

MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

# OP-32 Automated Data System

AD-A165 872

## Functional Description

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MANAGEMENT TECHNOLOGIES DIVISION

**GENERAL  
RESEARCH**



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Submitted To:

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(Operations and Maintenance)  
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## SECTION 1

### GENERAL

#### 1.1 Purpose of the Functional Description

This Functional Description (FD) for "Automation of the Army Budget Activities for Civilian Personnel" (Contract Number MDA903-83-M-7399, 16 August 1983) is written to provide:

- The civilian portion of the Army budget system requirements which must be satisfied to serve as a basis for mutual understanding between the user and the developer.
- Information on performance requirements and data sources for development of Operating Program (OP)-32 budget exhibit formats for hard copy and CRT displays which will provide civilian personnel budget data broken out by categories.
- A basis for development of automated procedures to display, access, and update civilian personnel budget data through remote entry devices and computer interfaces.

#### 1.2 Project References

This FD is the first of two describing OP-32 budget format preparation, which will be prepared by the General Research Corporation (GRC) under the terms of the performance schedule required by the contract referred to above. The second FD will describe the automated Force Development Integrated Management System (FORDIMS) Program/Budget Subsystem (P/BS) interface with the OP-32 (Price and Program Changes). The FD will identify the data elements in the FORDIMS P/BS that will be used to update the OP-32 system and translate the data elements into a format acceptable as input for the OP-32. As a related activity, a Data Processing Request (DPR) (DAS Form 56) will be prepared to forward the FD to the US Army Management System Support Agency (USAMSSA).

The Project Sponsor is the Comptroller of the Army (COA); the contracting agency is the Defense Supply Service-Washington (DSS-W); The Contracting Officer's Representative (COR) is Mrs. Jean S. Rogers. The



primary user of the automated system will be OCA. The operating center of the system will be the United States Army Management System Support Agency (USAMSSA).

A copy of the unsolicited proposal submitted by GRC to OCA, which led to award of the contract identified above is at Appendix A. A copy of the Statement of Work, required deliverables, and performance schedule required by the contract is at Appendix B.

1.2.1 Contractual Documents

- a. Proposal entitled "Functional Descriptions for Automation of the Army Budget Activities for Civilian Personnel," General Research Corporation, McLean, Virginia, 3 March 1983.
- b. Procurement for "Functional Description for Automation of the Army Budget Activities for Civilian Personnel," Contract Number MDA903-83-M-7399, Defense Supply Service-Washington (DSS-W), 16 August 1983.

1.2.2 Reference Documentation

- a. DOD Directive 5100.73, "DOD Management Headquarters and Headquarters Support," 12 March 1981.
- b. Department of Defense Standard 7935, (DOD-STD-7935) 15 February 1983.
- c. OMB Circular A-11, Subject: "Preparation and Submission of Budget Activities," July 1983.
- d. DOD Budget Guidance Manual 7110-1-M.
- e. Memorandum, OSD, Subject: "FY 1984 Revised and 1985 Budget Estimates Guidance," July 1983.
- f. AR 10-5, Organization and Functions, Department of the Army.
- g. AR 18-1, Army Automation Management.
- h. AR 37-15, Budget Development and Review.
- i. AR 37-100, Account/Code Structure, Financial Administration.
- j. AR 37-100-xx, The Army Management Structure.
- k. AR 470-4, Manpower Management, Manpower and Equipment Control.
- l. AR 570-8, Army Management Headquarters Activities (AMHA).

- m. CSR 5-3, Management of the FORDIMS.
- n. CSR 10-23, Organization and Functions, Office of the Comptroller of the Army.
- o. CSR 11-6, Army Programs, Program and Budget Guidance.
- p. CSR 11-7, Staff Responsibilities for the Army Management Structure Code Data Base.
- q. CSR 15-1, Boards, Commissions, and Committees, Program and Budget Committee.
- r. CSR 18-11, Force Development Management Information System.
- s. CSR 37-4, Financial Administration, Army Staff Budget Responsibilities.
- t. CSR 570-5, Determination and Presentation of Civilian Manpower Requirements.
- u. Memorandum 18-4, HQDA 18 March 1976, Subject: Automatic Data Processing Support from the USAMSSA.
- v. Letter DACA-BUF, HQDA Subject: "Department of the Army Budget Directive, 5 July 1983.
- w. Volume I, FORDIMS User's Guide, August 1980
- x. Volume II, FORDIMS User's Guide, April 1979.

### 1.3 Terms and Abbreviations

The definitions of terms, abbreviations, and acronyms used in this document are listed in Appendix C.

SECTION 2  
SYSTEM SUMMARY

2.1 Background

) The OP-32 Budget Exhibit (Summary of Price and Program Changes) provides detailed information on price and program changes in the Operation and Maintenance, Army (OMA) and other Army appropriations. It is used by the Office of the Secretary of Defense (OSD), and the Office of Management and Budget (OMB) analysts to track program and price growth in a number of areas within appropriations. The OP-32 exhibit is required by the DOD Budget Guidance Manual 7110-1-M. The system described herein concerns itself with the civilian personnel costs of the OP-32 exhibit.

The OP-32 is prepared by the Comptroller of the Army Directorate of Operation and Maintenance Army, Program Budget Division (DACA-OMP). Reports from the Army Standard Finance System (STANFINS), the FORDIMS P/BS, Foreign Currency Fluctuation WANG System, along with guidance from OMB and OSD, are used to develop the information that must go into the OP-32 exhibit. The OP-32 Automated Reports and Interface Requirements will be included in the Vertical Force Development Management Information System (VFDMIS) design.

The portions of the OP-32 with which this functional description is concerned are explained below. The explanation of entries is keyed to the numbers in parentheses following the title of the field on the OP-32 format shown at Figures 2.1 and 2.1A. As indicated in the heading, entries in the table are in thousands of dollars.

(1) Fiscal Year (FY) - The year shown will be the year for which the exhibit is prepared. An exhibit is prepared for the current year as well as for the budget year. The current year is the FY in which the exhibit is submitted to Congress and the budget year is the FY for which the budget is being prepared. For example, for the FY 85 budget submission, FY 84 is the current year and FY 85 is the budget year. Likewise, FY 83 is the prior year.

APPROPRIATION  
SUMMARY OF PRICE AND PROGRAM CHANGES - FY 19(1)  
(\$ in Thousands)

|   | FY 1983(2)<br>Program<br>(3) | Foreign<br>Currency<br>Rate Difference<br>(4) | Price Growth<br>Percent<br>(5) | Price Growth<br>Amount<br>(6) | Program<br>Growth<br>(7) | FY 1984 (2)<br>Program<br>(8) |
|---|------------------------------|---|--------------------------------|-------------------------------|--------------------------|-------------------------------|
| <u>Civilian Personnel Compensation</u>            |                              |   |                                |                               |                          |                               |
| 0101 Executive, General and Special Schedules (9) |                              |   |                                |                               |                          |                               |
| 0103 Wage Board (9)                               |                              |   |                                |                               |                          |                               |
| 0104 Foreign National Direct Hire (FNDH) (9)      |                              |   |                                |                               |                          |                               |
| 0105 Separation Liability (FNDH) (9)              |                              |   |                                |                               |                          |                               |
| 0106 Benefits to Former Employees (9)             |                              |   |                                |                               |                          |                               |
| 0110 Unemployment Compensation (9)                |                              |   |                                |                               |                          |                               |
| Total Civilian Personnel Comp. (10)               |                              |   |                                |                               |                          |                               |
| <u>Industrial Fund Purchases (Ex. Transp)</u>     |                              |   |                                |                               |                          |                               |
| 0681 Unfinanced (IF) Pay Raise (11)               |                              |   |                                |                               |                          |                               |
| 0691 IF Pass Throughs (12)                        |                              |   |                                |                               |                          |                               |
| Total I.F. Purchases (10)                         |                              |   |                                |                               |                          |                               |
| <u>Other Purchases</u>                            |                              |   |                                |                               |                          |                               |
| 0901 Foreign National Indirect Hire (FNIH) (13)   |                              |   |                                |                               |                          |                               |
| 0902 Separation Liability (FNIH) (13)             |                              |   |                                |                               |                          |                               |
| 0989 Other Contracts (14)                         |                              |   |                                |                               |                          |                               |
| 0991 Foreign Currency Variance (15)               |                              |   |                                |                               |                          |                               |
| Total Other Purchases (10)                        |                              |   |                                |                               |                          |                               |

Figure 2.1. OP-32 Budget Exhibit Format - Current Year  
(Civilian Personnel Compensation Lines Only)

APPROPRIATION  
SUMMARY OF PRICE AND PROGRAM CHANGES - FY 19(1)  
(\$ in Thousands)

|   | FY 1984(2)<br>Program | Foreign<br>Currency<br>Rate Difference | Price Growth<br>Percent | Price Growth<br>Amount | Program<br>Growth | FY 1985 (2)<br>Program |
|---|-----------------------|--|-------------------------|------------------------|-------------------|------------------------|
|   | (3)                   | (4)                                    | (5)                     | (6)                    | (7)               | (8)                    |
| <u>Civilian Personnel Compensation</u>            |                       |  |                         |                        |                   |                        |
| 0101 Executive, General and Special Schedules (9) |                       |  |                         |                        |                   |                        |
| 0103 Wage Board (9)                               |                       |  |                         |                        |                   |                        |
| 0104 Foreign National Direct Hire (FNDH) (9)      |                       |  |                         |                        |                   |                        |
| 0105 Separation Liability (FNDH) (9)              |                       |  |                         |                        |                   |                        |
| 0106 Benefits to Former Employees (9)             |                       |  |                         |                        |                   |                        |
| 0110 Unemployment Compensation (9)                |                       |  |                         |                        |                   |                        |
| Total Civilian Personnel Comp. (10)               |                       |  |                         |                        |                   |                        |
| <u>Industrial Fund Purchases (Ex. Transp)</u>     |                       |  |                         |                        |                   |                        |
| 0681 Unfinanced (IF) Pay Raise (11)               |                       |  |                         |                        |                   |                        |
| 0691 IF Pass Throughs (12)                        |                       |  |                         |                        |                   |                        |
| Total I.F. Purchases (10)                         |                       |  |                         |                        |                   |                        |
| <u>Other Purchases</u>                            |                       |  |                         |                        |                   |                        |
| 0901 Foreign National Indirect Hire (FNIH) (13)   |                       |  |                         |                        |                   |                        |
| 0902 Separation Liability (FNIH) (13)             |                       |  |                         |                        |                   |                        |
| 0989 Other Contracts (14)                         |                       |  |                         |                        |                   |                        |
| 0991 Foreign Currency Variance (15)               |                       |  |                         |                        |                   |                        |
| Total Other Purchases (10)                        |                       |  |                         |                        |                   |                        |

Figure 2.1A. OP-32 Budget Exhibit Format - Budget Year  
(Civilian Personnel Compensation Lines Only)

(2) FY - The year entered is the prior year, current year or budget year, as appropriate to the exhibit being prepared. Figure 2.1 shows the FYs for the current year and Figure 2.1A shows the FYs for the budget year.

(3) FY Program - For the current year exhibit this column reflects dollar amounts for the previous year. These amounts must agree with the dollar amounts as shown in the prior year column of the budget being submitted. For the budget year exhibit, this column will show current year information and must agree with the far right column (8) of the current year exhibit.

(4) Foreign Currency Rate Difference - This column shows the difference in budgeted foreign currency exchange rates between the two years reflected in this exhibit. Variances resulting from changes in guidance after budget approval should not be included in this column for items other than 0991. Only items which deal in foreign currency have entries in this column.

(5) Price Growth Percent - This column reflects, for civilian personnel costs, the rates, or percent, of growth for the items experiencing price growth. In reports generated by this FD, civilian personnel rate changes will not be displayed.

(6) Price Growth Amount - The amount of price growth for applicable items are shown in this column. The price growth reflected must be consistent with the rate of increase or revised rates, as applicable, that are prescribed by OSD. This column reflects the difference in funds required as a result of price changes (up or down) to perform the same program reflected in the left hand column (3).

(7) Program Growth - This column reflects the amount of program growth. It is in the type dollars reflected in the right-most column (8), i.e., current year dollars for the current year exhibit and budget year dollars for the budget year exhibits.

(8) FY Program - This column shows the approved program for the year designated (current or budget). It reflects all manpower changes approved in the previous budget submission for the current year or the latest POM for the budget year, together with any out-of-cycle, Command Operating Budget (COB), or miscellaneous approved manpower changes.

(9) Civilian Personnel Compensation - These lines identify the categories of civilian personnel costs. The column fields corresponding to these lines will indicate costs associated with each category of civilian personnel costs.

(10) Total Civilian Personnel Compensation, Total IF Purchases, and Total Other Purchases - The subtotals are recorded on these lines.

(11) Unfinanced (IF) Pay Raise - This line displays unfinanced Industrial Fund pay raises and reflects information provided through various OSD program/budget documents.

(12) Industrial Fund Pass Throughs - Industrial pay raise pass throughs or refunds are listed on this line and apply to prior year and current year only. This information is developed based on guidance provided through OSD program/ budget documents.

(13) Foreign National Indirect Hire - The amounts for Foreign National Indirect Hire and Separation Liability reflect the costs for these types of civilian employment expenses. Currency changes are shown on these lines in the Foreign Currency Rate column as appropriate.

(14) Other Contracts - This line contains charges for contractual services not reported in any other line.

(15) Foreign Currency Variance - Any variances from budgeted foreign currency exchange rates will be reflected on this line. For example, OSD guidance may change the foreign exchange rates based on experience or new information. Since the new rates were not budgeted, the variances from the budget rates are reflected here.

## 2.2 Objective

The OP-32 automated system is designed to accept and process data that is both input through remote terminal in the OCA and derived from P/BS. It will also manipulate the data to print it in the format prescribed by the OSD Budget Guidance Manual. Specific objectives are to:

- a. Receive and store data input by DACA-OMP through remote console located in their secure room.
- b. Retrieve information and data stored in the P/BS data base.
- c. Process the input and retrieved data and output this information into the OP-32 format, which will provide dollar controls to subprogram directors.
- d. Develop input from FORDIMS P/BS and budget guidance.
- e. Process inputs into final OP-32 format for use by OMA subprogram directors and appropriation directors.
- f. Provide reports and audit trails of processed data in prescribed formats.

## 2.3 Existing Methods and Procedures

The existing methods and procedures used in preparing the OP-32 are primarily manual. They are time-consuming and subject to human error because of the many similar values used from a large number of data fields. It is estimated that approximately 4 people, working 2 to 3 days in DACA-OMP, are required to prepare the OP-32 controls for the subprogram directors. Each subprogram director must expend approximately the same level of effort to determine the subprogram detailed costs. These manual procedures are largely repetitive, arithmetic operations ("number crunching") that are suitable for computerized operations. More importantly, the manual procedures consume valuable analysis and decision time of professionals who should be available to



perform analysis and evaluation of budget proposals and to develop guidance necessary for support of Army operations. The flow diagram in Figure 2.2 depicts the existing procedures which are explained below.

The process begins with the recosting of the current year's civilian manpower workforce based on the previous year's actual experience factors. For example, in 1983 to prepare for FY 85 budget submission, the budgeted costs for FY 83 were recomputed based on FY 82 actual cost experiences. Recomputed costs for FY 83 will be the start point for the FY 85 budget submission; FY 83 will become the previous year instead of the current year. The recosting normally is performed during the Program Objective Memorandum (POM) cycle some time prior to preparing the new budget year submission.

Block 1 - The first step in the actual OP-32 preparation cycle is the submission of "percentage data elements" to USAMSSA. The "percentage data elements" are computed by DACA-OMP personnel from actual elements of expense figures provided on the Budget Execution and Appropriation Management System (BEAMS) reports from the US Army Finance and Accounting Center (USAFAC). The "percentage data elements" specify the percentages of total costs that are direct obligations (and, therefore, are budgetable expenses) and percentages that are reimburseable obligations. The percentage values are provided separately for each subprogram and are shown by C-type category for each category of civilian personnel cost within each of the three basic types of useage (i.e., mission, base operations, real property maintenance Army). These "percentage data elements" are provided manually to USAMSSA for use in preparing appropriation workpapers. The relation of C-types to categories is shown in the C-Type/Category Correlation Table (Table 2.1).

Block 2 - Using an automated program (ID:URLJ4P), USAMSSA applies the "percentage data elements" to the civilian personnel cost data on the P/BS file and produces tables which are used by DACA-OMP to generate additional information. The tables are in the form of appropriation workpapers. The appropriation workpapers show costs by Army Management Structure Code (AMSCO) level of detail within each subprogram. Separate

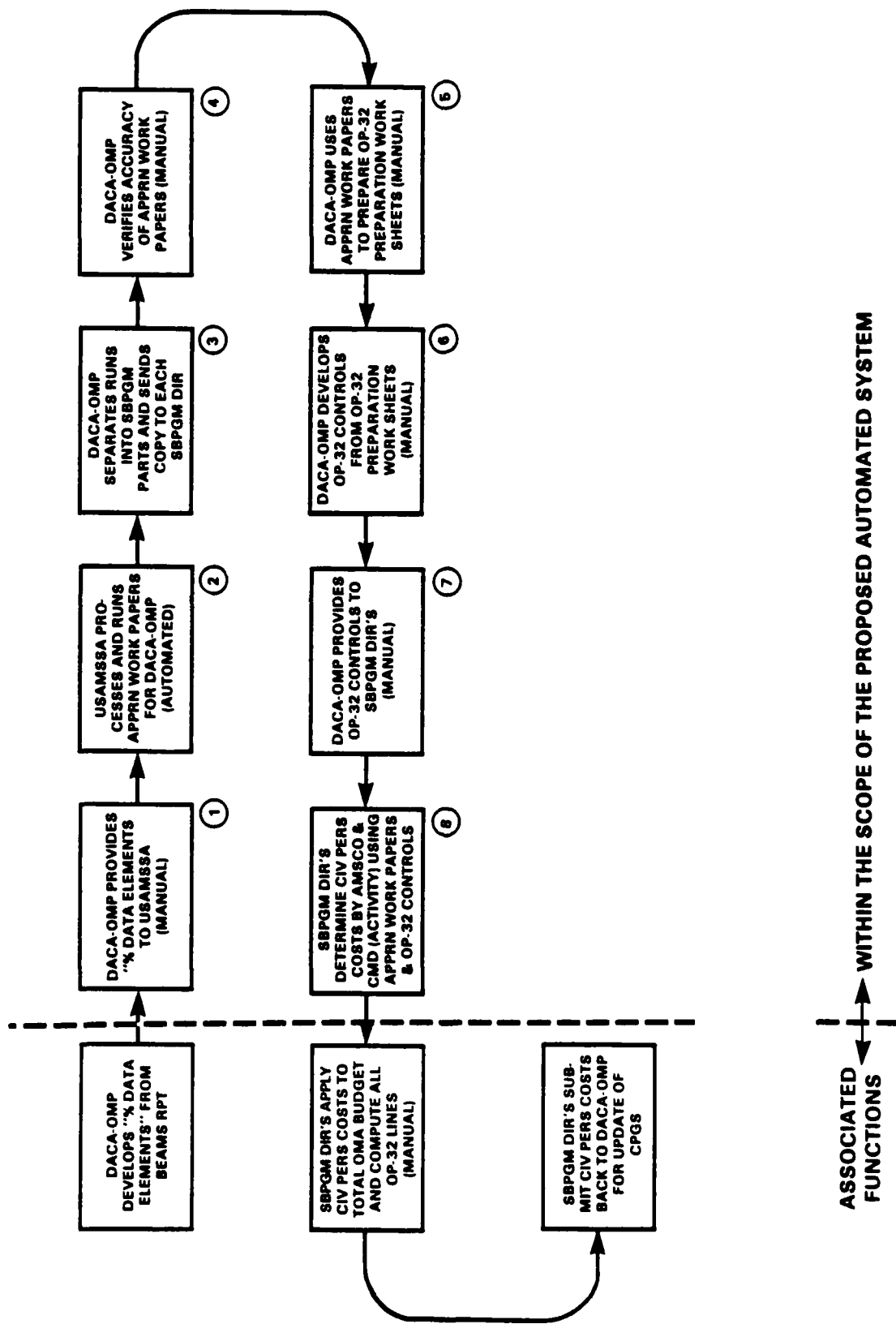


Figure 2.2. Flow Diagram of Existing OP-32 Preparation Procedures

TABLE 2.1  
C-TYPE/CATEGORY CORRELATION TABLE

| <u>Categories</u> | <u>Types</u>                 |
|-------------------|------------------------------|
| 1                 | 101, 111, 118, 121, 122      |
| 2                 | 102, 120, 301, 302, 303, 304 |
| 3                 | 105                          |
| 4                 | 103, 104, 109, 110, 119      |
| 5                 | 201, 202, 203, 204, 206      |
| 6                 | 106                          |
| 7                 | 205                          |

tables are provided for direct and reimbursable obligations. Costs are divided into basic compensation (BCOMP), overtime (OTIME), benefit dollars (BBENE -shown as OC12), severance pay (SVPAY -shown as FNFA), and former employee compensation (FECMP). Summaries of costs by C-type are provided for each subprogram. The identification of C-type is reflected in the C-Type Identification table (Table 2.2).

Block 3 - The appropriation workpapers provided to DACA-OMP by USAMSSA in block 2 are summarized by subprogram. DACA-OMP provides each subprogram director a copy of the workpapers that pertain to the director's subprogram. These are used to develop detailed cost information that will be explained in a later step.

Block 4 - DACA-OMP verifies the information reflected on the appropriation workpapers. The verification process is accomplished through several steps. First, the program listing of Program ID:URLJ4P is checked to insure that the C-type categories includes the appropriate C-types. Next, the parameters used in Program ID:URLJ4P are checked to insure that the correct "percentage data elements" were input. Once these checks have been made and any errors corrected, the tables produced by the program are checked for application of the appropriate factors or percentages as appropriate. This step of the verification process is accomplished by using the total costs reflected in the "current position" workpapers as a base. As an example, the "current position" is the recosted dollar figures applicable to the COB, Miscellaneous and Out-of-Cycle live file appropriation workpapers. The percentages listed in the "percentage data elements" table are manually applied to selected AMSCO within each subprogram to verify that the percentages were applied correctly, e.g., the total cost in the current position, multiplied by the direct cost percentage for a specific C-type category for BCOMP, should equal the amount of dollars listed for BCOMP in the direct cost appropriation workpapers.

Block 5 - The next step is the manual preparation of an OP-32 Preparation Worksheet, shown in Figure 2.3. This worksheet provides the

Table 2.2

## C-TYPE CODE IDENTIFICATION TABLE

The CTYPE codes shown below identify the different types of civilians indicated. Historical CTYPEs are indicated by an "(H)" after the title.

| <u>Direct Hire US</u>                                 | <u>CTYPE</u> |
|---|--------------|
| Graded US Citizens                                    | 101          |
| Wage Grade US Citizens                                | 102          |
| US Citizens Paid With Deutsche Marks                  | 111          |
| PL-89-61 Dependent School Teachers (H)                | 112          |
| PL-89-61 School Teachers paid with Deutsche Marks (H) | 114          |
| Substitute School Teachers (H)                        | 115          |
| Professionals (H)                                     | 116          |
| ROTC Instructors (H)                                  | 117          |
| US Dependents - Graded                                | 118          |
| US Dependents - Wage Grade                            | 120          |
| Senior Executive Service                              | 121          |
| General Merit Pay                                     | 122          |
| <u>Direct Hire Foreign Nationals</u>                  |              |
| Graded Panamanians                                    | 103          |
| Wage Grade Panamanians                                | 104          |
| Korean  | 105          |
| Vietnamese (H)  | 107          |
| Thai (H)  | 108          |
| Italians  | 109          |
| Other Direct Hire (ODH)                               | 110          |
| Ryukyuan (H)  | 113          |
| ODH Foreign Nationals paid by Foreign Country         | 119          |
| <u>Indirect Hire Foreign Nationals</u>                |              |
| Korean Service Corps                                  | 106          |
| German National Personnel                             | 201          |
| German National Personnel Paid with Deutsche Marks    | 202          |
| German Labor Service                                  | 203          |
| German Labor Service Paid with Deutsche Marks         | 204          |
| Japanese  | 205          |
| Other Indirect Hire                                   | 206          |
| <u>Exempt Categories</u>                              |              |
| Graded Summer Employment Youth                        | 301          |
| Wage Grade Summer Employment Youth                    | 302          |
| Graded Youth Opportunity Back to School               | 303          |
| Federal Junior Fellowship Program                     | 304          |

FY 85 OSD Budget Submit

P7-S

|  | FY 1983 |     | RPMMA | FY 1984 |     | TOTAL | FLUCTUATION |     |
|--|---------|-----|-------|---------|-----|-------|-------------|-----|
|  | MSN     | BOS |       | MSN     | BOS |       | MSN         | BOS |
| Schedule 6A - Civilian Personnel Compensation/AIF Pay Rate |         |     |       |         |     |       |             |     |
| AIF/Pass Through   |         |     |       |         |     |       |             |     |
| Civilian Personnel Compensation                            |         |     |       |         |     |       |             |     |
| Executive Schedule   |         |     |       |         |     |       |             |     |
| General Schedule   |         |     |       |         |     |       |             |     |
| Wage Board   |         |     |       |         |     |       |             |     |
| Foreign Natl Direct Hire (FNDR)                            |         |     |       |         |     |       |             |     |
| Separation Liability (FNDR)                                |         |     |       |         |     |       |             |     |
| Benefits to Former Employees                               |         |     |       |         |     |       |             |     |
| Unemployment Compensation                                  |         |     |       |         |     |       |             |     |
| TOTAL  |         |     |       |         |     |       |             |     |
| 0901 Foreign Natl Indirect Hire (FNIR)                     |         |     |       |         |     |       |             |     |
| 0902 Separation Liability (FNIR)                           |         |     |       |         |     |       |             |     |
| 0681 Unfinanced (IF) Pay Rate                              |         |     |       |         |     |       |             |     |
| 0691 IF Pass Through                                       |         |     |       |         |     |       |             |     |
| 0989 Other Contracts                                       |         |     |       |         |     |       |             |     |
| 0991 Foreign Currency Variance                             |         |     |       |         |     |       |             |     |
| 9999 TOTAL   |         |     |       |         |     |       |             |     |

Figure 2.3. OP-32 Preparation Worksheet

|  | TOTAL  | FY 1984<br>MSU | BOS   | RCMA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------|----------------|-------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Schedule 6A - Civilian Personnel Compensation/AIP Pay Raise AIP/Pass Through |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>Civilian Personnel Compensation</u>                                       |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Executive Schedule   |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Schedule   | 702362 | 645617         | 99869 | 6876 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wage Board   | 132192 | 122621         | 5775  | 2796 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foreign Natl Direct Hire (FNDH)  | 19387  | 19837          | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separation Liability (FNDR)  | 568    | 568            | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit to Former Employees  | 321    | 321            | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Unemployment Compensation  | .      | 4498           | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL  | 128032 | 128032         | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foreign Natl Indirect Hire (FNIH)  | 5561   | 5561           | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separation Liability (FNIH)  | 3433   | 3433           | -     | -    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Unfinanced (IF) Pay Rates  |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IF Pass Throughs   |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other Contracts  |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foreign Currency Variance  |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL  |        |                |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 2.3 (Cont.). OP-32 Preparation Worksheet

1785 O&P Output Submit

1785

|      |   | TOTAL  | FY 1985<br>MAY | 805   | 8 PMA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------|---|--------|----------------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0101 | Schedule 6A - Civilian Personnel Compensation/AIF Pay Raise | 711280 | 661074         | 43285 | 6761  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0103 | AIF/Pass Through  | 132164 | 122377         | 8980  | 2807  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0104 | Executive Schedule  | 19898  | 19898          | -     | -     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0105 | General Schedule  | 576    | 576            | -     | -     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0106 | Wage Board  | 385    | 385            | -     | -     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0110 | Foreign Matl Direct Hire (FNDR)                             |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|      | Separation Liability (FNDR)                                 |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|      | Benefits to Former Employees                                |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|      | Unemployment Compensation                                   |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|      | TOTAL   | 13472  | 13472          | -     | -     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0901 | Foreign Matl Indirect Hire (FNIR)                           | 4895   | 4895           | -     | -     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0902 | Separation Liability (FNIR)                                 |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0681 | Unfinanced (IP) Pay Raise                                   |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0691 | IP Pass Throughs  |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0989 | Other Contracts   |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0991 | Foreign Currency Variance                                   |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9999 | TOTAL   |        |                |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 2.3 (Cont.). OP-32 Preparation Worksheet



vehicle for determining cost growth by OP-32 line number by fiscal year. The data needed for completing the worksheet are derived from the appropriation workpapers for direct obligations and the Audit Trail by Transaction Number (ACTNO) report.

a. For OP-32 line items 0101, 0103, 0104, and 0901 the Analysis of Civilian Personnel Costs portion of the appropriation workpapers direct obligations is used. For OP-32 line numbers 0105, 0106, and 0902, the Analysis of Civilian Personnel Costs-Foreign National Separation Allowance (FNSA) part of the appropriation workpapers direct obligations is used. The appropriation workpapers are entered at the subprogram summaries. Using the conversion table for identifying the C-type corresponding to the OP-32 line items, the amounts listed under the total dollar column are added for the C-types corresponding to the OP-32 line item. Data for OP-32 line items 0101, 0103, and 0104 come from the direct hire part of the listing and data for OP-32 line item 0901 come from the indirect hire part of the listing. Note that this procedure is performed for the prior year (FY83 for the FY85 budget submission), the current year, and the budget year. Likewise for OP-32 line items 0105 and 0106, the direct hire portion of the FNSA listing is used and for OP-32 line item 0902 the indirect hire listing is used. This part of the procedure determines the total FY costs by OP-32 line item. There are separate appropriation workpaper runs for Base Operations (BASOPS or BOS) and Real Property Maintenance, Army (RPMA). From these two listings the costs for the BOS and RPMA columns are derived. The mission, or MSN, column is determined by subtracting BOS and RPMA from the total costs.

b. OP-32 line item 0110, Unemployment Compensation, reports dollar resources budgeted to reimburse the Unemployment Trust Fund for unemployment benefit obligations attributable to Army civilian employees. Data for this line is provided off-line by DACA-OMP for inclusion in the step described below for block (8).

c. The foreign currency fluctuation information for OP-32 line items 0901 and 0902 is derived from data provided by the Foreign

Currency Fluctuation WANG report. This report feeds the audit trail by ACTNO report which has information totalled by subprogram. The total value of the subprogram fluctuation is determined from the audit trail by ACTNO report by reading the TOSAL column at the subprogram total. The BOS and RPMA values are determined by adding the values of the BOS and RPMA AMSCOs, respectively. The MSN column value is determined by subtracting the BOS and RPMA values from the total values. The sign (+ or -) of the value must be carried to the worksheet. (A minus sign indicates that the dollar is rising in value in relation to foreign currencies.) A separate worksheet is completed for BOS and RPMA. In addition, a total OMA worksheet is prepared; the sum of all the subprogram totals should equal the total OMA values.

Block 6 - This step consists of manually transferring information from OP-32 preparation worksheets to a manual OP-32 form. A manual OP-32 form is prepared for each subprogram. This form provides the dollar controls for the subprogram directors.

Block 7 - The OP-32 controls are transmitted manually to the subprogram directors.

Block 8 - The subprogram directors must determine civilian personnel costs by AMSCO and command within each budget activity group. This is a manual procedure. The appropriation workpapers are entered at AMSCO level; each command costs are listed individually within each AMSCO. The AMSCO totals are recorded by budget activity group. This information is needed for the next step.

The subprogram directors apply the civilian personnel costs determined in the step above to their total budget amount and spread the remaining dollars to the other line items which they must fund. The OP-32 is completed and forwarded to DACA-OMP for updating the Cost/Program Growth System (CPGS). These last two steps, shown to the left of the broken verticle line on Fig. 2.2, complete the OP-32 preparation process.

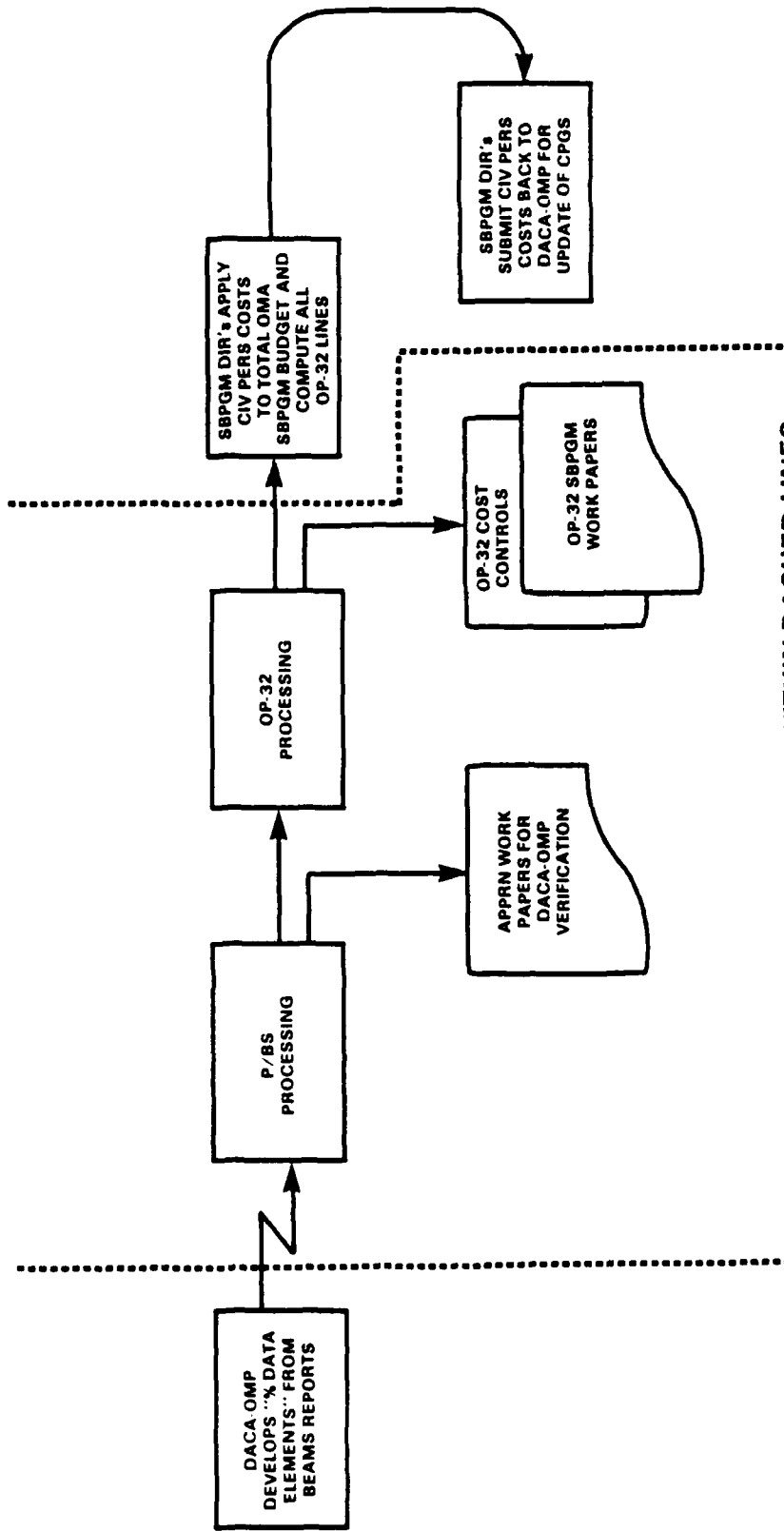
## 2.4 Proposed Methods and Procedures

The proposed OP-32 system will provide a responsive, timely system for generation of civilian personnel cost data in a format ready for budget submission. Civilian personnel cost data will be generated by OP-32 line item by subprogram; detailed cost data will be provided by AMSCO and budget activity group. The system will provide the means for accurate computation of cost data and free budget analysts from repetitive arithmetic drills so that their time can be utilized more profitably to analyze budget and program data. The system also will facilitate the preparation of subprogram information needed for final preparation of the complete OP-32 exhibit. It will be operated on the IBM 3033 and IBM 370-165 computers located in USAMSSA with remote interactive input terminal in DACA-OMP.

The schematic for the proposed OP-32 system is at Figure 2.4. The system is designed to receive input, via interactive remote terminal in DACA-OMP, of percentage cost factors ("percentage data elements") for direct and reimbursable obligations, apply them to the civilian personnel costs residing in the P/BS data base and produce appropriation workpapers. (With the exception of the method of "percentage data elements" input, this procedure is done now through program ID:URLJ4P.) After verification of the application of the percentage cost factors, the system will generate the OP-32 cost controls and subprogram and appropriation workpapers by manipulating the information contained in the appropriation workpapers. From this information the complete OP-32 will be developed.

### 2.4.1 Summary of Improvements

The OP-32 automated system will provide timely generation of budget data that currently requires several days of work by 4 people in one office and one or more persons in each of seventeen other offices. The system will enhance the accurate determination of cost information and will relieve highly paid analysts of tedious manual manipulation of data. It also will enable the OCA to be more responsive, with more accurate data, to guidance changes during preparation of budget submissions.



**PROPOSED AUTOMATED SYSTEM WITHIN DASHED LINES**

Figure 2.4. Flow Diagram of Proposed OP-32 ADS

## 2.4.2 Summary of Impacts

### 2.4.2.1 User Organization Impacts

The OP-32 automated system will increase the efficiency of the COA as well as that of the program and appropriation directors by saving time and providing more timely information. There will be no requirements for reorganization in either DACA-OMP or the various appropriations and program directors' offices.

### 2.4.2.2 User Operational Impacts

Since this system will be developed after the OSD budget submission, there will be no adverse impacts on the preparation of the FY 85 budget submission. After development of the system, the operational impact will be the enhanced ability to analyze budget proposals and submissions. There will be no adverse operational impacts.

### 2.4.2.3 User Development Impacts

Since the system will employ equipment currently operated by the user organizations, no equipment training will be required. Personnel will have to become familiar with new CRT displays. A system check using the current manual process will be required, but no adverse impact will result.

## 2.5 Assumptions and Constraints

The following assumptions have been made in developing this system:

- The OP-32 budget exhibit will continue to be required by OSD.
- Computer time for processing the input and stored data will be made available.
- The FORDIMS data base may be utilized for producing required outputs.
- The VFDMIS data base will be designed to provide the same automated capabilities.

If computer support or the P/BS data base is unavailable this system will not provide the improved efficiencies that are expected. Non-availability of actual cost information from the BEAMS reports would dilute the accuracy of the system, but it would have no greater impact on the automated system than on the manual system.

The capability of determining the percentage factors for direct and reimbursable obligations from the BEAMS reports by automation is a very desirable capability. However, that is not within the scope of the statement of work for this FD. It should be viewed as an enhancement to this system and should be considered for future development.

SECTION 3  
DETAILED CHARACTERISTICS

3.1 Specific Performance Requirements

The OP-32 automated system will be compatible with VFDMIS and must be capable of performing the following tasks:

- Receive data input by remote interactive terminal from DACA-OMP.
- Produce a printout in the prescribed OP-32 format for each OMA subprogram and military function appropriations showing costs computed using input data combined with cost data resident on the P/BS file.
- Produce for each OMA subprogram and appropriation a report in the format described herein that is derived from the OP-32 formatted information.

3.1.1 Accuracy and Validity

a. The system must compute cost data accurately. The major problem in achieving accurate cost information is developing a consistent round-off rule. Numbers ending with 5 or above should be rounded up; less than five should be rounded down.

The system must provide for data validation and editing prior to producing the final documents. There should be a capability to verify the correct application of the percentage cost factors. An audit trail of the values totalled for the OP-32 line items should also be provided. These verification procedures will ensure an accurate product result.

b. Data utilized by the system must be accurate. The "percentage data elements" must be accurate to .01%. The P/BS data base data must be verified for accuracy. Data used should be from the live, approved file so that it reflects verified data.

c. In its present configuration, the system will not use data transmitted from locations outside the Pentagon. However, the system must have the capability of verifying the data input through remote terminals in the Pentagon.

### 3.1.2 Timing

While there are no established timing requirements anticipated for throughput times, the system must have the capability to meet short suspense times on the order of 24 hours or less for production of required reports. However, it must be noted that during budget preparation, suspense times are somewhat short and may be subject to change.

## 3.2 Functional Area System Functions

### 3.2.1 Data Input

This function consists of input of "percentage data elements" by DACA-OMP using remote terminal. The data will be configured by subprogram. Within each subprogram, the data will be further subdivided as to mission (MSN) BOS, or RPMA. For each of those three subdivisions the input will be by C-type category and civilian personnel expense category. Percentages will be provided for direct and reimbursable obligations in each of the subdivisions described above.

### 3.2.2 P/BS Processing

This function will consist of executing Program ID:URLJ4P using P/BS information and the "percentage data elements" entered through remote terminal by DACA-OMP. Appropriation workpapers showing total, direct, and reimbursable costs separately will be produced in the format designed with Program ID:URLJ4P.

### 3.2.3 OP-32 Processing

After verification of the P/BS processing, the OP-32 cost controls and OP-32 subprogram and appropriation workpapers must be developed. For each subprogram and appropriation, the OP-32 controls are developed by adding the total direct costs for the various C-types that comprise



the individual line items of the OP-32. The costs will be totalled by line item for the categories shown in the \$ fields in Table 3.1. Separate reports will be calculated for MSN, BOS, and RPMA. The report will be divided by, and totals calculated for, operating agency (OPAGY) and activity group, with a total roll-up for OMA or other appropriation by activity group. The costs portion of the OP-32 subprogram and appropriation workpapers are produced using the same OP-32 line item aggregation of C-types as were used for the OP-32 controls. Strength figures will be determined for the OP-32 line items shown in Table 3.2. The calculation will be done for each subprogram by activity group. Within the budget activity group, total costs will be shown by AMSCO and further listed by command within each AMSCO. A second report will show total civilian personnel costs by command.

### 3.3 Inputs-Outputs

#### 3.3.1 Inputs

Inputs consist of percentage data elements. The percentage data element is a numerical percentage which describes the proportion of total civilian personnel costs that are direct obligations and reimbursable obligations. A distinctive percentage value is computed for each class of obligation for each C-type category. The format for listing the data elements is at Figure 3.1. The percentages are determined to the hundredth of a percent, e.g., 83.47%, and can range from 00.00 percent to 100.00 percent. The data elements will be typed into a remote interactive terminal that is connected to the USAMSSA computer. The format should be designed to be called up on the remote terminal screen so that the elements may be entered simply by typing them into the correct place on the screen. A separate screen should be formatted for each type expenditure (MSN, BOS, RPMA) for each subprogram. The user should have the capability of reviewing a menu of screens and calling up a specific screen to verify the data entered.

#### 3.3.2 Outputs

Outputs will be in the form of hard copy reports and CRT displays. As mentioned above, the percentage data element format should be

Table 3.1  
CORRELATION TABLE  
C-TYPE TO OP-32 LINE ITEMS (DOLLARS)

The dollar costs for the OP-32 Line Items shown below are derived from the indicated dollar fields of the P/BS Appropriation Workpapers using the C-TYPES listed below the field. Direct hire tables are used except where indicated otherwise.

| <u>OP-32 Line Item</u>  | <u>Total \$ Field</u>  |
|-------------------------|--|
| 0101                    | A. Graded U.S. Citizens<br>B. Senior Executive Service<br>C. Graded U.S. Dependent Hire<br>D. General Merit Pay  |
| 0103                    | A. Wage Grade U.S. Citizens<br>B. Wage Grade U.S. Dependent Hire<br>C. Graded Summer Employment Youth<br>D. Wage Grade Summer Employment Youth<br>E. Graded Youth Opportunity Back to School<br>F. Federal Junior Fellowship Program |
| 0104                    | A. Graded Panamanians<br>B. Wage Grade Panamanians<br>C. Koreans<br>D. Italians<br>E. Other Direct Hire  |
| 0901<br>(Indirect Hire) | A. German Nationals<br>B. Japanese<br>C. Korean Service<br>D. Other Indirect Hire  |
|                         | <u>FNSA \$ Field</u>   |
| 0105                    | A. Koreans<br>B. Italians<br>C. Other Direct Hire  |
|                         | <u>FECOMP \$ Field</u>   |
| 0106                    | A. Graded U.S. Citizens<br>B. Wage Grade U.S. Citizens   |
| 0902<br>(Indirect Hire) | <u>FNSA \$ Field</u><br>A. Korean Svc Corps<br>B. Japanese   |

TABLE 3.2  
CORRELATION TABLE  
C-TYPE TO OP-32 LINE ITEMS (STRENGTH)

The strength figures for the OP-32 Line Items shown below are derived from the indicated strength fields of the P/BS Appropriation Workpapers using the C-Types listed below the field. Direct Line tables are used except where indicated otherwise.

| <u>OP-32 Line Item</u>  | <u>Begin</u> | <u>End</u> | <u>Strengths</u>   | <u>FTP</u> | <u>Man Years</u> |
|-------------------------|--------------|------------|--|------------|------------------|
| 0101                    |              |            | A. Graded US Citizens<br>B. Senior Executive Service<br>C. Graded US Dependent Hire<br>D. General Merit Pay<br>E. US Citizens Paid with Deutschemarks <sup>1</sup>   |            |                  |
| 0103                    |              |            | A. Wage Grade<br>B. Wage Grade US Dependent Hire<br>C. Graded Summer Employment Youth <sup>2</sup><br>D. Wage Grade Summer Employment Youth <sup>2</sup><br>E. Graded Youth Opportunity Back to School <sup>2</sup><br>F. Federal Junior Fellowship Program <sup>2</sup> |            |                  |
| 0104                    |              |            | A. Graded Panamanians<br>B. Wage Grade Panamanians<br>C. Korean<br>D. Italians<br>E. Other Direct Hire<br>F. ODH Foreign Nationals Paid by Foreign Country <sup>1</sup>  |            |                  |
| 0901<br>(Indirect Hire) |              |            | A. German Nationals<br>B. Japanese<br>C. Korean Service Corps<br>D. Other Indirect Hire  |            |                  |

<sup>1</sup>For these categories of employees man years are a memo entry--do not pick up man years.

<sup>2</sup>For these categories of employees Begin, End, and FTP Strength are memo entries--do not pick up.

NOTE: The PBS/FORDIMS data elements are the following:

- A. Begin = BGSTR
- B. End = APCIV
- C. FTP = APFTP
- D. Man year = APMYR

PERCENTAGE DATA ELEMENTS

| DIRECT/<br>REIMBURSABLE | APCAT | PROGRAM | SUBPROGRAM | RPM | MSN | C TYPE | B COMP        | PERCENTAGE<br>DATA ELEMENTS (FUNDS) |               |                | SVPAY          | FECMP |
|-------------------------|-------|---------|------------|-----|-----|--------|---------------|-------------------------------------|---------------|----------------|----------------|-------|
|                         |       |         |            |     |     |        |               | OTIME                               | BBENE         |                |                |       |
| DIRECT<br>REIMB         | 2020  | 2       | 0          |     | MSN | 1      | 99.06<br>.94  | 99.06<br>.94                        | 99.06<br>.94  | 100.00<br>0.00 | 100.00<br>0.00 |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 2      | 97.01<br>2.99 | 97.01<br>2.99                       | 97.01<br>2.99 | 100.00<br>0.00 | 100.00<br>0.00 |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 3      | 96.23<br>3.77 | 96.23<br>3.77                       | 96.23<br>3.77 | 100.00<br>0.00 | 100.00<br>0.00 |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 4      | 96.23<br>3.77 | 96.23<br>3.77                       | 96.23<br>3.77 | 100.00<br>0.00 | 100.00<br>0.00 |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 5      | 96.03<br>3.97 | 96.03<br>3.97                       | 96.03<br>3.97 | 100.00<br>0.00 | 100.00<br>0.00 |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 6      | 26.03<br>3.97 | 96.03<br>3.97                       | 96.03<br>3.97 | 100.00<br>0.00 | 97.12<br>2.88  |       |
| DIRECT<br>REIMB         |       |         |            |     |     | 7      | 96.03<br>3.97 | 96.03<br>3.97                       | 96.03<br>3.97 | 100.00<br>0.00 | 100.00<br>0.00 |       |

Figure 3.1. Percentage Data Elements Screen

available on CRT for review and change/update as required. Other outputs will include the appropriation workpapers produced by Program ID:URLJ4P, the OP-32 cost controls, and the OP-32 subprogram and appropriation workpapers. Examples of the appropriation workpapers output by Program ID:URLJ4P are at Figures 3.2 and 3.2A. There is no proposal to change the format of the appropriation workpapers. Consequently, the data elements and data fields required for the OP-32 system remain the same as in Program ID:URLJ4P.

The OP-32 cost controls report should be produced in hard copy in the format shown in Figure 3.3 and 3.3A. There should be a separate report for the current year and the budget year for each subprogram and appropriation. Within each subprogram, the cost data should be added by OP-32 line item for the FY program columns using the relationships for C-type to OP-32 line item shown in Table 3.1; the line items will be totalled by activity group and subprogram. The information for foreign currency rate difference column is taken from the sum of the ACTNO's on foreign currency fluctuation identified by DACA-OMP. The information for both the program and foreign currency rate difference columns is available from the P/BS data base. The information for the price growth column will be determined by DACA-OMP. Price growth factors are used by DACA-OMP to generate ACTNOs. The ACTNO transactions identified by DACA-OMP are used to generate the price growth for each OP-32 line item. The price growth factors are : (1) essentially percentages based on experience, (2) provided to DACA-OMP by OSD, and (3) provided to USAMSSA by DACA-OMP in the form of retrieval definitions which generate ACTNOs. The program growth column for each line is determined by subtracting from the right-hand FY program (Column 7 in Fig. 3.3 and 3.3A) the sum of the left-hand FY program (Column 3 in Fig. 3.3 and 3.3A), foreign currency rate difference (Column 4), and price growth (Column 5).

The format for the OP-32 subprogram and appropriation workpapers is shown in Figure 3.4. There are separate workpapers for each subprogram and appropriation. The subprogram and appropriation listing will show costs by activity group. The AMSCOs pertaining to a specific activity

RECOSTING OSD FY85 BUDGET SUCHIT  
ANALYSIS OF CIVILIAN PERSONNEL COSTS  
BASIC LEVEL APPROPRIATION WORKPAPERS  
FYEAR - 1984 APLPH - DIA

| DIRECT HIRE              | APPROPRIATION/PROGRAM/<br>SUB PROGRAM/ANSCO/RCOID | STRENGTHS | FTP  | MAN<br>YEARS | D O L L A R S | I I I<br>OVERTIME | T H O U S A N D S | O C 12<br>TOTAL | A V G<br>DAILY<br>SALARY | P E R . =<br>O C 12/<br>O C 11 | P E R . =<br>O T TO<br>O C 11 | A V G<br>YEARLY<br>SALARY |
|--------------------------|---|-----------|------|--------------|---------------|-------------------|-------------------|-----------------|--------------------------|--------------------------------|-------------------------------|---------------------------|
|                          |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| 6A01 DARCOM              |   | 135       | 135  | 135          | 3189          | 119               | 449               | 3757            | 90.85                    | .1407                          | .0373                         | 23622                     |
| GRADED US CITIZENS       |   | 0         | 0    | 0            | 0             | 0                 | 0                 | 0               | .00                      | .0000                          | .0000                         | 0                         |
| GRADED US DEPENDENT HIRE |   | 0         | 0    | 0            | 0             | 0                 | 0                 | 0               | .00                      | .0000                          | .0000                         | 0                         |
| WAGE GRADE US CITIZENS   |   | 6         | 6    | 6            | 208           | 0                 | 47                | 255             | 133.33                   | .2259                          | .0300                         | 34666                     |
| GENERAL MERIT            |   | 141       | 141  | 141          | 3397          | 119               | 496               | 4012            |                          |                                |                               |                           |
| TOTAL                    |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| 7601 FORSCOM             |   | 55        | 55   | 55           | 1155          | 0                 | 168               | 1323            | 80.76                    | .1454                          | .0000                         | 21000                     |
| GRADED US CITIZENS       |   | 55        | 55   | 55           | 1155          | 0                 | 168               | 1323            |                          |                                |                               |                           |
| TOTAL                    |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| 7701 USA JAPAN           |   | 13        | 13   | 13           | 355           | 8                 | 88                | 451             | 105.02                   | .2478                          | .0225                         | 27307                     |
| GRADED US CITIZENS       |   | 9         | 9    | 9            | 269           | 7                 | 60                | 336             | 114.95                   | .2230                          | .0260                         | 29888                     |
| WAGE GRADE US CITIZENS   |   | 22        | 22   | 22           | 624           | 15                | 148               | 787             |                          |                                |                               |                           |
| TOTAL                    |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| 8901 USAREUR/7A          |   | 116       | 116  | 118          | 2309          | 8                 | 643               | 2960            | 75.25                    | .2784                          | .0034                         | 19567                     |
| GRADED US CITIZENS       |   | 102       | 0    | 243          | 3011          | 0                 | 293               | 3309            | 47.65                    | .0909                          | .0000                         | 12390                     |
| GRADED US DEPENDENT HIRE |   | 3         | 3    | 3            | 14            | 0                 | 4                 | 18              | 17.54                    | .2057                          | .0000                         | 4666                      |
| WAGE GRADE US CITIZENS   |   | 0         | 0    | 0            | 0             | 0                 | 0                 | 0               | .00                      | .0000                          | .0000                         | 0                         |
| WAGE GRADE US DEP HIRE   |   | 79        | 0    | 79           | 1632          | 11                | 646               | 2289            | 79.45                    | .3558                          | .0067                         | 20658                     |
| ITALIANS                 |   | 313       | 0    | 366          | 7064          | 71                | 1771              | 8936            | 74.23                    | .2507                          | .0100                         | 19300                     |
| OTHER DIRECT HIRE        |   | 4         | 4    | 4            | 176           | 0                 | 37                | 213             | 169.23                   | .2102                          | .0000                         | 44000                     |
| GENERAL MERIT            |   | 617       | 123  | 813          | 14206         | 90                | 3399              | 17695           |                          |                                |                               |                           |
| TOTAL                    |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| ANSCO = 7211110000       |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |
| GRADED US CITIZENS       |   | 319       | 319  | 321          | 7008          | 135               | 1348              | 8491            | 83.96                    | .1923                          | .0192                         | 21831                     |
| GRADED US DEPENDENT HIRE |   | 102       | 0    | 243          | 3011          | 0                 | 293               | 3309            | 47.65                    | .0909                          | .0000                         | 12390                     |
| WAGE GRADE US CITIZENS   |   | 12        | 12   | 12           | 283           | 7                 | 64                | 354             | 90.70                    | .2261                          | .0247                         | 23503                     |
| WAGE GRADE US DEP HIRE   |   | 0         | 0    | 0            | 0             | 0                 | 0                 | 0               | .00                      | .0000                          | .0000                         | 0                         |
| ITALIANS                 |   | 79        | 0    | 79           | 1632          | 11                | 646               | 2289            | 79.45                    | .3958                          | .0067                         | 20658                     |
| OTHER DIRECT HIRE        |   | 313       | 0    | 366          | 7064          | 71                | 1771              | 8936            | 74.23                    | .2507                          | .0100                         | 19300                     |
| GENERAL MERIT            |   | 10        | 10   | 10           | 384           | 0                 | 84                | 468             | 147.69                   | .2187                          | .0000                         | 38400                     |
| TOTAL                    |   | 835       | 341  | 1031         | 19382         | 224               | 4211              | 23817           |                          |                                |                               |                           |
| 6A01 DARCOM              |   | 6039      | 5335 | 5978         | 124069        | 1811              | 15620             | 141500          | 79.82                    | .1258                          | .0145                         | 20754                     |
| GRADED US CITIZENS       |   | 0         | 0    | 0            | 0             | 0                 | 0                 | 0               | .00                      | .0000                          | .0000                         | 0                         |
| SENIOR EXECUTIVE SERVICE |   | 21        | 21   | 21           | 344           | 12                | 47                | 403             | 63.00                    | .1366                          | .0319                         | 16380                     |
| WAGE GRADE US CITIZENS   |   | 370       | 370  | 370          | 16948         | 24                | 1957              | 18929           | 176.17                   | .1154                          | .0014                         | 45805                     |
| GENERAL MERIT            |   | 6430      | 5726 | 6369         | 141361        | 1847              | 17624             | 160832          |                          |                                |                               |                           |
| TOTAL                    |   |           |      |              |               |                   |                   |                 |                          |                                |                               |                           |

Figure 3.2. Appropriation Workpapers (Basic Level) Example

FY85 OSD BUDGET OP-32 DIRECT OBLIGATIONS ONLY  
 ANALYSIS OF CIVILIAN PERSONNEL COSTS - FOREIGN NATIONAL SEPARATION ALLOWANCE  
 BASIC LEVEL FISA APPROPRIATION WORKPAPERS  
 FYEAR - 1983 APRN - 01A

DIRECT HIRE

| APPROPRIATION/PROGRAM/<br>SUB PROGRAM/AMSCO/PCOMD | BEGIN | END | STRENGTHS | FTP | MAN<br>YEARS | OC 11<br>DOLLARS | IN<br>FISA | THOUSANDS<br>FECMP | PER.=<br>FNSA/<br>OC11 | PER.=<br>FECMP/<br>OC11 |
|---|-------|-----|-----------|-----|--------------|------------------|------------|--------------------|------------------------|-------------------------|
| 6901 USAREUR/7A                                   |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 33    | 33  | 33        | 19  | 383          | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 33    | 33  | 33        | 19  | 383          | 0                | 0          | 0                  | .0000                  | .0000                   |
| SUB-AMSCO = 202396H0000                           |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 33    | 33  | 33        | 19  | 383          | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 33    | 33  | 33        | 19  | 383          | 0                | 0          | 0                  | .0000                  | .0000                   |
| 8901 USAREUR/7A                                   |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 0     | 0   | 0         | 1   | 20           | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 0     | 0   | 0         | 1   | 20           | 0                | 0          | 0                  | .0000                  | .0000                   |
| SUB-AMSCO = 202396P0000                           |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 0     | 0   | 0         | 1   | 20           | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 0     | 0   | 0         | 1   | 20           | 0                | 0          | 0                  | .0000                  | .0000                   |
| 6901 USAREUR/7A                                   |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 12    | 12  | 12        | 13  | 262          | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 12    | 12  | 12        | 13  | 262          | 0                | 0          | 0                  | .0000                  | .0000                   |
| SUB-AMSCO = 202396S0000                           |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 12    | 12  | 12        | 13  | 262          | 0                | 0          | 0                  | .0000                  | .0000                   |
| TOTAL   | 12    | 12  | 12        | 13  | 262          | 0                | 0          | 0                  | .0000                  | .0000                   |
| 6901 USAREUR/7A                                   |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 0     | 0   | 0         | 88  | 1772         | 0                | 1          | 1                  | .0000                  | .0005                   |
| TOTAL   | 0     | 0   | 0         | 88  | 1772         | 0                | 1          | 1                  | .0000                  | .0005                   |
| SUB-AMSCO = 202396Z0000                           |       |     |           |     |              |                  |            |                    |                        |                         |
| US CITIZENS PD DEUTSCHEMARK                       | 0     | 0   | 0         | 88  | 1772         | 0                | 1          | 1                  | .0000                  | .0005                   |
| TOTAL   | 0     | 0   | 0         | 88  | 1772         | 0                | 1          | 1                  | .0000                  | .0005                   |
| AGGREGATE AMSCO = 202396                          |       |     |           |     |              |                  |            |                    |                        |                         |
| ITALIANS  | 2     | 0   | 2         | 2   | 36           | 0                | 20         | 20                 | .0000                  | .5555                   |
| US CITIZENS PD DEUTSCHEMARK                       | 59    | 59  | 59        | 131 | 2638         | 0                | 1          | 1                  | .0000                  | .0003                   |
| TOTAL   | 61    | 59  | 61        | 133 | 2674         | 0                | 21         | 21                 | .0000                  | .0003                   |
| 8901 USAREUR/7A                                   |       |     |           |     |              |                  |            |                    |                        |                         |
| ITALIANS  | 25    | 0   | 25        | 23  | 534          | 0                | 15         | 15                 | .0000                  | .0280                   |
| TOTAL   | 25    | 0   | 25        | 23  | 534          | 0                | 15         | 15                 | .0000                  | .0280                   |
| SUB-AMSCO = 20239631000                           |       |     |           |     |              |                  |            |                    |                        |                         |
| ITALIANS  | 25    | 0   | 25        | 23  | 534          | 0                | 15         | 15                 | .0000                  | .0280                   |
| TOTAL   | 25    | 0   | 25        | 23  | 534          | 0                | 15         | 15                 | .0000                  | .0280                   |

Figure 3.2A. Appropriation Workpapers (Foreign National Separation Allowance) Example

PROGRAM 7S - FY 85 BUDGET  
SUMMARY OF PRICE AND PROGRAM CHANGES  
APPROPRIATION

OP-32 COST CONTROLS (\$ IN THOUSANDS) - CURRENT YEAR DISPLAY

| OP-32<br>LIN ITEM<br>(1) | SUBPROGRAM/ACTIVITY<br>GROUP/AMSCO/OPAGY/LINE<br>DESCRIPTION<br>(2) | FY 83<br>PROG<br>(3) | FOR CURR<br>RATE DIF<br>(4) | PRICE<br>GROWTH<br>(5) | PROG<br>GROWTH<br>(6) | FY 84<br>PROG<br>(7) |
|--------------------------|---|----------------------|-----------------------------|------------------------|-----------------------|----------------------|
|                          | CIVILIAN PERSONNEL COMP (8)   |                      |                             |                        |                       |                      |
| 0101                     | EXEC, GEN AND SPEC SCHED (9)  |                      |                             |                        |                       |                      |
| 0103                     | WAGE BOARD (10)   |                      |                             |                        |                       |                      |
| 0104                     | FOR NATL DIR HIRE (FNDH) (11)                                       |                      |                             |                        |                       |                      |
| 0105                     | SEPARATION LIABL (FNDH) (12)  |                      |                             |                        |                       |                      |
| 0106                     | BENEFITS TO FORMER EMPLOY (13)                                      |                      |                             |                        |                       |                      |
| 0110                     | UNEMPLOYMENT COMPENSATION (14)                                      |                      |                             |                        |                       |                      |
| 0199                     | TOTAL CIV PERS COMP (15)  |                      |                             |                        |                       |                      |
|                          | IND FUND PURCHASES (16)   |                      |                             |                        |                       |                      |
| 0681                     | UNFIN (IF) PAY RAISE (17)   |                      |                             |                        |                       |                      |
| 0691                     | IF PASS THROUGH (18)  |                      |                             |                        |                       |                      |
|                          | OTHER PURCHASES (19)  |                      |                             |                        |                       |                      |
| 0901                     | FOR NATL INDIR HIRE (FNIH) (20)                                     |                      |                             |                        |                       |                      |
| 0902                     | SEPARATION LIABL (FNIH) (21)  |                      |                             |                        |                       |                      |
| 0989                     | OTHER CONTRACTS (22)  |                      |                             |                        |                       |                      |
| 0991                     | FOR CURRENCY VAR (23)   |                      |                             |                        |                       |                      |

NOTE: Field widths for above entries are as indicated below.

|   |    |   |   |   |   |   |
|---|----|---|---|---|---|---|
| 5 | 25 | 8 | 7 | 7 | 7 | 8 |
| 3 |    | 5 | 3 | 3 | 3 | 3 |

Figure 3.3. OP-32 Format - Current Year



PROGRAM 7S - FY 85 BUDGET  
 SUMMARY OF PRICE AND PROGRAM CHANGES  
 OP-32 COST CONTROLS (\$ IN THOUSANDS) - BUDGET YEAR DISPLAY

| OP-32<br>LIN ITEM<br>(1) | SUBPROGRAM/ACTIVITY<br>GROUP/AMSCO/OPAGY/LINE<br>DESCRIPTION<br>(2) | FY 84<br>PROG<br>(3) | FOR CURR<br>RATE DIF<br>(4) | PRICE<br>GROWTH<br>(5) | PROG<br>GROWTH<br>(6) | FY 85<br>PROG<br>(7) |
|--------------------------|---|----------------------|-----------------------------|------------------------|-----------------------|----------------------|
|                          | CIVILIAN PERSONNEL COMP (8)   |                      |                             |                        |                       |                      |
| 0101                     | EXEC, GEN AND SPEC SCHED (9)  |                      |                             |                        |                       |                      |
| 0103                     | WAGE BOARD (10)   |                      |                             |                        |                       |                      |
| 0104                     | FOR NATNL DIR HIRE (FNDH) (11)                                      |                      |                             |                        |                       |                      |
| 0105                     | SEPARATION LIABL (FNDH) (12)  |                      |                             |                        |                       |                      |
| 0106                     | BENEFITS TO FORMER EMPLOY (13)                                      |                      |                             |                        |                       |                      |
| 0110                     | UNEMPLOYMENT COMPENSATION (14)                                      |                      |                             |                        |                       |                      |
| 0199                     | TOTAL CIV PERS COMP (15)  |                      |                             |                        |                       |                      |
|                          | IND FUND PURCHASES (16)   |                      |                             |                        |                       |                      |
| 0681                     | UNFIN (IF) PAY RAISE (17)   |                      |                             |                        |                       |                      |
| 0691                     | IF PASS THROUGH (18)  |                      |                             |                        |                       |                      |
|                          | OTHER PURCHASES (19)  |                      |                             |                        |                       |                      |
| 0901                     | FOR NATL INDIR HIRE (FNIH) (20)                                     |                      |                             |                        |                       |                      |
| 0902                     | SEPARATION LIABL (FNIH) (21)  |                      |                             |                        |                       |                      |
| 0989                     | OTHER CONTRACTS (22)  |                      |                             |                        |                       |                      |
| 0991                     | FOR CURRENCY VAR (22)   |                      |                             |                        |                       |                      |

NOTE: Field widths for above entries are as indicated below.

|   |    |   |   |   |   |   |
|---|----|---|---|---|---|---|
| 5 | 25 | 8 | 7 | 7 | 7 | 8 |
| 3 |    | 5 | 3 | 3 | 3 | 3 |

Figure 3.3A. OP-32 Format - Budget Year

OP-32 SUBPROGRAM AND APPROPRIATION WORKPAPERS - ACTIVITY GROUP  
 FY-1984 APPRN-OMA SUBPRGM-7S

| APPROPRIATION/<br>PROGRAM/SUBPROGRAM/<br>ACTIVITY GROUP/<br>RCOMD<br>(1) | STRENGTHS    |            |            | DOLLARS IN THOUSANDS |                                   |                      |                              |  |              |               |
|--|--------------|------------|------------|----------------------|-----------------------------------|----------------------|------------------------------|--|--------------|---------------|
|  | BEGIN<br>(2) | END<br>(3) | FTP<br>(4) | WORK<br>YEARS<br>(5) | BASIC<br>COMPEN-<br>SATION<br>(6) | OVER-<br>TIME<br>(7) | BENEFITS<br>EMPLOYEES<br>(8) | BENEFITS<br>FORMER<br>EMPLOYEES<br>(9) | FNSA<br>(10) | TOTAL<br>(11) |
| 2601 TROOP SPT AGY (12)  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0101  | 222          | 224        | 212        | 218                  | 5081                              | 67                   | 665                          |  | 328          | 5813          |
| OP-32 Line 0105  | 222          | 224        | 212        | 218                  | 5081                              | 67                   | 665                          |  | 328          | 328           |
| TOTAL  |              |            |            |                      |                                   |                      |                              |  |              | 6141          |
| 6A01 DARCOM (12)   |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0101  | 1096         | 1096       | 1096       | 1096                 | 24619                             | 348                  | 3296                         |  |              | 28263         |
| OP-32 Line 0103  | 5            | 5          | 5          | 5                    | 108                               | 3                    | 14                           |  |              | 125           |
| OP-32 Line 0106  | 1101         | 1101       | 1101       | 1101                 | 24727                             | 351                  | 3310                         | 215                                    |              | 215           |
| TOTAL  |              |            |            |                      |                                   |                      |                              | 215                                    |              | 28603         |
| AMSCO 72282920000 (13)   |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0101  | 1310         | 1320       | 1308       | 1314                 | 29700                             | 415                  | 3961                         |  |              | 34076         |
| OP-32 Line 0103  | 5            | 5          | 5          | 5                    | 108                               | 3                    | 14                           |  | 228          | 125           |
| OP-32 Line 0902  | 1315         | 1325       | 1313       | 1319                 | 29808                             | 418                  | 3975                         |  | 228          | 228           |
| TOTAL  |              |            |            |                      |                                   |                      |                              |  |              | 34429         |
| LOG SUPPORT ACTIVITIES (14)  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0101  | 2500         | 2513       | 2480       | 2502                 | 56552                             | 845                  | 7542                         |  |              | 64939         |
| OP-32 Line 0103  | 105          | 105        | 105        | 105                  | 2268                              | 62                   | 290                          |  | 328          | 2620          |
| OP-32 Line 0105  |              |            |            |                      |                                   |                      |                              | 215                                    |              | 328           |
| OP-32 Line 0106  |              |            |            |                      |                                   |                      |                              |  | 228          | 215           |
| OP-32 Line 0902  | 2605         | 2618       | 2585       | 2607                 | 58820                             | 907                  | 7832                         | 215                                    | 556          | 228           |
| TOTAL  |              |            |            |                      |                                   |                      |                              |  |              | 68330         |
| SUBPROGRAM 7S (15)   |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0101  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0103  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0104  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0105  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0106  |              |            |            |                      |                                   |                      |                              |  |              |               |
| OP-32 Line 0902  |              |            |            |                      |                                   |                      |                              |  |              |               |
| TOTAL  |              |            |            |                      |                                   |                      |                              |  |              |               |

(All activity group totals for the listed subprogram will be added by OP-32 line and entered in this area)

Figure 3.4. OP-32 Subprogram and Appropriation Workpapers, Activity Group Format

group will be listed sequentially and subdivided by command within each AMSCO. A separate listing will be developed to show the same data summed by command for the entire subprogram as depicted in Fig. 3.5.

#### 3.4 Data Base Characteristics

The data base used for this system is the FORDIMS P/BS data base. The characteristics of that data base are outlined in the FORDIM P/BS FD and User's Guide.

#### 3.5 Failure Contingencies

It is expected there will be occasions when hardware or software system failures of relatively short duration will occur. Under such circumstances failure contingencies and alternate courses of action may be taken to temporarily satisfy OP-32 preparation requirements.

a. Back-up. The FORDIMS P/BS files and input data will be stored on disk files. USAMSSA provides back-up by daily dumps from disk to magnetic tape. Some of the input data will be retained on hard copy. Consequently, the loss of critical operational software would be minimal.

b. Fallback. Should the mainframe operating system at USAMSSA fail, batch processing or manual manipulation and recording of data may be used.

#### 3.6 Security

Because of the sensitivity of information relating to effort expended in some of the OMA subprograms, the appropriation workpapers are classified SECRET in the OMA aggregated form and must be protected. However, the data input by DACA-OMP and the final OP-32 cost controls are UNCLASSIFIED. Because the information is being used for budget formulation, it is not releasable to the general public and should be protected as such. There are no individual personnel records used in the system.

OP-32 SUBPROGRAM AND APPROPRIATION WORKPAPERS - RCOMD  
 FY-1984 APPRN-OMA SUBPRGM-7S

| APPROPRIATION/<br>PROGRAM/SUBPROGRAM/<br>ACTIVITY GROUP/<br>RCOMD | STRENGTHS    |            | DOLLARS IN THOUSANDS |                      |                                   |                      |  | TOTAL<br>(11) |              |
|---|--------------|------------|----------------------|----------------------|-----------------------------------|----------------------|--|---------------|--------------|
|   | BEGIN<br>(2) | END<br>(3) | FTP<br>(4)           | WORK<br>YEARS<br>(5) | BASIC<br>COMPEN-<br>SATION<br>(6) | OVER-<br>TIME<br>(7) | BENEFITS<br>EMPLOYEES<br>FORMER<br>(9) |               | FNSA<br>(10) |
| AMSCO 7211110000(1)   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0101   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0103   |              |            |                      |                      |                                   |                      |  |               |              |
| TOTAL   |              |            |                      |                      |                                   |                      |  |               |              |
| AMSCO 7211120000(1)   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0101   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0104   |              |            |                      |                      |                                   |                      |  |               |              |
| TOTAL   |              |            |                      |                      |                                   |                      |  |               |              |
| SUPPLY ACTIVITIES (2)   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0101   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0103   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0104   |              |            |                      |                      |                                   |                      |  |               |              |
| TOTAL   |              |            |                      |                      |                                   |                      |  |               |              |
| 8901 USAREUR/7A (3)   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0101   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0103   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0104   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0105   |              |            |                      |                      |                                   |                      |  |               |              |
| TOTAL   |              |            |                      |                      |                                   |                      |  |               |              |
| SUBPROGRAM 7S (4)   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0101   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0103   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0104   |              |            |                      |                      |                                   |                      |  |               |              |
| OP-32 Line 0105   |              |            |                      |                      |                                   |                      |  |               |              |
| TOTAL   |              |            |                      |                      |                                   |                      |  |               |              |

Figure 3.5. OP-32 Subprogram and Appropriation Workpapers - RCOMD Format

SECTION 4  
DESIGN DETAILS

This section provides a detailed description of the OP-32 Automated Data System (ADS) which will satisfy the system requirements outlined in more general terms in Sections 2 and 3.

4.1 System Description

The OP-32 ADS uses an established data base, and a discrete OP-32 data set containing data elements entered by interactive, remote terminal to calculate civilian cost controls for program and appropriation directors. It also provides an automated means for program and appropriation directors to define detailed civilian personnel costs and facilitates a prioritized and systematic distribution of total obligation authority to the various elements of appropriation funded activities.

The established system on which the OP-32 ADS relies is the FORDIMS P/BS. The use of P/BS and its data base configuration are explained in the FORDIMS User's Guide, Volume 1, dated August 1980. STANFINS provides actual cost data through the BEAMS reports. These actual cost data are used by DACA-OMP to manually develop percentage data elements that are used to calculate the final cost data on which the OP-32 is based. The OP-32 ADS provides the capability for automated input to the discrete OP-32 data set of the factors determined from the BEAMS reports. Final cost data are produced by processing the input data on the discrete OP-32 data set with the P/BS data base through a previously established automated P/BS program ID:URLJ4P. The accuracy of the cost data is manually checked by DACA-OMP through the use of appropriation workpapers produced by Program ID:URLJ4P. Once the appropriation workpapers are verified, the data reflected on the appropriation workpapers are manipulated in a way to produce the costs for the individual OP-32 lines. These costs will be reported by program and appropriation and recorded on an OP-32 cost control format (Figure 3.3).

The OP-32 format will constitute civilian personnel cost controls for the program and appropriation directors. The data also will be formatted into OP-32 subprogram and appropriation workpapers (Figures 3.4 and 3.5). The OP-32 subprogram and appropriation workpapers will assist the program and appropriation directors in apportioning their funds by providing the detailed expenditure of funds for civilian personnel costs by AMSCO, activity group and command. The relationship of user organizations to the system is shown in Figure 4.1.

#### 4.2 System Functions

- The data input function will be performed by DACA-OMP using the Four-Phase Systems, Inc Data IV/50 remote controller terminal cluster. This equipment provides DACA-OMP interactive and immediate data input capability. The data input will consist of percentage data elements reflecting the proportion of total actual civilian personnel costs that are direct and reimbursable obligations. These percentage data elements are computed off-line by DACA-OMP from BEAMS report information. A direct and reimbursable percentage will be input for each of the five classes of civilian personnel expense for each of the seven C-type categories in each support function (mission, base operations and real property maintenance) for each subprogram within the OMA or other appropriation. The format is described in detail in paragraph 4.4.1 below.
- The P/BS processing function is the first processing step in meeting the requirement to produce an OP-32 printout. This step will consist of applying the percentages input by DACA-OMP to the total civilian personnel costs reflected in the P/BS data base. Each percentage will be applied to its respective expense element class for each command and AMSCO within a subprogram. This process is already automated by use of Program ID:URLJ4P. The resultant information is displayed on a hard copy report called the appropriation workpapers, an example of which is at Figure 3.2. The

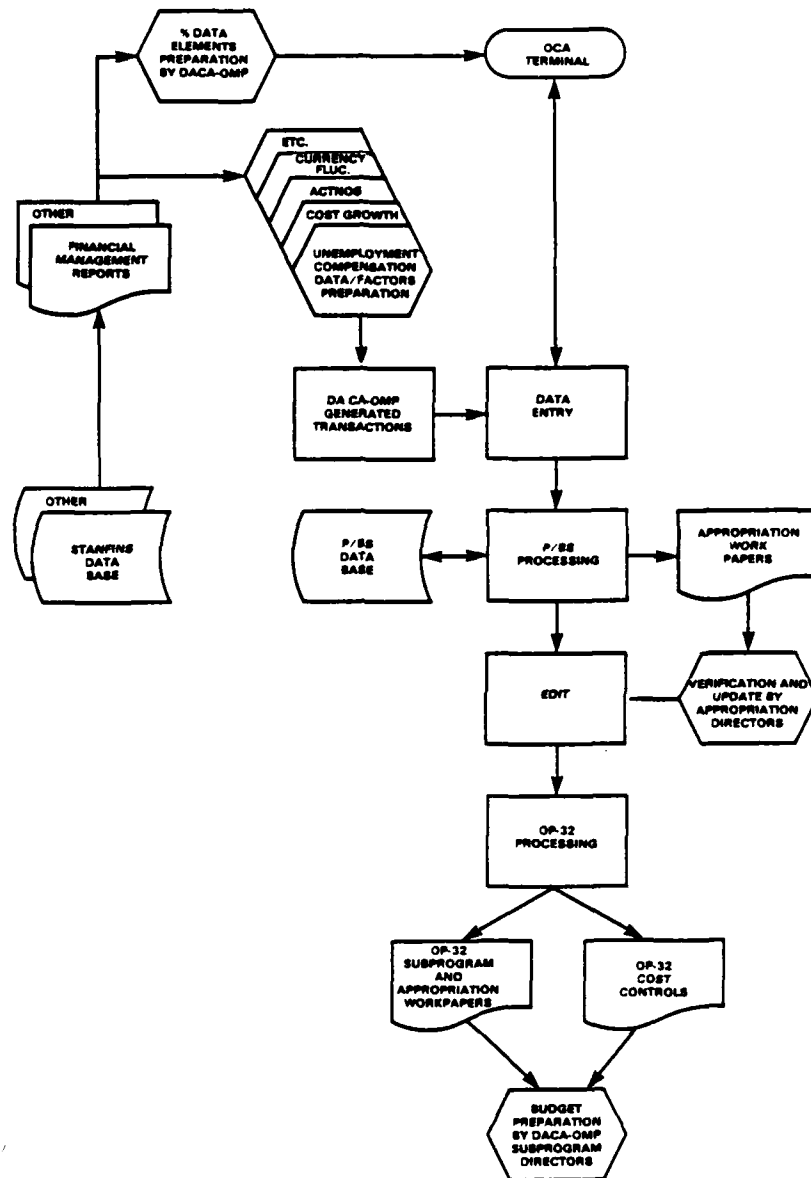


Figure 4.1. Schematic of the OP-32 ADS and User Organization Interfaces

printout is explained in detail in paragraph 4.4.2 below. DACA-OMP manually verifies that the Program ID:URLJ4P accepted the percentage data elements (entered by DACA-OMP) and correctly applied those elements to the total civilian personnel costs resident in the P/BS data base. These computations are performed for each FY through the program years of the current POM. Upon verification of the direct and reimbursable obligations, the OP-32 processing begins.

- The OP-32 processing results in the automated production of OP-32 cost controls and OP-32 subprogram and appropriation workpapers discussed in paragraph 3.1 above. The OP-32 cost controls are derived from the direct obligations computed by the P/BS processing step described above. The total direct obligations of the C-types comprising each OP-32 line item (as shown by Table 2.3) will be totalled and entered for each FY on the OP-32 format. The foreign currency dollars will be computed by totalling, by subprogram, the foreign currency fluctuations entered into the P/BS data base via numerous ACTNOs prepared by DACA-OMP. The information for the price growth will be computed by line item during OP-32 processing by totalling the cost growth items entered to the P/BS data base by numerous ACTNO from DACA-OMP. The system will then compute the program growth figures by line number by subtracting from the succeeding FY program the algebraic sum of the preceding FY program plus the currency fluctuations and the price growth. These computations are performed for the prior year, current year and budget year. For example, for the FY 85 budget submission, FY 83 is the prior year, FY 84 is the current year and FY 85 is the budget year. A separate report will be prepared for the current year and the budget year. The system will be designed to provide a report for each program year of the current POM.

#### 4.2.1 Accuracy and Validity

- a. The OP-32 ADS will accurately compute costs to the dollar and round off to the nearest \$1000 dollars. Rounding off will be done



consistently using the following rule: amounts that end with \$500 or more will be rounded up to the next \$1000; amounts less than \$500 will be rounded down to the next lower \$1000.

b. Percentage data elements will be entered to the nearest .01%. Calculations will be accomplished using the percentage data elements to .01% and the resultant answer will be rounded off according to the round off rule described above. The data used from the P/BS should come from the live approved file unless otherwise requested; the system will have the capability of using the temporary (or "TC") files of the P/BS data base.

c. The P/BS data base, on which the OP-32 ADS will depend, has a comprehensive validation and checking system to insure the accuracy of data input. Trial, unapproved reports are generated along with automation error reports for use by users and system operators in verification of the accuracy of input data.

d. Validation of system accuracy will be performed manually through the use of a number of reports. The appropriation workpapers produced by Program ID:URLJ4P will be used to verify the accuracy of the percentage cost factor applications. This report, in the format presently used by Program ID:URLJ4P, will be provided to DACA-OMP for the verification procedures. Included in the report to DACA-OMP are tables showing the C-type category codes, by C-type, used for application of the percentage data elements. In addition, a list of the actual percentage data elements used is provided. For verification of the OP-32 processing, the OP-32 format will include a listing of C-types and dollar fields from the appropriation work papers that were used to compute each OP-32 line item.

#### 4.2.2 Timing

a. Throughput time will be a function of priorities for computer time. Because of the stringent requirements for development of budget exhibits, the throughput time will never exceed 24 hours.

b. Responses to queries and update of data files will be real time.

c. The system will run sequentially from input of percentage data elements to P/BS processing to OP-32 processing. This order must be followed because each function depends on the data or processing performed by the preceding step. In addition, the system will have built-in pauses to allow for data and processing verification, e.g., after P/BS processing the appropriation work papers will be printed and provided to DACA-OMP for verification before the OP-32 processing is done. The system also will have the capability to perform all processing and production of all output reports in an uninterrupted mode when required.

d. Since the system is dependent upon the input of the percentage data elements before any other processing can be accomplished, it will give priority to the input of these elements. The primary mode of operation will allow for periodic interruption of data processing for verification of input data and processing accuracy.

e. There are no established timing requirements for traffic load variations.

#### 4.3 Flexibility

The OP-32 ADS will be compatible with VFDMIS. Since the OP-32 ADS depends on P/BS for data, it also will be capable of integration with P/BS and, in fact, will meet part of one of the objectives of P/BS, i.e., the generation of budget documents for civilian personnel costs. The system will be designed to allow for additional data elements in any category or modification of the definition or scope of any data identification. For example, the C-type list may require expansion or an OP-32 line item may have to be added.

#### 4.4 System Data

##### 4.4.1 Inputs: Percentage Data Element Screen

a. The title is Percentage Data Elements.

b. Format is at Figure 3.1. Columns are numbered for reference in the FD only and the following descriptions are keyed to the column numbers:

(1) Direct/Reimbursable - This column will show DIRECT on one line and REIMB on a line immediately below DIRECT. These identify the nature of the expenditure as being direct obligation, which must be budgeted, or reimbursable, which is an expenditure for which the Army is reimbursed and therefore is not included in the budget.

(2) APCAT - The appropriation category is the official accounting category used for classifying financial and budgetary data. It is indicated by a four-digit numeric code. A list of appropriations is at Table 4.1.

(3) Program - This column is used to identify the major DoD program being considered. A list of the programs and subprograms containing OMA civilian personnel costs is at Table 4.2. The program is identified by a two-digit code ranging from 01 to 10.

(4) Subprogram - A further subdivision of the program shown in column 3. The subprogram is indicated by a letter of the alphabet.

(5) MSN/BOS/RPMA - The purpose for the expenditures is indicated in this column. MSN denotes mission costs which are directly related to performance of the mission. The abbreviation "BOS" indicates base operations and includes costs that support the facilities needed to perform

TABLE 4.1

ARMY APPROPRIATIONS WITH CIVILIAN PERSONNEL COSTS

The following Army Appropriations have civilian personnel obligations and must prepare an OP-32 budget format. This table lists the appropriations and shows their Treasury code or APCAT, which is used to identify the appropriation.

| <u>CBS Code</u> | <u>Treasury &amp; P/BS Code</u> | <u>Appropriation</u>                        |
|-----------------|---------------------------------|---|
| 01              | 2020                            | Operation and Maintenance, Army             |
| 02              | 0700                            | Military Family Housing                     |
| 03              | 4090                            | Homeowners Assistance                       |
| 04              | 2040                            | Research Development, Testing, & Evaluation |
| 05              | 2065                            | Operation and Maintenance Army, NG          |
| 06              | 2050                            | Military Construction, Army                 |
| 07              | 2086                            | Military Construction, Army Reserve         |
| 08              | 4992                            | Army Industrial Fund                        |
| 09              | 3970                            | Army Management Fund                        |
| 10              | 1080                            | Military Assistance Program                 |
| 11              | 1705                            | Promotion Rifle Practice                    |
| 12              | 2080                            | Operation and Maintenance, Army Reserve     |

TABLE 4.2  
PROGRAMS AND SUBPROGRAMS

Department of Defense Programs

| <u>NUMERIC<br/>DESIGNATION</u> | <u>TITLE</u>   |
|--------------------------------|--|
| 01                             | Strategic Forces   |
| 02                             | General Purpose Forces                                       |
| 03                             | Intelligence and Communications                              |
| 04                             | Airlift/Sealift  |
| 05                             | Guard and Reserve Forces                                     |
| 06                             | Research and Development                                     |
| 07                             | Central Supply and Maintenance                               |
| 08                             | Training, Medical, and Other General Personnel<br>Activities |
| 09                             | Administration and Associated Activities                     |
| 10                             | Support of Other Nations                                     |

OMA Programs and Subprograms with Civilian Personnel Costs

| <u>ALPHA NUMERIC<br/>DESIGNATION</u> | <u>NUMERIC<br/>CODE</u> | <u>TITLE</u>   |
|--------------------------------------|-------------------------|--|
| 2                                    | 20                      | General Purpose Forces                               |
| 3C                                   | 39                      | Communications Program                               |
| 3I                                   | 38                      | Army Intelligence Program                            |
| 30                                   | 31                      | Other Intelligence Communications                    |
| 7M                                   | 73                      | Depot Supplies                                       |
| 7S                                   | 72                      | Central Supplies                                     |
| 8M                                   | 84                      | Medical  |
| 80                                   | 87                      | Other General Personnel Activities                   |
| 8T                                   | 81                      | Training   |
| 9                                    | 95                      | Administration & Associated Activities               |
| 10                                   | 10                      | Support of Other Nations                             |
| RPMA                                 | 12                      | Real Property Maintenance (RPMA)<br>Activities       |
| BOS                                  | 11                      | Base Operations (minus real property<br>maintenance) |

the mission. RPMA is the acronym for Real Property Maintenance, Army and represents the civilian personnel costs for maintaining real property in support of mission requirements. One of the three acronyms will be shown in this column to reflect the appropriate category of costs.

(6) C-type Category - Civilian types are categorized into seven different categories indicated by a single digit number in this column. The correlation of C-types, by category, is shown in Table 2.1.

(7) BCOMP - This column reflects the percentages of basic civilian compensation which is budgeted for direct obligations and reimbursable obligations. This and all succeeding columns will show the direct and reimbursable percentages. The values of the percentages range from 0.00 to 100.00.

(8) OTIME - Overtime percentages are reflected in this column.

(9) BBENE - This column contains the percentages for costs associated with basic benefits paid by the US Government, such as health insurance.

(10) SVPAY - The costs associated with severance pay are shown by the percentages in this column.

(11) FECMP - The percentages in this column reflect the costs for former employees' pensions, annuities or other benefits.

c. Two percentages are reflected for each class of expense for each C-type category. Direct obligations percentage will be manually entered by DACA-OMP. The reimbursable obligation percentage will be automatically computed. A total of 2310 percentages will be entered.

d. Input will be by remote console in DACA-OMP.

e. There are ten items for which entries must be made.

f. The format normally will be a routine entry capable of call-up by remote console. However, the system will have the capability to change the priority to meet unusual budget requirements.

g. The percentages which will be entered are manually computed from actual cost data reflected in the BEAMS reports from USAFAC. They are recorded on a manual worksheet which is maintained in the DACA-OMP files.

h. The percentages are unclassified in individual and aggregated conditions.

i. New inputs or corrections should be processed into the data base on a real time basis.

#### 4.4.2 Outputs

##### 4.4.2.1 Percentage Data Element Screen

The format by which the percentage data elements were input by DACA-OMP will be retrievable by DACA-OMP on remote CRT. It will be in the format described as an input in paragraph 4.4.1 above. The retrieval should be available on a real time basis.

##### 4.4.2.2 Appropriation Workpapers

Program ID:URLJ4P produces the appropriation workpapers in a format described in the FD for that program. It is desired that the format and other requirements satisfied by that program be unchanged.

##### 4.4.2.3 OP-32 Cost Control Report

a. The title of output is OP-32 Cost Controls

b. Formats for the OP-32 Cost Control report are shown in Figures 3.3 and 3.3A. The format contains column numbers in parentheses beneath the column headings and numbers to the right of line descriptions. These numbers are for use in facilitating this description only

and are not a necessary part of the output format. A table showing AMSCO and Budget Activity Groups is at Table 4.3. A correlation table for determining the data fields for the OP-32 reports is at Table 4.4. The report heading will show centered on the first line the title "Program 7S-FY 85 Budget." The program designation will be an appropriation or one of the eleven OMA subprograms listed in Table 4.1 or 4.2, respectively. The year shown will correspond to the budget submission being prepared, FY 85 in this example. Centered on the next line will be "Summary of Price and Program Changes." The third line of the heading will be the words "Operation and Maintenance, Army," or applicable appropriation. The last line of the heading is "OP-32 Cost Controls (\$ in thousands) -Current Year Display." (For the budget year display, the term - Budget Year Display will be used.) The column headings will begin on the third line below the report heading on the left-most column. In the following description of the column headings, the field width is specified. All dollar values entered in the columns will be right justified (columns three through eleven on the format).

(1) OP-32 Item # - This field will be five columns wide, left justified, and will show the OP-32 line item which is being addressed. The OP-32 line items in this format coincide with those in Figure 2.1.

(2) DESCRIPTION - This column describes the contents of the line item number and is taken from the line item number descriptions in Figure 2.1. This field is 25 columns wide and begins three columns from column (1); it is left justified.

(3) FY 83 PROG - The FY program dollar totals are reflected in this column. The FY used is the prior year FY for the current year display and the current year for the budget year display; in the case of the FY 85 budget submission current year display as shown in Figure 3.3, this column would be FY 83. The field is eight columns wide to accommodate \$99 billion; it begins five columns from column (2). The data for the column are computed in the OP-32 processing; the sources for the data are explained in the description of the line item numbers below.



TABLE 4.3

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>                   | <u>AMSCO</u>   |
|--|--|
| <u>ACTIVITY GROUP</u>                  |  |
| <b>General Purpose Forces<br/>(29)</b> |  |
| <b>Unified Command</b>                 | 201000, 201112, 201113, 201114,<br>201115, 201116, 201117, 201118,<br>201120, 201131, 201298, 201398,<br>201498, 201598, 201698  |
| <b>Alaska Forces</b>                   | 202100, 202180, 202181, 202185,<br>202189, 202190, 202191, 202192,<br>202193, 202194, 202195, 202199   |
| <b>Europe Forces</b>                   | 202300, 202310, 202311, 202312,<br>202313, 202314, 202315, 202316,<br>202317, 202318, 202319, 202380,<br>202381, 202382, 202383, 202384,<br>208013, 202385, 202386, 202389,<br>202390, 202392, 202393, 202395,<br>202398, 202399, 202391 |
| <b>Pacific Forces</b>                  | 202400, 202410, 202411, 202413<br>202414, 202415, 202416, 202417<br>202418, 202419, 202480, 202481<br>202482, 202483, 202484, 202486,<br>202490, 202491, 202492, 202493,<br>202495, 202498, 202499                                       |
| <b>South Forces</b>                    | 202500, 202580, 202583, 202585,<br>202588, 202590, 202591, 202592,<br>202593, 202595, 202599   |
| <b>CONUS Forces -<br/>FORSCOM</b>      | 202600, 202610, 202611, 202612,<br>202613, 202614, 202615, 202616,<br>202617, 202618, 202619, 202680,<br>202681, 202682, 202683, 202684,<br>202690, 202691, 202692, 202693,<br>202698, 202699  |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>                              | <u>AMSCO</u>  |
|---|---|
| <u>ACTIVITY GROUP</u>                             |   |
| CONUS Forces -<br>Other                           | 202800, 202810, 202815, 202816,<br>202817, 202818, 202883, 202889,<br>202891, 202892, 202899, 208019,<br>208090   |
| JCS Exercises                                     | 208011  |
| Combat Dev Act                                    | 208015, 208018, 208198, 208098  |
| Currency Fluc                                     | 208022  |
| <b>Other Intelligence<br/>Communications (31)</b> |   |
| WMCCS - ADP                                       | 313151, 313298, 313398  |
| Air Traffic Cont<br>Systems                       | 315114  |
| <b>Army Intelligence<br/>Program (38)</b>         |   |
| NFIP/S&IA   | 381011, 381055, 381198, 381194,<br>381196, 381302, 381311, 381318,<br>381321, 381307, 381308, 381327,<br>381329, 381330, 381331, 381334,<br>381335, 381339, 381398, 315127,<br>315128, 315298, 315398, 381315 |
| <b>Communications Program (39)</b>                |   |
| Com Sec   | 393401  |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>             | <u>AMSCO</u>                    |
|----------------------------------|---------------------------------|
| <u>ACTIVITY GROUP</u>            |                                 |
| WMCCS - Facilities               | 392012, 392053, 393131, 393145  |
| Long-Haul<br>Communications      | 393111, 393126, 393142          |
| Mgt HQ - Comm                    | 393998                          |
| Base Communications              | 393190, 395701, 395702, 395703  |
| <b>Central Supplies</b><br>(72)  |                                 |
| Supply Activities                | 721111, 721112, 721113,         |
| Log Support<br>Activities        | 722829, 722890, 722898, 728012, |
| Transportation                   | 728009, 728010, 728013          |
| Ind<br>Preparedness Opns         | 728011                          |
| Resale Commissaries              | 722891, 722892                  |
| Real Estate Admin/<br>Const Sup  | 728018                          |
| <b>Depot Maintenance</b><br>(73) |                                 |
| Depot Maintenance,<br>Other      | 732207                          |
| Maint Spt<br>Activities          | 738017                          |

TABLE 4.3 (Cont)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>              | <u>AMSCO</u>                              |
|-----------------------------------|---|
| <u>ACTIVITY GROUP</u>             |   |
| <b>Training (81)</b>              |   |
| Recruit Training                  | 814711                                    |
| One Station<br>Training           | 814761                                    |
| Officer Acquisition               | 814721, 814722                            |
| Senior ROTC                       | 814723                                    |
| Specialized Trng                  | 814731, 814733, 814734                    |
| Flight Training                   | 814741, 814743                            |
| Professional<br>Education         | 814751, 814752                            |
| Training Support                  | 814771, 814772, 815790, 815798,<br>819731 |
| <b>Medical (84)</b>               |   |
| Med Care/Reg<br>Def Fac           | 847711                                    |
| Station Hosp &<br>Clinics         | 847792                                    |
| Dental Care<br>Activities         | 847715                                    |
| Med Care in Non-Def<br>Facilities | 847713                                    |
| Med Ed & Trng                     | 846722, 846723, 846761                    |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>                       | <u>AMSCO</u>                   |
|--|--------------------------------|
| <u>ACTIVITY GROUP</u>                      |                                |
| Cmd Health Care                            | 847798                         |
| Med Recruiting & Examining                 | 841713                         |
| Other Med Act                              | 847714                         |
| Audio-Visual Spt                           | 847790                         |
| <b>Other Gen Personnel Activities (87)</b> |                                |
| Recruiting & Examining                     | 871711, 871712, 871713, 871798 |
| Other Personnel Act                        | 871714, 878716                 |
| Civ Education                              | 878751                         |
| Junior ROTC                                | 879721                         |
| ACES                                       | 879732                         |
| Audio-Visual Spt                           | 879790                         |
| VEAP                                       | 879733                         |
| AFRT                                       | 878711                         |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>                                       | <u>AMSCO</u>                                     |
|--|--|
| <u>ACTIVITY GROUP</u>                                      |  |
| <b>Administration &amp;<br/>Associated Activities (95)</b> |  |
| Dept HQ Spt  | 952398, 952498, 952798                           |
| Pers Admin Spt   | 951220   |
| Public Affairs   | 951214, 951298                                   |
| CID Act  | 951520, 952598                                   |
| Service-Wide Spt   | 951212, 951215, 951518, 951519,<br>**0510 (NBRP) |
| Audio-Visual Spt   | 952490   |
| <b>Support of Other Nations<br/>(10)</b>                   |  |
| Int. National Mil<br>HQSA & Agcy                           | 001098, 001004                                   |
| Misc. Spt<br>Other Nations                                 | 001010, **1080, *92098, *93098,<br>*94098        |
| Svc Spt to MAP and<br>Sales Program                        | 001009, 002002,                                  |
| <b>Base Operations<br/>(11)</b>                            |  |
| BOS - FORSCOM &<br>Other CONUS                             | 202696   |
| BOS - Europe   | 202396   |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>               | <u>AMSCO</u>   |
|------------------------------------|----------------|
| <u>ACTIVITY GROUP</u>              |                |
| BOS - Pacific                      | 202496         |
| BOS-Communications                 | 393196         |
| BOS - Other<br>Intelligence/Comm   | 315896         |
| BOS - Central Supply<br>Activities | 722896         |
| BOS - Training &<br>Education      | 815896, 815796 |
| BOS - Medical                      | 847796         |
| BOS-Administrative                 | 951296         |
| BOS - Real Estate<br>Leases        | 951396         |
| <b>RPMA Activities<br/>(12)</b>    |                |
| RPMA - FORSCOM<br>& Other CONUS    | 202694         |
| RPMA - Europe                      | 202394         |
| RPMA - Pacific                     | 202494         |
| RPMA-Communications                | 393194         |
| RPMA - Other<br>Intelligence       | 315894         |
| RPMA - Central<br>Supply Act       | 722894         |

TABLE 4.3 (Cont.)

AMSCO AND BUDGET ACTIVITY GROUPS

| <u>DECISION UNIT</u>        | <u>AMSCO</u>            |
|-----------------------------|-------------------------|
| <u>ACTIVITY GROUP</u>       |                         |
| RPMA - Training & Education | 815794, 815894          |
| RPMA - Medical              | 847794                  |
| RPMA-Administrative         | 951294                  |
| <br>                        |                         |
| AIP                         |                         |
| Army Ind Fund               | All AIP Program Element |



TABLE 4.4  
CORRELATION TABLE FOR OP-32 BUDGET EXHIBIT  
(Figures 3.3 and 3.3A)

Current Year Display

1. OP-32 LIN ITEM (1) - Standard as shown in Figure 3.3.
2. Subprogram/Activity Group/AMSCO/OPAGY/Line Description (2)
  - Subprogram = SBPGM (P/BS)
  - Activity Group = See Table 4.3
  - Army Management System Code = AMSCO
  - Operating Agency = OPAGY
  - Line Description = Standard as shown in Figure 3.3.
3. FY83 Prog (3)  
FY84 Prog (7)
  - a. Using Table 3.1, generate OP-32 Line Items: 0101; 0103; 0104; 0105; 0106; 0901; and 0902 from the P/BS main file.
  - b. Until data entry capability is developed OP-32 Line Items: 0110; 0199; 0681; 0691; 0991 should be left blank.
  - c. After data entry capability is developed OP-32 Line Items: 0110; 0681; 0691; 0991 will be data entered by DACA-OMP.
  - d. After data entry capability is developed OP-32 Line Item 0199 will be automatically calculated by adding lines 0101; 0103; 0104; 0105; 0106; 0110.
4. For Curr Rate Dif (4)
  - a. Using Table 3.1 generate OP-32 Line Items 0901 and 0902 for ACTNOs identified by DACA-OMP at time of update.
  - b. Until data entry capability is developed OP-32 line Items 0989 and 0991 should be left blank.
  - c. After data entry capability is developed OP-32 Line Items 0989 and 0991 will be data entered by DACA-OMP.
5. Price Growth (5)
  - a. Using Table 3.1 generate OP-32 Line Items 0101; 0103; 0104; 0105; 0901 and 0902 for ACTNOs identified by DACA-OMP at time of update.
  - b. Until data entry capability is developed OP-32 Line Items 0110; 0681; 0691 should be left blank.

TABLE 4.4 (Cont.)  
CORRELATION TABLE FOR OP-32 BUDGET EXHIBIT  
(Figures 3.3 and 3.3A)

Current Year Display

5. Price Growth cont.
- c. After data entry capability is developed OP-32 line item 0199 will be automatically calculated by adding lines 0101; 0103; 0104; 0105; 0106; 0110.
  - d. After data entry capability is developed OP-32 line items 0110; 0681; 0691 will be data entered by DACA-OMP.
6. Prog Growth (6)
- a. Until data entry capability is developed OP-32 line items 0101; 0103; 0104; 0105; 0106; 0901 and 0902 will be automatically generated by adding columns (3), (4), and (5) and taking the delta between that total and column (7).
  - b. Until data entry capability is developed OP-32 line items 0110; 0199; 0681; 0691; 0991 will be left blank.
  - c. After data entry capability is developed OP-32 line items 0110; 0199; 0681; 0691; 0991 will be automatically generated using the same methodology as in 6a above.

TABLE 4.4 (Cont.)  
CORRELATION TABLE FOR OP-32 BUDGET EXHIBIT  
(Figure 3.3A)

Budget Year Display

1. OP-32 Lin Item (1) - Same as Figure 3.3.
2. Subprogram/Activity Group/AMSCO/OPAGY/Line Description (2) - Same as Figure 3.3
3. FY84 Prog (3)  
FY85 Prog (7) - Use same methodology as Figure 3.3.
4. For Curr Rate Dif (4) -
  - a. Using Table 3.1 generate OP-32 line items 0901 and 0902 for ACTNOs identified by DACA-OMP at time of update.
  - b. Until data entry capability is developed OP-32 line items 0989 and 0991 should be left blank.
  - c. After data entry capability is developed OP-32 line items 0901; 0902; 0989; 0991 should have the capability of data entry.
5. Price Growth (5) -
  - a. Using Table 3.1 generate OP-32 line items 0101; 0103; 0104; 0105; 0901; and 0902 for ACTNOs identified by DACA-OMP. Also annualization costs developed by taking the delta between years in ACTNOs identified for Figure 3.3 which also apply to 3.3A, identified by DACA-OMP at time of update.
  - b. Until data entry capability is developed OP-32 line items 0110; 0681; 0691 should be left blank.
  - c. After data entry capability is developed OP-32 line item 0199 will be automatically calculated by adding lines 0101; 0103; 0104; 0105; 0106; 0110.
  - d. After data entry capability is developed OP-32 line items 0110; 0681; 0691 will be data entered by DACA-OMP.
6. Prog Growth (6) - Same as Figure 3.3.

(4) FOR CURR RATE DIF - The foreign currency rate difference column displays the total dollar costs of fluctuations in the exchange rates of foreign currencies. Note that this column reflects the difference between budgeted foreign currency rates. The foreign currency rate difference is used only on lines 0901 and 0902. It is determined by adding the foreign currency changes to the P/BS data base entered by ACTNOs on a periodic basis by DACA-OMP. The field for this value is seven columns wide and begins three columns from the previous data field.

(5) PRICE GROWTH - This column reflects the growth in dollars required by price changes only that would be required to execute the year's program shown in the FY program column to the left of this column; in the example shown in Figure 3.3, this would represent the price change for executing the FY 83 program. The data for this field are derived from the cost growth items provided by ACTNOs from DACA-OMP to USAMSSA. The computation is performed by the automated system. The field is seven columns wide and begins three columns from the previous field.

(6) PROG GROWTH - The program growth is shown in this column. It is derived (for the example in Figure 3.3) for each OP-32 line number by subtracting the sum of the FY 83 program, the foreign currency rate difference and the price growth (columns 3, 4 and 5) from the FY 84 program (column 7). This calculation will be performed by the automated system. The field will begin three columns from the previous field and be seven columns wide.

(7) FY 84 PROG - This column reflects the dollar values of the current year program, which is FY 84 in the example in Figure 3.3. Like column (3) it will be computed by the automated system explained by line numbers below. The field is eight columns wide and begins three columns from the preceding field.

(8) Civilian Personnel Comp - This line reflects the OP-32 title of the section made up of the line numbers which follow it. No data are recorded on this line; it is a header only.

(9) OP-32 Line Item 0101, Executive, General and Special Schedule - The values for this line for the FY program fields (columns 3 and 7) are computed by the program from the data developed during P/BS processing. They are computed separately for each FY. For FY 83, the value for line number 0101 is computed by adding the total dollar costs found in the TOTAL field of the direct hire listing of the direct cost appropriation workpapers for FY 83 for graded U.S. citizens, senior executive service, graded U.S. dependent hire, and general merit pay C-types; this addition uses the total values listed in the subprogram summary. The resulting sum is placed in the FY 83 data field on OP Line item number 0101. The line should be placed two lines below the column headings. The same procedure is performed for FY 84 and FY 85 using the respective FY appropriation workpapers.

(10) OP-32 Line Number 0103, Wage Board - This line begins on the second line below the previous line. It is computed by the automated system for each FY by adding the values in the TOTAL dollar field of the direct hire listing of the direct obligations appropriation workpapers for wage grade U.S. citizens and wage grade U.S. dependent hire C-types. This addition uses the subprogram totals and the derived value is placed in the respective FY program field for line number 0103.

(11) OP-32 Line Number 0104, Foreign National Direct Hire (FNDH) - This line is computed by the automated system by adding the values in the TOTAL dollar field of the direct hire listing of the direct obligation appropriation workpapers for graded Panamanians, wage grade Panamanians, Koreans, Italians, and other direct hire C-types. The addition uses the data listed for the subprogram totals. Line number 0104 will be placed on the second line below line number 0103.

(12) OP-32 Line Item Number 0105, Separation Liability - Computation of this line by the automated system uses the direct hire listing of the direct costs FNSA appropriation workpapers. The subprogram total values found in the FNSA dollar field for Koreans, Italians, and other direct hire C-types are added. The sum is placed in the FY program field for line item number 0105. This line goes on the second line below line number 0104.

(13) OP-32 Line Number 0106, Benefits to Former Employees - This line item is computed by the automated system and derives data from the direct hire listing of the direct obligations FNSA appropriation workpapers. The values in the workpapers for the FECMP dollar field at the subprogram total line for graded U.S. citizens and wage grade U.S. citizens are added. The sum is placed in the OP-32 FY program field on line number 0106, which is placed on the second line below the preceding line.

(14) OP-32 Line Number 0110, Unemployment Compensation - Since there are no established elements of expense for this cost, the amounts approved for budgeting for unemployment compensation will be provided off-line to USAMSSA by DACA-OMP. For the future, however, the system will be designed for data entry into the P/BS data base by ACTNO or retrieved from a separate data element established on the main file.

(15) OP-32 Line Number 0199, Total Civilian Personnel Compensation - This line is computed by adding the values for lines 0101, 0103, 0104, 0105, 0106 and 0110. The addition is performed for each year and placed in the respective FY program field on this line. It is listed on the second line below the preceding line.

(16) Industrial Fund Purchases - This line is the title for the next group of OP-32 lines which have to do with civilian personnel costs. It is a title line only and no values are placed in any fields for this line. The line will be on the second line below the preceding line.

(17) OP-32 Line Number 0681, Unfinanced (IF) Pay Raise - The data for this line are provided to DACA-OMP through various programs and budget documents, such as the Program Budget Decision Memorandum. There may not always be entries for this line. The data, if there are any, will be provided off-line to USAMSSA by DACA-OMP. The line will be placed on the second line below the preceding line.

(18) OP-32 Line Number 0691, IF Pass Throughs - Like the preceding line, the data for this line will be developed by DACA-OMP from various program and budget documents. The data are provided by ACTNO from DACA-OMP and will be placed on the second line below the preceding line.

(19) Other Purchases - This line is a title line for the next group of OP-32 line numbers that pertain to civilian personnel costs. It will be listed on the second line below the previous line and no values will be placed in the fields on this line.

(20) OP-32 Line Number 0901, Foreign National Indirect Hire (FNIH) - This line will be computed by the system. The values will be derived from the indirect hire listing of the direct costs appropriation workpapers. The value for the line will be determined by adding the values in the TOTAL dollar field for German Nationals, Japanese, Korean Service, and other indirect hire C-types. The result will be placed in the FY program field on the second line below the preceding line.

(21) OP-32 Line Number 0902, Separation Liability (FNIH) - The data which will be used by the system to compute this line are found in the indirect hire listing of the direct costs FNSA appropriation workpapers. The values listed at the subprogram totals in the FNSA dollar field for Korean Service Corps and Japanese are totalled for line number 0902; the sum is placed in the FY program field on the second line below line item 0901.

(22) OP-32 Line Item 0989, Other Contracts - Costs for contractual services not reported in any other OP-32 line item will be shown on this line. This information will be data entered by DACA-OMP.

(23) OP-32 Line Item 0991, Foreign Currency Variance - This line represents variations in the foreign currency exchange rates from those that were budgeted. The data reflect changes in guidance after the budgets have been prepared. The data will be data entered by DACA-OMP for entry on the second line below line item 0902.

c. There are a total of five vertical fields requiring entries. A separate listing will be shown for each subprogram and appropriation MSN, BOS, and RPMA.

d. There are no pre-printed form requirements for this output.

e. The report will be printed hard copy.

f. The report will be produced for each budget cycle. The system will be capable of providing additional reports in response to changes in data or guidance.

g. The report normally will be produced on a routine basis but may require priority processing depending on budget requirements.

h. Response time should be real time. In no case will it exceed 24 hours.

i. Dollar values will be accurate to the nearest \$1000 and will be calculated using the round-off rule stated in paragraph 4.2.1 above.

j. The report showing all listings will be prepared for DACA-OMP. A separate subprogram listing will be prepared for each of the subprogram directors and forwarded through DACA-OMP. This output is used by DACA-OMP and the subprogram directors to establish civilian personnel cost controls while preparing their total OMA budget submission.



k. The aggregated report will be classified SECRET. When subprograms are separated, only the subprogram 3I will be classified SECRET; all other subprograms are UNCLASSIFIED. Individual items of data are UNCLASSIFIED.

4.4.2.4 OP-32 Subprogram and Appropriation Workpapers - Activity Group Format

a. The title of the output is OP-32 Subprogram and Appropriation Workpaper - Activity Group.

b. The format for the report is shown in Figure 3.4. The format shows numbers in parentheses beneath column headings and to the right of line identifications. These numbers are provided to facilitate the description of the format in this FD and should not be included in the final format that is coded. A table showing correlation of P/BS data elements to the workpaper fields is at Table 4.5. The report heading will be centered at the top of the report format. The first line of the heading will show "OP-32 Subprogram and Appropriation Workpapers - Activity Group." The second line of the heading will show the appropriate fiscal year for which the report is being prepared. For each budget submission, a report will be generated for the prior year, current year, and budget year. The system will provide for generating reports for each program year of the current POM. The appropriation title from Table 4.1 and, if applicable, the subprogram alpha-numeric designation from Table 4.2 will be printed on the second line.

(1) APPROPRIATION, etc. - The various categories into which civilian personnel costs are separated will be shown in this field. The field will be 25 columns wide beginning in the leftmost column.

(2) BEGIN - The beginning civilian strength for the fiscal year will be shown in this field. Note that the word "Strengths" shown above this field applies to this and the next two fields. This field will begin five columns from the last one and will be seven columns wide.

TABLE 4.5

CORRELATION TABLE FOR SUBPROGRAM AND APPROPRIATION WORKPAPERS

(Figures 3.4 and 3.5)

1. The following P/BS-FORDIMS data elements relate to headers of the Subprogram and Appropriation Workpapers.

|                              |   |
|------------------------------|---|
| a. Appropriation             | = APCAT                                 |
| b. Program                   | = PROGM                                 |
| c. Subprogram                | = SBPGM                                 |
| d. Activity Group            | = See Table 4.3                         |
| e. RCOMD                     | = RCOMD                                 |
| f. Begin                     | = BGSTR                                 |
| g. End                       | = APCIV                                 |
| h. FTP                       | = APFTP                                 |
| i. Man Year                  | = APMYR                                 |
| j. Basic Compensation        | = BCOMP                                 |
| k. Overtime                  | = OTIME                                 |
| l. Benefits                  | = BBENE                                 |
| m. Benefits Former Employees | = FECMP                                 |
| n. FNSA                      | = SVPAY                                 |
| o. TOTAL                     | = BCOMP + OTIME + BBENE + FECMP + SVPAY |

2. Use Table 3.1 for dollar fields for OP-32 line items.

3. Use Table 3.2 for strength fields for OP-32 line items.

(3) END - The fiscal year end strength will be shown in this field. It will be three columns from the previous one and will be seven columns wide.

(4) FTP - The total fulltime permanent strength will be shown in this field and will be seven columns wide and three columns from the last field.

(5) WORK YEARS - This field shows the total number of work years on which total obligations are based. The field will be seven columns wide and three columns from the last field.

(6) BASIC COMPENSATION - This field will show the total basic compensation dollar obligations for the man years reflected in field (5). The field will be eight columns wide and three columns from the last field. This field through field (11) will have entries made in thousands of dollars.

(7) OVERTIME - This field shows overtime obligations. It will be seven columns wide and three columns from the last field.

(8) BENEFITS - Basic health and other benefits obligations are shown in this field, which will be seven columns wide and three columns from the last field.

(9) BENEFITS, FORMER EMPLOYEES - This field shows compensation to former employees. This field will be seven columns wide and three columns from the last field. It should be noted that there will be entries in this field for OP-32 line item 0106 and total lines only.

(10) FNSA - Severance pay will be shown in this field, which will be seven columns wide and three columns from the last field. There will be entries in this field for OP-32 line items 0105 and 0902 and totals only.

(11) TOTAL - This field will show the total obligations for each OP-32 line item and total lines in each listed subdivision, i.e., total line for (12), (13), etc.

(12) TROOP SPT AGY - This entry will indicate the RCOMD for which civilian personnel obligations are being listed. A listing of RCOMD and their codes is contained in Appendix E of Volume I of the FORDIMS User's Guide. The obligation will be listed by OP-32 line item and will correspond to a single AMSCO. All lines pertaining to a single RCOMD will be listed sequentially in OP-32 line item order with a total for the entire RCOMD on the last line labelled TOTAL. Each RCOMD and other category listing will begin on the second line below the preceding category listing.

(13) AMSCO - Each AMSCO within an activity group will be listed sequentially. All RCOMDs with obligations in the AMSCO will be listed and displayed as explained in (12) above. Note that the AMSCO listing shows total obligation by OP-32 line item for all the RCOMD listed.

(14) LOG SUPPORT ACTIVITIES - This category listing will show the appropriate activity group; the activity groups are listed in Table 4.3. For illustrative purposes "Log Support Activities" is shown in this example. The OP-32 line item entries in this category listing reflects the total of all the same OP-32 line item entries shown in the AMSCO totals of the activity group.

(15) SUBPROGRAM - This listing will show the total OP-32 line item costs for the activity groups within the subprogram or appropriation. The subprograms in OMA are shown in Table 4.2 and the appropriations in Table 4.1; Subprogram 7S is shown for illustrative purposes only.

- c. There are ten fields which require numerical entries.
- d. There are no preprinted form requirements.

e. The report will be printed in hard copy using a separate listing for each fiscal year.

f. Two complete reports which show all subprograms will be printed. The reports will be required for each budget cycle, i.e., OSD budget submission and President's budget submission.

g. The reports will be generated on a routine basis but may require priority processing depending on budget requirements.

h. Response time will be real time. In no case will it exceed 24 hours.

i. Dollar values will be accurate to the nearest \$1000 and will be calculated using the round-off rule stated in paragraph 4.2.1 above. End strengths and work years will be retrieved from the P/BS data base and will be exact to the nearest unit.

j. The reports will be provided to program and appropriation directors and will be used for breakdown of total obligation authority and preparation of budget displays.

k. The reports will be classified SECRET when aggregated by AMSCO and containing program 3I. Individual appropriation listings and subprograms other than 3I are UNCLASSIFIED. Individual items of data are UNCLASSIFIED.

4.4.2.5 OP-32 Subprogram and Appropriation Workpapers - RCOMD Format

a. The Title of the output is OP-32 Subprogram and Appropriation Workpapers - RCOMD.

b. The format for this report is shown in Figure 3.5. The format is similar to the workpapers by activity group. The differences are in the aggregations of data. The heading of the report is the same as Figure 3.4 except that in the second line the words "Activity Group"

will be replaced by RCOMD. The fields are the same as in Figure 3.4 so those explanations will not be repeated. This report will breakdown obligations for each RCOMD by AMSCO by activity group. The numbers in parentheses following the line identifications are used for explanatory purposes in this FD only and are not part of the required report. Individual items within each category listing will be shown on sequential lines with categories separated by a blank line.

(1) AMSCO - The AMSCO is the smallest subdivision in this report. Each AMSCO, in the respective activity group for which the command has civilian personnel obligations, will be listed. As shown, within each AMSCO, obligations for each OP-32 line item will be entered.

(2) SUPPLY ACTIVITIES - This category listing is for the activity group. "Supply Activities" is shown for illustrative purposes; other activity groups are listed in Table 4.3. The OP-32 lines entries will be the totals for those same lines listed within the AMSCO contained in the activity group.

(3) USAREUR/7A - This category listing is for the respective RCOMD and reflects the OP-32 line totals for all the preceding activity groups for which the listed RCOMD budgets. "RCOMD USAREUR/7A" is listed for illustrative purposes; other RCOMD's are listed in Appendix E of Volume I, FORDIMS User's Guide.

(4) SUBPROGRAM - This entry is for the respective subprogram or appropriation being addressed. Subprogram 7S is shown for illustrative purposes only; other appropriations and subprograms are shown in Tables 4.1 and 4.2, respectively. The OP-32 line entries are totals for all the RCOMDs which have obligations within the subprogram or appropriation for which the report is being prepared.

c. There are ten fields which require numerical entries.

d. There are no requirements for preprinted forms.

e. The report will be printed in hard copy with a separate listing for each fiscal year.

f. Two complete reports showing all subprograms will be printed. The reports will be required for each budget cycle.

g. The reports will be generated on a routine basis but may require priority processing depending on budget requirements.

h. Response time will be real time and in no case more than 24 hours.

i. Dollar values will be accurate to the nearest \$1000 and will be calculated using the roundoff rule stated in paragraph 4.2.1 above. End strengths and work years will be retrieved from the P/BS data base and will be exact to the nearest unit.

j. The reports will be provided to program and appropriation directors and will be used for breakdown of total obligation authority and preparation of budget displays.

k. The reports will be classified SECRET when aggregated by AMSCO and containing program 3I. Individual appropriation and subprograms other than 3I listings are UNCLASSIFIED. Individual data items are UNCLASSIFIED.

4.4.3 Data Base. The OP-32 ADS will operate on the P/BS data base. The description of the data elements of the P/BS data base is in Volume I of the FORDIMS User's Guide.

SECTION 5  
ENVIRONMENT

This section provides a description of the current ADP environment, and projects the environment needed to satisfy the requirements delineated in Sections 3 and 4. The discussion that follows will include the equipment that now supports the P/BS.

5.1. Equipment Environment

This paragraph provides a brief description of the present equipment environment that will support the development of the software leading to automation of certain budget displays (OP-32). The automated system is expected to be supported by the USAMSSA computer environment using the FORDIMS P/BS data base with interactive links to DACA-OMP.

The equipment environment includes the hardware presently available at USAMSSA for support of the P/BS. The automation of certain DACA-OMP civilian budget exhibits will require interactive and batch computer support and supporting hardware for its development and operation.

The following is a broad description of the USAMSSA equipment presently available to support the automation of certain budget displays which this FD defines. The discussion of the equipment configuration requires that the following equipment categories be addressed:

- Processors
- Storage media
- Output devices
- Input devices
- Communications Net



### 5.1.1 Processors

The mainframe capability of USAMSSA will be utilized to support the development of automated exhibits for OP-32 displays with interactive links to terminals located in DACA-OM.

USAMSSA has an IBM 3033 processor with 16 megabytes of main memory (core), and an IBM 370/165 with 6 megabytes of main memory. The two CPU (Central Processing Unit) operate loosely, coupled with shared queues and peripherals. They operate under the Multiple Virtual Storage (MVS) operating system. The existing IBM 370/165 system will be replaced by a fourth generation IBM 3081 Model K (or equivalent) with faster processing capability and added storage capacity.

### 5.1.2 Storage Media

The part of the computer that is able to store data is the computer's memory or storage. Storage refers to keeping processed data for future reference. The data are placed on storage media such as paper, magnetic tapes, or microfilm for retrieval when needed.

The USAMSSA storage media consists of:

- 31 Gigabytes DASD (Direct Access Storage Device) (112 disk drives).
- 38 Tape Drives (30,000 tapes)

### 5.1.3 Input/Output Devices

All data processing follows the same flow pattern of input, processing, and output.

- Input involves collection of data and verification of its accuracy, followed by conversion to machine-readable form so that it can be entered into the data-processing system.
- Processing relates, in order, to the classification, sorting, calculation, summarization, and storage of data.

- Output is the information that is produced by the computer after the processing steps identified above have been completed.

The input/output devices in the USAMSSA environment configuration are:

- Input
  - 564 terminals
  - 62 RJE (Remote Job Entry)
- Output
  - 2 laser, and 5 impact local printers
  - 564 terminals
  - 62 RJE

#### 5.1.4 Communications Net

Communication nets carry data from one location to another, and are the links permitting transmissions of electrical signals between locations. Types of communications nets used for data transfer are telegraph and telephone lines, coaxial cables, communications satellites, and laser beams.

#### 5.2 Support Software Environment

Software refers to the sets of prewritten, standardized computer programs, procedures, and related documentation that are developed for an ADS. Many organizations employ programmers to develop software programs for their internal operations. This approach called "in-house" development allows for programming creativity. On the other hand, it requires significant staff expenditures, and in many instances results in duplicative effort in, and among, organizations. For these reasons, firms specializing in software development have been formed to meet the growing demand for prewritten programs.

Systems programs, or packages, are normally machine-dependent; thus, system programming is normally provided by the manufacturer of the

hardware, or, as pointed out above, by specialized programming firms. USAMSSA already has a variety of software packages which will provide multiple user interactive, on-line, query and update service to meet the user's needs.

### 5.3 Interfaces

The following is a brief description of the means and equipment by which data relating to the P/BS are exchanged between DACA-OMP and the USAMSSA Computer facility.

DACA-OMP has a Four-Phase Systems Inc Data IV/50 remote controller terminal cluster. This is an intelligent terminal system consisting of:<sup>1</sup>

- A Model 5001-99 processor
- Three Model 5115-A display stations
- Two Model 8121 character printers

The IV/50 system is used for both remote data entry and on-line inquiry and retrieval. The IV/50 system has no local storage capability and no batch communications mode. Data are input to the USAMSSA computer data base by using an interactive communications capability with an IBM 3270 protocol. The advantages of this arrangement are:

- The 5001-99 processor contains the terminal's 48K memory and interfaces with the CRT display stations and printers. The 5001-99 has an on-line capability to operate in an interactive mode with discrete data sets (files) resident on the USAMSSA computer. This means that the system has the capability to allow the OCA operator to access the data set and enter changes such as percentage data elements and currency fluctuation; however, the software providing this capability is not in place at this time.

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<sup>1</sup>Information extracted from Vol. I, FORDIMS User's Guide, August 1980.

- The Model 5115-A display stations have a large video screen and a separate keyboard. The CRT video screen can display up to twenty-four, 80 character lines at one time.
- The Model 8121 character printer is a low speed printer which the terminal operator can use to produce a hard copy of any data that are displayed on the CRT screen. Thus, after making the changes to the USAMSSA computer work file, the terminal operator can retain a copy for staffing or reference until the USAMSSA input action has been completed.

#### 5.4 Summary of Impacts

It is expected that the organizational, operational, and developmental impacts of the proposed automation of OP-32 budget exhibits on the ADP organization (USAMSSA) will be minimal. Modification of positional responsibilities is not foreseen although reorientation of some staff members may be required. It would not appear, on the basis of functions defined in this FD, that there should be a need for additional ADP personnel. It is not anticipated that there will be any changes in the ADP configuration of USAMSSA. Additional requirements for program and data conversion are not known at this time.

#### 5.5 Failure Contingencies

Hardware or software failures of such magnitude, devastation, and duration as to require a fallback to periods of extended manual manipulation and recording procedure probably would occur only as a result of sabotage or war. If the computer center becomes inoperable under such conditions, Continuity Of Operations Plans (COOP) provide for support of automated systems elsewhere.

##### 5.5.1 Restart

In the event of temporary system failure during processing and execution activity, USAMSSA has the software capability to accommodate rapid restart. An example of this capability is the Automated Planning and Execution (APEX) Control System that resides on the USAMSSA mainframe. APEX allows automatic restart without user intervention or

loss of software in case of system failure through its automatic control of the release of job streams.

#### 5.5.2 Backup

"Back-up" refers to redundancy available in the event the primary system fails. The primary system files, data bases, and interactive hardware are maintained on disk files. USAMSSA provides backup by daily dumps from disk to magnetic tape. Thus, the loss of critical operational software would be minimal.

#### 5.5.3 Fallback

If the mainframe operating system at USAMSSA fails, the Continuity of Operations Plans (COOP) will provide temporary alternative processing activities. As stated in paragraph 3.5 batch processing or manual manipulation, rather than an interactive mode, may be used until system capability is restored.

### 5.6 Security

#### 5.6.1 Data Security Measures

Breaches and penetration of data security are matters of key concern at computer centers. Unauthorized disclosure, destruction, or modification/manipulation of data used by the data processing system could threaten the ability of a center to continue operations.

Various security measures will be instituted to protect the security and integrity of data in the Army budget system.

- The system will have security features built into it so that only certain information can be accessed from each terminal.
- Special codes will be required to access data sets, records, or files.
- Specific portions of the data base will be accessed only by those whose job requirements require such access.
- Scope of access will be proportionate to the user's security clearance and job responsibilities.

### 5.6.2 USAMSSA Data Security

The USAMSSA computer center has installed a data security system called ACF2--The Access Control Facility--which is an extension of the IBM OS/MVS Operating System that provides data security.<sup>1</sup>

ACF2 is not a data protection system but rather a system that provides for the controlled sharing of data. An algorithmic methodology, much like a program, is used to determine whether access to a specific data set by an individual user should be allowed.

Because ACF2 determines whether an individual user should be allowed access to a data set, it must be able to associate a user's identity with each job or time-sharing session. Each user has a logon Identification (LOGONID) and each LOGONID has a password associated with it. These passwords are kept in an encrypted format which cannot be reversed. If the user forgets the password, the USAMSSA Security Officer cannot tell the user what it is; he can only change.

### 5.7 Assumptions and Constraints

Several assumptions have been made in developing this FD defining the system requirements and providing the DACA-OMP with a clear statement of the operational capability to be developed for automation of certain budget activity exhibits. It is assumed that:

- There will be an increasing need for the Army to identify price versus program growth in budget estimates.
- The FORDIMS P/BS data base will produce the required outputs.
- The VFDMIS will replace the FORDIMS and will be designed to provide the data now furnished by P/BS.

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<sup>1</sup>Extracted from the ACF2-The Access Control Facility User's Guide, Modified by USAMSSA (18 November 1981), developed by Schragar, Klemens, and Krueger, Inc.

SECTION 6  
COST FACTORS

6.1 Introduction

The purpose of this section is to provide a summary of the cost factors associated with the Automation of the Army Budget Activities for Civilian Personnel. The cost factors shall occur in three system phases:

- System Development
- System Implementation
- System Operation

6.2 System Development Costs

Developmental effort will be required to generate the necessary custom programs for the automation of civilian personnel budget exhibits.

Developmental effort also is required to design screen formats, help function formats, and specify procedures for data base maintenance. In addition, instructions and system documentation must be produced during the development phase.

The required computer services also shall be considered. It is expected that this development effort will require eight person-weeks. The skill categories and person-weeks required for this task are:

|                            |            |
|----------------------------|------------|
| Senior Analyst/Programmer  | 2          |
| Junior Programmer          | 4          |
| Technical Writer           | 1-1/2      |
| Word Processor Specialists | <u>1/2</u> |
| Total Weeks                | 8          |

The development effort should not exceed two technical person-months.

### 6.3 System Implementation Costs

The initial implementation costs involve specifying the data base structure; and loading pre-defined tables, screen formats, and application programs. Testing of the operating system and application programs shall be performed during implementation. After software development has finished, functional personnel shall receive approximately four hours of informal training in concept design and hands-on training for manipulation of the CRT and terminal operations. All training shall be accomplished on-site prior to full utilization of the system. No additional personnel will be required to operate the system as existing operational and analytical personnel presently functioning in OP-32 activities shall be trained to operate the proposed system. Impact of the new system on USAMSSA facilities will be negligible. There are no additional implementation costs anticipated with respect to the user terminal.

### 6.4 System Operation Costs

The continuing operations-related costs will involve those currently in being for the contractor costs for the user terminal already in place. It is recommended that these services continue for the fully automated system.



SECTION 7  
SYSTEM DEVELOPMENT PLAN

7.1 Project Work Plan

The purpose of this plan is to provide for the project control necessary for the USAMSSA to design, develop, test, document, and install the software programs and interfaces necessary to satisfy the system requirements outlined in Section 4.

The life cycle activities to be considered for the implementation of the OP-32 ADS are depicted in the overall System Development Schedule, Figure 7.1. While the period of time for completion of this project may appear to be short, many of the events can be accomplished concurrently. Further, the schedule provides only a representative list of events necessary for system development. During design and development of the OP-32 ADS, changes to the schedule and approved requirements may become necessary. In this event, the proponent will notify the USAMSSA as early as practical.

Emphasis is placed on informal in-progress reviews. At the review time, the schedule will be checked and any changes will be identified. The activity during each event will be reviewed to ensure that it will satisfy the requirements for the OP-32 ADS. In the event of a slip in the schedule, or a significant change in the system requirements, both the USAMSSA and the OCA management will be informed as to the extent and nature of the impact. Where possible, if schedule or requirement changes have little or no impact on the project in terms of manpower or time, they will be incorporated directly in the development effort.

7.2 Definition/Design Phase

The Definition/Design Phase shall be accomplished by the USAMSSA utilizing this Functional Description and any other supporting documentation provided by the OCA. Work on this Phase shall be completed four weeks after initiation of the project.

OP-32 ADS DEVELOPMENT SCHEDULE  
 [.....]

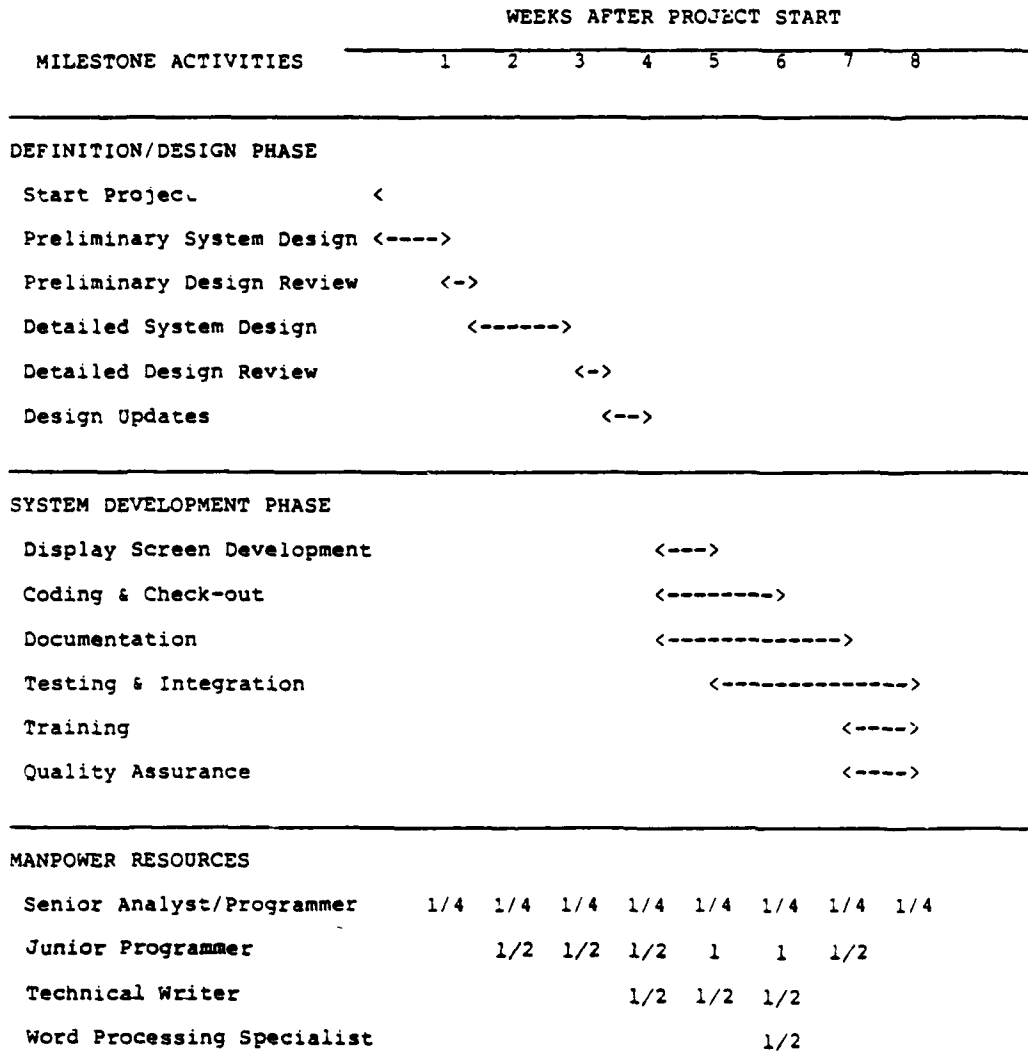


Figure 7.1 OP-32 ADS Development Schedule

#### 7.2.1 Preliminary System Design

The USAMSSA shall have one week in which to develop the Preliminary System Design and provide it for the OCA review.

#### 7.2.2 Preliminary Design Review

The OCA shall have two days in which to review the Preliminary Design for accuracy and completeness, ensuring that all aspects necessary to system development have been included. The OCA shall approve all designs, prior to initiation of any coding.

#### 7.2.3. Detailed System Design

Upon completion of the Preliminary System Design, the Detailed System Design shall be developed by the USAMSSA. This detailed design shall be completed and submitted to the OCA for review by the end of the third week of the project.

#### 7.2.4 Detailed Design Review

The OCA shall review the detailed design to ensure the developmental aspects of the design include all capabilities necessary for the system. This review shall be completed two days after receipt of the detailed design.

#### 7.2.5 Design Updates

The USAMSSA shall revise and update the system design based on recommendations provided by the OCA. The system design updates shall be completed by the end of the fourth week of the project.

#### 7.3 System Development Phase

The System development Phase shall be accomplished by the USAMSSA utilizing the final detailed design. Work on all listed events of the development phase shall be completed eight weeks after initiation of the project.

#### 7.3.1 Display Screen Development

The screens involving menu selection items and data input forms shall be developed during the fifth week of the project.

#### 7.3.2 Coding and Check-out/Program Modules

The coding of the programs shall begin during the fifth week of the project, to be completed and checked out by the end of the sixth week of the project.

#### 7.3.3 Documentation and Deliverables

The necessary system documentation shall be developed concurrently with the coding and check-out of the program modules. As a minimum, the documentation will include a program reference and user, operations, and maintenance instructions. Development of the instructions shall be coordinated with the OCA, completed by the end of the seventh week of the project, and made available for the Training Event.

In addition to system documentation, deliverables, on a time schedule determined by the functional proponent shall include:

- A functional proponent's user's manual
- OP-32 Budget Exhibit Reports

#### 7.3.4 Testing and Integration

Testing and integration of the program modules shall begin the sixth week of the project in order to check the accuracy and validity for integrating the OP-32 ADS with the existing systems. This phase of development shall be completed by the eighth week of the project.

#### 7.3.5 Training

Operator training shall be incorporated in the System Development Phase and involve informal meetings between the USAMSSA and the OCA personnel to discuss system operational procedures. This activity shall be accomplished during the eighth week of the project and result in initiation of the operation of the OP-32 ADS.

#### 7.3.6 Quality Assurance Certification

The completed OP-32 ADS shall be thoroughly tested for quality assurance during the final (eighth) week of the project. A Systems Engineering Test shall be conducted by the USAMSSA to ensure that the system components operate as a whole. This test will be conducted from a technical aspect. Testing from a functional point of view will be the responsibility of the OCA. This Operational Acceptance Test will be conducted in an operational environment and will ensure that the system performance is in accordance with the functional requirements.

#### 7.4 Deployment and Operational Phases

Since the OP-32 ADS shall be integrated into an operational system, there will be no additional time required for installation and check-out of the system. Any software modifications shall be accomplished on an as required basis using a Data Processing Request (DPR) form 56.

APPENDIX A  
WORK STATEMENT

WORK STATEMENT  
FUNCTIONAL DESCRIPTIONS FOR AUTOMATION OF THE ARMY  
BUDGET ACTIVITIES FOR CIVILIAN PERSONNEL

INTRODUCTION

The General Research Corporation (GRC) proposes to develop for the Office, Comptroller of the Army the functional descriptions for automation of (1) the Army Management Headquarters Activities (AMHA) PB-22 Budget Exhibit and (2) the Program and Price Growth OP-32 Budget Exhibit. In addition, GRC proposes to develop a third functional description for the interface requirement to update the OP-32 system from FORDIMS P/BS.

The purposes of this effort are to provide:

- The budget system requirements which must be satisfied to serve as a basis for mutual understanding between the user and the developer.
- Information on performance requirements, data sources, and interfaces with existing automated data systems.
- A basis for systems development of procedures to display, access, and update civilian personnel budget data through remote entry devices and computer interface.

APPROACH

The functional description will be developed by analysis of existing manual procedures, determination of specific user requirements, and identification of data elements to be extracted from relevant management systems. The specific tasks to be accomplished are described below.

#### TASK 1 - BUDGET EXHIBIT FORMATS

The objective of this task is to develop PB-22 and OP-32 Budget Exhibit formats for hard copy and CRT display which provide civilian personnel budget data broken out by categories such as:

- Fiscal year
- Command
- Program element
- Appropriation code
- Compensation area
- End strength
- Work years
- Army Management Headquarters
- Functional Category

The description of the budget exhibits will identify the manner in which the data elements will be displayed, necessary mathematical computations required to translate input data into summary type information, structure of the exhibit formats, and other information necessary to support a data processing request. Work on this task is of critical importance to all following efforts in automating the budget process.

The initial step in the work on this task will be to meet with the COR to determine specific data needs and obtain relevant extant data such as existing documentation of the budget process. In addition, the project staff will meet with other HQDA and USAMSSA staff representatives to define the budget exhibit format and content requirements and ensure development of a viable functional description. Following these initial meetings, GRC will develop and refine the budget exhibits in accordance with DoD Budget Guidance Manual 7110-1-M and in close coordination with the COR and other staff representatives, as necessary. The focus of these efforts will be not to critique current methods, but rather to ensure that the design of the exhibits incorporates the knowledge and experience of the personnel involved in the budget process. In



addition, particular attention will be focused on developing hardcopy formats that are easily understood and compatible with CRT displays.

Work on this task will be completed 2 weeks after contract award and require approximately 2 person-weeks of effort. The output will be a description with appropriate sample exhibits, of the PB-22 and OP-32 Budget Exhibit formats.

#### TASK 2 - BUDGET DATA SOURCES

The objective of this task is to identify the sources of data for the Army Management Headquarters Activities (AMHA) Program Budget 22.

Work on this task will involve review of the systems that support Army manpower management to identify data sources which could be used for input to the PB-22. The initial review will involve those systems identified by the COR as being particularly useful to the current budget preparation process. In addition, the project staff will endeavor to identify other potential sources of data that exist for allocating, costing, and managing civilians on both an end strength and a work year basis.

This review will involve selective examination of the program control and feedback system to include:

- The Program/Budget Subsystem (P/BS) of the Force Development Integrated Management System (FORDIMS)<sup>1</sup> and input to the Program Budget Guidance (PBG).
- The Civilian Personnel Information System - Model I (CIVPERSINS-I), as prescribed in AR 680-330, which provides feedback on actual characteristics of the civilian work force hired against authorized positions.

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<sup>1</sup>GRC supported the development of FORDIMS from a functional user aspect and developed the FORDIMS User's Guide, Volume I, Introduction and Program/Budget Subsystem (P/BS).

- The Tables of Distribution and Allowance (TDA) which are normally prepared only for the current, budget, and first program year (Concept Plans are a limited exception). Civilian manpower detail by category, grade, and civilian occupational specialty code is not normally available for the remaining program years ("outyears").<sup>1</sup>
- The Army Civilian Personnel System (ACPERS), currently in early stages of development.
- The CSFOR-78 report which currently displays actual and authorized civilian strengths at command, Army Management Structure Code, and civilian identity level (with some limited workload data).
- The Manpower Evaluation and Tracking System (METS) which compares actual and authorized civilian strength.

GRC already has a comprehensive understanding of functional interrelationships among Army mission and workload, civilian manpower requirements determination, documentation of current and future civilian work force characteristics, personnel management policy, external constraints, and life cycle functions. During this project, we will confirm, update, and upgrade our background knowledge with particular emphasis on relevant input data for the PB-22. Our current and extensive library of applicable directives, studies, and other background information will greatly simplify the literature search.

Work on this task will be completed approximately 3 weeks after contract award and require approximately 1 person-week of effort. The output will be a description which identifies the appropriate sources of input data for PB-22 and describes the data elements which can be obtained from these sources.

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<sup>1</sup>This may change under the Vertical Force Development Management Information System (VFDMIS) (currently under development with GRC support) since documentation details in that system are reflected on a time continuum and remain valid until modified.

AD-A165 872

OP-32 AUTOMATED DATA SYSTEM FUNCTIONAL DESCRIPTION(U)  
GENERAL-RESEARCH CORP MCLEAN VA MANAGEMENT TECHNOLOGIES  
DIV R L SCHROEDER ET AL. 06 SEP 83 1398-01-83-CR  
MDA903-83-M-7399

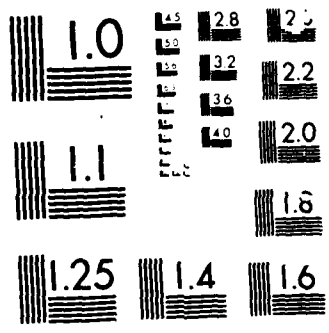
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### TASK 3 - DATA INPUT BY CRT

The objective of this task is to develop procedures to input additional PB-22 and OP-32 cost data via the DACA-OMP CRT and document these procedures by functional descriptions.

Work on this task will commence approximately 2 weeks after contract award and involve close coordination with the COR to review current capabilities and establish future requirements for input of cost data via the CRT. Based on this coordination, GRC will design and develop procedures to input additional cost data which specify:

- The data elements which are to be input
- The format and content of the data elements
- A structure for filing the input data which is compatible with the existing systems

Particular emphasis will be placed on development of procedures which are user friendly and facilitate data entry. The procedures will be documented by the development of the input required for a Data Processing Request (DPR) (DAS Form 56, Appendix B, DA Memo 18-4, dated 18 March 1979) for both the PB-22 and OP-32 systems. This documentation will include:

- Systems title and general description
- System benefits, assumptions, and constraints
- Source data media and formats of input data
- Frequency and timeliness
- Output title and general description
- Output interface constraints, media, and formats
- Description of the proposed system to include:
  - Data element definition and coding structure
  - Data tables
  - Relations between data elements

While it is not practical to scope completely the magnitude of this effort, we estimate that development of these procedures may require approximately 7 person-weeks of effort.

The output will be two functional descriptions of the procedures to input additional cost data via the DACA-OMP CRT:

- The OP-32 functional description will be delivered approximately 5 weeks after contract award.
- The PB-22 functional description will be delivered approximately 7 weeks after contract award.

#### TASK 4 - OP-32 AND FORDIMS P/BS INTERFACE

The objective of this task is to develop a functional description for the interface requirement to update the OP-32 system (resident at the USAMSSA computer) from FORDIMS P/BS.

GRC is fully aware that the functional description requirements must drive the system design and not vice-versa. This is not to say that existing system design considerations should not intrude in the process of developing the functional description. Such design considerations can exert a very positive influence, when, as in this case, there is another system (FORDIMS P/BS) with which the automated budget process must interface in order to update the OP-32 system.

Work on this task will involve identification of the data elements in the FORDIMS P/BS that will be utilized to update the OP-32 system translation of the data elements into a format acceptable as input for the OP-32 system, and development of the input required for a DPR as described under Task 3. Tentative FORDIMS P/BS data elements which may be used as input to the OP-32 system include:

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<sup>1</sup>Data element descriptions are in Appendix D, FORDIMS User's Guide, Vol I, Aug 1980.

FORDIMS P/BS DATA ELEMENTS<sup>1</sup>

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| AUCCO | BCOCO | BBECO | AYSCO | FEPER |
| AMYRC | CASHA | FECMP | CAPER | SVPER |
| MDAYS | CASCO | SVPAY | OTPER | BCOMP |
| MYRCO | OTIME | ADSAL | OTPCO | BBENE |
| OTMYR | OTICO | ADSCO | BEPER | AYSAL |

Work on this task is estimated to require approximately 4 person-weeks. The output will be a functional description for the interface requirement that will be delivered approximately 8 weeks after contract award.

**COORDINATION**

Successful completion of the work will require close and continuing interface with the personnel most knowledgeable about the development and use of the PB-22 and OP-32 Budget Exhibits and supporting systems. GRC intends to facilitate this coordination by almost daily liaison with these personnel to ensure the existing systems are properly described and defined in terms of systems requirements.

All functional descriptions will be developed in coordination with the COR and incorporate Government comments.

**PERSONNEL**

This research will be conducted by the personnel listed below. Estimated time to be devoted to the study is shown. Their qualifications are briefly described in the subparagraphs below.

|                        | <u>Person hours</u> |
|------------------------|---------------------|
| Mr. Robert Schroeder   | 240                 |
| Mr. Einar (Bill) Berge | 232                 |
| Mr. William Bartlett   | 80                  |

Mr. Schroeder will be project leader.

Mr. Robert L. Schroeder is a former Army Colonel who has extensive experience in manpower and personnel studies and analyses as well as civilian personnel management experience. He is a GRC Senior Analyst with a graduate degree in operations research, was recently project manager for two Army studies involving manpower and personnel management policy analysis and turbulence definition, and was a member of the project team developing a Civilian Personnel Management Module within the FORECAST System. Before joining GRC, Mr. Schroeder was Director, Systems Force Mix at the Army Concepts Analysis Agency. In this capacity, he directed and managed a staff of approximately 50 civilian and military analysts in the conduct of cost and benefit studies. Earlier assignments included management of study efforts requiring functional definition, data collection, analysis, and evaluation of organizational and operational requirements, and Army personnel policy analysis. His extensive background in the Army and in operations research studies makes him eminently qualified for this project.

Mr. Einar (Bill) Berge is a Senior Consultant with unparalleled expertise in the areas of manpower planning and analysis and mobilization manpower planning. He has been a member of several GRC project teams; most notably, the projects to develop the modifications to ELIM-COMPLIP and MOSLS for mobilization planning and to develop a Civilian Personnel Management Module within the FORECAST System.

Mr. Berge, a former Army Colonel with more than 30 years of military service, has extensive experience in analysis of manpower requirements and automated systems design. His analytical experience in these areas will be invaluable in this project.

Mr. William E. Bartlett, Jr. is a GRC Principal Analyst (and Deputy Director, Management Sciences Operations) with extensive experience in manpower management, ADP systems, personnel planning, and mobilization. He is currently serving as manager of the project to develop a Civilian Personnel Management Module within the FORECAST System. He was also a major contributor in the study to determine modifications to ELIM-



COMPLIP and MOSLS for mobilization strength planning and management for enlisted personnel.

A former Army Colonel with more than 4 years of day-to-day involvement with Army personnel matters as a key member of the staff of the Deputy Chief of Staff for Personnel at Department of the Army level, he brings an unparalleled depth and breadth of understanding of Army personnel functions and system development to this project.

APPENDIX B  
STATEMENT OF WORK

CONTRACT NO. MDA903-83-M-7399  
General Research Corp.

### I. SCOPE OF WORK

The contractor shall furnish the necessary personnel, materials, facilities and other services, managing and directing the same as may be required to conduct research to develop Functional Descriptions for Automation of the Army Budget Activities for Civilian Personnel. The work to be performed consists of the following tasks.

a) TASK A - Contractor will develop PB-22 and OP-32 Budget Exhibit formats for hard copy and CRT display which provide civilian personnel budget data broken out by categories.

b) TASK B - Contractor will identify the sources of data for the Army Management Headquarters Activities (AMHA) Program budget 22.

c) TASK C - Contractor will develop procedures to input additional PB-22 and OP-32 cost data via the DACA-OMP CRT and document these procedures by functional descriptions.

d) TASK D - Contractor will develop a functional description for the interface requirements to update the OP-32 System (resident at the USAMSSA computer) from FORDIMS P/BS.

### II. REPORTS

(a) During the period of research, the contractor shall submit reports in accordance with the delivery schedule set forth below. The reports shall include the following:

(1) Interim status reports - containing working notes and all papers related to development of functional descriptions.

(2) A written OP-32 functional description to include data processing request ready for submission to USAMSSA.

(3) A written PB-22 functional/description to include data processing request ready for submission to USAMSSA.

(4) A written functional description of P/BS FORDIMS Interface to the OP-32 System to include data processing request ready for submission to USAMSSA.

### III. DELIVERY SCHEDULE

| <u>REPORTS</u>                | <u>QUANTITY</u> | <u>DELIVERY DATE</u> |
|-------------------------------|-----------------|----------------------|
| First Interim Status on OP-32 | 5 copies        | 22 Aug 1983          |
| OP-32 Functional Description  | 5 copies        | 05 September 1983    |

CONTRACT NO. MDA903-83-M-7399  
General Research Corp.

| <u>REPORTS</u>   | <u>QUANTITY</u> | <u>DELIVERY DATE</u> |
|--|-----------------|----------------------|
| Second Interim Status on PB-22<br>and P/BS FORDIMS Interface<br>to OP32. | 5 copies        | 19 Sept 1983         |
| PB-22 Functional Description   | 5 copies        | 07 Oct 1983          |
| P/BS FORDIMS INTERFACE to the<br>OP-32                                   | 5 copies        | 07 Oct 1983          |

IV. CONTRACTING OFFICERS REPRESENTATIVE

Mrs. Jean S. Rogers, HQDA (DACA-OMP), Rm 3B666, The Pentagon, Washington, DC 20310: (202) 697-7669, is hereby designated as the Contracting Officer's Representative to:

a. Receive for the Government Reports and any other material called for and represent the Contracting Officer in the technical phases of the work. The Contracting Officer's Representative is not authorized to change any of the terms and conditions. Changes in the scope of work shall be made only by the Contracting Officer by properly signed modifications to the delivery order.

b. Certify the Contractor's "need to know" in connection with the contractor's:

(1) requests for information from Government activities,

(2) requests to private Contractors for information developed pursuant to Government contracts,

(3) visits to Government installations and other Government Contractors to obtain information to be used in the performance of this delivery order.

c. Act as the Authorized Government Representative to receive, inspect, and accept the services performed under this purchase order by executing the receiving report(s) (Block 26 & 27 of DD Form 1155 or block 23 of DD Form 250) required by this order as verification that the specified services have been performed. The COR will distribute one (1) copy of the signed receiving reports(s) to Defense supply Service-Washington.

V. PAYMENT

At the time of delivery of Functional Descriptions and Interface called for herein, the contractor shall complete a DD form 250. "Material Inspection and Receiving Report" and submit it along with an invoice in original and four copies to the Contracting Officer's Representative (COR). The COR shall forward same to the designated activity for payment.

VI. Military Security Requirements clause, DAR 7-104.12, dated 1971 APRIL, is applicable.

CONTRACT NO. MDA903-83-M-7399  
General Research Corp.

VII. MILITARY SECURITY CLASSIFICATION

Military security requirements in the performance of this contract shall be maintained in accordance with the DD Form 254 which is attached. The highest classification involved in the performance of this contract is secret. This contract document is unclassified.

VIII. CLASSIFIED INFORMATION

The contractor will not use any electrical information processing equipment in his possession for the purpose of processing or transmitting classified information under this contract without the written permission of the Contracting Officer.

IX. DISSEMINATION OF INFORMATION

There shall be no dissemination or publication, except within and between the contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of the COR or of the Contracting Officer.

X. LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

a. Attachments

DD Form 254 .

APPENDIX C  
ABBREVIATIONS AND ACRONYMS

APPENDIX C  
ABBREVIATIONS AND ACRONYMS

|          |  |
|----------|--|
| ABS      | Additional Budget Submits                            |
| ADSAL    | Average Daily Salary                                 |
| ACT      | Activity Group                                       |
| ACTNO    | Action Number  |
| AFP      | Annual Funding Program                               |
| AMHA     | Army Management Headquarters Activities              |
| AMSCO    | Army Management Structure Code                       |
| APCAT    | Appropriation Category                               |
| AIF      | Army Industrial Fund                                 |
| AMO      | Automation Management Office                         |
| AYSAL    | Average Yearly Salary                                |
| BDFA     | Basic Daily Food Allowance                           |
| BEAMS    | Budget Execution and Appropriation Management System |
| BBENE    | Basic Benefits                                       |
| BCOMP    | Basic Compensation                                   |
| BEPER    | Benefit Percent Factor                               |
| BOS      | Base Operations                                      |
| CA       | Commercial Activities                                |
| COA      | Comptroller of the Army                              |
| COB      | Command Operating Budget                             |
| COLA     | Cost of Living Allowance                             |
| COR      | Contracting Officer Representative                   |
| C/PGS    | Cost/Program Growth System                           |
| CPI      | Consumer Price Index                                 |
| CRT      | Cathode Ray Tube                                     |
| CSFOR-78 | Manpower Utilization and Requirements Report         |
| DBMS     | Data Base Management System                          |
| DOD      | Department of Defense                                |
| DPR      | Data Processing Request                              |
| EOE      | Elements of Expense                                  |
| FD       | Functional Description                               |
| FEEMP    | Former Employee Compensation                         |



ABBREVIATIONS AND ACRONYMS (Cont.)

|         |  |
|---------|--|
| FEGHI   | Federal Employee Group Health Insurance        |
| Fegli   | Federal Employee Group Life Insurance          |
| FEPER   | Former Employee Percent Factor                 |
| FICA    | Federal Insurance Contribution Act             |
| FNDH    | Foreign National Direct Hire                   |
| FNID    | Foreign National Indirect Hire                 |
| FNSA    | Foreign National Separation Allowance          |
| FORDIMS | Force Development Integrated Management System |
| FSS     | Force Structure Subsystem                      |
| FTP     | Fulltime Permanent                             |
| FYDP    | Five Year Defense Program                      |
| GFSR    | General Functional System Requirement          |
| GS      | General Schedule - Civilian Employee           |
| MACOM   | Major Army Command                             |
| MSN     | Mission  |
| MYP     | Multiyear Procurement                          |
| OC      | Object class                                   |
| OCA     | Office of the Comptroller of the Army          |
| O&M     | Operations and Maintenance                     |
| OMA     | Operation and Maintenance, Army                |
| OMAR    | Operation and Maintenance, Army Reserve        |
| OMARNG  | Operation and Maintenance, Army National Guard |
| OMB     | Office, Management and Budget                  |
| OPAGY   | Operating Agency                               |
| OSD     | Office, Secretary of Defense                   |
| OTIME   | Overtime                                       |
| OTPER   | Overtime Percentage Factor                     |
| PBD     | Program Budget Decision                        |
| PBG     | Program Budget Guidance                        |
| P.BS    | Program/Budget Subsystem                       |
| PCD     | Program Change Decision                        |
| PCS     | Permanent Change of Station                    |
| PDM     | Program Decision Memorandum                    |



ABBREVIATIONS AND ACRONYMS (Cont.)

|          |  |
|----------|--|
| PE       | Program Element  |
| POM      | Program Objective Memorandum                             |
| PPBES    | Planning, Programming, Budgeting, and Execution System   |
| RCOMD    | Resource Command   |
| RDTE     | Research, Development, Test, and Evaluation              |
| RPMA     | Real Property Maintenance, Army                          |
| SCR      | Systems Change Request                                   |
| SES      | Senior Executive Service                                 |
| SOW      | Statement of Work  |
| STANFINS | Standard Financial Systems                               |
| STARCIPS | Standard Army Civilian Payroll System                    |
| SVPAY    | Severance Pay  |
| TAADS    | The Army Authorization Documents System                  |
| TDA      | Table of Distribution and Allowance                      |
| TDY      | Temporary Duty   |
| TPT      | Temporary Parttime                                       |
| USAFAC   | United States Army Finance and Accounting Center         |
| USAMSSA  | United States Army Management System Support Agency      |
| VFDMIS   | Vertical Force Development Management Information System |

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