the delay of the new program which could be attributed to the CRA that occurred in that year. Another example has occurred in this fiscal year. This second example is also a program at Space Division. In this case, the Anti-Satellite Program was supposed to get advanced long-lead procurement money in October. (Advance procurement is an exception to the full-funding policy. It allows procurement of long-lead items in a fiscal year one year prior to the fiscal year in which the end item is to be acquired. Advance procurements include such things as materials and parts.) This long-lead effort had been classified as a new start by the Space Division budget office. Since they were under a CRA until 8 December 1984, this could have caused a delay in the long-lead effort. However, as it turned out, the anti-satellite system has been the subject of a political debate this year, and because of this the long-lead funds were not released to the Space Defense System Program Office until June 1984. Once again, the CRA could have impacted the program; but, because of other events, the program could not have begun even if funds had been available at the beginning of the fiscal year. These other events have overshadowed the impacts which could have been caused by a CRA. A third example
occurred at Aeronautical Systems Division when the F-111 production effort was considered a new start. Since there was a CRA that fiscal year, the CRA could have caused a delay in the production program since it had been classified as a new start. However, the program had an even longer delay because it had to wait for the Defense Systems Acquisition Review Council (DSARC) briefing and the Office of the Secretary of Defense (OSD) decision to go ahead with production. The DSARC meeting did not occur until February. At that time, the program was given approval to go ahead with production. Therefore, the Lot I contract was not let until March or April of that year. Consequently, the CRA had no impact on this new start because the program had had to wait for the DSARC briefing.

Some felt that part of the reason why a CRA has such a small impact is because most of the defense contractors understand the situation, and they tend to carry the program at their own risk at the beginning of the fiscal year. Others felt that there may be some schedule impacts in the support areas. For example, test organizations such as Arnold Engineering Development Center (AEDC) and Western Space and Missile Center (WSMC) tend to be funded at a reduced level by the program offices when a CRA is in effect. The lower funding level restricts the investments that these test organizations can make in order to support the programs they are responsible for. One interviewee was adamant in saying that he felt that the test organizations should get 100 percent of their approved funding at the beginning of the fiscal year whether or not a CRA takes place.
One program controller cited an example of a program that did have a major negative impact because of a CRA. The program impacted is an ASD program in the Strategic Systems Program Office. The effort had been determined to be a new start although it was an improvement to an existing system. The contract was negotiated on 25 September 1979. However, the FY 80 CRA kept the program office from getting any funds for this program for two months. The contractor decided to start the effort at its own risk and using its own financial resources. When the appropriation bill was passed, it turned out that the program got fewer dollars in FY 80 than they had expected. Hence, they ended up restructuring the program. This caused a stretch-out in the period of performance of the contract. Also, the government employees ended up having to renegotiate the second phase of the contract which increased from $25 million to $47 million. This growth of $22 million was partially due to the restructuring caused by the CRA and partially due to rescoping and adding effort to the contract.

All of the fourteen program control interviewees felt that there was really more impact on the people working on the acquisitions than on the systems being acquired by the Air Force. They felt that operating under a CRA greatly increased the volume of paperwork generated. For example, the interviewees believed that if the appropriation bill was passed by 30 September they would probably have one set of funding documents at the beginning of the fiscal year and another set during the third quarter of the fiscal year. In contrast, with a CRA, the program controllers generally have to go through several iterations of identifying and justifying funding requirements

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for the first 30, 45, 60, and 90 days of the fiscal year. (Reference Appendix A for a sample of these instructions.) Then, multiple funding documents are processed during the beginning of the fiscal year when a CRA is in effect. These documents partially fund the efforts of defense contractors, test organizations, laboratories, and various other agencies and activities. This results in the contracting personnel having to do multiple sets of paperwork to fund modifications to the contracts as total fiscal year funds become available. The interviewees stated that most program efforts are funded in four to six increments during the fiscal year. All attributed these multiple sets of paperwork solely to a CRA. In the case of the 3600 appropriation they are, in effect, sub-incrementally funding incremental funds.

In addition to the time spent on preparing and processing the paperwork, most felt that considerable time was spent in deciding what to fund, what not to fund, and how much to fund the various activities in order to stay within the reduced and restricted funds made available during the period of the CRA. Many felt that the time spent on trying to alleviate the confusions and uncertainties created by the CRA is extremely wasteful of the personnel resources. They felt that the people should not have to spend so much time worrying about the CRA, but should be working on normal program activities. They thought that it is unfortunate that year after year the failure to pass and sign an appropriation bill by 30 September makes a CRA necessary, which leads to inescapable inefficiencies in time, paperwork, and personnel usage.
Furthermore, it seems that program controllers work with the contracting personnel in preparing the funding requests that go to the product division's budget office to determine how much each SPO will get for the duration of the CRA period. A few program controllers felt that the contracting personnel's workload was significantly increased because of the CRA. For example, they believed that the contracting people were routinely forced to issue several contract funding modifications during the CRA period. In contrast, if the appropriation bill had been signed in a timely fashion, they could send out one funding modification to each contractor at the beginning of the fiscal year, and then possibly send out one more to each towards the end of the fiscal year to adjust the current year's budget for the engineering change proposals, award fees, or other items that may have changed the budget line for the particular contractor. One interviewee felt that having a multi-year contract may reduce the administrative burden typically encountered by the contracting people during the CRA.

Several mentioned that they believed that the contractors should not have to worry about being funded during the CRA, but they are put in a position where they do have to worry. As was stated earlier, some contractors finance the programs with their own funds for as much as four weeks into the new fiscal year. Thus, they worry about when and if they will get reimbursed and how much they will receive. Then, when the government gives them small increments of funds during the first quarter of the fiscal year, the contractor worries about how long the dollars will last, what they should buy now and what can wait, and when they will get their next increment of funds. This process detracts
from the contractor's ability to forecast and stabilize his workload so as keep the program on schedule and on cost.

One example of a detrimental impact in contracting occurred at Space Division in fiscal year 1983. The incident pertains to the federal government's contract with the Aerospace Corporation located in El Segundo, California. The Aerospace Corporation is a Federally Contracted Research Center (FCRC). Therefore, the federal government negotiates a contract with this FCRC each year in order to obtain their technical support on various government weapon systems acquisitions.

Before a contract ceiling can be negotiated the program offices at Space Division must collectively fund at least 50 percent of their budgeted requirements for aerospace support. In FY 83, due to the multiple CRAs and the confusion associated with the last CRA which was to continue through 30 September 1983, Space Division could not fund the minimum level required for negotiating a ceiling. Consequently, the Aerospace ceiling was not negotiated until the beginning of the fourth quarter of FY 83. Then there were only a few weeks remaining for the Aerospace managers to adjust their support to the various programs based on the newly negotiated ceiling. This caused significant and drastic increases and decreases of Aerospace support to individual programs as well as last-minute budget adjustments in the SPOs to accommodate the appropriate Aerospace funding level.

In order to minimize the potential adverse impacts on cost and schedule, some programs negotiate contingencies which allow them to reduce contractor efforts as necessary. Here too, however, extra effort must be expanded and extra costs may be incurred just because
the threat of a CRA exists. Some of the interviewees cited examples of contractual arrangements that allowed for contingencies to circumvent the potential impacts of a CRA or other cost/schedule impacts. One example given is in regard to the government contract with AVCO for the Instrumented Test Vehicle (ITV) program. This contract contains options for a contractor team to travel and prepare for each ITV launch. However, the government can recall the deployed team if for some reason the schedule slips or the funds are not available or whatever the reason. Of course, the government will incur some cost penalties if this is done. Nonetheless, the contingencies have been planned for contractually.

Comments Concerning CRA Guidelines. Most of the interviewees felt that the guidelines were insufficient and definitely not explicit. Several commented that the term "new starts" seemed ill-defined, and that it seemed to be redefined from year to year. Some felt that it was good that the guidelines were vague because they allowed more room for flexibility in the interpretations of what can and cannot be funded during a CRA. Others believed that the guidelines should be more specific in order to avoid the confusion that usually results with the guidelines that are received. One interviewee who is the head of a program control directorate at Space Division felt that the guidelines should say "do business as usual," disallow new starts, and set a funding level for the CRA period. This person also felt that the guidelines should be published prior to the start of the fiscal year so that the ground rules would be known in advance. Several other program controllers mentioned that they do not receive the guidelines
until October, which is approximately three months after they have to do their official forecasts of how they intend to commit, obligate, and expend program funds in the upcoming fiscal year. The comments reflected the frustration of having to predict the CRA guidance and funding levels. The net result being great disparities between what was forecasted in July and what is actually allowed during the first quarter under a CRA. Furthermore, deviation reports are required to be filled out giving an explanation of the discrepancies. It seems that citing the CRA as an impact is currently not considered an acceptable explanation. Apparently, at ASD and SD, the higher levels of management at the two product divisions have been giving increased attention to the forecasts and deviation reports. Currently, at both places, the product division commanders are reviewing these financial reports. One interviewee felt that the CRA guidelines to the SPO might be more explicit if the division budget office attached the guidelines sent down through the budget chain-of-command.

Proposed Changes and General Comments Regarding a CRA. The proposed changes from the interviewees are presented here:

* Revamp the whole budget flow process at the beginning of the fiscal year because the budget release is slow coming down the budget chain-of-command.
* There should be no time limit on a CRA — only a dollar limit.
* Should be able to fully fund those procurement items needed in Government Furnished Aeronautical Equipment (GFAE).
* Exclude the 3010 appropriation from the same restrictions as the 3600 appropriation while operating under a CRA.
* The only restriction for the 3010 appropriation should be that the quantities pursued by the program office should not exceed the minimum Congressional position.
* Make some sort of provisions for new starts. For example, let the program office start at least enough of the effort to protect cost and schedule. Another possibility is to allow new starts on the individual merit of each program.
* If there has to be a CRA, make it quarterly, not monthly. This would eliminate the need for the 30, 45, and 60 day funding requirement identification and justification which is asked for at the beginning of each fiscal year when a CRA is anticipated or is in effect. Therefore, only the quarterly requirements would be needed and requested.

* Ensure funding under a CRA does not interfere with good program management.

* Allow the following to be funded under a CRA:
  - Fund contractors at the Limit of Government Obligation (LOGO) level.
  - Fund effort that will not change during the fiscal year.
  - Limit funds available for travel and ECPs.
  - Fund anything that, if delayed, would endanger the schedule.

* Program officers should be allowed to fund test organizations at 100 percent of the approved budget line item at the beginning of the fiscal year as soon as either the CRA or the appropriation bill has been passed.

* Ongoing efforts should get all funds up front.

* Change the fiscal year to meet Congress’ schedule, if it will get Congress to pass the appropriation bill on time.

* Do not change Congress being the decision-making body to decide what programs we do or do not pursue.

* CRA restrictions should not apply to government laboratories.

* Changing the fiscal year to a two-year fiscal period may be a partial solution in helping to get the appropriation bill passed on time.

* Be consistent on ground rules of how to operate under a CRA between the product divisions.

The following represents general comments that the program control interviewees had regarding a CRA:

* The current CRA restrictions are more appropriate for the 3600 appropriation than the procurement appropriations such as 3010, 3020, and 3080 money.

* Most of the defense prime contractors and subcontractors understand our CRA problems and will continue to work at their own risk. Most know that they will eventually get paid.

* In FY 84, the F-16 program at ASD got what it forecasted and needed for the first three months, so there was no problem.
It is an administrative burden to incrementally fund incremental funds (3600 appropriation).

Program controllers should plan for a three-month CRA. A six-month CRA would be detrimental.

A CRA could affect the first year of a multi-year contract unless there was specific Congressional language in the CRA Act by Congress to preclude this.

The F-16 program may be cushioned from CRA impacts because it is a mature program (well into production) and it has multi-year contracting.

The F-16 program gets about $3 billion a year in research and development (3600) and procurement dollars. Bigger programs can probably absorb more impacts.

A line item veto might help the President sign the appropriation bill sooner, but there would still be a potential problem with riders on the bill.

Congress should have the appropriation bill passed on time. This interviewee wondered if Congress realized the perturbations in the system caused by not having the bill signed on time.

Personnel should not have a problem with wondering what to do on the first of October. They should keep on doing business for the program.

Sometimes a CRA is not passed on the first of October. Sometimes it is not passed until several days into the new fiscal year. There are problems when this occurs, too.

A possible incentive to get Congress to pass the appropriation bill by 30 September is as follows:

— If Congress does not pass the appropriation bill on time, then they should not get paid until it is passed. Also, they should not get paid retroactively.

One interviewee who is currently a director of program control at one of SD's SPOs gave the following as the internal ground rules used for the July forecast submission to Air Force Systems Command:

— Assume a CRA on 1 October.
— Assume a CRA for 90 days.
— Assume efforts for first quarter will be funded.
— Assume balance of efforts will be funded in January (beginning of second quarter of the fiscal year).
The problem occurs when one or more of the assumptions are wrong. Then the forecast is thrown off. By regulation, if there are significant changes in the program since the time of the July forecasts, the program office program control personnel should be allowed to reforecast. This program office tried to reforecast the FY 84 programs, but Air Force Systems Command would not allow them to reforecast. Hence, they have had numerous deviation reports this fiscal year.

* Probably part of the reason that a CRA does not seem to have severe impacts on the acquisition of major weapon systems today is because a CRA has become "a way of life" and most people plan for it.

* Have problems with the end of the fiscal year TDY trips when the period of the trip overlaps the two fiscal year periods.

* Better to have a CRA than no money at all at the beginning of the fiscal year.

* The primary problem with a CRA is the uncertainty and the lack of decisive direction. If the system would plan and provide clear guidance, the program controllers could incorporate CRA restrictions in their planning process with minimal impacts.

* Do not like working under a CRA.

* One big problem is that it takes two to three weeks to get dollars through the system and to the program office when a CRA occurs.

* Acquisition personnel should preplan for a CRA.

* Do not think that changing the fiscal year from 1 October - 30 September to 1 January - 31 December will help in getting the appropriation bill passed on time.

* A CRA is "hard to work with."

* Congress's indecisions on new starts causes delays. Democracy seems inefficient, but it is the best form of government available.

* It seems that Congress is getting too bogged down in details.

* It makes good business sense to obligate a hefty amount at the beginning of the fiscal year. Instead, we are forced to send out small incremental amounts of funds to various contractors and agencies who are performing work for the program. It seems that we are forced to operate this way at the beginning of the fiscal year to help solve budget problems that would not exist if the appropriation bill was passed on time.
* There is a real problem when a CRA is not taken into consideration when the forecasts are done.

* A CRA seems to be causing low expenditure rates due to the delay in getting the full amount of approved dollars for the programs. However, a CRA is not being accepted as an explanation for low expenditures. Currently, there is a lot of pressure on getting the expenditure rate above 60 percent by the end of FY 84. At Space Division, a letter from the Space Division commander states that all SD programs not reaching at least a 60 percent expenditure rate by the end of this fiscal year will receive a budget cut next year.

In addition to the above comments regarding a CRA and proposed changes, several interviewees mentioned adjustment techniques that they have used to cushion the potential effects of a CRA. For example, one program controller never plans new starts to begin effort in the first quarter. Instead, efforts are planned to start in the second quarter. Another example given by a program control personnel at ASD is, if the funds given under a CRA are tight, some items such as support equipment and government furnished equipment can be funded later in the fiscal year versus being funded up front. While these strategies may reduce today's problems, they may also insure future program difficulties. For instance, delaying the beginning of a one-year effort until the second quarter means funding it over two fiscal years, and delaying the development and procurement of support equipment may guarantee future logistics problems. Adjustments within a system as rigid as defense funding and contracting will almost inevitably lead to more adjustments — and more — and more.

Contracting

As indicated in Table IV, nine contracting personnel were interviewed. Five of the interviews were conducted at ASD and four
at SD. Information regarding demographic data, perceived impacts, comments about the CRA guidelines, and proposed changes and general comments regarding a CRA are presented in the following text.

**Demographic Data.** Of the nine persons interviewed, seven had only contracting experience. The other two also had experience in program control. The experience levels in contracting varied from six months to ten years at their current job. The average number of years at their present job was 4.6 years. Three had two years or less experience at their current job. However, each of these three had at least 4½ years experience in AFSC. The total years experience in AFSC ranged from 4½ to 23 years. The average number of years worked in AFSC was 14.1 years.

**Perceived Impacts Caused by a CRA.** Most interviewees perceived no significant cost, schedule, or contracting impacts caused by a CRA. Some felt that impacts had been avoided by planning in advance for a CRA. For example, a couple of the contracting personnel mentioned that they try to advise program managers to schedule requirements so that they do not conflict with a CRA. With this in mind, a new start should not be scheduled to begin in the first quarter of the fiscal year as the CRAs in the past have typically lasted through most of the first quarter.

Some personnel felt that there were minor impacts such as having to delay exercising an option that was scheduled at the beginning of the fiscal year. Consequently, the option price increased. Others had not experienced such impacts on options either because there were enough dollars available to exercise the option or the option occurred
late enough in the fiscal year that the program was no longer operating under a CRA and the full budget authority was available. Two contracting people in the F-16 SPO at ASD pointed out that there were provisions in the contracts to delay exercising the F-16 production options. One personnel said that the delay had been used on his contract because of a CRA. However, there were no schedule impacts or claims from the contractor for using the delay. The other contracting personnel explained that, in the contract he was working with, there were cost penalties if the government decided to delay the exercising of the option. He pointed out the clause which stated that the first 30-day delay would have a penalty cost to the government of $12.5 million, the second 30-day delay would cost an additional $12.5 million ($25 million total cost to the government), and the third 30-day delay would cost another $12.5 million ($37.5 million total cost to the government). He also stated that the government has not had to exercise the delay option. Most contracting personnel felt that there were no significantly detrimental impacts on contract options because they always seemed to get the funds needed before the option was no longer available. Several commented that there may be less of an impact on a multi-year contract.

Several mentioned other minor impacts such as an increase on the contracting directorate's administrative workload. For example, two or three funding modifications may have to be issued during the first half of the fiscal year instead of just one that would be necessary if they were not operating under a CRA. Most deemed this as being extremely inefficient. They also felt that their workload was increased because
they often prepared two or more sets of paperwork for a contractual
effort in anticipation of the possible decisions that could be made
regarding activities to pursue under the CRA.

One contracting official stated that he did remember an impact on
the F-100 engine program about six years ago that was caused by a CRA.
He claimed that the CRA delayed a Lot II buy. This delay resulted in
impacting the cost, schedule, and lead time of the contractual effort.
Another perceived impact attributed directly to a CRA is, if you cannot
obligate more than you had in the previous fiscal year, you have to
delay contractual supplemental agreements. When you delay these, a
higher labor rate is used and the government ends up paying more for
the effort.

Several mentioned techniques that they have used to avoid
potential CRA impacts. One technique that can be used is the extension
of the period of performance of an existing contract, if a new contract
cannot be let during the CRA period. Another technique that has been
used is to put options on the contract to avoid the predicament of
being classified as a new start (namely for use in going from the full
scale development phase to the production phase or for going from long-
lead production efforts to actual production).

A few commented on their perceptions of how a CRA impacts the
defense contractors. One felt that the contractors are less apt to
proceed as fast on the program while under a CRA, because there is some
uncertainty as to how much funds will actually be appropriated to the
program. Therefore, the contractor assumes some degree of risk in
continuing the efforts of the program at an aggressive rate. Another
person asserted that in the past the government has missed getting funds on contract by the date the contractor said they would run out of money. Nevertheless, the contractor carried the program until the government could send out the next increment of funds. Some smaller companies may have problems doing this, because they may not be able to afford it.

Most of the contracting personnel interviewed commented on how a CRA causes delays in decisions on what to do. The uncertainties instigated by a CRA seems to be a big problem and a very frustrating problem. The biggest uncertainties are how much money will be received under the CRA, how will the CRA guidelines be interpreted, when will the appropriation bill signed, and how much will the total budget authority for the program be. Many also commented on the time-consuming efforts of prioritizing and reprioritizing efforts to be pursued on the limited funds received under the CRA. It seems that a standard tactic is to fund priority one at a level to avoid any near-term program impacts. Then, see how much is left for the next item on the priority list and so on down the list. Apparently, many hours of deliberation are spent on these types of activities while the CRA is in effect.

Comments Concerning CRA Guidelines. All but one of the interviewees had no comments regarding the CRA guidelines as they had never seen them before. The one person who did have a comment about the guidelines had worked in program control prior to his current assignment. He seemed to recall that the guidelines were mediocre.
Proposed Changes and General Comments Regarding a CRA. The proposed changes from the interviewees are presented below:

* Do not make any changes.
* No comment.
* Congress should do like some of the states and have a two-year budget. It would probably be better than an annual budget. It may work out especially well since the House term is two years.
* Do not think changing the fiscal year to a two-year fiscal period would help.
* Would keep the fiscal year dates the same, but change the date that the appropriation bill is due from 30 September to 30 June.
* Would recommend a Presidential line item veto. Should have trust in the President not to veto items that are imperative for national interest.

The following represent general comments that the contracting interviewees had regarding a CRA:

* Should not have a CRA.
* Need something to force Congress to take action and get the appropriation bill passed sooner. Currently, there is no incentive for Congress to pass the appropriation bill by 30 September. They can fall back on enacting a CRA, and they do.

— Need to give Congress an incentive to pass the appropriation bill on time. For example, in California there is a grassroots movement to make an amendment to the state constitution that will prohibit the stated legislation from getting paid until it passes a balanced budget.

* Even if there was not a CRA, personnel should not plan on using funds on the first few days of the fiscal year because of having to wait for paperwork that gives the go-ahead.
* Personnel should plan for a CRA ahead of time.
* Some programs may be protected from CRA impacts, if they have high visibility and political support.
* There seems to be a Catch 22 effect in that, when Congress does not pass the appropriation bill until the end of the first quarter, the delay in getting the total budget authority causes delays in SFO activities. It also increases the likelihood of year-end spending. However, if there is a significant amount of year-end spending, then the SFO is chastised by higher headquarters and by Congress.

* CRA seems to be institutionalized (i.e., way of life).

* Changing the fiscal year start date to 1 January probably will not help eliminate a CRA.

  — No matter what deadline Congress has, it will probably go over it.

  — It may help to change the fiscal year start date to 1 January because most defense contractors' fiscal years start on 1 January. Therefore, contract analysis would be easier.

* Changing the fiscal year-end date from 30 June to 30 September made it harder for the government to handle the end-of-the-year workload as many military personnel change assignments during the summer and others are trying to take summer vacations. It was supposed to eliminate the need for a CRA, but it did not.

* Should definitely have provisions to make a CRA effective on 1 October, if a CRA is necessary.

* The impacts are not so great, if the program has been in existence for a few years and if each fiscal year budget is equitable. The problem arises when the expected budget for the new fiscal year is much higher than the previous fiscal year.

* Do not really think the impacts to a program are due to a CRA. If the requirement is urgent and the country needs the system, there always seems to be a way to get on with the effort.

**Budget Analysis**

As indicated in Table IV, eleven budget analysts were interviewed. Six of the interviews were given at ASD and five at SD. Information regarding demographic data, impacts, comments about the CRA guidelines, and proposed changes and general comments regarding a CRA are presented in the following text.
Demographic Data. Of the eleven interviewed, just one had only budget analysis experience. The other ten had had previous experience in program control. The amount of time spent at their current jobs ranged from two months to twelve years. The average number of years at their current job was 3.7 years. Six of the eleven had less than three years of experience at their current job, but each had well over four years experience in AFSC. The length of time spent in AFSC varied from 5 to 23 years. The average number of years spent in AFSC was 14.4 years.

Perceived Impacts Caused by a CRA. Most interviewed were not aware of any major cost increases or schedule slips caused by a CRA. Several remarked that a CRA would probably have more of an effect on new starts versus ongoing programs. Some commented that it seems the ongoing programs get enough funds to keep them going.

Some impacts discussed included the observation that in FY 84, when the appropriation bill was finally signed, several ASD programs got less than expected. If they had tried to obligate all the funds expected, they would have had to deobligate funds. Another observation was that when the full amount of budget authority is not received until well into the fiscal year, then it puts the SPOs in a position of having to do an increased amount of year-end spending. Also, unfunded requirement requests cannot be worked until after the appropriation bill is signed. Furthermore, a CRA leads to a lot of forward financing of the 3600 appropriation funds. However, forward financing funds for about three months into the next fiscal year seems to reduce the potential cost and schedule impacts due to a CRA. On the other hand,
if the unfunded requirements cannot be worked until about January (four months into the fiscal year), then that is pretty late to have to try to get the reprogramming request approved by Congress and receive the reprogrammed dollars before the end of the fiscal year. Many of the budget analysts stated that they perceived that having a CRA leads to lower expenditure rates and negatively affects the forecasts. This was particularly evident in FY 84 because Headquarters USAF did not let AFSC reforecast in January as they have done for the last few fiscal years. Consequently, the forecasting of commitment, obligation, and expenditures that were done in July (prior to the start of the fiscal year and prior to receiving the CRA guidelines or knowing how much will be available under the CRA) are quite different than the actual commitment, obligation, and expenditures. Thus, the program control personnel and budget analysts have to handle an increased amount of paperwork each month to account for the difference between the numbers forecasted versus actuals. This paperwork is called deviation reports. Another ramification of having lower obligation and expenditure rates than the standard expected is that the 3600 funds are susceptible to being cut in the outyears due to what higher headquarters regards as "poor execution" of funds. Some of the potential schedule impacts are diverted because some of the contractors are willing to take risks in order to avoid a schedule delay caused by a CRA. Most of those interviewed felt that there is an increased administrative burden on contracting personnel during a CRA because they have to generate several funding modifications in order to incrementally fund the contractors during the CRA period. One example given in which the
contractor accepted risk was that there was a delay in the issuance of the production contract, but the contractor started doing the work anyway at his own risk. One of the biggest problems mentioned was the uncertainty of not really knowing what the total budget authority will be for the program at the beginning of the fiscal year. Usually, this information is not available until after the first quarter of the fiscal year. One reaction to the uncertainties is a fear of sending out too much money so the SPO spoonfeeds the efforts. Thus, multiple funding documents are issued. This causes an increased workload on all four work areas, especially for program control, contracting, and the budget analysts. One example cited shows cause for this conservative approach. In FY 84, one procurement program had 95 percent of its expected dollars made available in the accounting and finance office. Consequently, all the funds were obligated. However, when the appropriation bill was signed, they received less than the 95 percent figure. Therefore, they had to deobligate funds. There is also a potential for a cost impact in that there is a moderate level of risk in losing money in some lower priority SPOs by asking to forward finance. Asking to forward finance identifies funds that probably will not be used in the current fiscal year, and these funds may be considered as possible sources for the unfunded requirement requests. Several mentioned the uncertainties and the uneasiness in the field that is caused by a CRA. They also made a point to mention the inefficiencies caused by a CRA. These inefficiencies primarily occur in wasted manpower consumption and wasted administrative workload. For example, having to go through several iterations of identifying
and justifying requirements for 30, 45, 60, and 90 days is extremely
time-consuming.

Several techniques were discussed as means to avoid the potential
impacts of a CRA. For example, a SPO can try to get funds a year
before the program is actually due to start so that it will not be
classified as a new start the year it wants to gear up. Two programs
were mentioned as using this technique. The first program is an SD
program called the Military Strategic-Tactical Relay System (MILSTAR),
and it was successful in using this technique. The second program
is an ASD program called Air-to-Air Strategic Missile (AASM). This
program was originally planned as being an FY 85 new start. However,
in order to avoid the probable CRA delay in starting the program, it is
currently trying to reprogram some funds into FY 84 so that it will not
be classified as a new start in FY 85. Another technique mentioned
occurred as a result of a delay in awarding a production contract. The
delay was attributed to the CRA. Therefore, in order to get the work
started, the contractor was funded for the production efforts under the
existing research and development contract.

Comments Concerning CRA Guidelines. Most of budget analysts felt
that the guidelines were pretty vague and not very explicit. They
especially remarked about the ambiguity in the definitions of "new
start" and in "operate in a prudent manner." Not only are the terms
ambiguous in the guidelines; but, when an interpretation is requested,
different responses are given. The following are four somewhat
different definitions of new starts as explained by four different
budget analysts.
* A new start is a new effort or a new program element (PE). Also, in research and development, a new budget program activity code (BPAC) (one level below a program element) is a new start.

* A new start is a new PE. Also, a new BPAC may be a new start. Furthermore, a production contract is a new start. It is controversial as to whether, if a long lead effort is considered a new start, the production effort may or may not be a new start. New start definitions are caveated by the CRA Congressional language.

* A new start is a new PE or BPAC. This is caveated by specific Congressional language.

* If the long-lead effort is considered a new start, then the production effort is not considered a new start. Also changing the PE of a research and development effort from 63XXX to 63XYZ is not a new start.

Most commented that they would rather have the guidelines be vague than too specific. With vague guidelines, there is more flexibility in the interpretations. On the contrary, one interviewee felt quite strongly about it being more advantageous to have more specific guidelines, because we now operate in confusion. One interviewee felt that the future guidelines would have less language in them from Headquarters AFSC, and he expected more of the interpretation would be delegated to the production divisions. A few commented that the CRA guidelines should be sent in July (before the SPOs have to do their official forecasts for Headquarters AFSC). One budget personnel felt that some SPOs are more cautious in their interpretations than others regarding what is meant by "operating in a prudent manner." He felt that those who were more cautious would say that the guidelines were vague. In contrast, those who were more apt to take some risks would say that the guidelines were sufficient. One interviewee claimed that the budget process gets in disarray with a CRA. He felt that the CRA
unnecessarily interferes with and restricts the program manager's program activities. One budget analyst felt that programs were unduly hurt by the local interpretation of the CRA guidelines when really the CRA restrictions are primarily at the appropriation level. Another felt that Congress should address the problems of the vagueness and explain their intent.

Proposed Changes and General Comments Regarding a CRA. The proposed changes from the interviews are presented below:

* Do away with a CRA.

* Let the SPOs operate as if they had all their budget authority on 1 October. The exception to this would be programs that were an issue in Congress or new starts.

* Congress should discipline themselves to get out of the predicament of having to pass a CRA every year.

* If Congress does not pass an appropriation bill by 30 September, they should be fired.

* If a CRA is necessary, then Headquarters USAF should send the CRA guidelines down early so that personnel receive them in a timely manner. Also, the guidelines should clearly reflect the intent of Congress regarding which programs to move out on and which programs to defer.

* Want good definition of "new start" and have the same definition at all levels (i.e., OSD, HQ USAF, HQ APSC, etc.).

* Give more time to do the CRA exercises requesting funding requirements for the first 30, 45, 60, and 90 days of the fiscal year. On second thought, do not ask for a 45-day requirement as it is difficult to calculate requirements for a part of the month. Monthly increments should be the smallest.

* Define how much you can obligate. Not sure if the 30-day requirement should reflect funds for only 30 days worth of work, funds for first quarter efforts or funds wanting to obligate during the first 30 days of the fiscal year.

* When planning for a CRA, should be able to fund all the dollars needed for ongoing efforts for the year in the first thirty days. For the next sixty days, should request funds to cover contract changes.
* The two year budget has merit and may help to avoid a CRA.

* If changed the fiscal year start date from 1 October to 1 January, would like to think it would avoid a CRA, but it probably would not.

* Launch services at Vandenberg should be fully funded to avoid impacting launches.

* Test and Evaluation organizations, such as the Air Force Flight Test Center (AFFTC) and Arnold Engineering Development Center (AEDC) should get 100 percent of their approved budget for the year up front as stated in the regulations.

The following represents general comments that the program control interviewees had regarding a CRA:

* Have become used to a CRA, so it does not impact the programs as much now as it used to.

* A CRA mainly affects research and development efforts (i.e., 3600 appropriation funds).

* A CRA has become a way of life. If personnel do not plan on a CRA, they are either naive or do not understand the system.

* Managers should plan the execution of the budget so that the contractors do not have to stop work.

* Unfortunately, Congressional intention is usually not known. Therefore, this causes a lot of uncertainties and hesitancies.

* Sometimes personal risks are taken under a CRA. This usually occurs when someone finally takes a stand on a controversial or questionable interpretation of the guidelines.

* The CRA has been used as an excuse to cover poor planning. For example, new starts should not be planned to begin in October.

* A CRA is just one more thing that allows bureaucrats to slow down the system. It really should not bother anyone. Actually, it seems that people make more of a CRA than they should.

* If serious about a CRA, then the base should be shut down if there is no CRA enactment on 1 October.

* The fiscal year date change in 1976 was supposed to help avoid the CRAs, but it only helped temporarily. Now we consistently have the CRAs again.
Program Management

As indicated in Table IV, six program managers were interviewed. Three of the interviews were given at ASD and three at SD. Information regarding demographic data, impacts, comments about the CRA guidelines, and proposed changes and general comments regarding CRA are presented.

Demographic Data. Of the six interviewed, two had only program management experience while being assigned to AFSC. The other four had other AFSC experience such as program control and contracting. The experience levels of these personnel ranged from four months to 3½ years at their present assignment. The average length of time in their current position was 1½ years. However, the range for the number of years worked in AFSC was 5 to 15. The average number of years in AFSC was 10.4 years. Thus, all met the work experience criteria established earlier in the text.

Perceived Impacts Caused by a CRA. Most of the interviewees felt that there had been no significant cost or schedule impacts caused by a CRA on the programs they had worked on. Several commented that a CRA is something that should be planned for both internally in the SPO and externally with the defense contractor. Those interviewed were currently working on ongoing programs. Some remarked that a CRA probably has more of an impact on smaller and/or new programs. A couple of people remarked that there may be more of an impact on programs using the 3600 appropriation funds versus programs using the procurement appropriation funds (i.e., 3010, 3020, and the 3080 appropriations). One personnel stated that he perceived a problem when a program is trying to build up and has planned on needing and using a
much higher expenditure rate than the previous year, but is forced to
constrain its spending rate to the previous year for the duration of
the CRA period. Another program manager declared that it is really
hard to quantify the cost impacts because the contractors tend to carry
the program efforts and the associated costs during a CRA. Also,
an interviewee felt that programs in the laboratories such as the
Air Force Weapons Laboratory (AFWL) and the Air Force Geophysics
Laboratory (AFGL) are probably more impacted by a CRA than the SPOs.
One program manager perceived no impacts on his program due to a CRA
as he has the contractor working on residual tasks during the CRA.
One interviewee pointed out, if the program does not get started
on schedule, then the usual consequence is that the costs go up and
the schedule is stretched. One interviewee stated that there were no
contracting impacts that he was aware of on the current F-16 program,
but there may be a problem with the F-16F as it will be a new start
in FY 87. Therefore, it may have problems if it is restricted under
a CRA. Another contracting impact mentioned was the observation that
the contracting personnel have to do multiple funding modifications at
the beginning of the year as they are forced to incrementally fund the
incremental funds (i.e., 3600 appropriation funds) for their respective
contracts. This interviewee also claimed that this was a very
inefficient way to operation. Another observation made was that the
government contracts typically get slowed down at the beginning of the
fiscal year. One of the six interviewed had no comments as he felt he
really did not know if there were any contracting impacts or not. When
asked if they perceived any other impacts (other than cost, schedule,
or contracting), three of the six interviewed felt there were no other impacts. They supplied several reasons for this such as that they had experienced personnel in the SPO, the program was a multi-year procurement program, the program had high visibility and high dollars, and the program was backed by Congress. The other three program managers had several comments to make about the other impacts due to a CRA. For example, it was mentioned that a CRA is an increased administrative burden for everyone. Another statement reflected the concern regarding the uncertainties both from the government and contractor point of view. It was also asserted that morale is negatively affected during a CRA. One observation made was that good government and contractor personnel leave the program when the delay of the start of the program is too long. In addition, there was a comment concerning the needless paperwork and inefficiencies which result in increased costs to the taxpayers. Another interviewee related CRA impacts to the current productivity issue. The point made was that, when the contractors have to use their own funds to cover the program costs during the CRA period, they are prevented from using those dollars for capital investment. This interviewee went on to say that it is probably a mistake for the defense contractors to carry the program at the beginning of the year. They should probably shut down the program efforts in order for Congress to see the real impacts.

Despite all the negative impacts cited, one interviewee made a point to bring up one possible good impact due to a CRA. This individual felt that a CRA gives Congress more time to decide on which new starts to start and prevents a proliferation of too many new starts.
Comments Concerning CRA Guidelines. Four of the six program managers had no comments regarding the guidelines. However, two comments were made by the other two interviewed. One interviewee stated that he felt that the guidelines were not really explicit. He was not sure whether the problem was with the product division's budget shop or higher up the budget chain-of-command. Furthermore, he felt that the guidelines tended to be late, confusing, and required considerable interpretations. He did ponder that perhaps it is better that the guidelines are vague in order to allow more flexibility. The second interviewee who offered comments regarding the CRA guidelines stated that he had never understood the guidelines. He contended that it is "hard to get a straight story from year to year." He definitely was opposed to the guidelines being too specific because that would reduce the flexibility of the interpretations.

Proposed Changes and General Comments Regarding a CRA. The proposed changes from the interviewees are presented here:

* No major changes to current policy suggested.

* Have automatic CRA provisions in previous year's appropriation bill rather than passing a separate CRA act.

* While under a CRA, ongoing programs should automatically get a percentage of the budget for the new fiscal year versus being restricted to last year's budget.

* Make provisions for new starts. Would suggest that if a new start has been authorized, then allow it to begin at some percentage of the fiscal year budget under consideration.

* Should have some way to allow more research and development efforts to go ahead so that they do not lose good people. Perhaps Headquarters AFSC should let new starts begin when they know they are a high priority item.

* Do not have a CRA! A CRA should be an exception to the rule.
* It seems that the appropriation bill gets hung up for just a couple of controversial issues. Therefore, the controversial issues should be set aside and the remainder of the proposed bill should be passed.

* Make a law that if there is no signed appropriation bill by 30 September, then the signed authorization bill or the Unified Federal Budget, whichever is lower, should become effective on 1 October.

* Do not set aside controversial issues on the proposed appropriations bill and pass the rest; because, tactically, it is bad.

The following represent general comments that the program managers had regarding a CRA:

* Should encourage Congress to get the appropriation bill passed on time to avoid a CRA.

* A CRA is better than nothing. However, an approved appropriation bill is definitely better than a CRA.

* The federal government employees should not have the burden of the inefficiencies caused by compensating for Congress's repeated inability to get the appropriation bill signed by 30 September.

* CRA is a shoddy business practice.

* Congress complains about year-end spending, but the SPO is forced to wait to spend their funds because they do not get their full budget authority until late into the fiscal year.

* People tend to use the CRA as an excuse for not being efficient managers. For example, if they are behind schedule anyway, then the managers use the CRA as an excuse to take pressure off themselves. There always seems to be a way to avoid the potential CRA impacts. The program managers should be held accountable to their baseline.

Chapter Summary

The previous text is merely a compilation of the data collected from the forty interviews that were given during June and July 1984. The views presented reflect the perceptions of those interviewed and not necessarily the perceptions of the author. Hence, the next chapter will be an analysis of the data presented in this chapter.
IV. **Data Analysis**

**Introduction**

The previous chapter reflected the data obtained from the forty interviews. This chapter will focus on summarizing the data and presenting the prevalent views of the interviewees. The following topics will be discussed: demographic data, perceived impacts, the CRA guidelines, proposed changes and general comments, and adjustment techniques and inefficiencies.

**Demographic Data**

Table V shows a summarization of the demographic data. An analysis reveals that 62.5 percent of the interviewees had work experience outside of their current area. For example, ten of the eleven budget analysts had previous experience working in program control. The balance of the interviewees (37.5 percent) had only experience in their current work area. For example, seven of the nine contracting personnel had only work experience in the contracting area. The average number of years in their current job for the forty interviewed was 3.7 years. In addition, the average number of years in AFSC was 13.1 years. All forty met the pre-established criteria pertaining to the number of years in the current job or the number of years in AFSC. The main factor regarding the rationale for the higher number of people interviewed in program control and budget analysis.
TABLE V
Summary of Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Program Controllers</th>
<th>Contracting Personnel</th>
<th>Budget Analysts</th>
<th>Program Managers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worked only this area</td>
<td>5.0</td>
<td>7.0</td>
<td>1.0</td>
<td>2.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Worked other job areas</td>
<td>9.0</td>
<td>2.0</td>
<td>10.0</td>
<td>4.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>14.0</td>
<td>9.0</td>
<td>11.0</td>
<td>6.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Average years at present job</td>
<td>4.0</td>
<td>4.6</td>
<td>3.7</td>
<td>1.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Average years in AFSC</td>
<td>12.7</td>
<td>14.1</td>
<td>14.4</td>
<td>10.4</td>
<td>13.1</td>
</tr>
</tbody>
</table>

versus the lower number in contracting and program management is that the program control and budget personnel are more directly involved with a CRA. Also, the involvement occurs at lower work levels in the program control and budget offices.

Perceived Impacts

Almost all of the interviewees perceived that there really were no severe cost, schedule, or contracting impacts on the programs they were currently working on or on any they had previously worked. Most mentioned that a CRA really has the potential of causing the greatest amount of negative impacts to programs that are classified as new

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starts. Several mentioned techniques that have been used to avoid impacts to ongoing programs. These techniques will be discussed later. Though the majority of the interviewees felt that a CRA does not significantly impact the programs, they did feel that there were definite negative impacts on personnel. The list of these impacts on personnel includes uncertainties, confusion, low morale, inconveniences, administrative burden, wasted time, wasted manpower, and indecisions. The general feeling seemed to be one of wishing there were a way to reduce the confusion that occurs when a CRA is in effect. Another common concern among the program controllers and budget analysts was the helplessness associated with the official forecasts that are submitted to AFSC. It seems that the program controllers who fill out the forecasts are in a no-win situation. Typically the forecast exercise begins in July with the submittal to AFSC due by the end of July or August. When given the forecast sheets, the program controllers are typically told to assume a CRA for 90 days (possibly longer in FY 85 to due elections). However, that is the extent of the guidelines given for the forecasting. The CRA guidelines are generally not given to program control personnel until sometime in October. Therefore, the assumptions made for the forecasting exercise are not usually borne out when the first quarter of the fiscal year comes around. Common discrepancies are that the first budget authority released to the SPOs comes later in October than estimated. Therefore, not all the funds forecasted to be obligated in October do, in fact, get obligated. Also, the SPOs frequently receive less budget authority
during the CRA period than they had assumed when forecasting. Furthermore, when the appropriation bill is finally signed, the SPOs often get less funds than they had assumed. Consequently, they spend much time refiguring the budget to determine what must be cut/deferred/rescoped. The net result is that, because of the CRA period, funds are obligated at a slower rate and at reduced levels than what was expected when the forecasts were done. The effect on the slower obligation rate has a snowball effect on the expenditure rate. When obligation rates are slowed down and are at lower levels, this necessarily causes the expenditure rate to slow down and be at lower levels. Unfortunately, the program personnel are criticized and the programs penalized for having low expenditure rates when the AFSC budget team visits the product divisions for the Program Financial Reviews in the May-June timeframe. One program controller at Space Division said that a letter had been sent out by the Space Division commander stating that if the expenditure rate of an SD program is not at 60 percent by the end of the fiscal year, the program will have a budget cut in the following fiscal year. The paradox which currently exists occurs because, during a CRA, budget authority is released at a slow, reduced level. Therefore, funds are obligated and expended at a slow, reduced level. Furthermore, since the appropriation bill is not signed until well into the fiscal year, the SPOs do not receive their full budget authority until about midway through the fiscal year. Therefore, this delay causes a lag in the obligations and expenditures. Then, when the Program Financial Review occurs, the SPOs are criticized and penalized.
for having low obligations and expenditures (as compared to a standard that does not take into account the delay caused by a CRA).

The CRA Guidelines

All the interviewees felt that the CRA guidelines were very vague. Most felt that they preferred them to be vague versus too specific. They believed that, if the guidelines were too specific, it would inhibit flexibility in interpretation. This lack of flexibility would probably be detrimental to many programs. Several program controllers felt that the guidelines were confusing and that they usually had to call the local budget analysts for interpretations and additional guidance. It seems that because of the vagueness of the guidelines and the lack of understanding the Congressional intent, the budget analysts at various levels in the chain-of-command are reluctant to make quick decisions on what should or should not be permitted during the CRA. Therefore, there is a lengthy time of indecision in the S&Os as the program control personnel await guidance from the budget community. Some of the more seasoned program control personnel try to aggressively tackle the CRA dilemma, but they are often constrained by what their local budget analysts will approve. Some of the local budget analysts that work for the Comptroller at the product division attempt to be aggressive during the CRA. Hence, they are willing to take greater personal risks in determining what can and cannot be done during the CRA. It seems that the degree of risk the budget analysts are willing to assume fluctuates. Apparently, more risk is taken until
a problem occurs because programs were allowed to obligate more than the total finally received after the appropriation bill was signed. This forces the SPO to hurriedly deobligate funds. Afterwards, the budget personnel become extremely conservative on what is allowed to be obligated during the CRA.

The budget analysts and program control personnel felt that "new start" and "operate in a prudent manner" should be better defined. (Reference Appendix B for a sample of the CRA guidelines issued to the SPOs at Space Division during the FY 84 CRA.)

Proposed Changes and General Comments

Many suggestions were offered as proposed changes. Most suggested that something should be done to get Congress to pass the appropriation bill on time. Most felt that changing the fiscal year start date from 1 October to 1 January would only help temporarily, if at all. They based their view on the fact that the change of the fiscal year start date back in 1976 from 1 July to 1 October only averted a CRA for the first two fiscal years following the change. Since then, a CRA has occurred each fiscal year. Some comments were made regarding changing the fiscal period from one year to two years. A few of those interviewed felt that this could be a partial solution. However, they felt that, in addition, Congress must be given some type of incentive to pass the appropriation bill on time. Various other unique proposals and comments have been presented in the preceding chapter.
Adjustment Techniques and Inefficiencies

Since a CRA seems to be the rule rather than the exception, many of those interviewed have learned to use some adjustment techniques to cushion the impacts caused by a CRA on new starts or ongoing programs. For example, to avoid impacts on new starts two techniques were mentioned. The first is to try to justify why the program should not be classified as a new start. Sometimes this is accomplished by a convincing argument that the program is not really a new start but, instead, a modification to an existing program. This has been done at ASD. A second way to avoid impacts on a new start is to try to get funds reprogrammed a year before the intended start. This is currently being done on the AASM program at ASD. Several adjustment techniques have been used on ongoing programs. Some of these techniques include variations on contract options, year-end spending, and forward financing. (Forward financing is the request and approval to use current year 3600 funds during the next fiscal year for effort done during the next fiscal year.) Other techniques involve an increase in risk on the part of the defense contractors supporting the program. These and other techniques consume a great deal of time and resources. Almost all of the interviewees pointed out the extreme amount of inefficiencies that take place during a CRA. Some of the inefficiencies occur as a result of trying to predict the CRA guidelines and the interpretations of the guidelines. Some occur as a result of techniques tried in order to avoid the potential impacts of the CRA to the program cost, schedule, and contracting activities. Though some
of the adjustment techniques used to avoid or reduce the CRA impacts may appear questionable, they are being used by dedicated personnel who feel, if their program is not the subject of Congressional controversy, the intent of Congress is for their program to continue without being impacted by the CRA. Thus, they try to do everything they can to prevent their programs from being affected. They feel their job is to try to acquire weapon systems on time and on cost; and, despite the obstacles, they try to achieve this goal.
V. Conclusions and Recommendations

Introduction
The following text presents conclusions and recommendations based on the data collected for this research effort.

Research Conclusions and Recommendations
In conclusion, the researcher gleaned evidence that the perceptions of the CRA impacts at the working level in AFSC are that a CRA does not significantly impact the AFSC programs. However, ample evidence indicates that a CRA does cause substantial detrimental impacts on the working level personnel in AFSC. In particular, four work areas were studied. These areas were program control, contracting, budget analysis, and program management. The consensus in each area was that they and their co-workers were impacted to some degree by the mass confusion, lack of decisive actions, and dramatic increase in workload and inefficiencies that seem to epitomize the CRA period. Throughout the forty interviews, a sentiment of needed reform (to the current situation of a CRA enactment each fiscal year) was clearly evident. Since the majority of the interviewees felt that a CRA causes negative impacts on personnel such as confusion, indecision, low morale, and so forth, the author believes that something should be done to reduce and/or eliminate these effects. Clearly, the CRA is a deviation from the normal flow of fund availability which can be dealt with through careful planning and extraordinary effort. One is led to
ask, however, how much better our management might be if we could eliminate this yearly aberration. Failing that, there may be remedies that the Air Force can pursue to alleviate the uncertainty and heavy administrative burden caused by a CRA. One potential remedy is to develop Air Force regulations to provide guidance for operating under a CRA. The regulations should define a CRA and provide guidance on what should and should not be done during the CRA period. Among other things, the regulations should better define the terms "new start" and "operate in a prudent manner." More steps should be taken in the budget area to ensure that the SPOs are able to "operate in a prudent manner." For example, one budget person has made new plans for handling the probable CRA in FY 85. When the CRA is passed, he will ensure either the FY 85 President's Budget as amended by Congress or the FY 84 appropriated dollars will be made available for the programs at SD. This is definitely a positive step forward in reducing the impacts on programs and personnel which occur due to the CRA.

A second recommendation is for the budget personnel to provide the CRA guidelines and assumptions to the program control people at the same time that the forecast instructions are provided. This recommendation assumes the regulations governing a CRA do not come into being. The author believes that CRA guidelines/regulations should strike a balance between being vague-confusing-flexible and specific-clear-inflexible.

A last recommendation would be to consider some of the responses regarding proposed changes and general comments regarding a CRA. Some of the following seem to have merit, but should be researched further:
* Revamp the whole budget process at the beginning of the fiscal year because the budget release is slow coming down the budget chain-of-command.

* Abolish the time limit on a CRA. There should be only a dollar limit.

* Exclude the procurement appropriations (3010, 3020, and 3080) from some of the same restrictions as the 3600 appropriation while operating under a CRA.

* Ensure funding under a CRA does not interfere with good program management.

* Change the fiscal year to a two-year fiscal period. This may be a partial solution in helping to get the appropriation bill passed on time.

* Do not think that changing the fiscal year from 1 October - 30 September to 1 January - 31 December will help in getting the appropriation bill passed on time.

* Should definitely have provisions to make a CRA effective on 1 October, if a CRA is necessary.

* A CRA should be the exception to the rule. Steps should be taken at higher levels to ensure this.

Recommendations for Future Research

Several other related areas of research could be pursued. One possibility is to study the effects of a CRA on other AFSC organizations. For example, one could study the effects incurred at the laboratories, the test centers, the ranges, and/or one or more of the other product divisions not studied in this research effort.

Another possibility would be to look at the impacts at higher levels or even in other Air Force commands. Also, along this vein, one could study other impacts caused by a CRA. For example, the relation of the impacts on pay and bonuses versus retention could be studied.
Furthermore, a related area would be to study why Congress is late with the appropriation bills. This may be helpful in determining proposed changes to help lessen the frequency of late appropriation bills.

An additional related area would be to research the problem of low expenditure rates. The potential researcher could try to determine what factors cause the rates to be low and the extent of the effect of each factor. One may also consider developing new standards for rates of obligation and expenditures which are adjusted for a three-month CRA period.

Summary

In summary, the study of the impacts caused by a CRA is one that should be pursued further. The researcher attempted to do an initial pilot study to guide others on areas to pursue. One would hope that the responses made in the data section will be given careful consideration as they were made by experts in the acquisition field who have had to deal with a CRA in each of several years. Furthermore, it is hoped that the data analysis, conclusions, and recommendations will be read with an eye for insight and much needed reform to the current situation.
Appendix A: Sample of a CRA Funding Requirement Request

DEPARTMENT OF THE AIR FORCE

28 AUG 1983

SUBJECT: Operating Under Continuing Resolution (CRA) (AFSC Mag 221225Z Aug 83)

TO: SD/TBP SD/YTG SD/TRP AFSCP/PC
SD/TDM SD/TFL SD/TYG AFSTC/XN
SD/TEC SD/TNP SAFSP-12 SD/ACBO

1. Please provide SD/ACBC No-Later-Than Close-of-Business Friday 2 Sep 83 that information requested by paragraphs one and two of the AFSC message.

2. For information contact Charles Merlott, ext. 30473.

FRANK O. ATKINSON Assistant Deputy for Comptroller

Ctys to: SD/CG
SD/CF
SD/ACBI
AFSCP/CC
AFSTC/CC

1 Atch
AFSC Mag 221225Z Aug 83

67
SUBJECT: OPERATING UNDER CONTINUING RESOLUTION AUTHORITY (CRA)

1. Given the current status of the DOD Appropriation bills and Congress not due to reconvene prior to 12 Sep, it is apparent that we will have to operate under CRA. In order to justify the FY 84 apportionment request the Air Staff has requested the following information:

A. Obligational Authority, by Appropriation, required for 30 days of operation.
B. Obligational Authority, by Appropriation, required for 45 days of operation.
C. Obligational Authority, by Appropriation, required for 60 days of operation.
D. Obligational Authority, by Appropriation, required for 90 days of operation.

2. Justification statements for each period, by Appropriation should be provided along with the requirements. Once more specific programmatic impacts including contractual information is requested to assist OSD in negotiations with OMB, we must be able to identify the effect of not having more than one twelfth of an annual funding released for 30 days, more than two twelthes for 60 days, etc.

3. For purposes of this message, obligational authority is defined as the amount of FY 84 funds that would be issued to field activities and product divisions for 30, 45, 60, and 90 day requirements. You are reminded that under CRA obligations are to be constrained to the cost-management consideration. Commitments are to be constrained to that level which directly supports your minimum essential obligations.

4. This tasking pertains to direct obligations only. Your reimbursable authority will be separately determined and we anticipate page 03 RUDDA#7407 UNCLAS ALAFSC 332/83 it will be fully supported.
5. Request this information be provided by 30 Aug 83. Points of contact are Mr. George Brown and Mr. Michael Novak, ACM, AUTOVON 858-4206.

BT
87407
ANN

PRIORITY
Appendix B: Sample of CRA Guidelines

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SPACE DIVISION (AFSPC)
LOS ANGELES AIR FORCE STATION PO BOX 5416, WOODDREW POSTAL CENTER
LOS ANGELES, CA 90003

7 OCT 83:

Operating Under Continuing Resolution Authority (CRA)

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<thead>
<tr>
<th>S7/YHP</th>
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<th>SD/YNP</th>
<th>SO/XR</th>
<th>SAFSP-12</th>
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1. As of today, we have not received any FY84 funds. We do not anticipate any release for another two to three weeks and we have been "advised to continue operations in a prudent manner."

2. Under CRA, commitments and obligations against directed FY84 programs are authorized. The intent of CRA is to provide for continued prudent operations and to protect cost and schedule. Until we receive a Budget Authorization, SO/AC will approve, on a case-by-case basis, the authority to obligate FY84 funds. Requests for authority to obligate funds will include: document number, amount to be obligated, effort, why it must be funded/impact, and the fund cite. A sample format is attached.

3. Additionally, the following guidance is provided:
   a. Expiration date for the CRA is 10 Nov 83.
   b. Cannot initiate any new multiyear procurement or new starts.
   c. The new start prohibition is defined as follows: "...no appropriation or funds made available or authority granted pursuant to this subsection shall be used to initiate or resume any project, activity, operation or organization which is defined as any project, subproject, activity, budget activity, program element, and subprogram within a program element, and for investment items is further defined as a P-I line item in a budget activity within an appropriation account and an R-I line item which includes a program element and subprogram element within an appropriation account, for which appropriations, funds, or other authority were not available during the fiscal year 1983."
   d. Cannot accelerate/increase the scope of existing programs.
   e. Cannot obligate funds where Congressional committees have expressed criticism or have indicated reductions for specific programs.

4. Please refer any questions to your ACB budget analyst.

I Attach
Sample

Info cy to: SD/CG
SD/CF
SD/PM

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Sample Letter Requesting Authority to Obligate FY84 Funds

SD/ACBI

1. Request authority to obligate $2,500,000 be granted in order to preclude work stoppage by Hughes-Douglas Corp. on contract #F04701-84-C-0007. Planning PR #FY76168401110 was issued for this purpose and submitted to SD/ACFC. Fund cite is as follows:

5743020 154 4730 29XXYZ 051300 00000 12345F 594200 F94200

JAMES W. BOND, Colonel, USAF
Director, Program Control
Deputy for Space Program XYZ

1st Ind, SD/ACBI

TO: SD/YXZ

Authority to obligate is hereby granted.

WARREN A. CARLSON
Chief, Investment Programs Division
Directorate of Programs/Budget

SAMPLE
Bibliography


First Lieutenant Roberta M. Tomasini was born 1976 in Southwest Texas State University from which she received the degree of Bachelor of Science in Education in May 1980. Upon graduation, she received a commission in the United States Air Force through the Air Force Reserve Officer Training Corps program. Her first assignment was as a financial manager in the Space Defense Systems Program Office at Space Division, Los Angeles Air Force Station, California. Lieutenant Tomasini worked in this capacity for two and a half years until entering the School of Systems and Logistics, Air Force Institute of Technology, in June 1983.

Permanent Address: [Redacted]
Title: THE PERCEIVED EFFECTS ON WEAPON SYSTEMS ACQUISITION IN AIR FORCE SYSTEMS COMMAND WHILE OPERATING UNDER A CONTINUING RESOLUTION AUTHORITY

Thesis Advisor: Mr. Dyke McCarty
This research effort reflects the perceived effects of a Continuing Resolution Authority (CRA) on weapon systems acquisition as observed by experienced acquisition personnel. The analysis was accomplished by interviewing military and civilian personnel assigned to Air Force Systems Command's Space Division and Aeronautical Systems Division. All interviewees were currently assigned to one of the following areas: program control, contracting, program management, or budget analysis. Many of those interviewed had worked in more than one of the four areas prior to their current assignment.

The analysis reflects the perceived cost, schedule, contracting, and other impacts caused by a CRA. In addition, issues regarding CRA guidelines and suggested changes to CRA policy were addressed. Furthermore, the analysis discusses the inefficiencies caused by a CRA and the adjustments personnel have made and are making to reduce and/or avoid the impacts of a CRA.

The results of this research effort indicate that a CRA has become more the rule than the exception. Consequently, personnel have learned to plan for it and work around it as best as they can. The net effect is an increased administrative burden in all four areas of acquisition that were researched. All interviewees felt a CRA should be the exception versus the rule and that Congress should make changes to eliminate the conditions which have been causing a CRA year after year. Few felt that changing the fiscal year to coincide with the calendar year would solve the CRA problem. Some felt that changing the fiscal period from one to two years had potential as being a partial solution. Other recommendations are discussed.