DATABASE ACCESS MANAGER FOR THE SOFTWARE ENGINEERING LABORATORY (DAMSEL) USER'S GUIDE

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Goddard Space Flight Center
Greenbelt, Maryland 20771

FOREWORD

The Software Engineering Laboratory (SEL) is an organization sponsored by the National Aeronautics and Space Administration/Goddard Space Flight Center (NASA/GSFC) and created for the purpose of investigating the effectiveness of software engineering technologies when applied to the development of applications software. The SEL was created in 1977 and has three primary organizational members:

> NASA/GSFC, Systems Development Branch
>
> The University of Maryland, Computer Sciences Department
>
> Computer Sciences Corporation, Systems Development Operation

The goals of the SEL are (1) to understand the software development process in the GSFC environment; (2) to measure the effect of various methodologies, tools, and models on this process; and (3) to identify and then to apply successful development practices. The activities, findings, and recommendations of the SEL are recorded in the Software Engineering Laboratory Series, a continuing series of reports that includes this document.

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ABSTRACT

This document presents operating instructions for the Database Access Manager for the Software Engineering Laboratory (DAMSEL) system. It includes step-by-step instructions for performing various data entry and report generation activities. Also included are sample sessions showing the user interface display screens. Instructions for generating reports are accompanied by sample outputs for each of the reports. The document groups the available software functions by the classes of users that may access them.

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SECTION 1 - INTRODUCTION

1.1 DOCUMENT ORGANIZATION

This document is a guide for using the Database Access Manager for the Software Engineering Laboratory (DAMSEL). The DAMSEL system provides access to the Software Engineering Laboratory (SEL) database via various screen interfaces. The functions available to the user in the DAMSEL system are described in the four sections of this document. Section 1 provides an overview of the SEL database. Section 2 discusses the view screens and report generation functions that are available to all DAMSEL users. Section 3 concerns data entry procedures for librarians. Finally, Section 4 describes the functions available to the database administrator (DBA).

1.2 SEL DATABASE OVERVIEW

The SEL database stores data collected by the SEL on numerous software development projects. These data are obtained from forms completed by the various projects' personnel. (See Section 1.3 for a further discussion of these forms.) The data from these forms are stored in relational databases, implemented using the ORACLE database management system on a DEC VAX 11/780 under the VMS operating system and on a personal computer (PC) under the MS-DOS operating system. The data are used for research and by managers to monitor current projects and predict resource needs for future projects. For further information on the data being collected and stored by the SEL, refer to Reference 1.

The SEL DBA monitors the data in the SEL database. This person is referred to numerous times in this document as a point of contact for verifying data, correcting bad data, and enrolling new users in the SEL database.

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1.3 SEL DATA SOURCES

Various types of data are stored in the SEL database. Thirteen forms, completed by personnel involved with the monitored projects, provide a source for SEL data. Each of the forms represents a logical grouping of a specific type of data. The data entry screens and some of the reports are designed to correspond to these forms. The names of these forms, how often they are collected, and what types of data they contain are listed below. Reference 2 contains a more detailed explanation of the various SEL forms.

SEL DATA (BY FORMS)

Project Estimates Form (PEF)

- Submitted: At the initial entry of the project into the database and every 6 to 8 weeks thereafter through the development life cycle.

- Types of Data

    - Project phase dates
    - Estimated staff resource data
    - Estimated project size data
    - Estimated source lines of code

Personnel Resource Form (PRF)

- Submitted: Every Friday for duration of the project development life cycle.

- Types of Data: The number of hours spent by each project team member on various types of activities for each given week.

Cleanroom Personnel Resource Form (Cleanroom PRF)

- Submitted: Every Friday for duration of the project development life cycle. Some projects use the Cleanroom PRF instead of the regular PRF to record

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their personnel resources hours. The Cleanroom PRF contains activities specific to the Cleanroom Methodology. For any given project, either the PRF or Cleanroom PRF will be used. No project will use both forms.

● Types of Data: The number of hours spent by each of the project's personnel on various types of activities for each given week.

Services/Products Form (SPF)

● Submitted: Every week in which support services or computer resources are used or in which product growth data are available.

● Types of Data

  – Computer hours and runs used by the project during the week

  – Number of modules in controlled library

  – Number of changes to modules in controlled library

  – Lines of code

  – Services personnel hours

Subsystem Information Form (SIF)

● Submitted: At the time of the preliminary design review (PDR) and any time a new subsystem is introduced into the design of the system.

● Types of data

  – Subsystem prefix
  – Subsystem name
  – Subsystem function

Component Origination Form (COF)

- Submitted: For each component at the time the component is ready to be moved into the controlled source library.

- Types of data

  - Component name and subsystem prefix
  - Difficulty of developing the component
  - Origin of the component
  - Type of component
  - Purpose(s) of executable component

Change Report Form (CRF)

- Submitted: For each change to the system at the time the component is updated in the library.

- Types of data

  - Description of change
  - Name of component(s) changed
  - Date of change
  - Effort involved in change
  - Type of change
  - Effects of change
  - Source of error
  - Class of error
  - Error characteristics
  - Ada information

Development Status Form (DSF)

- Submitted: Biweekly during the development phase.

- Types of data

  - Design status of modules
  - Code status of modules
  - System and acceptance testing status

- Discrepancy tracking status
- Specification modifications status
- Questions status

Component Change Form (CCF)

- Submitted: Whenever the name of a component in the project controlled source library is changed or a component is deleted.

- Types of data
  - Old component name
  - New component name

Project Completion Statistics Form (PCSF)

- Submitted: When the final system products have been delivered.

- Types of data
  - Actual project phase dates
  - Actual staff resource data
  - Actual computer hours and runs
  - Actual source lines of code
  - Actual number of executable modules
  - Actual number of executable statements
  - Actual number of subsystems, actual number of components
  - Actual number of changes, actual number of pages of documentation

Subjective Evaluation Form (SEF)

- Submitted: When final products have been delivered.

- Types of data
  - Subjective assessment of problems encountered

- Subjective assessment of technical staff

- Subjective assessment of technical/management staff

- Subjective assessment of process characteristics

- Subjective assessment of environmental characteristics

- Subjective assessment of product characteristics

Maintenance Change Report Form (MCRF)

- Submitted: For each change to the system during the maintenance phase.

- Types of data

  - Description of change
  - Type of modification
  - Cause of change
  - Name of components changed, added, deleted
  - Effort involved in change
  - Related changes to documents, etc.
  - Class of error
  - Estimated size
  - Component change statistics

Weekly Maintenance Effort Form (WMEF)

- Submitted: Every week during the maintenance phase.

- Types of data: The number of hours spent by each project team member on various types of activities for each given week.

SECTION 2 - GENERAL USER

2.1 INTRODUCTION

This section is intended for the user who is interested in examining data in the SEL database. All the functions described in this section are also available to data entry and DBA personnel. Three main topics are discussed in this section.

- Section 2.2 describes the menu screens available in the DAMSEL system.

- Section 2.3 describes the DAMSEL view screens.

- Section 2.4 describes the DAMSEL report generation subsystem.

The view screens and the reports provide a method for displaying information from the database. The view screens allow the user to interactively view data in the database one form at a time. The reports provide a formatted output of various database information. The resulting reports may be output directly to the printer or output to a file.

2.2 MENU SYSTEM

The DAMSEL menu system provides access to the various data access functions on the VAX. Figure 2-1 shows the structure of the menu system. The following three steps are necessary to allow the user access to the menu system:

1.   A VAX account must be set up for the user. If the user does not currently have a VAX account, contact the Systems Technology Laboratory (STL) manager to establish an account.

2.   The user's LOGIN.COM file must be updated to include a reference to a command file that defines various ORACLE and DAMSEL symbols. Use the VAX editor to edit an existing

LOGON TO ORACLE

```
                    ┌─────────────┐
                    │    MAIN     │
                    │  FUNCTIONS  │
                    │    MENU     │
                    └─────────────┘
```

| DBA FUNCTIONS MENU | REPORT FUNCTIONS MENU | FORM FUNCTIONS MENU | QUERY SUPPORT FUNCTIONS MENU * | GENERAL DATABASE SUPPORT FUNCTIONS MENU |

| MENU FOR VIEW OPERATIONS | MENU FOR INSERT OPERATIONS | MENU FOR UPDATE OPERATIONS | MENU FOR DELETE OPERATIONS | MENU FOR QA OPERATIONS |

*NOT CURRENTLY IMPLEMENTED

5047G(6)-1
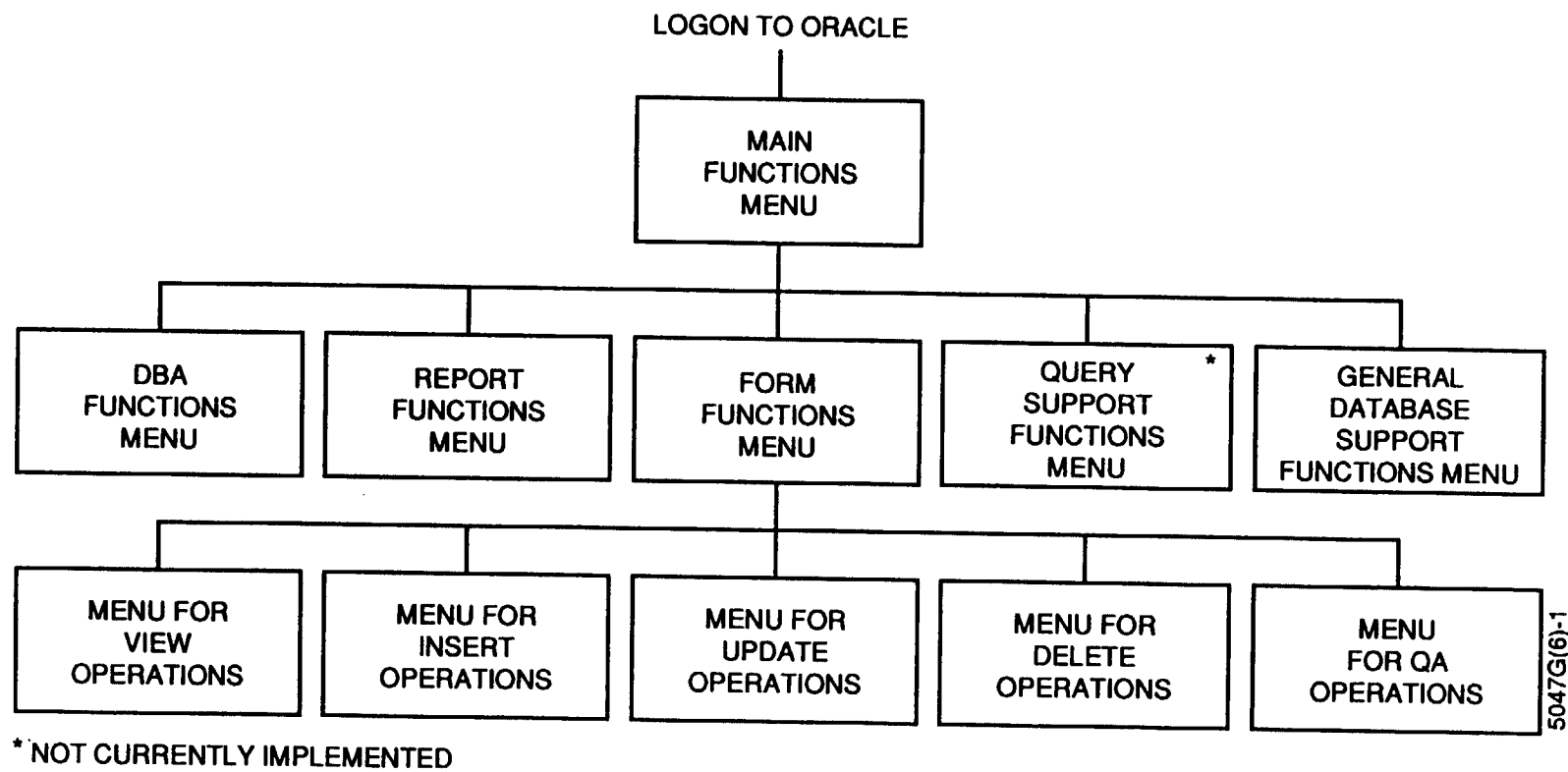
Figure 2-1. Menu System

LOGIN.COM file or create a new LOGIN.COM file if one does not currently exist. The following line must be inserted into the LOGIN.COM file:

$ @[TOOLS]SELINIT.COM

3. The user must be given an ORACLE account and enrolled in the SEL database. Each user is enrolled in the database at a specific user class level. Contact the SEL DBA to create an ORACLE account and enroll the user.

After the above steps have been performed, the user will have access to the DAMSEL menu system. To access the menu, do the following:

1. Logon to the VAX.

2. Run the DAMSEL system: $ DAMSEL

3. Enter ORACLE user name and password (Figure 2-2) and press the <Next Field> key to bring up the Main Function menu. Figure 2-3 shows a picture of the Main Function Menu as it will be displayed on the terminal screen. The menu system function keys are shown in Figure 2-4.

4. Enter the number associated with the desired operation and press the <Next Field> key to display the selected menu.

5. Figures 2-5 and 2-6 show the second- and third-level menu screens. The third-level menu screens (view, insert, update, delete, and QA) are similar; therefore, only one is shown in Figure 2-6. Figures 2-7 through 2-20 show the generic screen layout for all of the SEL data entry forms. These screens are explained in more detail in the sections that follow.

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SQL*Forms (Run Form): Version 2.0.18 - Production on Tue Jan 19 18:21:05 1988

.

SECURE DATABASE: ENTER NAME AND PASSWORD

     Name : ▓▓▓▓▓▓▓
  Password :

Press Escape k at any time to show function keys

Figure 2-2. ORACLE User Name and Password

MAIN FUNCTION MENU
────────────────

What type of function do you want to perform?

       1 - Form function
       2 - Report function
       3 - Query support function
       4 - DBA function
       5 - General database support function

    <PF4> - Exit

Please enter your selection number: ▓▓

Char Mode: Replace Page 1   Count: *0

Figure 2-3. Main Function Menu
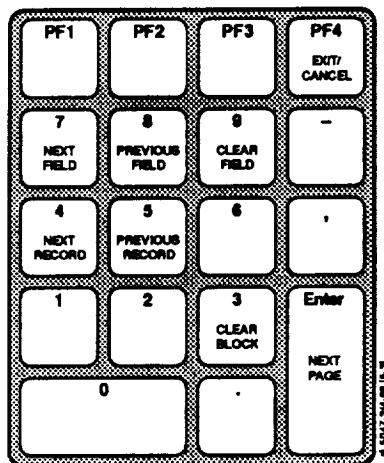
ADDITIONAL FUNCTION KEYS

FUNCTION	KEY
NEXT FIELD	Return or Tab
PREVIOUS FIELD	Backspace
NEXT RECORD	↓
PREVIOUS RECORD	↑
LIST FIELD VALUES	<Esc -V>

Figure 2-4. Menu System Keypad

```
                FORM FUNCTIONS MENU
                _____

     What type of operation do you want to perform?

              1 - View existing data
              2 - Insert new data
              3 - Update existing data
              4 - Delete existing data
            . 5 - Quality assure data

              <PF1>- Top menu
              <PF4>- Previous menu


     Please enter your selection number: ▓


Char Mode: Replace  Page 1                    Count: *0
```

Figure 2-5. Second-Level Menus (1 of 4)

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REPORT FUNCTION MENU
_____

What type of report operation do you want to perform?

    1 - Create a report script

    2 - Retrieve an existing report script to run or modify

    3 - View or delete existing report scripts

        <PF1>- Top menu
        <PF4>- Previous menu

Please enter your selection number: ▓▓

Please enter script name to be retreived or <ESC V> to list:
            ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
Char Mode: Replace Page 1   Count: *0

Figure 2-5. Second-Level Menus (2 of 4)

DBA FUNCTIONS MENU
_____

What type of data do you want to operate on?

        1 - New project data
        2 - Encoding data
        3 - Programmer data
        4 - Computer data
        5 - Status flags
        6 - General project description
        7 - Supervisory percentages

        <PF1> - Top menu
        <PF4> - Previous menu

Please enter your selection number: ▓▓

Char Mode: Replace Page 1   Count: *0

Figure 2-5. Second-Level Menus (3 of 4)

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What type of function do you want to perform?

    1 - Generate distribution tape

    <PF4> - Previous menu

Please enter your selection number: ▓▓

Char Mode: Replace   Page 1   Count: *0

Figure 2-5.   Second-Level Menus (4 of 4)

MENU FOR VIEW OPERATIONS
────────────────────────────

    What type of data do you want to operate on?

1 - Subsystem data   8 - PCSF data
2 - COF data   9 - Component Statistics data
3 - CRF data   10 - Cleanroom PRF data
4 - PRF data   11 - WMEF data
5 - SPF data   12 - MCRF data
6 - PEF data   13 - General Project data
7 - SEF data   14 - DSF data

            <PF1> - Top menu
            <PF4> - Previous menu
        Please enter your selection number: ▓▓

Char Mode: Replace   Page 2   Count: *0

Figure 2-6.   Sample Third-Level Menu

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SUBSYSTEM DATA ███████ SCREEN

Project Name: ████████████

Subsystem Prefix	Subsystem Name	Subsystem Function	Submission Date

Char Mode: Replace . Page 1   Count: *0

Figure 2-7.   Subsystem Data Screen

COMPONENT ORIGINATION FORM ███████ SCREEN (One of Two)   Press <enter>
                                                          for next page

Project Name: █████████
Subsystem Prefix: ████████
Component Name: █████████

Form No.: █████████
Programmer: ████████
Form Date (DD-MMM-YY): ████████

Date entered into controlled library: █████████ (DD-MMM-YY)
Relative difficulty of component:████ (1 to 5)
Origin: █████████

Type of component: (put an 'X' by the appropriate component type)
█ 'INCLUDE' file   █ Ada subprogram specification
█ JCL   █ Ada subprogram body
█ ALC   █ Ada package specification
█ FORTRAN source   █ Ada package body
█ PASCAL source   █ Ada task specification
█ Namelists or parameter lists   █ Ada task body
█ Display identification   █ Ada generic specification
█ Menu definition or help   █ Ada generic body
█ Reference data files   █ Other
█ BLOCK DATA file

        Char Mode: Replace . Page 1   Count: *0

Figure 2-8.   COF Screen (1 of 2)

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Project Name· ▒▒▒▒▒▒   Form No.: ▒▒▒▒▒▒▒▒
Subsystem Prefix:▒▒▒▒▒▒▒   Programmer:▒▒▒▒▒▒▒
Component Name:▒▒▒▒▒▒▒   Form Date (DD-MMM-YY): ▒▒▒▒▒▒

Purpose of executable component:
(Put an 'X' by each purpose that applies)
  ▒ I/O processing   ▒ Control module
  ▒ Algorithmic/computational   ▒ Interface to operating system
  ▒ Data transfer   ▒ Ada process abstraction
  ▒ Logic/ decision   ▒ Ada data abstraction

        Char Mode: Insert   Page 2   Count: *0

Figure 2-8. COF Screen (2 of 2)

Project Name: ▒▒▒▒▒▒▒▒▒   Date (DD-MMM-YY):▒▒▒▒▒▒▒▒▒
Programmer:▒▒▒▒▒▒▒▒▒   Form No: ▒▒▒▒▒▒▒▒
Components being changed:
                                     Press <nxtrec> to scroll
 ███ ████████████████████   forward or <prvrec> to
 ███ ████████████████████   scroll backward.
Number of additional components examined: ▒▒▒▒▒▒▒▒
Need for changed determined on (DD-MMM-YY):▒▒▒▒▒▒▒
Change completed on (DD-MMM-YY):▒▒▒▒▒▒▒▒
Effort to isolate the change:▒▒▒▒▒▒▒▒
Effort to implement the change:▒▒▒▒▒▒▒
Type of change: ▒▒▒▒▒▒▒▒▒

Effects of change: (Y or N)
Was the change or correction to one and only one component? ▒
Did you look at any other component?▒▒
Did you have to be aware of parameters passed explicitly or
implicitly to or from the changed component? ▒

        Char Mode: Replace . Page 1   Count: *0

Figure 2-9. CRF Screen (1 of 3)

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Project Name: ▒▒▒▒▒▒▒▒   Date (DD-MMM-YY): ▒▒▒▒▒▒▒▒
Programmer:▒▒▒▒▒▒▒▒   Form No: ▒▒▒▒▒▒▒

   Source of error: (Put an 'X' by the appropriate column)
   ▓ Requirements   ▓ Code
   ▓ Functional specifications   ▓ Previous change
   ▓ Design

   Class of error: (Put an 'X' by the appropriate column)
   ▓ Initialization   ▓ Interface (external)
   ▓ Logic/control structure   ▓ Data
   ▓ Interface (internal)   ▓ Computational

   Characteristics: (Y or N)
   ▓ Omission error
   ▓ Comission error
   ▓ Error was created by transcription

           Char Mode: Replace   Page 2   Count: *0

Figure 2-9.   CRF Screen (2 of 3)

   Project Name: ▒▒▒▒▒▒▒   Date (DD-MMM-YY): ▒▒▒▒▒▒▒ ⸱⸱
   Programmer: ▒▒▒▒▒▒▒   Form No: ▒▒▒▒▒▒▒

1. Did the use of Ada as a design and implementation language
   contribute to this change (Y OR N) ? ▒▒▒
   If so, which feature(s) were involved? ▒▒▒ ▒▒▒ ▒▒
   ▒▒▒▒▒   ▒▒▒▒▒   ▒▒▒▒▒   ▒▒▒▒▒
2. For an error involving Ada:
 a. Does the compiler documentation or the language reference
    manual explain this feature clearly (Y OR N) ? ▒▒
 b. Enter the statement that is most true:
    ██
 c. Which of the following resources provided the information needed
    to correct the error? (Put an 'X' by each column that applies)
    ▓ Class Notes   ▓ Own memory
    ▓ Ada reference manual   ▓ Someone not on the team
    ▓ Own project team member   ▓ Other
 d. Which, if any, tools aided in the detection and correction of this
    error? ▒▒▒   ▒▒▒   ▒▒▒

        Char Mode: Replace   Page 3   Count: *0

Figure 2-9.   CRF Screen (3 of 3)

PERSONNEL RESOURCE FORM ████████ SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	███
Rework Enhancing/Refining /Optimizing Documenting Reuse	███

Project Name: ████████

Date(Friday): ████████

Programmer: ████████

Form No: ██ ██████

Char Mode: Replace   Page 1   Count: *0

Figure 2-10.   PRF Screen

SERVICES/PRODUCTS FORM ████████ SCREEN

Service	Hours
Tech Pubs Secretary Librarians Other Proj. Mgmt	███

Form No: ████████

Project Name: ████████

Date(Friday): ████████

Computer	Hours	Runs
███	███	███

Modules	Changes	LOC
███	███	███

Char Mode: Replace Page 1   Count: *0

Figure 2-11.   SPF Screen

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PROJECT ESTIMATES FORM ▮▮▮▮ SCREEN

Project Name: ▓▓▓▓▓▓▓   Form No.: ▓▓▓▓▓
Form Date (dd-mmm-yy): ▓▓▓▓▓▓

Phase	Start Date (dd-mmm-yy)
Requirements Design Code & Test System Test Acceptance Test Clean-up Maintenance Project End	▓▓▓▓▓▓

Staff Resource Estimates	
Programmer Hrs Management Hrs Services Hrs	▓▓▓▓▓

Source Lines of Code	
Total New Modified Old	▓▓▓▓▓

Project Size Estimates	
Number of Subsystems Number of Components	▓▓▓

Char Mode: Replace Page 1   Count: *0

Figure 2-12. PEF Screen

SUBJECTIVE EVALUATIONS ▮▮▮ SCREEN

Project Name : ▓▓▓▓▓▓▓▓▓▓   Form Number : ▓▓▓▓▓▓▓▓▓▓▓▓

SE1   SE17   SE22   SE26   SE30   SE34
SE2   SE18   SE23   SE27   SE31   SE35
SE3   SE19   SE24   SE28   SE32   SE36
SE4   SE20   SE25   SE29   SE33
SE5
SE6   SE21 (Tools) : (Put an 'X' by each tool that applies)
SE7   Compiler   PANVALET
SE8   Linker   Test coverage tool
SE9   Editor   Interface checker
SE10   Graphics display builder   Language sensitive editor
SE11   Requirements language processor   Symbolic debugger
SE12   Structured analysis support tool   Configuration Management Tool
SE13   PDL processor   Others
SE14   ISPF
SE15   SAP
SE16   CAT

Char Mode: Replace Page 1   Count: *0

Figure 2-13. SEF Screen

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Press <enter>
for next page.

Project Name: ░░░░░░░░░░░░░░░░░ Form No.: ░░░░░░░░░░░░░░
Form Date (dd-mmm-yy): ░░░░░░░░░░

Phase Dates (Saturdays)	
Phase	Start Date (dd-mmm-yy)
Requirements	░░░░░░░░░░░░░
Design	░░░░░░░░░░░░░
Code & Test	░░░░░░░░░░░░░
System Test	░░░░░░░░░░░░░
Acceptance Test	░░░░░░░░░░░░░
Clean-up	░░░░░░░░░░░░░
Maintenance	░░░░░░░░░░░░░
Project End	░░░░░░░░░░░░░

Staff Resource Estimates	
Technical and Management Hrs	░░░░░░░░░░░░░
Services Hrs	░░░░░░░░░░░░░

Computer Resource Statistics		
Computer	CPU-hours	No.of runs
░░░░░░░░	░░░░░░░░	░░░░░░░░
░░░░░░░░	░░░░░░░░	░░░░░░░░
░░░░░░░░	░░░░░░░░	░░░░░░░░

Char Mode: Replace   Page 1   Count: *0

Figure 2-14.   PCSF Screen (1 of 2)

Press <enter>
for next page.

Project Name: ░░░░░░░░░░░░░░░░ Form No.: ░░░░░░░░░░░
Form Date (dd-mmm-yy): ░░░░░░░░░

Project Size Estimates			
General Parameters		Source Lines of Code	
Number of Subsystem	░░░░░░░░	Total	░░░░░░░░░░░░
Number of Components	░░░░░░░░	New	░░░░░░░░░░░░
Number of Changes	░░░░░░░░	Modified	░░░░░░░░░░░░
Pages of documentation	░░░░░░░░	Old	░░░░░░░░░░░░
		Comments	
Executable Modules		Executable Statements	
Total	░░░░░░░░░░░░	Total	░░░░░░░░░░░░
New	░░░░░░░░░░░░	New	░░░░░░░░░░░░
Modified	░░░░░░░░░░░░	Modified	░░░░░░░░░░░░
Old	░░░░░░░░░░░░	Old	░░░░░░░░░░░░

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Figure 2-14.   PCSF Screen (2 of 2)

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PERSONNEL RESOURCE DATA INPUT SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:

Date(Friday):

Programmer:

Form No:

Char Mode: Replace   Page 1   Count: *0

Figure 2-15.   Cleanroom PRF Screen

WEEKLY MAINTENANCE EFFORT FORM VIEWING SCREEN

Class	Hours
Correction Enhancement Adaptation Other	

Activity	Hours

Isolation
Change Design
Implementation
Unit Test/
   System Test
Acceptance/
   Benchmark Test
Other	

Project Name:

Date(Friday):

Programmer:

Form No:

Char Mode: Replace   Page 1   Count: *0

Figure 2-16.   WMEF Screen

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```
               MAINTENANCE CHANGE REPORT FORM VIEW SCREEN
Form No.:██████████
Programmer: ████████          OSMR No.:  ████████████
Project Name: ████████         Date (DD-MON-YY): ████████████
─────────────────────────────────────────────────────────────────
What was the type of modification?██        What caused the change? ██
        1 - Correction          1 - Requirements      4 - Previous change
        2 - Enhancement         2 - Software design   5 - Other
        3 - Adaptation          3 - Code
─────────────────────────────────────────────────────────────────
Effort to isolate change:██      <1 hr   1hr-1dy   1dy-1wk   1wk-1mon   >1 mon
Effort to implement change:██      1        2         3         4         5
─────────────────────────────────────────────────────────────────
Put an 'X' by all changed objects:        Characterize the change: ██
░Requirements Doc.  ██User's Guide    1 - Initialization      5 - Data
██Design Doc.        ██Other          2 - Logic/control       6 - Computational
██Code                                3 - Interface (int)     7 - Other
░System Desc.                         4 - Interface (ext)
─────────────────────────────────────────────────────────────────
Number of lines of code: added ████████changed ████████deleted ████████
Number of components: added ████ changed ████deleted ████
Number of added components: new ████ reused ████modified ████

        Char Mode: Replace  Page 1    .              Count: *0
```

Figure 2-17.   MCRF Screen

```
             DEVELOPMENT STATUS FORM VIEWING SCREEN
Name: ████████████              Form No.: ██ ████████
Project: ████████               Date: ████████        .
┌──────────────────────────────────────────────────────────┬────────┐
│ DESIGN STATUS Estimated total number of modules to be designed │ ████ │
│               Number of modules designed                       │      │
├──────────────────────────────────────────────────────────┼────────┤
│ CODE STATUS   Estimated total number of modules to be coded    │ ████ │
│               Number of modules completed                      │      │
├──────────────────────────────────────────┬─────────────┬──────────┤
│ TESTING STATUS                            │ SYSTEM TEST │ ACCEPTANCE TEST │
│ Total number of separate tests planned    │ ████████    │ ████████████ │
│ Number of tests executed at least one time│ ████████    │ ████████     │
│ Number of tests passed                    │ ████████    │ ████████████ │
│ Total test runs, including re-runs        │ ████████    │ ████████     │
├──────────────────────────────────────────┴─────────────┴──────────┤
│ DISCREPANCY TRACKING STATUS Total number of discrepancies reported │ ████ │
│                             Total number of discrepancies resolved │      │
├──────────────────────────────────────────┬─────────────────────────┤
│ Spec. modifications received ████████     │ Questions submitted to analysts ████ │
│ Spec. modifications completed ████████    │ Questions answered by analysts  ████ │
└──────────────────────────────────────────┴─────────────────────────┘

        Char Mode: Replace  Page 1                   Count: *0
```

Figure 2-18.   DSF Screen

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PROJECT MESSAGE ███ SCREEN

Project Name: ███████
Message Type: ████████ ████████████████████████████

Line   Text of Message   Date

Press <exit> to leave form or <clear block> to view another message type.

Char Mode: Replace   Page 1   Count: *0

Figure 2-19. Project Message Screen

COMPONENT STATISTICS DATA INPUT SCREEN

Project Name : ████████████

Password : ████████

Press <PF3> to add component statistics from input file.
      <PF4> to exit.

Char Mode: Replace   Page 1   Count: *0

Figure 2-20. Component Statistics Data Screen

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Messages

A number of messages may be displayed while at the menu level. Messages without a solution are informational. These messages and an explanation of each are provided as follows:

Message: You do not have access to **xxxx**

Cause: The user selected an option (specified in place of the **xxx**) for which he/she does not have the required privilege.

Message: The **xxx** functions are not available at this time

Cause: This function (specified in place of the **xxx**) is not currently available but will be available in a later release.

Message: Unrecognized command

Cause: The user pressed a key that is not valid on this menu screen.

Solution: This will not cause any problems; simply press a valid key. (Refer to Figure 2-4 to see the valid menu function keys.)

Message: Invalid selection. Must be between **xx** and **yy**

Cause: The user selected an option number that is less than the first available option number (**xx**) or greater than the last option number (**yy**).

Solution: Enter a valid option number, or use the <Previous Menu> or <Top Menu> keys to exit from the menu screen.

2.3 VIEWING DATA

The view screens are intended to be used for looking at data. No data can be added, deleted, or changed in the database by using the view screens. A view screen is shown in Figure 2-10. A sample viewing session is shown in

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Appendix A. The general procedure to be followed when viewing data is as follows:

1. From the Main menu, select option 1 (Form function).

2. Select option 1 (View existing data) from the Form Functions menu.

3. Select the option number associated with the type of data you would like to view.

4. Enter the key field(s) as specified for the particular screen. In all cases, except Subsystem view, the form number can be used as the key for viewing the data. In addition, some forms can be viewed by key field information that make that form unique. These key fields are identified in the description for each form.

5. Press the <Next Field> key to retrieve data.

6. After data have been viewed, press the <Clear Block> key to clear the screen and ready the screen for viewing another form.

7. You may exit from the view screen at any point in the viewing process by pressing the <Exit/Cancel> key.

The keypad diagram shown in Figure 2-21 highlights the keys that are available during the view screens. Keys that are used on all the view screens are described as follows. Some view screens allow the use of additional keys. These special cases will be described in the section associated with the specific view screen.

General View Keys

<Next Field>   :   After the key field has been entered, the user should press the <Next Field> key. This will cause the form data to be retrieved and displayed on the screen.

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Figure 2-21. View Keypad

<Clear Block>   This key clears the screen in prep-
                       aration for viewing another form.

<Clear Field>   This key may be used to clear the key
                       field(s) in preparation for entering
                       a new key.

<List Field Values>   This key will cause all the values
                       that are valid for the current field
                       to be displayed. The values are
                       displayed one at a time. A message
                       is displayed instructing the user how
                       to move through the list of values
                       and select one. This key is only
                       available on certain fields on each
                       screen. These specific field names
                       will be listed in the section that
                       describes the particular screen.

<Exit/Cancel>   This key causes the user to exit from
                       the screen and return to the View
                       menu.

General Messages

A number of messages may be displayed while running the view
screens. Messages without a solution are informational. The

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messages that may be displayed during any of the screens are listed below. Messages that are specific to a given screen are described in the section associated with that screen.

Message: Unrecognized Command

Cause: The user has pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described above.

Message: Form number not found in database

Cause: This means that the form number does not exist in the database.

Solution: Verify that the correct form number was entered. The cursor will remain positioned on the form number field. The user may either reenter the form number or press the <Exit/Cancel> key to exit and return to the View menu.

Message: Project name not found in database

Cause: This means that a project name was entered that does not exist in the database.

Solution: The cursor will be positioned on the project name field. The user can either press the <Exit/ Cancel> key to return to the View menu or enter another project name.

Each of the following sections describes a different view screen. The key field(s) required to view the data is described as well as the screen-specific keys that may be used while in the screen. Screen-specific error and information messages and the appropriate responses to them are discussed.

2.3.1 SUBSYSTEM VIEW

The data displayed on this screen were entered using data from a SEL SIF. To select this screen,

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 1 (Subsystem data).

Figure 2-7 shows the Subsystem screen as it appears on the terminal screen. (Refer to Section 2.3, steps 4 through 7, for an explanation of running a view screen.) The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Project Name--Upon entry to this screen, the cursor will be positioned at the Project Name field. The user should enter a valid project name that currently exists in the database. If an invalid name is entered, the user will be prompted to enter a valid name.

Keys

Refer to Section 2.3 for a list of keys that are available on all views. Following are additional keys that may be used for this screen:

\<Next Record\>	This key allows the user to scroll down to see more subsystem information. Some projects have more subsystems than can fit on the screen. In this case, the user will have to scroll to see the rest of the subsystems.
\<Previous Record\>	This key allows the user to scroll up to see previous subsystem information that has scrolled off the page.
\<List Field Values\>	This key is available on Project Name.

Messages

Refer to Section 2.3 for a list of messages that may appear while data are viewed. Following are additional messages that may appear on this screen:

Message: At last subsystem. Cannot scroll forward

Cause: There are no more subsystem names for this project, so the user cannot scroll any further.

Solution: The user may want to try scrolling back (<Previous Record> key).

Message: At first subsystem name. Cannot scroll backward

Cause: The first scrolling area is displayed. There are no previous names.

Solution: If the scrolling area is full, the user may want to try scrolling forward to see if more subsystems exist for this project (<Next Record> key).

2.3.2 COMPONENT ORIGINATION FORM VIEW

The data displayed on this screen were entered using data from a SEL COF. To select this screen,

1. Perform steps 1 and 2 from Section 2.3 to display the View menu.

2. Enter option number 2 (COF data).

Figure 2-8 shows the COF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen the cursor will be positioned on the Form Number field. If the user wants to view COF data based on the form number, a valid form number

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should be entered. A message will be displayed, and the user will be reprompted if an invalid form number is entered. If a user would like to view COF data based on a component specification, the user should press the <Next Field> key to move to the next field to enter component specification information.

OR

Project-Subsystem-Component--Upon entry to the screen, the cursor will be placed on the Form Number field. To enter a component specification as a key, press the <Next Field> key to move to the Project Name field (the first part of this three-part key).

Project Name--Enter a valid project name. If the user enters an invalid name, a message will be displayed, and the user will be reprompted.

Subsystem Prefix--Enter a valid subsystem prefix. If an invalid prefix is entered, a message will be displayed, and the user will be reprompted.

Component Name--Enter a valid component name. If an invalid component name is entered, a message will be displayed, and the user will be reprompted.

Keys

Refer to Section 2.3 for a list of keys that are available on all views. Following are additional keys that may be used for this screen:

<Previous Field>	This key allows the user to move between key fields. Specifically, the user may move between the Component Name, Subsystem Prefix, Project Name, and Form Number fields. The current field is cleared before the cursor is moved to the previous field.
<Next Page>	This key allows the user to move between pages. The COF view screen

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has two pages of data. This key
goes circularly between pages, from
page 1 to page 2, from page 2 back
to page 1.

<List Field Values>   This key is available on Project
                          Name.

Messages

Refer to Section 2.3 for a list of messages that may appear
while data are viewed. Following are additional messages
that may appear on this screen:

Message: Subsystem prefix not found in database for this
          project

Cause: The subsystem prefix that was entered does not exist
        in the database for this project name.

Solution: The cursor will remain positioned at the subsystem
           field. The user may either press the <Exit/
           Cancel> key to return to the menu or enter an-
           other subsystem prefix.

Message: Component name not found in database for this
          project and subsystem

Cause: The component name that was entered does not exist
        in the database under this project name and subsys-
        tem prefix.

Solution: The cursor will remain positioned at the component
           field. The user may either press the <Exit/
           Cancel> key to return to the menu or enter
           another component name.

Message: Data must first be retrieved

Cause: The user pressed the <Next Page> key to go the
        second page of the COF screen before retrieving data.

Solution: Enter the key field(s) and press <Next Field> to
           retrieve data. Once the data have been retrieved
           from the database and displayed to the terminal,
           the user may move to the second page.

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2.3.3 CHANGE REPORT FORM VIEW

The data displayed on this screen were entered using data from a SEL CRF. To select this screen

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 3 (CRF data).

Figure 2-9 shows the CRF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation on running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Change Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid change number (the change number is the form number on the CRF). If the change number does not exist in the database, the user will be prompted to enter a valid change number.

Keys

Refer to Section 2.3 for a list of keys that are available on all views. Following are additional keys that may be used for this screen:

<Next Page>   This key allows the user to move between pages. The CRF view screen has three pages of data. This key goes circularly between pages, from page 1 to page 2, from page 2 to page 3, and from page 3 back to page 1.

<Next Record>   This key allows the user to scroll down to see more subsystem/component names. Some CRFs have so many component names associated with them that all the names cannot be displayed on the screen. Only three names will be displayed at a time. If the three slots for names are filled, the user may want to try

scrolling down to see if there are
more subsystem/component names
associated with this CRF.

<Previous Record>   This key allows the user to scroll up
                       to see previous subsystem/component
                       names that have scrolled out of the
                       component name scroll area.

Messages

Refer to Section 2.3 for a list of messages that may appear
while data are viewed. Following are additional messages
that may appear on this screen:

Message: At last component name. Cannot scroll forward

Cause: The last component name has been displayed. A maxi-
        mum of 21 component names can be viewed.

Solution: If all 21 viewing slots are filled, the user
           should contact the SEL DBA for any component names
           after the 21st one. If 21 component names have
           not been displayed, all the component names asso-
           ciated with the component have been displayed.
           The user may use the <Previous Record> key to
           scroll backwards to see component names that may
           have been scrolled off the screen.

Message: At first component name. Cannot scroll backward

Cause: The first group of three component names is currently
        being displayed. There are no previous component
        names to be viewed.

Solution: The user may try to scroll down to check for ad-
           ditional subsystem/component names.

Message: Must be on first page to scroll through component
          names

Cause: The user pressed one of the scroll keys (<Next
        Record> or <Previous Record>) while on the second or
        third page. The scroll keys are only active for the
        subsystem/component name fields on page 1.

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Solution: Use the <Next Page> key to go to page 1 and scroll
          through the names.

Message: Data must first be retrieved

Cause: The user pressed the <Next Page> key to move to
        the second page before retrieving data.

Solution: Enter a key field and press the <Next Field> key
          to retrieve data before moving to the second page.

2.3.4 PERSONNEL RESOURCES FORM VIEW

The data displayed on this screen were entered using data
from a SEL PRF. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display the
     View menu.

2.   Enter option number 4 (PRF data).

Figure 2-10 shows the PRF screen as it will appear on the
terminal screen. Section 2.3, steps 4 through 7, contains
an explanation of running a view screen. The key field(s)
for the screens, screen-specific keys, and screen-specific
messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be po-
sitioned at this field. The user should enter a valid PRF
number. If the form number does not exist in the database,
the user will be prompted to enter a valid form number.

OR

Project-Date-Programmer--Upon entry to the screen, the cursor
will be placed on the Form Number field. To enter a person-
nel resource specification as the key, press the <Next Field>
key to move to the Project Name field (the first part of this
three-part key).

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Project Name--The user should enter a valid project name.
If the project name does not exist in the database, the
user will be prompted to enter a valid project name.

Date--The user should enter a valid submission date, a
Friday. If the date is not a Friday, the user will be
prompted to enter a valid date.

Programmer--The user should enter a valid programmer
name. If the programmer name does not exist in the
database, the user will be prompted to enter a valid
programmer name.

Keys

Refer to Section 2.3 for a list of keys that are available
on all views.

Messages

Refer to Section 2.3 for a list of messages that may appear
while data are viewed. Following are additional messages
that may appear on this screen:

Message: Data is not displayed for this form - it has sub-
        system activity hours

Cause: The form being retrieved has associated subsystem
        activity hours.

Solution: Contact the DBA for assistance in retrieving these
        data.

Message: Please enter a project name

Cause: A value of NULL was entered for the project name.

Solution: Enter a valid project name or use the <Previous
        Field> key to retrieve form by personnel resource
        specification.

Message: Date is not a Friday - Please reenter

Cause: The date entered was not a Friday date.

Solution: Reenter a Friday date.

Message: Must supply a date or use <Previous Field> key two times to retrieve by form number

Cause: A value of NULL was enter for the date.

Solution: Enter a valid date or use the <Previous Field> key twice to retrieve by personnel resource specification.

Message: Please enter a programmer

Cause: A value of NULL was entered for the programmer.

Solution: Enter a valid programmer or use the <Previous Field> key three times to retrieve by personnel resource specification.

Message: Programmer not found in database. Please re-enter

Cause: The programmer name that was entered does not exist in the database for a PRF form.

Solution: Verify that the correct programmer name was entered. The cursor will remain positioned on the programmer name field. To reenter the programmer name, the user may type over the current programmer name or use the <Clear Field> key to clear the field before entering a new programmer. To exit and return to the main menu, the user should press the <Exit/Cancel> key.

Message: No form found associated with this project, date, and programmer

Cause: The project, date, and programmer combination entered does not have an associated form existing in the database.

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Solution: Verify that the correct project, date, and pro-
            grammer were entered. To reenter the fields, the
            user may use the <Clear Block> key to clear the
            fields before entering new values. To exit and
            return to the main menu, the user should press the
            <Exit/Cancel> key.

Message: First character of form number must be 'P' or NULL

Cause: A value other than 'P' or NULL was entered as the
        first character of the form number.

Solution: Enter a value of 'P' or NULL as the first charac-
            ter of the form number.

2.3.5 SERVICES/PRODUCTS FORM VIEW

The data displayed on this screen were entered using data
from a SEL SPF. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display the
     View menu.

2.   Enter option number 5 (SPF data).

Figure 2-11 shows the SPF screen as it will appear on the
terminal screen. Section 2.3, steps 4 through 7, contains
an explanation of running a view screen. The key field(s)
for the screens, screen-specific keys, and screen-specific
messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be po-
sitioned at this field. The user should enter a valid SPF
number. If the form number does not exist in the database,
the user will be prompted to enter a valid form number.

Project-Date--Upon entry to the screen, the cursor will be
placed on the Form Number field. To enter a services/
products specification as the key, press the <Next Field>
key to move to the Project Name field (the first part of
this two-part key).

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Project Name--The user should enter a valid project name. If the project name does not exist in the database, the user will be prompted to enter a valid project name.

Date--The user should enter a valid submission date, a Friday. If the date is not a Friday, the user will be prompted to enter a valid date.

<div align="center"><u>Keys</u></div>

Refer to Section 2.3 for a list of keys that are available on all views. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

<div align="center"><u>Messages</u></div>

Refer to Section 2.3 for a list of messages that may appear while data are viewed. Following are additional messages that may appear on this screen:

Message: Must supply a project name or use <Previous Field>
          to retrieve by form number

Cause: The user entered <Next Field> without supplying
        a project name when the form number was NULL.

Solution: Enter a valid project name, use the <List Field
           Values> key or use the <Previous Field> key
           to retrieve form by number.

Message: Date is not a Friday - please reenter.

Cause: The user enter a date that was not a Friday.

Solution: Enter a valid Friday date.

Message: Form for this project and date not found

Cause: The user entered a project name and date combination
        that does not have an SPF associated with it.

<div align="center">2-31</div>

<u>Solution</u>: Enter a valid project name and date combination, retrieve the form by form number, or exit.

<u>Message</u>: Must supply a date or use <Previous Field> two times to retrieve by form number

<u>Cause</u>: The user entered <Next Field> without supplying a Friday date after entering a valid project name.

<u>Solution</u>: Enter a valid Friday date or retrieve form by form number.

<u>Message</u>: First character of form number must be an 'S' or NULL

<u>Cause</u>: The user entered a character that is invalid.

<u>Solution</u>: Clear field, enter an S or space; clear block; or exit the form.

2.3.6 PROJECT ESTIMATES FORM VIEW

The data displayed on this screen were entered using data from a SEL PEF. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display the View menu.

2.   Enter option number 6 (PEF data).

Figure 2-12 shows the PEF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

<u>Key Field to View Data</u>

<u>Form Number</u>--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid PEF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

Refer to Section 2.3 for a list of keys that are available on all views.

Messages

Refer to Section 2.3 for a list of messages that may appear while viewing data.

2.3.7 SUBJECTIVE EVALUATION FORM VIEW

The data displayed on this screen were entered using data from a SEL SEF. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display the View menu.

2.   Enter option number 7 (SEF data).

Figure 2-13 shows the SEF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid SEF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

Keys

Refer to Section 2.3 for a list of keys that are available on all views.

Messages

Refer to Section 2.3 for a list of messages that may appear while data are viewed.

2.3.8 PROJECT COMPLETION STATISTICS FORM VIEW

The data displayed on this screen were entered using data from a SEL PCSF. To select this screen,

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 8 (PCSF data).

Figure 2-14 shows the PCSF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid PCSF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

Keys

Refer to Section 2.3 for a list of keys that are available on all views. Following is an additional key that may be used for this screen:

<Next Page>   This key allows the user to move between pages. The PCSF view screen has two pages of data. This key goes circularly between pages, from page 1 to page 2, and from page 2 back to page 1.

Messages

Refer to Section 2.3 for a list of messages that may appear while data are viewed.

2.3.9 CLEANROOM PERSONNEL RESOURCES FORM VIEW

The data that are displayed on this screen were entered using data from a SEL Cleanroom PRF. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display View menu.

2.   Enter option number 10 (Cleanroom PRF data).

Figure 2-15 shows the Cleanroom PRF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Fields to View Data

Form Number--Upon entry to the screen, the cursor will be positioned on the Form Number field. If the user wants to view Cleanroom PRF data based on the form number, a valid form number should be entered. Note that the Form Number field already contains an 'R'. If the user wants to enter a form number, he/she must either type the 'R' again or press the right arrow key to avoid erasing the 'R'. If an invalid form number is entered, a message will be displayed, and the user will be reprompted.

OR

Project-Date-Programmer--Upon entry to the screen, the cursor will be placed in the Form Number field. To enter a personnel resources specification as a key, press the <Next Field> key to move to the Project Name field (the first part of this three-part key).

Date--Enter a valid Friday date. If the user enters an invalid Friday date, a message will be displayed, and the user will be reprompted.

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Programmer--Enter a valid programmer. If the user enters
an invalid programmer, a message will be displayed, and
the user will be reprompted.

Keys

Refer to Section 2.3 for a list of keys that are available on
all views. Following is an additional key available on the
Cleanroom PRF View screen.

<Previous Field>   This key allows the user to move from
                          one field to the previous field. The
                          current field is cleared before the
                          cursor is placed on the previous field.

Messages

Refer to Section 2.3 for a list of messages that may appear
while data are viewed. Following are additional messages
that may appear on this screen.

Message: Invalid FRIDAY date. Please reenter.

Cause: The date that was entered is not a valid Friday date.

Solution: Verify that the correct Friday date was entered.
           The cursor will remain positioned on the Date
           field. To reenter the date, the user may type
           over the current date or use the <Clear Field> key
           to clear the field before entering a new date, or
           the user may press the <Previous Field> to return
           the cursor to the form number so that the form
           can be viewed by the form number specification.

Message: Please enter a date

Cause: The cursor was on the Date field. The user pressed
        the <Next Field> key before entering a date.

Solution: If a user is viewing a form by the project-date-
           programmer specification, all three of these
           fields must be entered. Enter a valid Friday
           date or press <Previous Field> to return the
           cursor to the form number so that the form can
           be viewed by the form number specification.

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Message: Date format is DD-MON-YY

Cause: An invalid date format was entered.

Solution: Reenter the date using the 'DD-MON-YY' format.

Message: Programmer not in database. Please reenter

Cause: The programmer name entered is not a valid
. programmer.

Solution: Verify that the name was typed in as it appears
on the form. The name should consist of a first
initial and a last name. A maximum of 15 charac-
ters can be entered. If the name was typed in as
it appears on the form, the DBA should be con-
tacted. It is possible that the name was not
spelled correctly on the form or the writing was
not legible. Another possibility is that the
name is a new programmer's name and has not yet ·
been added to the database.

Message: Please enter a programmer

Cause: The cursor was on the Programmer field. The user
pressed the <Next Field> key before entering a
programmer name.

Solution: If a user is viewing a form by the project-date-
programmer specification, all three fields must be
entered. Enter a valid programmer name or press
<Clear Block> to view the form by the form number.

Message: No form found associated with this project, date,
and programmer

Cause: The user tried to view a form by the project-date-
programmer specification, but no form was found in
the database with the project, date, and programmer
values entered.

Solution: Verify that the project, date, and programmer were
typed just as they appear on the form. If the
values were entered correctly but this message

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still appears, the user can press the <Clear Block> key and try viewing the form by the form number specification.

2.3.10 WEEKLY MAINTENANCE EFFORT FORM VIEW

The data on the screen correspond to a SEL WMEF. To select this screen,

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 11 (WMEF data).

Figure 2-16 shows the WMEF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key fields for the screen, screen-specific keys, and screen-specific messages are listed below.

Key Fields to View Data

Form Number--Upon entry to the screen, the cursor will be positioned on the Form Number field. To view WMEF data based on the form number, enter a valid form number.

OR

Project-Date-Programmer--Upon entry to the screen, the cursor will be placed in the Form Number field. To enter a person- nel specification as the key, press the <Next Field> to move to the Project Name field (the first part of this three-part key).

Project Name--The user should enter a valid project name. If the project name does not exist in the database, the user will be prompted to enter a valid project name.

Date--The user should enter a valid submission date, a Friday. If the date is not a Friday, the user will be prompted to enter a valid date.

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Programmer--The user should enter a valid programmer
name. If the programmer name does not exist in the
database, the user will be prompted to enter a valid
programmer name.

Keys

Refer to Section 2.3 for a list of keys that are available on
all view screens. Following is an additional key that may
be used for this screen:

<Previous Field>   This key allows the user to move from
                        one field to the previous field. The
                        current field is cleared before the
                        cursor is placed on the previous field.

Messages

Refer to Section 2.3 for a list of messages that may appear
while data are viewed. Following are additional messages
that may appear on this screen.

Message: Please enter a project name

Cause: The cursor was on the Project name field. The user
       pressed the <Next Field> key before entering a
       project name.

Solution: The Project name must be entered. Enter a valid
          project name.

Message: Invalid FRIDAY date. Please reenter

Cause: The date that was entered is not a valid Friday date.

Solution: Verify that the correct Friday date was entered.
          The cursor will remain positioned on the date
          field. To reenter the date, the user may type
          over the current date or use the <Clear Field>
          key to clear the field before entering a new date.

Message: Please enter a date

Cause: The cursor was on the Date field. The user pressed
       the <Next Field> key before entering a date.

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Solution: If viewing a form by the project-date-programmer specification, all three of these fields must be entered. Enter a valid Friday date.

Message: Please enter a programmer

Cause: The cursor was on the Programmer field. The user pressed the <Next Field> key before entering a programmer name.

Solution: If viewing a form by the project-date-programmer specification, all three fields must be entered. Enter a valid programmer name.

Message: Programmer not in database

Cause: The programmer name entered is not a valid name.

Solution: Verify that the name was typed in as it appears on the form. If the name was typed in as it appears on the form, the DBA should be contacted.

Message: Date format is DD-MON-YY

Cause: An invalid date format was entered.

Solution: Reenter the date using the 'DD-MON-YY' format.

Message: No form found associated with this project, date, and programmer

Cause: The key fields that were entered do not exist in the database for a WMEF.

Solution: Verify that the correct number was entered. The cursor will remain positioned on the Form Number field. To reenter the form number, the user may type over the current form number or use the <Clear Field> key to clear the field before entering a new form number. Or the user may view a form by the project-date-programmer specification by clearing the Form Number field and then pressing <Next Field> to place the cursor on the Date field.

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2.3.11 MAINTENANCE CHANGE REPORT FORM VIEW

The data displayed on this screen were entered using data from a SEL MCRF. To select this screen,

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 12 (MCRF data).

Figure 2-17 shows the MCRF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid MCRF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

Keys

Refer to Section 2.3 for a list of keys that are available on all views.

Messages

Message: Form number not found in database; please reenter

Cause: The form number that was entered does not exist in the database for a MCRF.

Solution: Verify that the correct form number was entered. The cursor will remain positioned on the form number field. To reenter the form number, the user may type over the current form number or use the <Clear Field> key to clear the field before entering a new form number. To exit and return to the main menu, the user should press the <Exit/Cancel> key.

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2.3.12 DEVELOPMENT STATUS FORM VIEW

The data displayed on this screen were entered using data from a SEL DSF. To select this screen,

1. Perform steps 1 and 2 of Section 2.3 to display the View menu.

2. Enter option number 14 (DSF data).

Figure 2-18 shows the DSF screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field to View Data

Form Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid DSF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

OR

Project-Date--Upon entry to the screen, the cursor will be placed on the Form Number field. To enter a development status specification as the key, press the <Next Field> key to move to the Project Name field (the first part of this two-part key).

> **Project Name**--The user should enter a valid project name. If the project name does not exist in the database, the user will be prompted to enter a valid project name.

> **Date**--The user should enter a valid submission date, a Friday. If the date is not a Friday, the user will be prompted to enter a valid date.

Keys

Refer to Section 2.3 for a list of keys that are available on all views.

Messages

Refer to Section 2.3 for a list of messages that may appear while data are viewed. Following are additional messages that may appear on this screen:

Message: Must supply a project name or use <prvfld> to retrieve by form number

Cause: The user entered <Next Field> without supplying a project name when the form number was null.

Solution: Enter a valid project name, use the <List Field Values> key, or use the <Previous Field> key to retrieve by form number.

Message: Date is not a Friday - Please reenter

Cause: The user entered a date that was not a Friday.

Solution: Enter a valid Friday date.

Message: No form found associated with this project and date

Cause: The user entered a project name and date combination that does not have a DSF associated with it.

Solution: Enter a valid project name and date combination, retrieve the form by form number, or exit.

Message: Must supply a date or use <Previous Field> two times to retrieve by form number

Cause: The user entered <Next Field> without supplying a Friday date after entering a valid project name.

Solution: Enter a Friday date or retrieve form by form number.

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2.3.13 PROJECT MESSAGE FORM VIEW

The data displayed on this screen were entered by the DBA using the SEL Project Message form. To select this screen,

1.   Perform steps 1 and 2 of Section 2.3 to display the View menu.

2.   Enter option number 13 (General Project data).

Figure 2-19 shows the Project Message screen as it will appear on the terminal screen. Section 2.3, steps 4 through 7, contains an explanation of running a view screen. The key field(s) for the screens, screen-specific keys, the screen-specific messages are listed below.

Key Field to View Data

Project Name--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid project name. If the project name is invalid, the user will be prompted to enter a valid form number.

Keys

Refer to Section 2.3 for a list of keys that are available on all views. The following are additional keys that may be used for this screen:

<List Field Values>	This key is available on Project Name Message Type
<Next Record>	This key is available for scrolling to the next record in the message area of the screen.
<Previous Record>	This key is available for scrolling to previous record in the message area of the screen.

Messages

Refer to Section 2.3 for a list of messages that may appear while data are viewed. Following is an additional message that may appear on this screen:

<u>Message</u>: Invalid message type - Please reenter or use
                  <ESC-V> to list

<u>Cause</u>: The user entered a message type that is not in the database.

<u>Solution</u>: Enter a valid message type, use the <List Field Values> function, or exit.

2.4 GENERATING REPORTS

This section describes the procedures for generating reports of the SEL data. The user may want to generate a report to easily view a large amount of data. The reports are divided into three major categories: multiple project, single project, and miscellaneous. The multiple project reports, as the name suggests, provide information on one or more projects. The user must specify a list of project names or select a project criterion (such as ALL projects) that will be used to select the projects on which the report will be run. These types of reports tend to give a general overview of the data. For more detailed information, such as weekly data, the single project reports should be used. The single project reports make up the majority of the reports. A project name must be specified for a single project report. The miscellaneous reports are for data not associated with a specific project.

Section 2.4.1 describes the report function screens, which are used to select and generate reports. Section 2.4.2 describes the types of reports that are available and the options available for each report, and provides a sample output.

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2.4.1 REPORT FUNCTION SCREENS

This section contains descriptions of the operation of the
report screens. Figure 2-22 shows the structure of the re-
port function screen system. The report function screens
allow the user to create a new report script (a sequence of
one or more report selections and their corresponding op-
tions), make changes to an existing script, run a script, and
perform various other operations on a script. Initially, the
user must create a report script. This script may contain
information on one or more reports. Each entry in a script
will specify a report name, any report options that were
selected, and any report-specific information, such as the
project name for single project reports. A report script
should be organized to contain related information that is to
be output at the same time. For example, the user may want
to create a script that will output various information for
a given project, such as manpower hours, services hours,
components, growth history, and computer resources. This
script could be saved and run at regular intervals to monitor
the project. A script may be saved after it is created or it
may be run once and deleted. A saved script may be updated,
deleted, or viewed. (Section 2.2 describes the menu system).
A sample report script session is shown in Appendix A. Gen-
eral procedures to create, update, and delete report script
are as follows:

Creating a new report script

1.   From the Main menu, select option 2 (Report Func-
      tion).

2.   Select option 1 (Create a report script) from the
      Report Function menu.

3.   Select option 3 (Add report to the current report
      script).

```
                        ┌───────────────┐
                        │    REPORT     │
                        │   FUNCTION    │
                        │     MENU      │
                        └───────┬───────┘
             ┌──────────────────┴──────────────────┐
     ┌───────┴───────┐                     ┌────────┴──────┐
     │     MAIN      │                     │    REPORT     │
     │    REPORT     │                     │    SCRIPT     │
     │     MENU      │                     │     MENU      │
     └───────┬───────┘                     └───────┬───────┘
             │                        ┌────────────┴────────────┐
             │                ┌───────┴────────┐        ┌───────┴────────┐
             │                │    VIEWING     │        │  DELETING A    │
             │                │ SCRIPTS SELECTION│      │ SCRIPT SELECTION│
             │                │    SCREEN       │        │    SCREEN      │
             │                └────────────────┘        └────────────────┘
```

| RUN SCRIPTS | VIEW/EDIT CURRENT SCRIPT | ADD REPORTS | SAVE CURRENT SCRIPT | CHANGE ROUTING |

| MULTIPLE PROJECT MENU | SINGLE PROJECT MENU | MISCELLANEOUS REPORT MENU |

| 1 | 2 | ENCODED VALUES |

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Figure 2-22.   Report Function Screen Structure (1 of 3)

```
                              ┌─────┐
                              │  1  │
                              └──┬──┘
```

| ACTUAL STATISTICS AT COMPLETION | ACTUAL STATISTICS TO DATE | ESTIMATED STATISTICS | FORM COUNTS | MAINTENANCE INFORMATION SUMMARY | SUBJECTIVE EVALUATION |

PROJECT CRITERION SELECTION MENU

SELECTED BY CONDITION

PROJECT LIST

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Figure 2-22.   Report Function Screen Structure (2 of 3)

```
                                    ┌───┐
                                    │ 2 │
                                    └─┬─┘

┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
│ ACTIVITY │   │ COMPUTER │   │ GENERAL  │   │   GSFC   │   │   SEL    │
│  HOURS   │   │RESOURCES │   │ PROJECT  │   │MANPOWER  │   │  FORMS   │
│          │   │          │   │   DATA   │   │  HOURS   │   │          │
└──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘

┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
│  ACTUAL  │   │          │   │          │   │MAINTENANCE│   │   SEL    │
│STATISTICS│   │ESTIMATED │   │ GROWTH   │   │ ACTIVITY │   │MAINTENANCE│
│ TO DATE  │   │STATISTICS│   │ HISTORY  │   │  HOURS   │   │  FORMS   │
└──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘

┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
│COMPONENT │   │  FORM    │   │GSFC FORM │   │ MANPOWER │   │ SERVICES │
│  NAMES   │   │ COUNTS   │   │ COUNTS   │   │  HOURS   │   │  HOURS   │
└──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘
```

*NOT CURRENTLY AVAILABLE.

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Figure 2-22. Report Function Screen Structure (3 of 3)

4. Select the type of report you would like to add. Refer to Section 2.4.2 for a description of the available reports.

5. Select the report to be added and enter the project name. Press <Commit> to save the report.

6. Some reports require that the user select specific options. Place an X next to desired options.

7. At this point the user has three options:

   - Select another single project report

   - Exit to the Report Categories menu and select another report type to add to the script

   - Exit to the Main Report menu and save or run the script

Updating a saved script

1. From the Main menu, select option 2 (Report Function).

2. Select option 2 (Retrieve an existing report script...) from the Report Function menu.

3. Various operations can be performed on a saved script; for example, add a report to an existing script by selecting option 3 (Add report to the current report script).

4. Select the type of report to be added. Refer to Section 2.4.2 for a description of the available reports.

5. Select the report to be added. Press <Commit> to save the report.

6. Some reports require that the user select specific options. Place an X next to desired options.

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7. At this point the user has three options:

- Select another report of the same type

- Exit to the Report Categories menu and select another report type to add to the script

- Exit to the Main Report menu and save or run the script

Deleting a saved script

1. From the Main menu, select option 2 (Report Function).

2. Select option 3 (View or delete existing ...) from the Report Function menu.

3. Select option 2 (Delete report scripts) from the Report Script menu.

4. Enter the name of the script to be deleted. Press <Commit> to delete the script from the database.

5. At any point the user may exit from this screen.

The keypad diagram shown in Figure 2-23 highlights the keys that are available for the report screens. Some keys are used by all the report screens. These keys are listed and explained below. Keys that are specific to a given report screen will be explained in the section describing the individual screen.

General Keys

<Exit/Cancel>   This key causes the user to exit from the screen and return to the previous screen.

<Next Field>   This key is used to move among fields on a screen and to select options on a menu screen. When the key is pressed, the cursor is moved to the next field on the screen. If the screen is a menu screen, then the screen specified by the selected option is displayed.

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```
+--------+--------+--------+--------+
|  PF1   |  PF2   |  PF3   |  PF4   |
| REPORT | CREATE | COMMIT | EXIT/  |
| CATEGO-| RECORD |        | CANCEL |
|RIES MENU|       |        |        |
+--------+--------+--------+--------+
|   7    |   8    |   9    |   -    |
|  NEXT  |PREVIOUS| CLEAR  |        |
| FIELD  | FIELD  | FIELD  |        |
+--------+--------+--------+--------+
|   4    |   5    |   6    |   ,    |
|  NEXT  |PREVIOUS| CLEAR  |        |
| RECORD | RECORD | RECORD |        |
+--------+--------+--------+--------+
|   1    |   2    |   3    | Enter  |
|  NEXT  |PREVIOUS| CLEAR  |        |
| BLOCK  | BLOCK  | BLOCK  |        |
+--------+--------+--------+--------+
|        0        |   .    |        |
+-----------------+--------+--------+
```

ADDITIONAL FUNCTION KEYS

FUNCTION	KEY
NEXT FIELD	RETURN or TAB
PREVIOUS FIELD	BACKSPACE
LIST FIELD VALUES	<Esc-V>
NEXT RECORD	↓
PREVIOUS RECORD	↑
DELETE RECORD	<Esc-D>

Figure 2-23. Report Functions Keypad

<Previous Field>	This key moves the cursor to the previous field on the screen.
<Clear Field>	This key is used to clear the current field.
<Clear Block>	This key clears the entire screen. This is useful if the user wants to erase the data currently on the screen and reenter different data.
<List Field Values>	This key will cause all the values that are valid for the current field to be displayed. The values are displayed one at a time. A message is displayed instructing the user how to move through the list of values and select one. This key is only available on certain fields on a screen. These specified field names will be listed in the section that describes the particular screen.

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General Messages

A number of messages may be displayed while running the Report Functions screens. Messages without a solution are informational. General messages that may be displayed while selecting reports are listed below. Messages that are specific to a given screen are described in the section associated with that screen.

Message: Transaction completed -- x records processed

Cause: Data have been successfully stored in the database.

Message: Press RETURN to retrieve next value, PF4 to stop

Cause: This message is displayed as part of the <List Field Values> operation.

Solution: Do as the message suggests. If the requested value is currently displayed, press the <Exit/ Cancel> key; otherwise, press the <Next Field> key to display the next valid value.

Message: Last value retrieved

Cause: This message is displayed while using the <List Field Values> key. There are no more values to be displayed.

Solution: To see the values again, press the <List Field Values> key.

Message: Unrecognized command

Cause: The user has pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described above or in the specific report section.

Each of the following sections describes a different report screen. The screen-specific keys that can be used with each screen are listed along with the actions they cause. The screen-specific error and information messages will be discussed, along with the appropriate responses to them.

2.4.1.1 Report Function Menu

This screen is the menu screen for the top level of the report interface system. This screen is selected by choosing option 2 of the Main Function menu.

Figure 2-5 shows the Report Function menu as it will appear on the terminal screen. The screen-specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens. Following are additional keys that may be used for this screen:

<List Field Values>   This key is available on Script Name.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Selection must be between 1 and 3

Cause: The user selected an option number that is less than the first available number (xx) or greater than the last option number (yy).

Solution: Enter a valid option number, or use the <Previous Menu> or <Top Menu> keys to exit from the menu screen.

Message: Specified report script does not exist--Please reenter

Cause: The user entered a script name that does not belong
         to him/her.

Solution: Reenter a valid script name or use the <List Field
            Values> to list the available script names.

2.4.1.2 Main Report Menu

This screen is used to select the type of activity the user
would like to perform on the current script. This screen is
selected by choosing either option 1 or option 2 from the
Report Function menu.

Figure 2-24 shows the Main Report menu screen that will
appear on the terminal screen. The screen-specific key and
messages are listed below.

MAIN REPORT MENU

What would you like to do to a script?

```
1 - Run current report script (script will be deleted upon completion
                              of report if it has not been saved)
2 - View/Edit current report script
3 - Add report to the current report script
4 - Save current report script
5 - Change routing of report script (current routing: ▓▓▓▓▓▓▓▓▓▓)
```

<PF4>- Previous menu

Please enter your selection number: ▓▓

NOTE: For creating a new script use option 3 to populate.

The current script will no longer be available if <PF4> is
            is pressed prior to saving script

Figure 2-24. Main Report Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Selection must be between 1 and 5

Cause: The user selected an option number that is less than the first available number (xx) or greater than the last option number (yy).

Solution: Enter a valid option number, or use the <Previous Menu> or <Top Menu> keys to exit from the menu screen.

Message: There are no reports in the current script to run

Cause: The user selected option 1, and there are no reports in the current script.

Solution: Select option 3 to create reports before running, or exit to the previous menu.

Message: There are no reports in the current script to save

Cause: The user selected option 4, and there are no reports in the current script.

Solution: Select option 3 to create reports before saving, or exit to the previous menu.

Message: There are no reports in the current script to view

Cause: The user selected option 2, and there are no reports in the current script.

Solution: Select option 3 to create reports before viewing, or exit to the previous menu.

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<u>Message</u>: Do you want to save this script?

<u>Cause</u>:   The user is trying to exit the main menu without
          first running or saving the current script.

<u>Solution</u>: Enter Y to save script, N to delete script.

2.4.1.3 <u>Run Current Script Selection Screen</u>

This screen is used to run the current report script. This
screen is selected by choosing option 1 from the Main Report
menu.

Figure 2-25 shows the Run Current Script selection screen as
it will appear on the terminal screen. The screen-specific
key and messages are listed below.

RUN CURRENT SCRIPT
_____

    Please enter your Oracle password: ▒▒▒▒▒▒▒▒
    Please enter desired processing: ▒▒
       (B-Batch Processing or I-Interactive Processing)

     Please change desired batch processing options.

     Batch processing name: ▒▒▒▒▒▒▒▒
     Date to submit report: ▒▒▒▒▒▒▒▒▒▒(DD-MON-YY)
     Time to submit report: ▒▒▒▒▒▒▒▒(HH:MM:SS)

     (Please do not submit jobs before 6:30 A.M.)

    Press <PF3> when selection is complete.

        <PF4>- Previous menu

Figure 2-25. Run Current Script

<u>Keys</u>

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Entry must be B or I

Cause: The user entered a invalid key for the processing type.

Solution: Enter an B or I to select either batch or interactive processing.
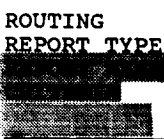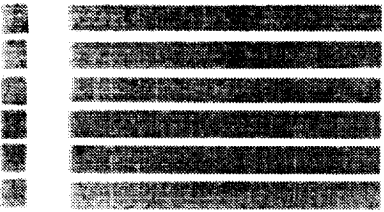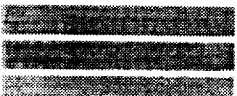
2.4.1.4 Current Script Viewing/Editing Screen

This screen is used to view the current report script. This screen is selected by choosing option 2 from the Main Report menu.

Figure 2-26 shows the Current Script Viewing/Editing screen as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

Figure 2-26. Current Script Viewing/Editing Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

<Next Record>   Allows scrolling of the list of project names for when the project type is multiple. It will retrieve the next project name.

<Previous Record>   Allows scrolling of the list of project names for when the project type is multiple. It will retrieve the previous project name.

<Delete Record>   Deletes the current record from the list of projects and the current report sequence from the current script.

<Create Record>   Adds the current record to the list of projects and updates the current report sequence with any changes made by the user.

<Clear Record>   Clears the current record in the list of projects.

<Next Block>   Retrieves the next report sequence in the specified script.

<Previous Block>   Retrieves the previous report sequence in the specified script.

<Key Enter>   Allows the user to view/edit a list of projects when the current report type is multiple projects and the criterion is list. Pressing this key again will allow the user to return to editing the rest of this report and script.

<List Field Values>   This key is available on

Criteria
Phase Code

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: At the last report in this script

Cause: The user is at the last report sequence in the specified script.

Solution: Press <Previous Block> to retrieve the previous report in the script, or select a new script name to view, or exit this screen.

Message: At the first report in this script

Cause: The user is at the first report sequence in the specified script.

Solution: Press <Next Block> to retrieve the previous report in the script, or select a new script name to view or exit this screen.

Message: Error deleting report from this script

Cause: There are several causes for this error, none of which the user can correct.

Solution: Contact the DBA about this specific problem. Select next or previous report, or exit this screen.

Message: Error updating report from this script

Cause: There are several causes for this error, none of which the user can correct.

Solution: Contact the DBA about this specific problem.

Message: Must select one report. Select report, delete re-
         port, or exit screen

Cause: The user did not select any of the possible reports
       for the current script.

Solution: Select one report, delete the report or exit the
          screen.

Message: Phase code must be provided when report 2 is se-
         lected

Cause: The user has selected report option 2 of the growth
       history report and has not entered an applicable
       phase code.

Solution: Enter a valid phase code or remove selection of
          report 2.

Message: Cannot delete the last report in a script

Cause: The user is trying to delete the last report sequence
       in the current script.

Solution: Edit the last report and update record or exit the
          screen.

2.4.1.5 Report Categories Menu

This screen is used to select the exact type of report that
is to be added to the current script. This screen is se-
lected by choosing option 3 from the Main Report menu.

Figure 2-27 shows the Report Categories menu screen as it
will appear on the terminal screen. The screen-specific key
and messages are listed below.

REPORT CATEGORIES MENU
_____

What type of report would you like to add?

     1 - Multiple Project

     2 - Single Project

     3 - Miscellaneous

     <PF4>- Previous menu

Please enter your selection number: ▓

Char Mode: Replace   Page 8   Count: *0

Figure 2-27. Report Categories Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following is an additional message
that may appear on this screen:

Message: Selection must be between 1 and 3

Cause: The user selected an option number that is less than
     the first available number (xx), or greater than the
     last option number (yy).

Solution: Enter a valid option number, or use the <Previous
     Menu> to exit from the menu screen.

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2.4.1.6 Multiple Projects Report Menu

This screen is the menu screen for the multiple project type reports. This screen is selected by choosing option 1 on the Report Categories menu.

Figure 2-28 shows the Multiple Projects Report menu as it will appear on the terminal screen. If either option 4 or 6 is selected, the project criterion selection menu is displayed. The screen-specific keys and messages are listed below.

```
                    MULTIPLE PROJECTS REPORT MENU
                    ─────────────────────────────

        Which multiple project report would you like to run?

                    1 - Actual Statistics at Completion
                    2 - Actual Statistics to Date
                    3 - Estimated Statistics
                    4 - Form Counts
                    5 - Maintenance Information Summary
                    6 - Subjective Evaluation

                    <PF1> - Report Categories Menu
                    <PF4> - Previous Menu

        Please enter your selection number:   ▓▓


        Char Mode: Replace   Page 1                    Count: *0
```

Figure 2-28.   Multiple Projects Report Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. An additional key that may be used on this screen is listed below:

<Next Field>   This key should be pressed after the selection number has been entered.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during all report screens. Following is an additional message that may appear on this screen:

Message: Invalid selection number. Please enter a number between 1 and 6

Cause: The user selected an invalid option number.

Solution: The user should either enter a number between 1 and 6, or exit from the screen.

2.4.1.7 Multiple Projects Report Selection Screen General Messages

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on any of the multiple projects report selec- tion screens, Sections 2.4.1.8 through 2.4.1.11:

Message: Report code was NOT saved

Cause: The user pressed the <Clear Block> key before pressing the <Commit> key. Any selected report options will not be entered into the current report script.

Message: Entry must be X or NULL

Cause: The user entered an incorrect key to either select or bypass the current report options.

Solution: Enter an X to select the current report option or enter a space or <Clear Field> to indicate the report is not being selected.

Message: No report options were selected -- select options or exit

Cause: The user pressed the <Commit> key without selecting any of the possible report options.

Solution: Select any of the available report options and press <Commit> again or press the <Exit/Cancel> key to leave the current form.

2.4.1.8 Actual Statistics At Completion Report Selection Screen

This screen is used to select a multiple projects actual statistics at completion report. The user must select one or more options from the screen or exit. This screen is selected by choosing option 1 from the Multiple Projects Report menu.

Figure 2-29 shows the Multiple Projects Actual Statistics at Completion Report Selection Screen as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

```
        ACTUAL STATISTICS AT COMPLETION REPORT SELECTION SCREEN
        ────────────────────────────────────────────────────────

           Please place an X beside all desired reports.
             Press <PF3> when selection is complete.

             ▓ - Executable Modules and Lines of Code

             ▓ - Size and Resource Statistics

             ▓ - Phase Information


           <PF4> - Previous Menu
```

Figure 2-29. Multiple Projects Actual Statistics at Completion Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. Following is an additional key that may be used for this screen:

<Commit>   This key causes the actual statistics at completion report to be added to the current script with the specified options.

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.7 for a list of messages that may appear during all multiple projects report selection screens.

2.4.1.9 Actual Statistics To Date Report Selection Screen

This screen is used to select a multiple projects actual statistics to date report. The user must select one or more options from the screen or exit. This screen is selected by choosing option 2 from the Multiple Projects Report menu.

Figure 2-30 shows the Multiple Projects Actual Statistics To Date Report Selection Screen as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

ACTUAL STATISTICS TO DATE REPORT SELECTION SCREEN
_____

Please place an X beside all desired reports.
   Press <PF3> when selection is complete.

   ▓ - Project Statistics

   ▓ - Resource Statistics

   ▓ - SAP Data

<PF4> - Previous Menu

Figure 2-30. Multiple Projects Actual Statistics to Date
Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. Following is an additional key that may be used for this screen:

<Commit>   This key causes the actual statistics to date
                report to be added to the current script with
                the specified options.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.7 for a list of messages that may appear during all multiple projects report selection screens.

2.4.1.10 Estimated Statistics Report Selection Screen

This screen is used to select a multiple projects estimated statistics report. The user must select one or more options from the screen, or exit. This screen is selected by choosing option 3 from the Multiple Projects Report menu.

Figure 2-31 shows the Multiple Projects Estimated Statistics Report Selection Screen as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

```
        ESTIMATED STATISTICS REPORT SELECTION SCREEN
        _____

        Please place an X beside all desired reports..
           Press <PF3> when selection is complete..

           ▓ - Size and Resource Information

           ▓ - Phase Information


           <PF4> - Previous Menu
```

    Figure 2-31. Multiple Projects Estimated Statistics Report
                  Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. Following is an additional key that may be used for this screen:

<Commit>   This key causes the estimated statistics report
                to be added to the current script with the
                specified options.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.7 for a list of messages that may appear during all multiple projects report selection screens.

2.4.1.11 Maintenance Information Summary Report Selection Screen

This screen is used to select a multiple projects maintenance information summary report. The user must select one or more options from the screen. This screen is selected by choosing option 5 from the Multiple Projects Report menu.

Figure 2-32 shows the Multiple Projects Maintenance Information Summary Report Selection Screen as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

```
      MAINTENANCE INFORMATION SUMMARY REPORT SELECTION SCREEN
      _____

            Please place an X beside all desired reports.
              Press <PF3> when selection is complete.

              ▉ - Resource Statistics

              ▉ - Component Statistics

              ▉ - Change Statistics (1 of 2)

              ▉ - Change Statistics (2 of 2)

              <PF4> - Previous Menu
```

Figure 2-32. Multiple Projects Maintenance Information
              Summary Report Screen

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens. Following is an additional key that may be used for this screen.

<Commit>   This key causes the maintenance information summary report to be added to the current script with the specified options.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.7 for a list of messages that may appear during all multiple projects report selection screens.

2.4.1.12 Project Criterion Selection Menu

This screen is used to select the type of criterion to be used when selecting projects for a multiple projects report. The user must select one or more options from the screen, or exit. This screen is displayed after a multiple projects report has been selected.

Figure 2-33 shows the Project Criterion Selection menu as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. Following is an additional key that may be used for this screen:

<Commit>   This key causes the project criterion to be saved in association with the multiple projects report, for the current script.

```
                    PROJECT CRITERION SELECTION MENU
          _____

         Which project criterion would you like to use for your multiple
                             project report?
              Press <PF3> when selection is complete.        *

                    1 - All projects
                    2 - Active projects in development
                    3 - Active projects in maintenance
                    4 - Inactive projects
                    5 - List of projects


                    <PF4> - Previous Menu

              Please enter your selection number: ▓


            Char Mode: Replace  Page 5                    Count: *0
```

Figure 2-33.   Multiple Projects Criterion Selection Menu

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following are additional messages
that may appear on this screen:

Message: Project criterion was NOT saved

Cause: The user pressed the <Clear Block> key.

Solution: The user may select a new project criterion; press
            <Commit> to save, or the user may exit from this
            screen. A project criterion must be selected for a
            multiple projects report to be added to the script.

Message: Invalid selection. Please select a number between
          1 and 5

Cause: The user selected an invalid project criterion.

Solution: The user may select a new project criterion or
            exit from the screen.

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Message: No project criterion was selected -- select a cri-
terion or exit

Cause: The user attempted to <Commit> the report infor-
mation, but no project criterion was specified.

Solution: A project criterion must be selected before
committing.

2.4.1.13 List of Projects Selection Screen

This screen is used to enter a list of projects to be used
for a multiple projects report. The user must enter one or
more project names up to a maximum of 10, or exit. This
screen is displayed by selecting option 5 from the Project
Criterion Selection menu.

Figure 2-34 shows the List of Projects Selection Screen as it
will appear on the terminal screen. The screen-specific keys
and messages are listed below.

LIST OF PROJECTS SELECTION SCREEN

Press <PF3> when selection is complete.
Enter project name(s) or <Esc-V> to list.

<PF4> - Previous Menu

Char Mode: Replace   Page 6   Count: *0

Figure 2-34.   Multiple Projects List of Projects Selection
Screen

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Keys

Refer to Section 2.4.1 for a list of keys that are available on all report screens. Following is an additional key that may be used for this screen:

<Commit>   This key causes the list of project names to be saved in association with the multiple projects report for the current script.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Project names were NOT saved

Cause: The user pressed the <Clear Block> key.

Solution: The user may enter new project names and press <Commit> to save, or the user may exit from this screen. In order for the multiple projects report to be saved with the current script, a project criterion must be entered. If the user does not want to enter any project names, another criterion should be selected from the Project Criterion Selection menu.

Message: Invalid project name. Please reenter

Cause: The user entered an invalid project name.

Solution: The user should enter a correct project name, or use the <List Field Values> key to display a list of valid project names. The <Clear Field> key can be used to blank out the project name, if it is not needed.

Message\ ERROR -- please enter at least one project name, or <PF4> to exit

Cause: The user attempted to <Commit> the report information, but no project names were entered.

<u>Solution</u>: At least one project name must be entered, if the
Project List selection is chosen.

<u>Message</u>: Error--duplicate project name on screen

<u>Cause</u>: The user attempted to <Commit> the project names,
but a duplicate project name was found on the screen.

<u>Solution</u>: Blank out the duplicate project name field.

2.4.1.14 Single Project Reports Menu

This screen is the menu screen for the single project re-
ports. This screen is selected by choosing option 2 on the
Report Categories menu.

Figure 2-35 shows the Single Project Reports menu as it will
appear on the terminal screen. The screen-specific key and
messages are listed below.

```
                    SINGLE PROJECT REPORTS MENU
                    _____
               Which Single Project Report would you like to run?
                    Press <PF3> to save your selection.


        1 - Activity Hours                 9 - GSFC Form Counts
        2 - Actual Statistics to Date     10 - GSFC Manpower Hours
        3 - Component Names               11 - Maintenance Activity Hours
        4 - Computer Resources            12 - Manpower Hours
        5 - Estimated Statistics          13 - SEL Forms (COF, CRF, PRF, SPF, DSF)
        6 - Form Counts                   14 - SEL Maintenance Forms (MCRF and WMEF
        7 - General Project Data          15 - Services Hours
        8 - Growth History

                    <PF4>- Previous menu



            Please enter your selection number ░░░░░░░
            Please enter project name or <ESC-V> to list: ░░░░░░░░░

        Char Mode: Replace  Page 1                       Count: *0
```


Figure 2-35.   Single Project Reports Menu

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Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens. Following is an additional key that may be used for this screen:

<List Field Values> This key is available on Project Name.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Report selection must be between 1 and 15

Cause: The user selected an option number that is less than the first available number (xx) or greater than the last option number (yy).

Solution: Enter a valid option number, or use the <Exit/ Cancel> or <Report Categories Menu> keys to exit from the menu screen.

Message: Invalid project name--please reenter

Cause: The user entered a project name that is not in the SEL database.

Solution: Reenter a valid project name or use the <List Field Values> to list the valid project names.

2.4.1.15 Single Project Report Selection Screen General

Messages

Refer to Section 2.4.1 for a list of messages that may appear during all report screens. Following are additional messages that may appear on any single project report selection screens, Sections 2.4.1.16 through 2.4.1.28.

Message: Report code was NOT saved

Cause: The user pressed the <Clear Block> key.

Solution: The user may select new options for the encoded
            values report and press <Commit> to save, or the
            user may exit from this screen.

Message: No report options were selected -- select options
           or exit

Cause: The user attempted to <Commit> the report informa-
         tion, but no options were specified.

Solution: At least one report option must be selected be-
            fore exiting. Refer to Section 2.4.2.1.1 for
            additional information on this report, and some
            sample output.

Message: Invalid character. Enter an X or a blank

Cause: The user entered a character other than an X or a
         blank in one or the option selection fields.

Solution: To select a specific option, place an X before
            the option. If the option is not selected, it
            should be blanked out.

2.4.1.16 Activity Hours Report Selection Screen

This screen is used to select an activity hours report. The
user must select one or more options from the screen. This
screen is selected by choosing option 1 from the Single
Project Reports menu.

Figure 2-36 shows the Activity Hours Report Selection Screen
as it will appear on the terminal screen. The screen-
specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens and Section 2.4.1.15 for a list of

ACTIVITY HOURS REPORT SELECTION SCREEN
_____

Please place an X beside all desired reports for the ▒▒▒▒▒ project.
Press <PF3> when selection is complete.

▓ - Summary of Hours

▓ - Totals by Phase

▓ - Averages by Phase

▓ - Detailed Weekly

<PF4>- Previous menu

Char Mode: Replace Page 2   Count: *0

Figure 2-36.   Single Project Activity Hours Report Screen

messages that may appear during all single project report
selection screens.

2.4.1.17   Component Names Report Selection Screen

This screen is used to select a component names report. The
user must select one or more options from the screen. This
screen is selected by choosing option 3 from the Single
Project Reports menu.

Figure 2-37 shows the Component Names Report Selection Screen
as it will appear on the terminal screen. The screen-
specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens and Section 2.4.1.15 for a list of
messages that may appear during all single project report
selection screens.

```
        COMPONENT NAMES REPORT SELECTION SCREEN
        ───────────────────────────────────────

Please place an X beside all desired reports for the ▓▓▓▓▓▓ project.
       Press <PF3> when selection is complete.

              ▓ - Component Names Only

              ▓ - Component Names and Codes



              <PF4>- Previous menu




        Char Mode: Replace   Page 4              Count: *0
```

Figure 2-37. Single Project Component Names Report Screen

2.4.1.18 Estimated Statistics Report Selection Screen

This screen is used to select an estimated statistics report. The user must select one or more options from the screen. This screen is selected by choosing option 5 from the Single Project Reports menu.

Figure 2-38 shows the Estimated Statistics Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

```
       ESTIMATED STATISTICS REPORT SELECTION SCREEN
       ────────────────────────────────────────────

Please place an X beside all desired reports for the ▓▓▓▓▓▓ project.
       Press <PF3> when selection is complete.

              ▓ - Size and Resource Information

              ▓ - Phase Information


              <PF4>- Previous menu
```

Figure 2-38. Single Project Estimated Statistics Report
              Screen

Refer to Section 2.4.1 for a list of keys that are available on report selection screens.

Refer to Section 2.4.1 for a list of messages that may appear during all report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.19 Form Counts Report Selection Screen

This screen is used to select a form counts report. The user must select one or more options from the screen. This screen is selected by choosing option 6 from the Single Project Reports menu.

Figure 2-39 shows the Form Counts Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

```
               FORM COUNTS REPORT SELECTION SCREEN
            _____

     Please place an X beside all desired reports for the ▓▓▓▓▓▓ project.
            Press <PF3> when selection is complete.

                    ▓ - Summary of Forms

                    ▓ - Form Counts by Phase

                    ▓ - Detailed Programmer Counts


               <PF4>- Previous menu




        Char Mode: Replace   Page 7                Count: *0
```

Figure 2-39. Single Project Form Counts Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.20 Growth History Report Selection Screen

This screen is used to select a growth history report. The user must select one or more options from the screen. This screen is selected by choosing option 8 from the Single Project Reports menu.

Figure 2-40 shows the Growth History Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

GROWTH HISTORY REPORT SELECTION SCREEN
_____

Please place an X beside all desired reports for the ▓▓▓▓▓ project.
Press <PF3> when selection is complete.

▓ - Summary

▓ - Detailed Values by Phase

<PF4>- Previous menu

Please enter the desired phase or <ESC V> to list: ▓▓▓▓▓▓▓

Char Mode: Replace   Page 9   Count: *0

Figure 2-40.   Single Project Growth History Report Screen

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Phase Code.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

Message: Must supply a valid phase code

Cause: The user selected report option 2, Growth History By Phase, and did not enter a valid phase code.

Solution: Enter a valid phase code, or use <List Field Values> key to list the valid phases, or enter a space in the option 2 selection field.

Message: Invalid phase name--please reenter

Cause: The user selected a phase code that is not in the SEL database.

Solution: Enter a valid phase code, or use <List Field Values> key to list the valid phases.

2.4.1.21 GSFC Manpower Hours Report Selection Screen

This screen is used to select a GSFC Manpower Hours report. The user must select one or more options from the screen. This screen is selected by choosing option 10 from the Single Project Reports menu.

Figure 2-41 shows the GSFC Manpower Hours Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

GSFC MANPOWER HOURS REPORT SELECTION SCREEN

Please place an X beside all desired reports for the ░░░░░░░ project.
Press <PF3> when selection is complete.   .

     ░ - Summary of Hours

     ░ - Totals by Phase

     ░ - Averages by Phase

     ░ - Detailed Weekly

Figure 2-41.   Single Project GSFC Manpower Hours Report
Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.22 Maintenance Activity Hours Report Selection Screen

This screen is used to select a Maintenance Activity Hours report. The user must select one or more options from the screen. This screen is located by choosing option 11 from the Single Project Reports menu.

Figure 2-42 shows the Maintenance Activity Hours Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

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MAINTENANCE ACTIVITY HOURS REPORT SELECTION SCREEN

Please place an X beside all desired reports for the ▓▓▓▓ project.
Press <PF3> when selection is complete.

    ▮ - Summary of Hours

    ▮ - Detailed Weekly by Class

    ▮ - Detailed Weekly by Activity

    <PF4>- Previous menu

**Figure 2-42. Single Project Maintenance Activity Hours
Report Screen**

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens and Section 2.4.1.15 for a list of
messages that may appear during all single project report
selection screens.

2.4.1.23 Manpower Hours Report Selection Screen

This screen is used to select a Manpower Hours report. The
user must select one or more options from the screen. This
screen is selected by choosing option 11 from the Single
Project Reports menu.

Figure 2-43 shows the Manpower Hours Report Selection Screen
as it will appear on the terminal screen. The screen-
specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

MANPOWER HOURS REPORT SELECTION SCREEN

Please place an X beside all desired reports for the ▓▓▓▓▓▓▓ project.
Press <PF3> when selection is complete.

▓ - Summary of Hours

▓ - Totals by Phase

▓ - Averages by Phase

▓ - Detailed Weekly

<PF4>- Previous menu

Char Mode: Replace   Page 12   Count: *0

Figure 2-43. Single Project Manpower Hours Report Screen

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.24 SEL Forms Selection Screen

This screen is used to select the SEL forms reports. The user must select one or more options from the screen. This screen is selected by choosing option 12 from the Single Project Report menu.

Figure 2-44 shows the SEL Forms Selection Screen as it will appear on the terminal screen. The PRF option will generate a report on either the PRFs or the Cleanroom PRFs submitted, depending on which form the current project uses. The screen-specific key and messages are listed below.

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SEL FORMS REPORT SELECTION SCREEN
_____

Please place an X beside all desired reports for the ▓▓▓▓ project.
Press <PF3> when selection is complete.

    ▓▓ - Component Origination Forms (COF)

    ▓▓ - Change Report Forms (CRF)

    ▓▓ - Personnel Resources Forms (PRF)

    ▓▓ - Services Products Forms (SPF)

    ▓▓ - Development Status Forms (DSF)

<PF4>- Previous menu

Form: SINGLE F   Block: SF12   Page: 13 SELECT: Char Mode: Replace

Figure 2-44. Single Project SEL Forms Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.25   SEL Maintenance Forms Report Selection Screen

This screen is used to select a SEL maintenance form report. The user must select one or more options from the screen. This screen is selected by choosing option 14 from the Single Project Report menu.

Figure 2-45 shows the SEL Maintenance Forms Report Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

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```
        SEL MAINTENANCE FORMS REPORT SELECTION SCREEN
        ──────────────────────────────────────────────

Please place an X beside all desired reports for the ▓▓▓▓ project.
        Press <PF3> when selection is complete.

                ▓ - Maintenance Change Report Forms (MCRF)

                ▓ - Weekly Maintenance Effort Forms (WMEF)

                <PF4> - Previous menu
```

Figure 2-45. Single Project SEL Maintenance Forms Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens and Section 2.4.1.15 for a list of
messages that may appear during all single project report
selection screens.

2.4.1.26 Services Hours Report Selection Screen

This screen is used to select a services hours report. The
user must select one or more options from the screen. This
screen is selected by choosing option 13 from the Single
Project Reports menu.

Figure 2-46 shows the Services Hours Report Selection Screen
as it will appear on the terminal screen. The screen-
specific key and messages are listed below.

Please place an X beside all desired reports for the ▓▓▓▓▓ project.
Press <PF3> when selection is complete.

▓ - Summary of Hours

▓ - Totals by Phase

▓ - Averages by Phase

▓ - Detailed Weekly

<PF4>- Previous menu

Char Mode: Replace Page 14   Count: *0

Figure 2-46. Single Project Services Hours Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens and Section 2.4.1.15 for a list of messages that may appear during all single project report selection screens.

2.4.1.27 Miscellaneous Reports Menu

This screen is the menu screen for the miscellaneous type reports. This screen is selected by choosing option 3 on the Report Categories menu.

Figure 2-47 shows the Miscellaneous Reports menu as it will appear on the terminal screen. The screen-specific keys and messages are listed below.

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
```
            MISCELLANEOUS REPORTS MENU
            _____


        Which miscellaneous report would you like to run?

            1 - Encoded Values


            <PF1> - Report Categories Menu
            <PF4> - Previous Menu


        Please enter your selection number:  ▓


        Char Mode: Replace  Page 1                    Count: *0
```

Figure 2-47. Miscellaneous Reports Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following is an additional message
that may appear on this screen:

Message: Invalid selection number. Enter 1, or exit

Cause: The user selected an option that is not available.

Solution: Currently, there is only one miscellaneous report
           available. Either select option 1, or exit the
           screen.

2.4.1.28 Encoded Values Report Selection Screen

This screen is used to select an encoded values report. The
user must select one or more options from the screen. This
screen is selected by choosing option 1 from the Miscellane-
ous Reports menu.

Figure 2-48 shows the Encoded Values Report Selection Screen
as it will appear on the terminal screen. The screen-
specific keys and messages are listed below.

```
ENCODED VALUES REPORT SELECTION SCREEN
─────────────────────────────────────

     Please place an X beside all desired reports.
       Press <PF3> when selection is complete.

       ▓ - Personnel Summary

       ▓ - Computer Summary

       ▓ - Validation Fields


     <PF4> - Previous Menu



     Char Mode: Replace  Page 2                    Count: *0
```

Figure 2-48. Miscellaneous Encoded Values Report Screen

Keys

Refer to Section 2.4.1 for a list of keys that are available
on all report screens. Following is an additional key that
may be used for this screen:

<Commit>   This key causes the encoded values report to be
                 added to the current script with the specified
                 options.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following are additional messages
that may appear on this screen:

Message: Report code was NOT saved

Cause: The user pressed the <Clear Block> key.

Solution: The user may select new options for the encoded
           values report and press <Commit> to save, or
           the user may exit from this screen.

Message: No report options were selected -- select options
          or exit

Cause: The user attempted to <Commit> the report informa-
        tion, but no options were specified.

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Solution: At least one report option must be selected before exiting. Refer to Section 2.4.2.3.1 for additional information on this report and some sample output.

Message: Invalid character. Enter an X or a blank

Cause: The user entered a character other than an X or a blank in one of the option selection fields.

Solution: To select a specific option, place an X before the option. If the option is not selected, it should be blanked out.

2.4.1.29 Save Script Screen

This screen is used to permanently save the current report script. The user must specify a report script name. This screen is selected by choosing option 4 from the Main Report menu.

Figure 2-49 shows the Save Script Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

SAVE SCRIPT SCREEN

Please enter script name:
Press <PF3> when complete

Script name can be up to 20 characters

<PF4>-Previous menu

Char Mode: Replace   Page 9   Count: *0

Figure 2-49.   Save Script Screen

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Refer to Section 2.4.1 for a list of keys that are available on report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during all report screens. Following are additional messages that may appear on this screen:

Message: Script with this name already exists -- Do you want to replace it (Y/N)?

Cause: The user entered a duplicate script name.

Solution: Enter Y to replace the old script or enter a new script name.

Message: Entry must be Y or N

Cause: The user entered an incorrect key to answer the replacement question.

Solution: Enter an N to enter a new script name or a Y to replace the old script.

2.4.1.30 Report Routing Menu

This screen is used to select a new output destination for the current report script. This screen is selected by choosing option 5 from the Main Report menu.

Figure 2-50 shows the Report Routing Menu Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

```
                      REPORT ROUTING MENU
                      ─────────────────────

              Where would you like the report to be sent?
              The current routing is: ▓▓▓▓▓▓▓▓▓▓        .
                     Press <PF3> when complete.


                 1 - GSFC Bldg. 23 printer

                 2 - GreenTec II printer

                 3 - External File

          Please enter your selection number: ▓▓

                   <PF4>- Previous menu

       Please enter your external filename and extension:
                        ▓▓▓▓▓▓▓▓▓▓▓▓


       Char Mode: Replace  Page 10            Count: *0
```

Figure 2-50. Report Routing Menu

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following is an additional message
that may appear on this screen:

Message: Selection must be between 1 and 3

Cause: The user selected an option number that is less than
        the first available number (xx), or greater than the
        last option number (yy).

Solution: Enter a valid option number, or use the <Previous
           Menu> to exit from the menu screen.

2.4.1.31 Report Script Menu

This screen is used to select functions that are to be per-
formed on permanent report scripts that are stored in the
database. This screen is selected by choosing option 3 from
the Report Function menu.

Figure 2-51 shows the Report Script menu screen as it will
appear on the terminal screen. The screen-specific key and
messages are listed below.

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What would you like to do to scripts?

1 - View report scripts

2 - Delete report scripts

<PF4>- Previous menu

Please enter your selection number: ▓

Char Mode: Replace   Page 3   Count: *0

Figure 2-51.   Report Script Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following is an additional message that may appear on this screen:

<u>Message</u>: Selection must be between 1 and 2

<u>Cause</u>: The user selected an option number that is less than the first available number (**xx**) or greater than the last option number (**yy**).

<u>Solution</u>: Enter a valid option number, or use the <Exit/ Cancel> or <Report Categories Menu> keys to exit from the menu screen.

2.4.1.32 <u>Viewing Script Selection Screen</u>

This screen is used to view permanent report scripts cur- rently stored in the database for the current user. This screen is selected by choosing option 1 from the Report Script menu.

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Figure 2-52 shows the Viewing Scripts Selection Screen as it will appear on the terminal screen. The screen-specific key and messages are listed below.

```
               VIEWING SCRIPTS SELECTION SCREEN
               ────────────────────────────────
       Please enter the script name you would like to view or <ESC V> to list:
            Press <PF3> to view desired script.        Press next block to
                     ████████████████████████         view the next report
                                                       in this script.
       ROUTING      ███████████                        Press previous block
       REPORT TYPE  █████████████                      to view the previous
       REPORT NAME  █████████████                      report.
                    ████████████ ███████████           Press <Enter> to view
                    ████████████ ███████████           list of Projects.
       ─────────────────────────────────────────┼───────────────────────────
                REPORT OPTIONS                   │   FOR MULTIPLE PROJECTS ONLY
       ██ ██████████████████████████████        │        CRITERIA = LIST
       ██ ██████████████████████████████        │   Press <Enter> to return.
       ██ ██████████████████████████████        │   Use up arrow or down arrow
       ██ ██████████████████████████████        │          to scroll.
                                                 │        ████████████████████
       ██ ██████████████████████████  <PF4>- Previous menu  ████████████████████
                                                          ████████████████████
            Char Mode: Replace   Page 4                      Count: *0
```

Figure 2-52. Viewing Scripts Selection Menu

Keys

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

<Next Record>   Allows scrolling of the list of
                         Project names for when the project
                         type is multiple. It will retrieve
                         the next project name.

<Previous Record>   Allows scrolling of the list of
                         Project names for when the project
                         type is multiple. It will retrieve
                         the previous project name.

<Next Block>   Retrieves the next report sequence in
                         the specified script.

<Previous Block>   Retrieves the previous report se-
                         quence in the specified script.

<Enter>   Allows the user to view/edit a list
                         of projects when the current report
                         type is multiple projects and the
                         criteria is list. Pressing this key

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again will allow the user to return
to editing the rest of this report
and script.

<List Field Values>   This field is available on Screen
                          Name.

Messages

Refer to Section 2.4.1 for a list of messages that may appear
during report screens. Following are additional messages
that may appear on this screen:

Message: Script with the specified name does not exist--
          Please reenter

Cause: The user entered a script name that does not belong
          to him/her.

Solution: Reenter a valid script name or use the <List Field
           Values> to list the available script names.

Message: At the last report in this script

Cause: The user is at the last report sequence in the spec-
          ified script.

Solution: Press <Previous Block> to retrieve the previous
           report in the script, or select a new script name to
           view, or exit this screen.

Message: At the first report in this script

Cause: The user is at the first report sequence in the spec-
          ified script.

Solution: Press <Next Block> to retrieve the previous report
           in the script, or select a new script name to view,
           or exit this screen.

Message: At the last project in this report

Cause: The user is at the last project name in the specified
          report.

Solution: Press <Previous Record> to scroll to the previous
            project in the report, or select a new script name
            to view, select the next or previous report, or
            exit this screen.   .

Message: At the first project in this report

Cause: The user is at the first project name in the spec-
         ified report.

Solution: Press <Next Record> to scroll to the previous
            project in the report, or select a new script
            name to view, select the next or previous report,
            or exit this screen.

2.4.1.33   Deleting a Script Selection Screen

This screen is used to delete permanent report scripts cur-
rently stored in the database for the current user. This
screen is selected by choosing option 2 from the Report
Script menu.

Figure 2-53 shows the Deleting a Scripts Selection Screen as
it will appear on the terminal screen. The screen-specific
key and messages are listed below.

DELETING A SCRIPT SELECTION SCREEN

_____

Please enter script name you would like to delete or <ESC V> to list:
Press <PF3> to delete selected script.

<PF4>- Previous menu

Char Mode: Replace   Page 5   Count: *0

Figure 2-53.   Deleting a Script Selection Menu

Refer to Section 2.4.1 for a list of keys that are available on all report selection screens.

<List Field Values>   This key is available on Script Name.

Messages

Refer to Section 2.4.1 for a list of messages that may appear during report screens. Following are additional messages that may appear on this screen:

Message: Script with the specified name does not exist--
          Please reenter

Cause: The user entered a script name that does not belong
        to him/her.

Solution: Reenter a valid script name or use the <List Field
           Values> to list the available script names.

Message: Error deleting report entries from this script name

Cause: There could be several causes for this error, none of
        which the user can correct.

Solution: Contact the DBA about this specific problem.

2.4.2 REPORT DESCRIPTIONS

This section provides a description of each of the available reports. The reports are grouped into multiple projects reports, single project reports, and miscellaneous reports. For each report there is a short description of the report, a list of any available options that may be selected for the report, sample output of the report, and any error messages that may appear on the report output.

2.4.2.1 Multiple Projects Reports

Multiple projects reports are reports that contain data on one or more projects. Refer to Section 2.4.1.6 for information on generating a multiple project report.

2.4.2.1.1 Multiple Projects Actual Statistics at Completion Report

This report outputs a summary of the actual statistics at the completion of a project, as entered on the PCSF. This information is supplied by the project personnel via the PCSF and may not be obtained by performing calculations on actual values in the database.

Option Number	Description	Sample Output
1	Statistics on the modules, lines of code, and executable statements for each project	Figure 2-54 (Part 1)
2	Statistics on the project size and the resources used by each project	Figure 2-54 (Part 2)
3	Phase dates for each project	Figure 2-54 (Part 3)

Possible Message

Message: No data for this project

Explanation: A PCSF does not exist in the database for this project.

Multiple Project Actual Statistics at Completion Report (Part 1)
(From Project Completion Statistics Form)

09/08/88   10:53:22   Projects : LIST

Project	Executable Modules				Lines of Code				Executable Statements				No. of Cat. Lines
	Total	Old	Mod.	New	Total	Old	Mod.	New	Total	Old	Mod.	New	
PROJECT1	132	24		108	15500	3700		11800	5600	600		5000	1000
PROJECT2	219	27		192	16000	1900		14100	9280	1030		8250	
PROJECT3	201	10	19	172	50911	893	4673	45345	19759	273	1321	18165	8056
PROJECT4	397	18	75	304	61178	1102	10364	49712	16316	306	3793	12217	
PROJECT5	54	1	3	50	8547	60	446	8041	1615	6	80	1529	12345
PROJECT6	323	93		230	81434	10483		70951	34750	4474		30276	999

Figure 2-54. Multiple Projects Actual Statistics at Completion (1 of 3)

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Multiple Project Actual Statistics at Completion Report (Part 2)
(From Project Completion Statistics Form)

09/08/88   11:26:47   Criteria : LIST

Project	No. of Subsys	No. of Capnts.	No. of Changes	Pages of Docmnt	Tech/Mgmt. Hours	Services Hours CPU_Id	Computer Resources Hours	Runs
PROJECT1	14	132	2670	574	17715.0	1774.0 OTHER	172.0	
PROJECT2	5	224	213	130	5498.0	11.0 OTHER	69.0	
PROJECT3	40	292	1255	1613	12588.0	1109.0 360-75	159.5	
						360-95	222.8	
						OTHER	.0	4604
PROJECT4	20	397	221	1341	17039.0	3056.0		
PROJECT5	1	76	307	100	2285.0	.0		
PROJECT6	11	494	1776	1609	17057.0	1875.0 OTHER	56.1	15950

Figure 2-54.   Multiple Projects Actual Statistics at
Completion (2 of 3)

Multiple Project Actual Statistics at Completion Report (Part 3)
(From Project Completion Statistics Form)

09/08/88   11:32:18   Criteria : LIST

Project	Phase Start Dates							Project End Date
	Requirements Analysis	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance	
PROJECT1	80/06/27	81/05/30	81/09/05	82/01/30	82/04/03	82/06/26	82/10/02	82/10/02
PROJECT2	81/02/28	81/07/04	81/08/29	82/02/13	82/03/20	82/05/01	82/11/06	82/11/06
PROJECT3		77/02/12	77/06/04	77/12/03	78/02/04	78/03/18		78/04/29
PROJECT4	80/03/01	80/05/31	80/12/13	81/10/03	82/02/27	82/07/03		82/08/14
PROJECT5	80/04/05	81/01/31	81/06/20	81/11/07	82/02/27	82/07/03		82/08/14
PROJECT6		85/01/26	85/07/27	86/02/01	86/05/03	86/09/27		86/10/11

Figure 2-54.   Multiple Projects Actual Statistics at
Completion (3 of 3)

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2.4.2.1.2 Multiple Projects Actual Statistics To Date Report

This report outputs a summary of the actual statistics as of the current date for the projects specified.

Option Number	Description	Sample Output
1	Statistics on the modules and lines of code for each project	Figure 2-55 (Part 1)
2	Statistics on the resources used by each project	Figure 2-55 (Part 2)
3	Summary of SAP information on the modules in each project	Figure 2-55 (Part 3)

Possible Message

Message: No SAP data for this project

Explanation: The Source Code Analyzer Program (SAP) output data for this project have not been stored in the database. These data are only available for projects that have been closed out.

2.4.2.1.3 Multiple Projects Estimated Statistics Report

This report outputs a summary of the estimated statistics data as recorded on the most recently submitted PEF for each of the projects specified.

Multiple Projects Actual Statistics to Date
Part 1 - Project Statistics

09/15/88   08:23:36   Project Criteria : LIST

Project	No. of Components (CDFs)	No. of Components (SPFs)	Exec. Total	Mod (from CDF)s Old	Mod.	New	Total Lines of code (SPFs)	No. of subsys.	No. of changes (SPFs)	No. of changed components (CRFs)
PROJECT1	0	0	0	0	0	0	0	2	0	0
PROJECT2	899	913	855	88	647	120	178682	979	4069	2819
PROJECT3	369	379	300	100	170	28	50920	369	471	24

Figure 2-55. Multiple Projects Actual Statistics to Date (1 of 3)

Multiple Projects Actual Statistics to Date
Part 2 - Resource Statistics

Project	Tech/Mgmt Hours (PRFs)	Services Hours (SPFs)	Computers Resources (SPFs)		
			CPU_ID	Hours	Runs
PROJECT1	450.0	0.0	NAS8040	0.00	0
			TSO	0.00	4
PROJECT2	12205.8	1655.2	VAX780	233.60	4235
PROJECT3	4094.5	53.2	360-75	34.30	0
			360-95	84.20	1843
PROJECT4	2675.0	162.0	VAX8600	8.55	3163

Figure 2-55.   Multiple Projects Actual Statistics to Date (2 of 3)

Multiple Projects Actual Statistics to Date
Part 3 - SAP Data

Project	Lines of code				Executable Statements			
	Total	Old	Mod.	New	Total	Old	Mod.	New
ACME	No SAP data for this project							
COBEDS	36905	2556	7363	24480	8183	674	1913	5304
DECAP	16538	219		16319	4468			4468
UARSTELS	No SAP data for this project							

Figure 2-55.   Multiple Projects Actual Statistics to Date (3 of 3)

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Option Number	Description	Sample Output
1	Estimated project size and resource expenditure for each project	Figure 2-56 (Part 1)
2	Estimated phase dates for each project	Figure 2-56 (Part 2)

Possible Message

Message: No data for this project

Explanation: A PEF is not in the database for this project.

2.4.2.1.4 Multiple Projects Form Counts Report

This report outputs a summary of the number of forms submitted for each project that is specified. The PRF Count for a given project is either the number of regular PRFs submitted or the number of Cleanroom PRFs submitted, depending on which form the project uses.

Option Number	Description	Sample Output
1	Entire report	Figure 2-57

2.4.2.1.5 Multiple Projects Maintenance Information Summary Report

This report outputs a summary of maintenance information submitted during the maintenance phase of a project. Four sections make up this report.

Option Number	Description	Sample Output
1	Maintenance summary information for resource statistics	Figure 2-58 (Part 1)
2	Maintenance summary information for change statistics	Figure 2-58 (Part 2)
3	Maintenance summary information component statistics part 1	Figure 2-58 (Part 3)
4	Maintenance summary information component statistics part 2	Figure 2-58 (Part 4)

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09/08/88   10:38:07   Projects : LIST

Project	No. of Compnts.	No. of Subsys.	Lines of Code				Programmer Hours	Management Hours	Services Hours
			Total	Old	Mod.	New			
PROJECT1	150	2	18750				5000.0	1000.0	
PROJECT2	413		37000	2900	1570	32530	25800.0	4000.0	3100.0
PROJECT3	913	28	175691		18878	156813	51388.0	7708.0	5139.0
PROJECT4	440	4	62400	20700		40500	6500.0	700.0	300.0
PROJECT5		6	100000	10000	80000	10000	6400.0	400.0	20.0
PROJECT6	750	7	160000	27250	27250	105000	16000.0	3100.0	1000.0

Figure 2-56.   Multiple Projects Estimated Statistics (1 of 2)

09/08/88   10:39:49   Projects : LIST

Project	Requirements Analysis	Design	Phase Start Dates				Maintenance	Project End Date
			Code and Unit Test	System Test	Acceptance Test	Cleanup		
PROJECT1		87/01/31	88/06/04	88/10/08	88/10/15	89/03/04		90/06/02
PROJECT2		84/04/28	85/05/04	87/07/04	88/10/01			88/10/01
PROJECT3		86/06/28	87/03/07	87/11/07	88/02/20			88/09/17
PROJECT4	88/01/02	88/02/20	88/07/23	88/11/05	88/12/31		89/02/04	89/02/18
PROJECT5	87/06/06	87/10/03	88/08/06	89/07/01		89/10/07		89/11/04
PROJECT6		87/05/30	88/03/19	88/12/03	89/03/04	89/05/13		89/05/27

Figure 2-56.   Multiple Projects Estimated Statistics (2 of 2)

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Project	PEF Count	SPF Count	PRF Count	COF Count	CRF Count	DSF Count	Total
PROJECT1	3	1	38	0	0	7	49
PROJECT2	3	128	1833	899	1477	32	4372
PROJECT3	4	45	294	369	14	0	726
Totals	10	174	2165	1268	1491	39	5147

Figure 2-57.   Multiple Projects Form Counts

Multiple Project Maintenance Information Summary Report
Part 1 - Resource Statistics

Project	Total Hours	Total Hours By Class				Total Hours By Activity					
		Correction	Enhancement	Adaptation	Other	Isolation	Change Design	Implement	Unit/Sys Test	Accept Test	Other
PROJECT1	1563.2	284.8	308.8	488.8	488.8	207.3	342.3	340.8	254.8	315.8	98.8
PROJECT2	NO DATA FOR THIS PROJECT										
PROJECT3	NO DATA FOR THIS PROJECT										
PROJECT4	8.0	2.0	2.0	2.0	2.0	4.0	.0	4.0	.0	.0	.0
PROJECT5	NO DATA FOR THIS PROJECT										
PROJECT6	NO DATA FOR THIS PROJECT										

Figure 2-58.   Multiple Projects Maintenance Information Summary (1 of 4)

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04/11/89   15:45:01   Projects : LIST

Project	No. Of Changes (NCRP)	Lines of Code			Number of Components			Added Components That Are		
		Added	Changed	Deleted	Added	Changed	Deleted	New	Reused	Modified
PROJECT1	No data for this project									
PROJECT2	15	74	268	323	124	149	220	23	35	57
PROJECT3	1	1	0	0	12	0	0	0	3	3
PROJECT4	1	300	50	30	3	3	2	1	1	1
PROJECT5	No data for this project									
PROJECT6	1	988	899	6778	88	0	0	78	5	5

Figure 2-58. Multiple Projects Maintenance Information
Summary (2 of 4)

04/11/89   15:45:20   Projects : LIST

Project	No. Of Changes (NCRP)	Type of Modification			Cause of Change					Number of Changes Made to:					
		Correct	Enhance	Adapt	Req/ Spec.	S/W Dsgn.	Code	Prev. Chg.	Other	Req. Doc.	Dsgn. Doc.	Code	Sys. Desc.	User Guide	Other
PROJECT1	No data for this project														
PROJECT2	15	4	5	6	4	2	2	4	3	11	7	0	7	2	1
PROJECT3	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0
PROJECT4	1	0	1	0	0	1	0	0	0	1	0	0	1	1	1
PROJECT5	No data for this project														
PROJECT6	1	1	0	0	0	0	0	1	0	0	0	1	1	0	0

Figure 2-58. Multiple Projects Maintenance Information
Summary (3 of 4)

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04/11/89   15:46:09   .Projects : LIST

Project	No. Of Changes (MCRF)	Time To Isolate					Time To Complete					Number of Changes Related to:						
		1HR	1DY	1WK	1MON	>1MON	1HR	1DY	1WK	1MON	>1MON	Init.	Logic	Int. Intrfc.	Ext. Intrfc.	Data	Computa-tional	Other
PROJECT1	No data for this project																	
PROJECT2	15	5	2	2	2	4	4	4	4	1	2	2	1	1	2	4	2	3
PROJECT3	1	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
PROJECT4	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
PROJECT5	No data for this project																	
PROJECT6	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Figure 2-58.   Multiple Projects Maintenance Information
Summary (4 of 4)

Possible Messages

Message: No data for this project

Explanation: If this message is received in Part 1, there is
WMEF data for this project. If this message is
received in parts 2, 3, or 4, there is no MCRF
data for this project.

2.4.2.1.6 Multiple Projects Subjective Evaluation Report

This report outputs a summary of the Subject Evaluation data
for each project that is specified. The data originally were
obtained from the SEF submitted by the project personnel.

Option Number	Description	Sample Output
1	Entire report	Figure 2-59

2.4.2.2 Single Project Reports

Single project reports are reports that contain data on a
specific project. Refer to Section 2.4.1.12 for information
on generating a single project report.

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Subjective Evaluation Data

Measurements	PROJECT1	PROJECT2	PROJECT3	PROJECT4	Projects PROJECT5	PROJECT6	PROJECT7	PROJECT8	PROJECT9
Problem Characteistics									
1. Problem Difficulity	1	4	1	2	N/A	3	4	N/A	5
2. Schedule Constraints	2	3	1	2	N/A	3	4	N/A	5
3. Requirements Stability	3	4	1	2	N/A	3	4	N/A	5
4. Quality of specs. doc.	4	3	1	2	N/A	3	4	N/A	N/A
5. Reqnts. documentation	N/A	3	1	2	N/A	3	4	N/A	N/A
6. Rigor of formal reviews	1	3	1	2	N/A	3	4	1	N/A
Tech. Personnel Characteristics									
7. Ability of devlpmnt. team	2	N/A	2	N/A	3	3	4	1	5
8. Devlpmnt. team appl. exp.	3	3	2	N/A	4	3	4	1	5
9. Devlpmnt. team env. exp.	4	3	2	N/A	4	3	4	1	5
10. Devlpmnt. team stability	5	4	2	N/A	4	3	4	1	5
Mgmt. Personnel Characteristics									
11. Proj. mgmt. performance	1	4	3	N/A	2	3	4	1	5
12. Proj. mgmt. appl. exp.	2	2	3	N/A	3	3	4	1	5
13. Mgmt. team stability	3	3	3	N/A	2	3	4	1	5
14. Project planning discipline	4	5	3	N/A	3	3	4	1	5
15. Degree plans followed	1	N/A	3	N/A	3	3	4	1	5
Process Characteristics									
16. Modern proj. practices	2	5	3	2	1	N/A	4	1	5
17. Disciplined change tracking	3	4	N/A	2	1	N/A	4	1	5
18. Discplned rqmt. anal. meth.	4	3	4	2	2	N/A	4	1	5
19. Disciplined design method	5	4	4	2	1	N/A	4	1	5
20. Disciplined testing method	1	3	N/A	2	1	N/A	4	1	5
21. Tools used:									
CAT	N	N	N	N	N	Y	N	N	Y
Configuration mgmt. tool	N	N	N	N	N	Y	N	N	N
Compiler	N	N	Y	N	N	Y	N	Y	N
Editor	N	N	N	N	N	Y	N	N	N
Graphics display builder	N	N	N	N	N	Y	N	N	N
Interface checker (RXVP80)	N	N	N	N	N	Y	N	Y	N
ISPF	N	N	Y	N	N	Y	N	N	N
Linker	Y	N	N	N	N	Y	N	N	N
Language sensitive editor	N	N	N	N	N	Y	N	N	N
Other tools	Y	N	N	Y	N	Y	N	N	N
PANVALET	N	N	N	N	N	Y	N	N	N
PDL processor	N	Y	N	N	N	Y	N	N	N
Reqnts. language processor	N	N	N	N	N	Y	N	N	N
Source code analysis program	N	N	N	N	N	Y	N	N	N
Structured analysis tool	N	N	N	N	N	Y	Y	N	N
Symbolic debugger	N	N	N	N	N	Y	Y	N	N
Test coverage tool	N	Y	N	N	N	Y	Y	N	N
22. Use of test plan	N/A	4	3	2	1	N/A	4	1	5
23. Use of QA procedures	3	4	3	2	1	N/A	4	1	5
24. Use of conf. mgmt. proc.	4	5	5	2	2	N/A	4	1	5

Figure 2-59. Multiple Projects Subjective Evaluation
.(1 of 2)

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	PROJECT1	PROJECT2	PROJECT3	PROJECT4	PROJECT5	PROJECT6	PROJECT7	PROJECT8	PROJECT9
Environment Characteristics									
25. Access to devlpmnt. system	5	3	5	2	3	3	N/A	1	5
26. Programmers per terminal	2	2	5	2	2	3	N/A	1	5
27. Machine resource constraints	3	4	3	2	2	3	N/A	1	5
28. System response time	3	2	1	2	2	3	N/A	1	5
29. H/W and S/W stability	4	3	1	2	1	3	N/A	1	5
30. S/W tools effectiveness	5	4	4	2	N/A	3	N/A	1	5
Product Characteristics									
31. Software supports rqmts.	1	5	4	2	N/A	3	4	1	5
32. Quality of delivered s/w	2	5	4	2	N/A	3	4	1	5
33. Quality of design	3	4	4	2	N/A	3	4	1	5
34. Qual./completeness of doc.	4	4	3	2	N/A	3	4	1	5
35. Timeliness of delivery	1	3	3	2	N/A	3	4	1	5
36. Smoothness of acc. testing	1	2	3	2	N/A	3	4	1	5

Figure 2-59. Multiple Projects Subjective Evaluation
(2 of 2)

2.4.2.2.1 Single Project Detailed Weekly Activity Hours Report

This report produces output detailing the hours that were spent on different activities during a given timeframe for a given project. The data come from either the PRFs or the Cleanroom PRFs completed for the current project, depending on which form the project uses.

Option Number	Description	Sample Output
1	Total hours charged to the project, grouped by type of activity	Figure 2-60 (Part 1)
2	Total hours grouped by activity for each phase of the project	Figure 2-60 (Part 2)
3	Average hours grouped by activity for each phase of the project	Figure 2-60 (Part 3)
4	Activity hours by week grouped by type of activity	Figure 2-60 (Part 4)

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09/08/88   10:59:55   Project: EXAMPLE

Estimates at Completion			Phases	Start	End
No. of Components:	1677		Design	85/08/10	86/06/07
Lines of Code:	234800		Code and Test (Imple	86/06/07	87/10/03
Activity hours:	52000.0		System Test	87/10/03	88/06/04
Management hours:	700.0		Acceptance Test	88/06/04	88/11/05
Services hours:	3000.0		Cleanup	88/11/05	88/12/03
Last Estimate Date:	88/08/25				

	Total Hours To Date	Average Weekly Hours To Date
Acceptance Test	538.0	3.4
Create Design	8626.5	54.3
Debugging	1185.5	7.5
Integration Test	6662.3	41.9
Other	14526.6	91.4
Pre Design	704.5	4.4
Read/Review Code	1623.6	10.2
Read/Review Design	1487.1	9.4
Test Code Units	4428.1	27.8
Write Code	9199.4	57.9
All activities	48981.6	308.1

Figure 2-60.   Single Project Activity Hours (1 of 4)

Total Activity Hours by Phase

09/08/88   11:05:10   Project : EXAMPLE

	Pre-Project	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Post-Project
Acceptance Test	.0	.0	.0	11.0	527.0	.0	.0
Create Design	.0	5219.7	2851.1	548.7	7.0	.0	.0
Debugging	.0	.0	.0	736.7	448.8	.0	.0
Integration Test	.0	?.0	2698.2	3234.1	728.0	.0	.0
Other	15.0	4216.9	6975.6	2881.1	438.0	.0	.0
Pre Design	.0	464.5	213.5	26.5	.0	.0	.0
Read/Review Code	.0	252.5	1052.3	231.8	87.0	.0	.0
Read/Review Design	.0	793.3	585.6	100.2	8.0	.0	.0
Test Code Units	.0	134.0	3838.2	388.9	67.0	.0	.0
Write Code	.0	317.7	7833.1	835.1	213.5	.0	.0
ALL ACTIVITIES	15.0	11400.6	26047.6	8994.1	2524.3	.0	.0

Figure 2-60.   Single Project Activity Hours (2 of 4)

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Average Weekly Activity Hours by Phase

Project : EXAMPLE

	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup
Acceptance Test	.0	.0	.3	43.9	.0
Create Design	121.4	41.3	15.7	.6	.0
Debugging	.0	.0	21.0	37.4	.0
Integration Test	.0	39.1	92.4	60.7	.0
Other	98.1	101.1	82.3	36.5	.0
Pre Design	10.8	3.1	.8	.0	.0
Read/Review Code	5.9	15.3	6.6	7.3	.0
Read/Review Design	18.4	8.5	2.9	.7	.0
Test Code Units	3.1	55.6	11.1	5.6	.0
Write Code	7.4	113.5	23.9	17.8	.0
ALL ACTIVITIES	265.1	377.5	257.0	210.4	.0

Figure 2-60.   Single Project Activity Hours (3 of 4)

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09/08/88   11:30:22   Project : EXAMPLE

	88-05-14	88-05-21	88-05-28	88-06-04	88-06-11	88-06-18	88-06-25	88-07-02	88-07-09	88-07-16	88-07-23	88-07-30
ACCTEST	.0	5.0	5.0	34.0	7.0	51.5	36.0	21.5	41.0	48.5	55.0	66.5
CREDES	3.0	1.0	.0	.0	5.0	.0	.0	.0	.0	2.0	.0	.0
DEBUG	30.0	24.0	18.0	30.0	40.5	36.0	30.5	43.0	53.0	66.3	47.5	59.5
INTTEST	117.2	133.0	116.5	98.5	73.0	85.0	46.0	53.0	53.0	67.5	74.5	63.0
OTHER	80.5	93.5	70.5	64.5	31.5	55.0	30.0	28.0	32.5	42.5	72.0	27.5
PREDES	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
RDREVCOD	.0	.0	.0	.0	9.5	7.5	6.0	5.5	12.5	12.5	18.5	12.0
RDREVDES	.8	.0	.0	.0	.0	.0	.0	.0	1.0	4.0	.0	.0
TSTCODUN	.0	.0	11.0	4.0	1.0	4.0	7.0	2.5	1.0	16.5	5.0	9.0
WRCODE	.0	9.5	18.5	12.0	20.5	19.5	12.5	27.0	25.0	21.0	6.0	30.5
Total	231.5	266.0	239.5	243.0	188.0	258.5	168.0	180.5	219.0	280.8	278.5	268.0
Cumulative Total	45936.8	46202.8	46442.3	46685.3	46873.3	47131.8	47299.8	47480.3	47699.3	47980.1	48258.6	48526.6

	88-08-06	88-08-13	88-08-20	Totals
ACCTEST	94.5	71.5	.0	538.0
CREDES	.0	.0	.0	8626.5
DEBUG	37.5	5.0	.0	1185.5
INTTEST	75.5	39.0	.0	6662.3
OTHER	29.5	25.0	.0	14511.6
PREDES	.0	.0	.0	704.5
RDREVCOD	3.0	.0	.0	1623.6
RDREVDES	3.0	.0	.0	1487.1
TSTCODUN	.0	17.0	.0	4428.1
WRCODE	26.5	13.0	.0	9199.4
Total	269.5	170.5	.0	48966.6
Cumulative Total	48796.1	48966.6	48966.6	

Figure 2-60.   Single Project Activity Hours (4 of 4)

2.4.2.2.2   Single Project Component Names Report

This report produces output detailing all the component names associated with a given project.

Option Number	Description	Sample Output
1	Displays the subsystem prefixes and component names associated with the project	Figure 2-61 (Part 1)
2	Displays the subsystem prefixes, the component names, and the component codes associated with the project	Figure 2-61 (Part 2)

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Component Names
(Name and Code)

Total Number of Subsystems: 7
Total Number of Components: 246

Subsystem Prefix	Component Name	Comp. Code	Subsystem Prefix	Component Name	Comp. Code
AC	AOCS	22057	CN	PROCOM	12794
	ATTCON	22055		PROCON	678
	BKUPSK	12069		PROOUT	12796
	C2FLTR	12077		PROTAB	12797
	CONTRL	22005		PRUDAT	12795
	D2FLTR	12076		RPYCMD	21990
	DBAND	12075		RTDPRM	21981
	EARACQ	12074		SCBPRM	648
	INFORM	12073		SENCMD	12798
	LIMITR	12070		SENPRM	12799
	MAGCOI	22006		STAPRM	617
	MCDIST	22004		STKCMD	21992
	MOMDIS	22003		STKPRM	677
	NI	12071		STTPRM	647
	NISTEP	12072		SYSCON	616
	ONORBT	22002		SYSDBG	676
	PITCTL	22001		TAMPRM	646
	PSEPHD	22000		THRCMD	21984
	PWPF	12083		THRPRM	615
	RTDAMP	12082		TMOUT	12800
	RYCTL	21999		TORPRM	675
	SENPRO	12081		WHLPRM	645
	SKCNTL	12080	PG	AUTPLT	6143
	SKTMOD	12079		CHGLIN	1055
	SUMACQ	12078		CHGUNT	10430
	VCOILD	21998		INIGPH	6142
	WHLCTL	21996		MINIPL	1058
CN	ACQPRM	652		NEWTIM	1053
	AMDATA	6149		PLOTIT	1056
	AOCS_TM	21983		PLTGEN	6152
	ATTPRM	621		POSTRB	6144
	CSSPRM	681		PRINT	1054
	DIRPRM	651		SCALE	1057
	DSSPRM	620		TRMPLT	6150
	DYNEQU	12789		USRFLG	6151
	EEDCMD	21982	PP	PRDID	614
	ESAPRM	680		PRDINI	674
	FILES	650		PRDINT	644
	INTRPL	12790		PRDNT	7939
	LGRNGE	12791		PRDTL	7937
	MATCMD	12792	SD	ACQINT	640
	MODES	21986		ADD	599
	MOVCMD	21994		ADDP	659
	MOVPRM	619		ATTINT	609
	MTAPRM	679		BOT	629
	MTXCON	12793		CAPS	598
	NORPRM	649		CHG	658
	NURPRM	21988		CHRINT	628
	ORBPRM	618		COMPL	597

Figure 2-61.   Single Project Component Names (1 of 2)

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09/07/88   08:45:04   Project : EXAMPLE

Total Number of Subsystems: 7
Total Number of Components: 246

SUBSYSTEM	SUBSYSTEM	SUBSYSTEM
AC	CM	PP
COMPONENTS	COMPONENTS	COMPONENTS
AOCS	MOVPRM	PROID
ATTCOM	MTAPRM	PROINI
BKUPSK	MTXCON	PROINT
C2FLTR	NORPRM	PROMT
CONTRL	NURPRM	PROTL
D2FLTR	ORBPRM	
DBAND	PROCOM	SUBSYSTEM
EARACQ	PROCON	SD
INFORM	PROOUT	
LIMITR	PROTAB	COMPONENTS
MAGCOI	PRUBAT	ACQINT
MCDIST	RPYCMD	AOB
MOMDIS	RTDPRM	ADDP
NI	SCBPRM	ATTINT
NISTEP	SENCMD	BOT
OMORBT	SENPRM	CAPS
PITCTL	STAPRM	CHG
PSEPMB	STKCMD	CHRINT
PWPF	STKPRM	COMPL
RTDAMP	STTPRM	CSSINT
RYCTL	SYSCON	DECNUM
SENPRO	SYSDBG	DEL
SKCNTL	TAMPRM	DELP
SKTMOD	THRCMD	DIRINT
SUMACQ	THRPRM	DSSINT
VCOILD	TMOUT	EDIT
WHLCTL	TORPRM	EDITSS
	WHLPRM	ESAINT
SUBSYSTEM		ESMINT
CM	SUBSYSTEM	EIT
	PG	GETCAS
COMPONENTS		GETDIR
ACQPRM	COMPONENTS	GETLIN
AMDATA	AUTPLT	GOFOR
AOCS_TM	CHGLIM	INS
ATTPRM	CHGUNT	INSCMD
CSSPRM	INIGPH	INSCON
DIRPRM	MINIPL	KILL
DSSPRM	NEWTIM	LOC
DYNEQU	PLOTIT	LSTP
EEDCMD	PLTGEN	LSTT
ESAPRM	POSTRB	MOVE
FILES	PRINT	MOVINT
INTRPL	SCALE	NEI
LGRNGE	TRMPLT	NEIP
MATCMD	USRFLG	NORINT
MODES		OPENS
MOVCMD		ORBINT

Figure 2-61.   Single Project Component Names (2 of 2)

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2.4.2.2.3 Single Project Estimated Statistics Report

This report produces output detailing the estimated statistics data for a given project.

Option Number	Description	Sample Output
1	Outputs the estimated size and resource information for a given project	Figure 2-62 (Part 1)
2	Outputs the estimated phase information for a given project	Figure 2-62 (Part 2)

Estimated Statistics Report (Part 1 of 2)

09/08/88   10:11:45   Project : EXAMPLE

Total Number of Project Estimates Forms : 3

Project	No. of Compnts.	No. of Subsys.	Lines of Code				Programmer Hours	Management Hours	Services Hours
			Total	Old	Mod.	New			
88/03/28	890		166250		40050	147950	34966.0	5245.0	3497.0
88/06/13	913	28	175691		18878	156813	51388.0	7708.0	5139.0
88/08/11	913	28	175691		18878	156813	51388.0	7708.0	5139.0

Figure 2-62. Single Project Estimated Statistics (1 of 2)

Estimated Statistics Report (Part 2)

09/08/88   10:13:24   Project : EXAMPLE

Submission Date	Requirements Analysis	Design	Phase Start Dates				Maintenance	Project End Date
			Code and Unit Test	System Test	Acceptance Test	Cleanup		
88/03/28		86/05/28	87/03/07	87/11/07	88/01/16			88/06/03
88/06/13		86/06/28	87/03/07	87/11/07	88/02/20			88/08/13
88/08/11		86/06/28	87/03/07	87/11/07	88/02/20			88/09/17

Figure 2-62. Single Project Estimated Statistics (2 of 2)

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2.4.2.2.4 Single Project Form Count Report

This report produces output detailing the number of forms submitted during a given timeframe for a given project. The total count for the PRF is either the number of regular PRFs submitted or the number of Cleanroom PRFs submitted, depending on which form the project uses.

Option Number	Description	Sample Output
1	Outputs the total count of PEFs, PRFs, SPFs, COFs, and CRFs submitted for the project	Figure 2-63 (Part 1)
2	Outputs the total counts of the PEFs, SPFs, PRFs, COFs, and CRFs submitted during each phase of the project	Figure 2-63 (Part 2)
3	Outputs the total counts of the PRFs, COFs, and CRFs submitted by each programmer during the project	Figure 2-63 (Part 3)

Form Counts Report
(Summary by Form)

09/07/88   07:13:35   Project: EXAMPLE

Estimates at Completion			Phases	Start	End
No. of Components:	474		Design	88/01/02	88/08/20
Lines of Code:	67000		Code and Test (Imple	88/08/20	89/04/22
Programmer hours:	9677.0		System Test	89/04/22	89/08/05
Management hours:	3000.0		Acceptance Test	89/08/05	89/11/04
Services hours:	962.0		Cleanup	89/11/04	89/11/04
Last Estimate Date:	88/08/22		Maintenance	89/11/04	89/12/30

Form Counts Summary

Form Name	Total Counts
COF	45
CRF	0
PRF	143
PEF	4
SPF	32

Figure 2-63.   Single Project Form Counts (1 of 3)

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09/07/88   07:17:49   Project : EXAMPLE

Form Name	Pre Project	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance	Post Project
COF	0	7	38	0	0	0	0	0
CRF	0	0	0	0	0	0	0	0
PRF	0	143	0	0	0	0	0	0
PEF	0	3	1	0	0	0	0	0
SPF	0	31	1	0	0	0	0	0

Figure 2-63.   Single Project Form Counts (2 of 3)

Form Counts Report
(Detailed Programmer Counts)

09/07/88   07:24:29   Project : EXAMPLE

Programmer	COF Count	CRF Count	PRF Count	Total
PROGRAMMER1	0	0	30	30
PROGRAMMER2	45	0	32	77
PROGRAMMER3	0	0	31	31
PROGRAMMER4	0	0	30	30
PROGRAMMER5	0	0	12	12
PROGRAMMER6	0	0	8	8
Totals	45	0	143	188

Figure 2-63.   Single Project Form Counts (3 of 3)

2.4.2.2.5   General Project Message Information Report

This report outputs a summary of all of the general information about the specified project.

Option Number	Description	Sample Output
1	Entire report	Figure 2-64

Possible Messages

Message: No information available for this message type

Explanation: The specified project does not contain any information about this message.

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10/11/89   14:02:02   Project : PROJECT1

        Note: This information is provided as a communication area between project personnel and the SEL.
        Please contact SEL database personnel with updates as they occur.

Message type CLOSEOUT contains information about Project closeout status :
        No information available for this message type.

Message type COMPACCTS contains information about Computer accounts to monitor :
        No information available for this message type.

Message type COMPSYS contains information about Development and operational computer system :
        No information available for this message type.

Message type CONTACTS contains information about Project contacts :

        Line   Submission
        Number   Message   Date

            1   ·   CSC MANAGER: XXX XXXXXX   01-SEP-89

Message type CONTRLLIB contains information about Names of controlled libraries :

        Line   Submission
        Number   Message   Date

            1   LIBRARY 1   01-SEP-89

Message type DATAAVAIL contains information about Type of data available :

        Line   Submission
        Number   Message   Date

            1   EST_SCH-Y, EST_STAT-N, EFF_PROJ-Y, EFF_SUB-N, EFF_SPEC-Y,   21-JUL-89
            2   EFF_SERV-N, SIF-Y, COM_NAME-Y, COF-N, CRF-N, GRH-Y, CPU-N, SEF-Y,   21-JUL-89
            3   SAP-N, FIN_SCH-Y, FIN_STAT-N, FIN_CPU-Y   21-JUL-89
            4   See VIEW: VAL_DATA_AVAIL for explanation of data codes.   21-JUL-89

       Figure 2-64.   Single Project General Project Information
                      (1 of 2)

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General Project Information Report
(Detailed Listing)

Message type FORMSCOL contains information about SEL forms collected :

Line Number	Message	Submission Date
1	FIRST LINE OF SEL FORMS BEING COLLECTED	01-SEP-89

Message type GENMESS contains information about General messages :

Line Number	Message	Submission Date
1	FIRST LINE OF GENERAL MESSAGES	01-SEP-89

Message type GHTOOL contains information about Growth history tool used :

Line Number	Message	Submission Date
1	CMS VAX GROWTH HISTORY	01-SEP-89

Message type LANGUAGES contains information about Languages used :

Line Number	Message	Submission Date
1	FORTRAN	01-SEP-89

Message type PROJNAME contains information about Project full name :
     No information available for this message type.

Message type TASKNO contains information about Task numbers and corresponding years :

Line Number	Message	Submission Date
1	89-999	01-SEP-89

Figure 2-64.   Single Project General Project Information
               (2 of 2)

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2.4.2.2.6 Single Project Growth History Report

This report produces output detailing growth history statistics during a given timeframe for a given project.

Option Number	Description	Sample Output
1	Displays the most recent growth history information for this project	Figure 2-65 (Part 1)
2	Displays the growth history information by week for the selected phase	Figure 2-65 (Part 2)

2.4.2.2.7 Single Project GSFC Manpower Hours Report

This report produces output detailing the number of hours logged by various personnel during a given timeframe for a given project. These data come from the PRF forms that have been completed for the project. The difference between this report and the regular Manpower Hours report is that only GSFC personnel names are displayed on the report. Section 2.4.2.2.9 contains more information.

Growth History Report (Summary)

09/08/88   10:18:23   Project: EXAMPLE

Estimates at Completion

			Phases	Start	End
			-------------------- -------- --------		
No. of Components:	230		Requirements Definit	87/06/06	87/08/01
Lines of Code:	36000		Design	87/08/01	88/01/02
Programmer hours:	7500.0		Code and Test (Imple	88/01/02	88/08/06
Management hours:	1500.0		System Test	88/08/06	88/11/05
Services hours:	400.00		Acceptance Test	88/11/05	89/01/28
Last Estimate Date:	88/07/26		Cleanup	89/01/28	89/02/23

Current Status

Number of Modules : 246
Lines of Code : 30856
Number of Changes : 367

Figure 2-65. Single Project Growth History (1 of 2)

09/08/88   10:20:37   Project: EXAMPLE

Phase : Code and Test (Implementation)

Week ending date	Modules	Lines of code	Changes
88/02/19	52	4890	52
88/02/26	90	7921	90
88/03/04	93	8244	93
88/03/11	105	9608	105
88/03/18	128	12122	128
88/03/25	128	13122	128
88/04/01	136	14000	136
88/04/08	141	15555	144
88/04/15	141	15555	144
88/04/22	164	19189	167
88/04/29	168	19565	187
88/05/06	168	19565	187
88/05/13	183	21617	202
88/05/20	183	21617	202
88/05/27	183	21693	212
88/06/03	184	21865	216
88/06/10	202	24885	249
88/06/17	212	26501	292
88/06/24	224	27111	307
88/07/01	224	27121	312
88/07/08	224	27121	312
88/07/15	224	27121	312
88/07/22	224	27121	312
Average weekly growth:	7 / week	967 / week	11 / week

Figure 2-65. Single Project Growth History (2 of 2)

2.4.2.2.8 Single Project Maintenance Activity Hours Report

This report produces output detailing the hours that were
spent on different activities during the maintenance phase
for a given project. The data come from the WMEFs completed
for the current project.

Option Number	Description	Sample Output
1	Total hours charged to the project, grouped by activity and by class	Figure 2-66 (Part 1)
2	Hours by week grouped by type of class	Figure 2-66 (Part 2)
3	Hours by week grouped by type of activity	Figure 2-66 (Part 3)

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04/20/89   08:06:38   Project: Project1

Phase	Start	End
MAINTENANCE	89/01/07	89/04/23

Maintenance Class	Total Hours To Date	Average Weekly Hours To Date
Adaptation	524.8	35.0
Correction	331.8	22.1
Enhancement	343.8	22.9
Other	513.8	34.3
All classes	1714.2	114.3

Maintenance Activity	Total Hours To Date	Average Weekly Hours To Date
Acceptance/Benchmark Test	332.0	22.1
Implementation	380.6	25.4
Isolation	242.3	16.2
Other	121.0	8.1
Change Design	369.3	24.6
Unit Test/System Test	269.0	17.9
All activities	1714.2	114.3

Figure 2-66. Single Project Maintenance Activity Hours (1 of 3)

04/20/89   08:08:29   Project : Project1

	89-01-07	89-01-14	89-01-21	89-01-28	89-02-04	89-02-11	89-02-18	89-02-25	89-03-04	89-03-11	89-03-18	89-03-25
Adaptation	9.0	6.0	5.0	7.0	9.0	.0	104.0	14.3	70.0	58.0	46.0	116.0
Correction	12.0	6.0	5.0	7.0	9.0	.0	66.0	18.3	12.0	55.0	39.0	39.0
Enhancement	4.0	6.0	5.0	7.0	9.0	.0	31.0	20.3	19.0	57.0	41.0	42.0
Other	6.0	6.0	5.0	7.0	9.0	.0	19.0	17.3	68.0	59.0	55.0	194.0
Total	31.0	24.0	20.0	28.0	36.0	.0	220.0	70.2	169.0	229.0	181.0	391.0
Cumulative Total	31.0	55.0	75.0	103.0	139.0	139.0	359.0	429.2	598.2	827.2	1008.2	1399.2

	89-04-01	89-04-08	89-04-15	Totals
Adaptation	46.0	13.5	21.0	524.8
Correction	41.0	8.5	14.0	331.8
Enhancement	80.0	9.5	13.0	343.8
Other	31.0	20.5	17.0	513.8
Total	198.0	52.0	65.0	1714.2
Cumulative Total	1597.2	1649.2	1714.2	

Figure 2-66. Single Project Maintenance Activity Hours (2 of 3)

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04/20/89   08:12:45   Project : Project1

	89-01-07	89-01-14	89-01-21	89-01-28	89-02-04	89-02-11	89-02-18	89-02-25	89-03-04	89-03-11	89-03-18	89-03-25
Accept/Bench Tst	1.0	8.0	3.0	.0	5.0	.0	33.0	7.0	30.0	8.0	50.0	97.0
Implementation	6.0	8.0	3.0	8.0	5.0	.0	35.0	13.6	37.0	101.0	34.0	83.0
Isolation	9.0	8.0	3.0	10.0	5.0	.0	83.0	16.3	7.0	17.0	29.0	36.0
Other	7.0	.0	5.0	.0	11.0	.0	.0	5.0	2.0	3.0	10.0	.0
Change Design	5.0	.0	3.0	10.0	5.0	.0	69.0	15.3	39.0	97.0	25.0	60.0
Unit/System Tst	3.0	.0	3.0	.0	5.0	.0	.0	13.0	54.0	3.0	24.0	115.0
Total	31.0	24.0	20.0	28.0	36.0	.0	220.0	70.2	169.0	229.0	181.0	391.0
Cumulative Total	31.0	55.0	75.0	103.0	139.0	139.0	359.0	429.2	598.2	827.2	1008.2	1399.2

	89-04-01	89-04-08	89-04-15	Totals
Accept/Bench Tst	65.0	10.0	6.0	332.0
Implementation	12.0	16.0	19.0	380.6
Isolation	9.0	1.0	9.0	242.3
Other	74.0	1.0	3.0	121.0
Change Design	19.0	12.0	10.0	369.3
Unit/System Tst	19.0	12.0	18.0	269.0
Total	198.0	52.0	65.0	1714.2
Cumulative Total	1597.2	1649.2	1714.2	

Figure 2-66.   Single Project Maintenance Activity Hours (3 of 3)

Possible Message

Message: The project name xxxx is invalid

Explanation: This project name does not exist in the database.

2.4.2.2.9   Single Project Manpower Hours Report

This report produces output detailing the number of hours logged by various personnel during a given timeframe for a given project.   These data come from the PRFs that have been completed for the project.

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Option Number	Description	Sample Output
1	Total and average weekly manpower hours charged to the project, organized by technical and management personnel charging to the project	Figure 2-67 (Part 1)
2	Total manpower hours for each phase of the project, grouped by technical and management personnel charging to the project	Figure 2-67 (Part 2)
3	Average weekly manpower hours for each phase of the project, grouped by technical and management personnel charging to the project	Figure 2-67 (Part 3)
4	Total weekly manpower hours for each of the technical and management personnel charging to the project	Figure 2-67 (Part 4)

Possible Message

Message: Phase dates are not available for xxxx

Explanation: This message will appear on the hours by phase sections of the report (Option 2) if there are no phase dates for this project.

Manpower Hours Report (Summary of Hours)

09/07/88   07:30:22   Project: EXAMPLE

Estimates at Completion			Phases	Start	End
No. of Components:	474		Design	88/01/02	88/08/20
Lines of Code:	67000		Code and Test (Imple	88/08/20	89/04/22
Programmer hours:	9677.0		System Test	89/04/22	89/08/05
Management hours:	3000.0		Acceptance Test	89/08/05	89/11/04
Services hours:	962.0		Cleanup	89/11/04	89/11/04
Last Estimate Date:	88/08/22		Maintenance	89/11/04	89/12/30

	Total Hours To Date	Average Weekly Hours To Date
PROGRAMMER1	1117.0	31.0
PROGRAMMER2	1149.0	31.9
PROGRAMMER3	111.0	3.1
PROGRAMMER4	170.0	4.7
PROGRAMMER5	438.0	12.2
PROGRAMMER6	23.0	.6
All Programmers	3008.0	83.6

Figure 2-67. Single Project Manpower Hours (1 of 4)

Total Manpower Hours by Phase

	Pre-Project	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance	Post-Project
PROGRAMMER1	.0	1117.0	.0	.0	.0	.0	.0	.0
PROGRAMMER2	.0	1149.0	.0	.0	.0	.0	.0	.0
PROGRAMMER3	.0	111.0	.0	.0	.0	.0	.0	.0
PROGRAMMER4	.0	170.0	.0	.0	.0	.0	.0	.0
PROGRAMMER5	.0	438.0	.0	.0	.0	.0	.0	.0
PROGRAMMER6	.0	23.0	.0	.0	.0	.0	.0	.9
ALL MANPOWER	.0	3008.0	.0	.0	.0	.0	.0	.0

Figure 2-67. Single Project Manpower Hours (2 of 4)

Average Weekly Manpower Hours by Phase

	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance
PROGRAMMER1	33.8	.0	.0	.0	.0	.0
PROGRAMMER2	34.8	.0	.0	.0	.0	.0
PROGRAMMER3	3.4	.0	.0	.0	.0	.0
PROGRAMMER4	5.2	.0	.0	.0	.0	.0
PROGRAMMER5	13.3	.0	.0	.0	.0	.0
PROGRAMMER6	.7	.0	.0	.0	.0	.0
ALL MANPOWER	91.2	.0	.0	.0	.0	.0

Figure 2-67. Single Project Manpower Hours (3 of 4)

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09/07/88   07:38:39   Project : EXAMPLE

	88-01-02	88-01-09	88-01-16	88-01-23	88-01-30	88-02-06	88-02-13	88-02-20	88-02-27	88-03-05	88-03-12	88-03-19
PROG1	20.0	20.0	20.0	20.0	44.0	40.0	40.0	42.0	41.0	44.0	33.0	40.0
PROG2	18.0	28.0	40.0	42.0	38.0	32.0	32.0	37.5	40.0	32.0	40.0	39.0
PROG3	2.0	2.0	2.0	.0	6.0	7.0	6.0	4.0	4.0	1.0	3.0	2.0
PROG4	5.0	4.0	4.0	5.0	5.0	4.0	3.0	5.0	4.0	5.0	4.0	.0
PROG5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
PROG6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Total	45.0	54.0	66.0	67.0	93.0	83.0	81.0	88.5	89.0	82.0	80.0	81.0
Cumulative Total	45.0	99.0	165.0	232.0	325.0	408.0	489.0	577.5	666.5	748.5	828.5	909.5

	88-03-26	88-04-02	88-04-09	88-04-16	88-04-23	88-04-30	88-05-07	88-05-14	88-05-21	88-05-28	88-06-04	88-06-11
PROG1	40.0	48.0	50.0	40.0	.0	16.0	24.0	40.0	33.0	40.0	.0	42.0
PROG2	40.0	32.0	38.5	30.0	36.0	36.0	19.0	40.0	40.0	31.0	40.0	32.0
PROG3	2.0	4.0	4.0	8.0	8.0	6.0	4.0	3.0	2.0	4.0	2.0	1.0
PROG4	9.0	6.0	5.0	8.0	5.0	6.0	4.0	4.0	4.0	4.0	5.0	.0
PROG5	.0	.0	.0	.0	.0	.0	.0	.0	.0	32.0	32.0	19.0
PROG6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Total	91.0	90.0	97.5	86.0	49.0	64.0	51.0	87.0	79.0	111.0	79.0	94.0
Cumulative Total	1000.5	1090.5	1188.0	1274.0	1323.0	1387.0	1438.0	1525.0	1604.0	1715.0	1794.0	1888.0

	88-06-18	88-06-25	88-07-02	88-07-09	88-07-16	88-07-23	88-07-30	88-08-06	88-08-13	88-08-20	88-08-27	88-09-03
PROG1	44.0	48.0	33.0	53.0	45.0	48.0	29.0	.0	40.0	.0	.0	.0
PROG2	40.0	.0	36.0	40.0	40.0	44.0	44.0	36.0	36.0	.0	.0	.0
PROG3	3.0	1.0	3.0	.0	2.0	2.0	1.0	2.0	10.0	.0	.0	.0
PROG4	.0	8.0	4.0	6.0	8.0	6.0	7.0	12.0	11.0	.0	.0	.0
PROG5	34.0	52.0	32.0	40.0	37.5	40.0	40.0	39.5	40.0	.0	.0	.0
PROG6	3.0	3.0	2.0	2.0	5.0	3.0	.0	3.0	2.0	.0	.0	.0
Total	124.0	112.0	110.0	141.0	137.5	143.0	121.0	92.5	139.0	.0	.0	.0
Cumulative Total	2012.0	2124.0	2234.0	2375.0	2512.5	2655.5	2776.5	2869.0	3008.0	3008.0	3008.0	3008.0

Totals

PROG1	1117.0
PROG2	1149.0
PROG3	111.0
PROG4	170.0
PROG5	438.0
PROG6	23.0
Total	3008.0

Figure 2-67.   Single Project Manpower Hours (4 of 4)

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2.4.2.2.10 Single Project SEL Forms Report

This report produces output that details the contents of the COF, CRF, PRF, SPF, and DSF SEL forms submitted for the project.

Option Number	Description	Sample Output
1	Produces output detailing all the COFs submitted for a given project	Figure 2-68 (Part 1)
2	Produces output detailing all the CRFs submitted for a given project	Figure 2-68 (Part 2)
3	Produces output detailing all the PRFs submitted for a given project	Figure 2-68 (Part 3)
4	Produces output detailing all the Cleanroom PRFs submitted for a given project	Figure 2-68 (Part 4)
5	Produces output detailing all the SPFs submitted for a given project	Figure 2-68 (Part 5)
6	Produces output detailing all the DSFs submitted for a given project	Figure 2-68 (Part 6)

Possible Message

Message: No data for project: <Project Name>

Explanation: This will appear on the DSF report if there are no DSF data for the project.

2.4.2.2.11 Single Project SEL Maintenance Forms Report

This report produces output detailing the contents of the WMEF and MCRF SEL Maintenance forms submitted for the project.

Option Number	Description	Sample Output
1	Produces output detailing all the MCRFs submitted for a given project.	Figure 2-69 (Part 1)
2	Produces output detailing all the WMEFs submitted for a given project.	Figure 2-69 (Part 2)

09/07/88   09:02:42   Project: EXAMPLE

Total Number of COF Forms : 246

Form Number	Subsystem Prefix	Component Name	Purpose(s)	Programmer	Component Description	Dates	Status
C00001	UT	UNVEC	ALCOMP	PROG1	Orig: OLDUC Diff: 2 Type: FORTRAN	Crt: 02/19/88 Form: 02/05/88	HCCORRECT
C00003	CM	ACOPRM		PROG1	Orig: NEW Diff: 2 Type: INCL	Crt: 02/19/88 Form: 02/05/88	HCCORRECT
C00004	CM	ATTPRM		PROG1	Orig: NEW Diff: 2 Type: INCL	Crt: 02/19/88 Form: 02/05/88	HCERROR
C00005	CM	CSSPRM		PROG2	Orig: NEW Diff: 2 Type: INCL	Crt: 02/19/88 Form: 02/05/88	HCCORRECT
C00006	CM	DIRPRM		PROG2	Orig: NEW Diff: 2 Type: INCL	Crt: 02/19/88 Form: 02/05/88	HCCORRECT
C00007	CM	DSSPRM		PROG3	Orig: NEW Diff: 2 Type: INCL	Crt: 02/19/88 Form: 02/05/88	HCCORRECT

Figure 2-68.   Single Project SEL Forms (1 of 6)

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Change Report Form Report
(Detailed Listing)

Total Number of CRF Forms : 100

Form Information:	Components		Change Statistics	Errors	Use of Ada	Ada Errors
No: M12280	1 changed		Detmd:04/25/88	Srce: DESIGN	Contr: N	Doc OK:
Date: 05/09/88	1 examined		Compl:04/25/88	Class:INTERI	Features	Cause:
Prog: WSHOAN	SHEMADDING_UTILITIES_		Isol: 1HR	Omis: Y		Resources:
Stat: HCCORRECT			Impl: 1HR	Comis:N		Tools:
			Type: ERRCO	Typo: N		
			One: Y			
			Othrs:Y			
			Pares:Y			
No: M12784	1 changed		Detmd:06/23/88	Srce: CODE	Contr: Y	Doc OK: Y
Date: 06/23/88	3 examined		Compl:06/23/88	Class:INTERI	Features	Cause: INCOF
Prog: FBRECHBIEL	UTATTITUDE_MATH		Isol: 1DAY	Omis: Y	OVERLOAD	Resources:
Stat: HCCORRECT			Impl: 1HR	Comis:N	PACK	MEMORY
			Type: ERRCO	Typo: N		Tools:
			One: Y			SYMDEB
			Othrs:Y			
			Pares:Y			

Figure 2-68.   Single Project SEL Forms (2 of 6)

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09/07/88   09:23:45   Project: EXAMPLE

Total Number of PRF Forms : 38

Form Number	Form Date	Programmer	Pr Des Hours	Crt Des Hours	R/R Des Hours	Wrt Cod Hours	R/R Cod Hours	Tst Cod Hours	Debug Hours	Int Tst Hours	Acc Tst Hours	Other Hours	Sec C Hours	Status
P00001	12/25/87	PROG1	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		HCCORRECT
P00003	01/01/88	PROG2	14.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0		HCCORRECT
P00127	01/08/88	PROG3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0		HCCORRECT
P00128	01/08/88	PROG2	8.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0		HCCORRECT
P00355	12/25/87	PROG2	10.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0		HCCORRECT
P00420	12/11/87	PROG4	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5		HCCORRECT
P00421	12/11/87	PROG1	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.5		HCCORRECT
P00422	12/11/87	PROG2	2.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0		HCCORRECT
P00423	12/11/87	PROG5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0		HCCORRECT
P00428	12/18/87	PROG2	5.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0		HCCORRECT
P00429	12/18/87	PROG6	2.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0		HCCORRECT
P00430	12/18/87	PROG3	1.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5		HCCORRECT
P00431	12/18/87	PROG5	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0		HCCORRECT
P00432	12/18/87	PROG1	2.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5		HCCORRECT
P00433	12/18/87	PROG4	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0		HCCORRECT
P00513	01/15/88	PROG5	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.0		HCCORRECT
P00603	01/15/88	PROG1	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		HCCORRECT
P00604	01/15/88	PROG2	4.0	.0	.0	.0	.0	.0	.0	.0	.0	18.0		HCCORRECT
P00605	01/15/88	PROG4	.0	.0	.0	.0	.0	.0	.0	.0	.0	18.0		HCCORRECT
P00613	01/22/88	PROG1	.0	.0	.0	.0	.0	.0	.0	.0	.0	24.0		HCCORRECT
P00614	01/22/88	PROG4	.0	.0	.0	.0	.0	.0	.0	.0	.0	24.0		HCCORRECT
P00670	01/29/88	PROG3	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0		HCCORRECT
P00671	01/29/88	PROG2	4.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0		HCCORRECT
P00672	01/29/88	PROG4	3.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0		HCCORRECT
P00673	01/29/88	PROG1	3.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0		HCCORRECT
P00675	01/29/88	PROG6	22.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0 REUSE: 8.0		HCCORRECT
P00688	01/22/88	PROG6	.0	.0	.0	.0	.0	.0	.0	.0	.0	24.0		HCCORRECT
P00689	01/15/88	PROG6	.0	.0	.0	.0	.0	.0	.0	.0	.0	16.0		HCCORRECT
P00690	01/22/88	PROG3	.0	.0	.0	.0	.0	.0	.0	.0	.0	16.0		HCCORRECT
P00691	01/22/88	PROG2	4.0	.0	.0	.0	.0	.0	.0	.0	.0	24.0		HCCORRECT
P00776	02/12/88	PROG3	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0		HCCORRECT
P00777	02/12/88	PROG1	3.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0		HCCORRECT
P00778	02/12/88	PROG2	6.0	.0	.0	.0	.0	.0	.0	.0	.0	18.0		HCCORRECT
P00779	02/12/88	PROG4	5.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0		HCCORRECT
P00780	02/12/88	PROG5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0		HCCORRECT
P00846	02/12/88	PROG6	14.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0		HCCORRECT
P00848	02/26/88	PROG5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	6.5		UNCHK
P00851	02/26/88	PROG6	18.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0		UNCHK

Figure 2-68. Single Project SEL Forms (3 of 6)

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Cleanroom Personnel Resource Form Report
(Detailed Listing)

Total Number of Cleanroom PRF Forms : 38

Form Number	Form Date	Programmer	Pr Des Hours	Pr Tst Hours	Cr Des Hours	Verify Hours	Rv Des Hours	Vr Cod Hours	RR Cod Hours	In Tst Hours	Rs SFR Hours	Ac Tst Hours	Other Hours	Sec C Hours	Status
R00002	01/13/89	Programmer1	2.0	4.0	6.0	3.0	8.0	5.0	6.0	43.0	80.0	.0	.0		UNCHK
R00004	02/10/89	Programmer2	4.0	5.0	6.0	7.0	3.0	.5	.2	10.0	9.0	.0	.0		UNCHK
R00005	09/16/88	Programmer2	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	8.0	7.0	DOCMT: 4.0 ENHCE: 5.0 REUSE: 3.0 REWRK: 6.0	UNCHK
R00006	03/03/89	Programmer3	4.0	.0	6.0	.0	8.0	.0	1.0	2.0	3.0	4.0	5.0	DOCMT: 8.0 ENHCE: 7.0 REUSE: 9.0 REWRK: 6.0	UNCHK
R00007	02/17/89	Programmer4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.0	.0	.0	DOCMT: 1.0 REWRK: 1.0	UNCHK
R00008	02/24/89	Programmer3	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	.0	8.0	.0	ENHCE: 8.0 REUSE: 8.0	UNCHK

Figure 2-68.   Single Project SEL Forms (4 of 6)

Services/Products Forms Report
(Detailed Listing)

Total Number of SPF Forms: 101

Form Number	Form Date	Tech Pubs Hours	Secretary Hours	Librarian Hours	Other Hours	Proj Mgmt Hours	Computer Data			Module Count	Changes Count	Line Count	Status
							CPU ID	Hrs	Runs				
37	10/11/85	.0	.0	.0	5.0	.0	IBM4341	.3	125	303	471	33166	UNCHK
							TSO	.4	125				
38	10/18/85	12.0	.0	.0	15.0	.0	IBM4341	.3	125	321	518	37463	HCERROR
							TSO	.4	125				
39	10/25/85	18.5	.0	.0	10.0	10.0	IBM4341	.3	125	331	539	39126	UNCHK
							TSO	.4	125				
40	11/01/85	16.5	24.5	.0	8.0	10.0	IBM4341	.3	125	377	622	44691	HCCORRECT
							TSO	.4	125				
41	11/08/85	15.0	.5	.0	5.0	.0	IBM4341	.6	191	394	665	48441	HCCORRECT
							TSO	.4	180				

Figure 2-68.   Single Project SEL Forms (5 of 6)

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02/02/90   14:43:05   Project: EUVEDSIM

Form Number	Form Date	Design Desgn Targ.	Design Desgn Comp.	Code Code Targ	Code Mod. Comp	System Testing Test Targ	System Testing Unique Runs	System Testing Tests Passed	System Testing Test Runs	Acceptance Testing Test Targ	Acceptance Testing Unique Runs	Acceptance Testing Tests Passed	Acceptance Testing Test Runs	Discrepancies Discr Reprtd	Discrepancies Discr Resolv	Spec Mod Spec Sub	Spec Mod Spec Imp	Questions Qst Sub	Questions Qst Ans
D00042	04/14/89	573	382																
D00054	04/28/89	573	471																
D00075	05/12/89	573	572																
D00074	05/26/89	573	573	573															
D00084	06/09/89			591	117														
D00107	06/23/89			591	123														
D00113	07/07/89			591	145														
D00020	07/21/89			591	160														
D00007	08/04/89			608	332													134	112
D00001	08/18/89			616	332									4	4			144	122
D00132	09/01/89			615	333									4	4			148	122
D00139	09/15/89			612	333									4	4			150	122
D00155	09/29/89			620	333									4	4			171	136
D00166	10/13/89			717	353									4	4			171	137
D00183	10/27/89			714	391									5	4			177	141

Figure 2-68.   Single Project SEL Forms (6 of 6)

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Total Number of MCRF Forms : 15

FORM INFORMATION	CHANGE CHARACTERISTICS	ESTIMATED EFFORT	CHANGED OBJECTS	TYPE OF CODE CHANGE	LINES OF CODE			NUMBER OF COMPONENTS			ADDED COMPONENTS		
No: 809876 OSMR: 9876 Date: 03/12/89 Prog: MSO Stat: UNCHK	Type: ADAPTATION Cause: DESIGN	Isolate: 1HR Complete: 1HR	CODE REQMTDOC SYSDESC USERGUID	DATAVAL	Added: Changed: 12 Deleted:			Added: Changed: 12 Deleted:			New: Reused: Modified:		
No: B39833 OSMR: 3939 Date: 01/01/89 Prog: MSO Stat: UNCHK	Type: ADAPTATION Cause: OTHER	Isolate: 1HR Complete: 1HR	REQMTDOC	OTHER	Added: 12 Changed: 13 Deleted: 14			Added: 12 Changed: 34 Deleted: 56			New: Reused: 12 Modified: 3		
No: B44738 OSMR: 9876 Date: 04/12/88 Prog: MSO Stat: UNCHK	Type: CORRECTION Cause: PRECH	Isolate: 1MONTHMORE Complete: 1MONTHMORE	CODE	DATAVAL	Added: Changed: 67 Deleted:			Added: 1 Changed: 67 Deleted:			New: Reused: Modified: 1		
No: B4545 OSMR: 8383 Date: 03/12/88 Prog: MSO Stat: UNCHK	Type: ADAPTATION Cause: REQMTSPEC	Isolate: 1MONTH Complete: 1WEEK	REQMTDOC SYSDESC	INTERE	Added: Changed: Deleted: 23			Added: 3 Changed: Deleted: 23			New: Reused: 3 Modified: 3		
No: B46455 OSMR: 3876 Date: 12/01/88 Prog: MSO Stat: UNCHK	Type: ENHANCEMNT Cause: DESIGN	Isolate: 1MONTHMORE Complete: 1WEEK	CODE DESIGNDO OTHER REQMTDOC SYSDESC USERGUID	INTERE	Added: 12 Changed: 56 Deleted: 78			Added: Changed: 3 Deleted: 3			New: Reused: Modified: 2		
No: B50000 OSMR: 1234 Date: 01/12/89 Prog: MSO Stat: UNCHK	Type: CORRECTION Cause: REQMTSPEC	Isolate: 1DAY Complete: 1DAY	CODE	LOGIC	Added: 12 Changed: 13 Deleted: 14			Added: 15 Changed: 16 Deleted: 17			New: 3 Reused: 2 Modified: 1		

Figure 2-69. Single Project SEL Maintenance Forms (1 of 2)

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04/27/89   08:22:32   Project: Project1

Total Number of Weekly Maintenance Effort Forms : 88

Form Number	Form Date	Programmer	Class Hours				Activity Hours						
			Correct	Enhance	Adapt	Other	Isolate	Change Design	Implemnt	Unit/ Sys Test	Accept/ Ben Test	Other	Status
V00000	03/03/89	Programmer1	1.0	3.0	1.0	3.0	2.0	.0	2.0	.0	2.0	2.0	UNCHK
V00001	03/03/89	Programmer2	3.3	3.3	3.3	3.3	2.3	2.3	2.0	2.0	2.0	2.0	ICCORRECT
V00002	03/03/89	Programmer3	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	ICERROR
V00003	03/03/89	Programmer4	.0	3.0	2.0	2.0	.0	3.0	2.0	2.0	.0	.0	UNCHK
V00010	03/17/89	Programmer3	.0	.0	10.0	10.0	.0	10.0	5.0	.0	5.0	.0	UNCHK
V00014	03/24/89	Programmer5	2.0	4.0	3.0	5.0	7.0	.0	.0	7.0	.0	.0	UNCHK
V00015	03/10/89	Programmer6	9.0	9.0	9.0	.0	.0	10.0	5.0	5.0	5.0	2.0	UNCHK

Figure 2-69.   Single Project SEL Maintenance Forms (2 of 2)

Possible Messages

Message: The project name **xxxx** is invalid

Explanation: This project name does not exist in the database.

Message: No MCRF data for project **xxx**

Explanation: Option 1 was selected for a project without maintenance change information.

Message: No WMEF data for project **xxx**

Explanation: Option 2 was selected for a project without weekly maintenance effort data.

2.4.2.2.12   Single Project Services Hours Report

This report produces output detailing the number of hours logged by various support personnel during a given timeframe for a given project.   These data come from the SPF forms that have been completed for the project.

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Option Number	Description	Sample Output
1	Total and average weekly services hours charged to the project, organized by various support personnel charging to the project	Figure 2-70 (Part 1)
2	Total services hours for each phase of the project, grouped by the various support personnel charging to the project	Figure 2-70 (Part 2)
3	Average weekly services hours for each phase of the project, grouped by the various support personnel charging to the project	Figure 2-70 (Part 3)
4	Total weekly services hours for each of the various support personnel charging to the project	Figure 2-70 (Part 4)

Services Hours Report (Summary of Hours)

09/07/88   07:52:25   Project: EXAMPLE

Estimates at Completion			Phases	Start	End
No. of Components:	474		Design	88/01/02	88/08/20
Lines of Code:	67000		Code and Test (Imple	88/08/20	89/04/22
Programmer hours:	9677.0		System Test	89/04/22	89/08/05
Management hours:	3000.0		Acceptance Test	89/08/05	89/11/04
Services hours:	962.0		Cleanup	89/11/04	89/11/04
Last Estimate Date:	88/08/22		Maintenance	89/11/04	89/12/30

	Total Hours To Date	Average Weekly Hours To Date
OTHER SUPPORT	65.5	1.8
PROGRAM MANAGEMENT	102.0	2.8
SECRETARY	42.0	1.2
TECHPUBS	189.0	5.3
All services	398.5	11.1

Figure 2-70. Single Project Services Hours (1 of 4)

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Total Services Hours by Phase

09/07/88   07:52:47   Project : EXAMPLE

	Pre-Project	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance	Post-Project
OTHER SUPPORT	.0	65.5	.0	.0	.0	.0	.0	.0
PROGRAM MANAGEMENT	.0	102.0	.0	.0	.0	.0	.0	.0
SECRETARY	.0	42.0	.0	.0	.0	.0	.0	.0
TECHPUBS	.0	189.0	.0	.0	.0	.0	.0	.0
ALL SERVICES	.0	398.5	.0	.0	.0	.0	.0	.0

Figure 2-70.   Single Project Services Hours (2 of 4)

Average Weekly Services Hours by Phase

09/07/88   07:53:17   Project : EXAMPLE

	Design	Code and Unit Test	System Test	Acceptance Test	Cleanup	Maintenance
OTHER SUPPORT	2.0	.0	.0	.0	.0	.0
PROGRAM MANAGEMENT	3.1	.0	.0	.0	.0	.0
SECRETARY	1.3	.0	.0	.0	.0	.0
TECHPUBS	5.7	.0	.0	.0	.0	.0
ALL SERVICES	12.1	.0	.0	.0	.0	.0

Figure 2-70.   Single Project Services Hours (3 of 4)

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Services Hours Report (Detailed Weekly Hours)

	88-01-02	88-01-09	88-01-16	88-01-23	88-01-30	88-02-06	88-02-13	88-02-20	88-02-27	88-03-05	88-03-12	88-03-19
OTHSUPP	.0	2.5	4.0	4.0	8.0	.0	2.0	3.0	.0	6.0	.0	4.0
PROGMGMT	6.0	6.0	3.0	2.0	6.0	2.0	4.0	2.0	4.0	4.0	8.0	9.0
SECRTARY	2.0	.5	.0	2.5	.0	.0	1.0	3.0	2.0	3.0	2.0	.0
TECHPUBS	1.0	.0	.0	.0	.0	3.0	.0	.0	.0	4.5	20.5	20.0
Total	9.0	9.0	7.0	8.5	14.0	5.0	7.0	8.0	6.0	17.5	30.5	33.0
Cumulative Total	9.0	18.0	25.0	33.5	47.5	52.5	59.5	67.5	73.5	91.0	121.5	154.5

	88-03-26	88-04-02	88-04-09	88-04-16	88-04-23	88-04-30	88-05-07	88-05-14	88-05-21	88-05-28	88-06-04	88-06-11
OTHSUPP	.0	.0	.0	.0	.0	3.0	5.0	4.0	4.0	.0	.0	4.0
PROGMGMT	2.0	5.0	.0	4.0	2.0	1.0	4.0	2.0	2.0	2.0	2.0	3.0
SECRTARY	4.0	2.0	.0	3.0	.0	.0	3.0	.0	2.0	3.0	.0	2.0
TECHPUBS	3.5	28.5	.0	9.5	5.0	3.5	.0	.0	.0	1.0	7.0	.0
Total	9.5	35.5	.0	16.5	7.0	7.5	12.0	6.0	8.0	6.0	9.0	9.0
Cumulative Total	164.0	199.5	199.5	216.0	223.0	230.5	242.5	248.5	256.5	262.5	271.5	280.5

	88-06-18	88-06-25	88-07-02	88-07-09	88-07-16	88-07-23	88-07-30	88-08-06	88-08-13	88-08-20	88-08-27	88-09-03
OTHSUPP	4.0	.0	6.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0
PROGMGMT	2.0	2.0	1.0	10.0	2.0	.0	.0	.0	.0	.0	.0	.0
SECRTARY	4.0	.0	.0	.0	3.0	.0	.0	.0	.0	.0	.0	.0
TECHPUBS	21.5	12.5	13.0	24.5	10.5	.0	.0	.0	.0	.0	.0	.0
Total	31.5	14.5	20.0	36.5	15.5	.0	.0	.0	.0	.0	.0	.0
Cumulative Total	312.0	326.5	346.5	383.0	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5

	Totals
OTHSUPP	65.5
PROGMGMT	102.0
SECRTARY	42.0
TECHPUBS	189.0
Total	398.5

Figure 2-70.   Single Project Services Hours (4 of 4)

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Possible Messages

Message: Not Available

Explanation: This will appear under the Average Weekly
Hours Column if there are no phase dates for
the project. The average hours are calculated
by dividing the total hours by the number of
weeks since the project started. This number
of weeks cannot be calculated if the phase
dates are not known.

Message: Phase dates are not available for **xxxx**

Explanation: This message will appear on the hours by phase
sections of the report (Option 2) if there are
no phase dates for this project.

2.4.2.3 Miscellaneous Reports

Miscellaneous reports are reports that contain data that are
not specific to any project. Section 2.4.1.22 contains
information on generating a miscellaneous report.

2.4.2.3.1 Miscellaneous Encoded Values Report

This report produces output detailing the personnel codes,
computer codes, and encoded values stored in the database.

Option Number	Description	Sample Output
1	Outputs a listing of all the personnel in the database, including short names, long names, and codes	Figure 2-71 (Part 1)
2	Outputs a listing of all the computer names in the database, both the short and long names	Figure 2-71 (Part 2)
3	Outputs a listing of all the validation fields, the field's values, and the field's codes	Figure 2-71 (Part 3)

09/07/88   08:30:01   Report Type: Miscellaneous

Personnel Summary

Form Name	Full Name	Internal Programmer Id	Date Entered
AAGRE	ANNE AGRE	545	06/01/88
AFERNANDEZ	Al Fernandez	581	09/02/88
ALYUBOMIRSKY	ANATOLY LYUBOMIRSKY	548	06/14/88
ANESKIN	AARON NESKIN	168	01/04/88
ATADG	ATADG ACCEPTANCE TEST (TCOPS)	221	01/04/88
ATAUBER	ANDREW TAUBER	553	08/15/88
ATDBMS	ATDBMS ACCEPTANCE TEST (TCOPS)	380	01/04/88
ATUI	ATUI ACCEPTANCE TEST (TCOPS)	358	01/04/88
ATUTIL	ATUTIL ACCEPTANCE TEST (TCOPS)	225	01/04/88
BALDRIDGE	BALDRIDGE	425	01/04/88
BANKS	BANKS	15	01/04/88
BCHU	BEN CHU	445	01/04/88
BEDWARDS	BETSY EDWARDS	62	01/04/88
BGROVEMAN	BRIAN GROVEMAN	542	04/25/88
BHUGHES	B HUGHES	58	01/04/88
BLANK	BLANK	268	01/04/88

Figure 2-71.   Miscellaneous Encoded Values (1 of 3)

09/07/88   08:37:04   Report Type: Miscellaneous

Computer Summary

Computer Short Name	Computer Full Name
360-75	IBM S/360 - 75
360-75C1	IBM S/360 - 75 C1
360-91	IBM S/360 - 91
360-95	IBM S/360 - 95
ANY360	Any IBM 360 computer
ANYPDP	Any DEC PDP computer
IBM4341	FDF IBM 4341 (F3)
INT8086	Intel 8086 Microproc
LSI11	LSI-11/70 Microproc
NAS8040	FDF NAS 8040 (F1,F2)
OTHER	Other computer
PDP11	STL PDP 11/70
TSO	Time Sharing Option
VAX780	STL VAX 11/780
VAX8600	DSTL VAX 8600

Figure 2-71.   Miscellaneous Encoded Values (2 of 3)

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Validation Fields

Field where used	Value (Description)	Code
ACTIVITY	Create Design	CREDES
ACTIVITY	Read/Review Code	RDREVCOD
ACTIVITY	Test Code Units	TSTCODUN
ACTIVITY	Debugging	DEBUG
ADA_FEATURE	Generics	GEN
ADA_FEATURE	Recursion	RECUR
ADA_FEATURE	System Dependent Features	SYSDEPF
ADA_FEATURE	Tasking	TASK
CH_TYPE	Improvement of User Services	IMPUS
CH_TYPE	Improvement of Clarity, Maintainability, or Documentation	IMPCM
CH_TYPE	Implementation of Requirements Change	IMPRE
CH_TYPE	Other Change Type	OTHCH
COM_TYPE	Include File	INCL
COM_TYPE	Assembly Language Component	ALC
COM_TYPE	Ada Package Body	ADAPACKB
COM_TYPE	Ada Task Body	ADATASKB

Figure 2-71.   Miscellaneous Encoded Values (3 of 3)

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SECTION 3 - DATA ENTRY

3.1 INTRODUCTION

Data entry personnel are concerned with entering data into the database, updating existing data, deleting existing data, and performing quality assurance on the data. They also have access to the functions available to the general user as described in Section 2 and upload/download functions as described further in Section 3.7. In general, the following steps are followed when entering data into the SEL database:

1. Enter data into the database from data written on SEL forms.

2. Perform quality assurance on the data.

3. Correct or delete bad data.

These steps are executed by using the menu system. Operation of the various screens will be described in the following sections. Section 3.2 describes the process for inserting data into the database. Section 3.3 contains the procedures for updating existing data. Section 3.4 describes the procedures for deleting data. Section 3.5 explains the process for quality assuring data. Section 3.6 describes general database support functions. Section 3.7 describes the DAMSEL PC system.

3.2 INSERTING DATA

The data insertion screens are intended to be used for entering data from completed SEL forms into the database. An insert screen is shown in Figure 2-10. A sample insert session is shown in Appendix A.

The general procedure to be followed when inserting data is as follows:

1. Select option 1 (Form function) from the Main menu.

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2. Select option 2 (Insert new data) from the Form
    Functions menu.

3. When the Insert menu is displayed, select the option
    number associated with the type of data to be in-
    serted.

4. Enter data into the appropriate fields, correspond-
    ing to the information written on the SEL form.
    Each field is validated after it is entered.

5. After all the data have been entered, press the
    <Commit> key to save the data to the database.

6. The user may exit from the insert screen at any
    point by pressing the <Exit/Cancel> key.

    <u>NOTE</u>: Data not yet saved by the <Commit> key will
             not be saved to the database.

The keypad diagram shown in Figure 3-1 highlights the keys
that are available for the insert screens. There are many
keys used by each of the insert screens. These keys are
listed and explained as follows. Keys that are specific to
a given insert screen will be described in the section de-
scribing the individual insert screen.

<div align="center"><u>General Keys</u></div>

<Next Field>   This key allows the user to move from
                            one field to the next. When the cur-
                            sor is positioned on the last field
                            on the screen, this key will cause
                            the cursor to loop back to the first
                            field on the screen.

<Previous Field>   This key allows the user to move from
                            one field to the previous field.
                            When the cursor is positioned on the
                            first field on the screen, this key
                            will move the cursor to the last
                            field on the screen.
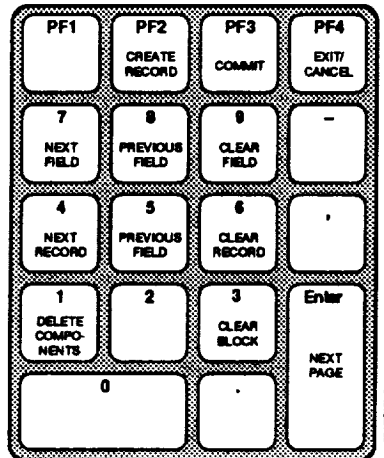
Figure 3-1. Insert Keypad

<Commit>   This key causes the data currently on
                              the screen to be stored to the data-
                              base. Additional validations are
                              performed on the data at this time.
                              If an error is found, the user will
                              be notified, and the data will not be
                              saved. See the list of General Messages
                              below for additional information.

                              <u>NOTE</u>: It is good practice to press
                              the <Next Field> key after the last
                              field is entered before pressing the
                              <Commit> key. This ensures that the
                              field is validated before an attempt
                              is made to save the data to the data-
                              base. The fields are validated dur-
                              ing execution of the <Commit> key,
                              but the validation is much quicker
                              when performed with the <Next Field>
                              key.

<Clear Block>   This key will clear the entire screen
                              in preparation for entering a new form.

                              <u>NOTE</u>: Any data on the screen when
                              this key is pressed will not be saved
                              in the database.

<Clear Field>   This key will clear the field where
                              the cursor is currently positioned.
                              The first time this key is pressed,
                              any data after the cursor are erased.
                              The second time this key is pressed,
                              the entire field is cleared.

<Exit/Cancel>   This key exits from the screen and
                              returns to the Insert menu.

                              NOTE: Any data on the screen when
                              this key is pressed will not be saved
                              in the database.

<List Field Values>   This key will cause all the values
                              that are valid for the current field
                              to be displayed. The values are dis-
                              played one at a time. A message is
                              displayed instructing the user how to
                              move through the list of values and
                              select a value. This key is only
                              available on certain fields on each
                              screen. These specific field names
                              will be listed in the section that
                              describes the particular screen.

General Messages

A number of messages may be displayed while the insert
screens are run. Messages without a solution are informa-
tional. The messages that may be displayed while the data
are inserted are listed below. Messages that are specific
to a given screen are described in the section associated
with that screen.

Message: Field must be entered

Cause: A mandatory field was not entered.

Solution: Enter a value for this field. If you are unsure
             of a value, use the <List Field Values> key if
             available for the field, or exit from the screen
             if you are unable to continue.

Message: Do you want to commit the change you have made? <u>Y</u>

Cause: This message is displayed if the user presses the <Clear Block> or <Exit/Cancel> key after. an error occurred while trying the save the information to the database.

Solution: The user should always respond No to this question. This requires typing an N over the Y that is currently displayed and pressing the <Next Field> key.

Message: Transaction completed--x records processed

Cause: Data have been successfully stored in the database after the user pressed the <Commit> key.

Message: Press RETURN to retrieve next value, PF4 to stop

Cause: This message appears while using the <List Field Values> key.

Solution: Do as the message suggests. If the value you want is currently displayed, press the <Exit/Cancel> key; otherwise, press the <Next Field> key to display the next valid value.

Message: Last value retrieved

Cause: This message is displayed while using the <List Field Values> key. There are no more values to be displayed.

Solution: To see the values again, press the <List Field Values> key again.

Message: Unrecognized command

Cause: The user has pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described above.

Message: Form was NOT inserted

Cause: This message appears after the user has pressed the
       <Clear Block> key. The message reminds the user
       that the data that were on the screen before it was
       cleared were not saved.

Solution: To save the data, reenter it, and press the
          <Commit> key.

Message: Project name not in database. Please reenter

Cause: The user entered a project name that does not exist
       in the database.

Solution: The cursor will be positioned on the project name
          field. The user can either press the <Exit/
          Cancel> key to return to the menu or enter another
          project name. A new project name can be entered
          over the current name, or the current name may be
          blanked out with the <Clear Field> key and the
          new name entered.

Message: Date format is DD-MON-YY

Cause: An invalid date format was entered.

Solution: Reenter the date using the 'DD-MON-YY' format.

Message: Form number already exists. Please reenter

Cause: A form with this number has already been entered in
       the database.

Solution: Verify that the correct form number was typed in.
          The cursor will be positioned on the form number
          field. To retype the form number either type over
          the current form number, or use the <Clear Field>
          key to clear the field and enter another number.

<u>Message</u>: Programmer name not in database. Please reenter

<u>Cause</u>: The user has entered a programmer name that does not
        exist in the database.   .

<u>Solution</u>: Verify that the name was typed in as it appears on
        the form. The name should consist of a first ini-
        tial and a last name. A maximum of 15 characters
        can be entered. If the name was typed in as it
        appears on the form and it still cannot be found
        in the database, contact the DBA. It is possible
        that the name was not spelled correctly on the
        form, or the writing was not legible. Another
        possibility is that the name is a new programmer's
        name and has not yet been added to the database.

Each of the following sections describes a different insert
screen. The screen-specific keys that can be used in each
screen are listed along with the action they cause. Required
fields are listed. Screen-specific error and information
messages will be discussed, along with the appropriate re-
sponses to them.

3.2.1 SUBSYSTEM INSERT

The data should be entered using a SEL SIF. To select this
screen,

1.   Perform steps 1 and 2 of Section 3.2 to display the
      Insert menu.

2.   Enter option 1 (Subsystem data).

Figure 2-7 shows the Subsystem screen as it appears on the
terminal screen. Section 3.2, steps 4 through 6, contains
an explanation of running an insert screen. The mandatory
fields, screen-specific keys, and screen-specific messages
are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date
- Prefix
- Name

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following are additional keys that may be used for this screen:

<Next Record>   This key allows the user to scroll down to enter additional subsystem information. If the cursor is at the last line of the page, this key will scroll some of the current entries off the top of the page to allow the user to enter additional lines of subsystem information.

<Previous Record>   This key allows the user to scroll up to see previous subsystem information that has scrolled off the page.

<List Field Values>   This key is available on

                       Project Name
                       Function

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: Prefix already exists in database for this project. Please reenter

Cause: A subsystem prefix was entered that already exists in the database for this project.

Solution: Verify that the user has typed in the subsystem
            prefix as it appears on the form. If the prefix
            is correct, the user should verify that the cor-
            rect information exists in the database for this
            subsystem. To do this, the user should exit from
            this screen and get into the subsystem view
            screen. If the information that is displayed in
            the view for this subsystem does not match the
            information on the form, he/she should notify the
            DBA.

Message: Invalid subsystem function. Use <Esc-v> to display
          valid options

Cause: An invalid "Function" field value was entered.

Solution: Use the <List Field Values> key to select a valid
            value. If the user is unsure of a value, contact
            the DBA.

3.2.2 COMPONENT ORIGINATION FORM INSERT

The data should be entered from a SEL COF. To select this
screen,

1.   Perform steps 1 and 2 of Section 3.2 to display the
      Insert menu.

2.   Enter option 2 (COF data).

Figure 2-8 shows the COF screen as it will appear on the
terminal screen. Section 3.2, steps 4 through 6, contains
an explanation of running an insert screen. The mandatory
fields, screen-specific keys, and screen-specific messages
are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must
be entered before the data can be stored in the database.
These fields are

● Form Number
● Project Name

- Subsystem Prefix
- Component Name

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following are additional keys that may be used for this screen:

<Next Page>   This key is used to move between pages of the COF insert screen. The COF screen has two pages. The <Next Page> key causes paging in a circular motion. The first time the second page is displayed. From the second screen, the key brings up the first screen.

<List Field Values>   This key is available on

                                Project Name
                                Origin

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: COF form number starts with a C. Please reenter

Cause: The user entered a character other than C as the first character for the COF form number.

Solution: Enter C as the first character for COF form number.

Message: The X position should be a numeric digit. Please reenter

Cause: The user entered non-numeric digits in the X position of the COF form number.

Solution: Enter numeric digits for the second to sixth positions of the form number.

Message: Subsystem prefix not found for this project.
           Please reenter

Cause: This subsystem does not exist in the database for
         this project.

Solution: Verify that the subsystem prefix was typed cor-
            rectly. If so, this may mean that the subsystem
            prefix has not been stored in the database yet.
            Contact the DBA. If the subsystem prefix was
            entered incorrectly, retype it. The cursor will
            be positioned on the subsystem prefix field.
            Either type over the current subsystem name, or
            use the <Clear Field> key to clear the field
            and then enter another subsystem prefix.

Message: Component already exists for this subsystem.
           Please reenter

Cause: The user entered a component name that already exists
         in the database with the same subsystem prefix and
         project name.

Solution: Verify that the component name was typed in as it
            appears on the form. If the component name was
            typed in correctly, a COF was probably already
            stored for this component. The user should verify
            that the information that exists in the database
            for this component corresponds to the information
            on the form. To do this, the user should exit
            from this screen and select the COF view screen.
            If the information that is displayed in the view
            for this component does not match the information
            on the form, notify the DBA.

Message: Must be in range 1 to 5

Cause: The user has entered a number greater than 5 or less
         than 1 in the "Relative Difficulty" field.

Solution: Enter a number between 1 and 5.

Message: Invalid character. Please enter X or blank

Cause: The user entered a character other than an X or a blank in either the "Type of component" field or the "Purpose" field.

Solution: Enter an X next to the appropriate selection or use the <Clear Field> key to blank out the field.

Message: Mandatory fields must be entered before going to next page

Cause: The user pressed the <Next Page> key to go to the second page before entering all the mandatory fields.

Solution: See the Mandatory Fields section above for a list of mandatory fields. Fill in these fields before pressing the <Next Page> key to move to the second page.

Message: Invalid origin type. Hit <Esc-V> to see valid options

Cause: The user entered an invalid value in one of the "Origin Type" fields.

Solution: Check the value that was entered for typographical errors and reenter if necessary. If the correct value is not known, use the <List Field Values> key to see a list of valid values, and select the appropriate one. If the value was entered by mistake and the field should be blank, use the <Clear Field> key to clear the field.

3.2.3 CHANGE REPORT FORM INSERT

The data should be entered using a SEL CRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 3 (CRF data).

Figure 2-9 shows the CRF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains

an explanation of running an insert screen. The mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date
- Programmer
- Form Number
- At least one subsystem/component name

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<Next Page>   This key moves to the next sequential page of the CRF. When the cursor is on page 4, it moves back to page 1.

<Next Record>   This key may be used to scroll through the subsystem prefix component names associated with the current CRF. This key is only active on the component page. It will move the cursor from the current subsystem/component entry to the subsystem field below the current entry.

<Previous Record>   This key may be used to scroll to a previous subsystem prefix/component name associated with the current CRF. This key is only active on the component page. It will move the cursor from the current subsystem/component entry to the subsystem field above the current entry.

<Delete Components>   This key deletes all the components
                       associated with this CRF. The key is
                       only available on the component name
                       page. It is useful when ·it is nec-
                       essary to delete all the components
                       at once.

<Create Record>   This key creates a new space for a
                       subsystem/component name to be en-
                       tered. This allows the user to enter
                       a new component without having to
                       scroll through all the components first.

<Delete Record>   This key deletes the subsystem/
                       component name combination from the
                       line on which the cursor is posi-
                       tioned.

<Clear Record>   This key also deletes the subsystem/
                       component name combination from the
                       line on which the cursor is posi-
                       tioned.

<List Field Values>   This key is available on

                       Project name
                       Effort to isolate the change
                       Effort to implement the change
                       Type of change
                       If so, which feature(s) were
                         involved?
                       Enter the statement that is most true
                       Which, if any, tools aided in the
                         detection and correction of this
                         error?

Messages

Refer to Section 3.2 for a list of messages that may appear
during all insert screens. Following are additional messages
that may appear on this screen:

Message: Must delete the component names before changing the
         project name

Cause: The user attempted to change the project name asso-
         ciated with the current CRF. This is not allowed
         until all the component names associated with the

form have been deleted first because component names are associated with specific projects; therefore, if the project name on the form is changed, the component names will need to be changed, too.

Solution: If it is necessary to change the project name, first position the cursor on the first subsystem prefix in the scrolling area and press the <Clear Field> key. Then use the <Next Field> key to move to the next subsystem field in that scrolling area, and delete that Subsystem/component. Finally, use the <Next Record> key to scroll down, and verify that all the component names have been deleted. Now the project name can be changed.

Message: ERROR--The component name field is blank

Cause: User pressed <Commit> key or <Next Record> or <Previous Record> keys, but the component name field was blank for a nonblank subsystem prefix.

Solution: The cursor will be positioned on the blank component name. Either enter a valid component name, or use the <Delete Record> key to delete the record.

Message: Must be on the component page to scroll

Cause: The user pressed the <Next Record> or <Previous Record> key but was not positioned on the component page.

Solution: Answer Y to the Component Question field on page 1 to move the cursor to the component page.

Message: Duplicate component name please delete

Cause: The user entered a duplicate component name, then tried to commit.

Solution: The cursor will be positioned on the duplicated component name. Delete the duplicate component using the <Delete Record> key.

Message: Invalid subsystem prefix

Cause: The user entered an invalid subsystem prefix.

Solution: Enter a valid subsystem prefix, or use the <Delete Record> key to delete the subsystem.

Message: Invalid subsystem/component combination

Cause: The user entered a subsystem/component name combination that is not valid for this project.

Solution: Enter a valid subsystem/component name combination or use <Delete Record> to delete this subsystem/ component name.

Message: Backspace not allowed. Use <Previous Record> to get to the previous component

Cause: The user attempted to use the <Previous Field> key from the subsystem prefix field. This is not available.

Solution: Use the <Previous Record> key to go to the previous subsystem field.

Message: Invalid component

Cause: The user entered an invalid component name for the current subsystem prefix and project name.

Solution: Enter a valid component name, or use <Delete Record> to delete the subsystem prefix/component name combination.

Message: Use <Next Record> to move to the next subsystem/ component name

Cause: The user attempted to use the <Next Field> key from the component name field. This is not available.

Solution: Use the <Next Record> key to move to the next subsystem prefix field.

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Message: CRF form number starts with M. Please reenter

Cause: The user entered a character other than M as the first character for the CRF form number..

Solution: Enter M as the first character for CRF form number.

Message: The X position should be a numeric digit. Please reenter

Cause: The user entered non-numeric digits in the X position of the CRF form number.

Solution: Enter numeric digits for the second to sixth positions of the form number.

Message: No previous component names to be displayed

Cause: The user pressed the <Previous Record> key in an attempt to scroll before the first component name. This means that the first component name is being displayed.

Solution: To view additional components for this subsystem, the user may attempt to scroll down by using the <Next Record> key.

Message: Invalid subsystem prefix

Cause: The user entered an invalid subsystem prefix.

Solution: Enter a valid subsystem prefix, or use the <Delete Record> key to delete the subsystem.

Message: This is not a valid component for this project

Cause: The user entered an invalid component name for the current subsystem prefix and project name entered.

Solution: Enter a valid component name, or use <Delete Record> to delete the subsystem prefix/component name combination.

Message: Invalid value. Enter a blank or use <Listval> to list the field values

Cause: An invalid value was entered in a field that has the <List Field Values> capability. (Refer to the description of the <List Field Values> key at the start of this section.)

Solution: See the General Keys list in Section 3.2 for an explanation of the <List Field Values> key.

Message: Please enter an N or a Y or a blank

Cause: The user entered a value other than a Y or an N or a blank in either the "Effects of change", "Ada contributed?", or "Documentation okay?" fields.

Solution: The user should enter a Y or an N, if appropriate, or use the <Clear Field> key to blank out the field.

Message: Must be on the first page to scroll through component names

Cause: The user pressed the <Next Record> or <Previous Record> key to scroll through the component names while the cursor was positioned on the second or third page.

Solution: To scroll through the component names, use the <Next Page> key to page to the first page, then use the <Next Record> or <Previous Record> keys to scroll through the names.

Message: Please enter a Y or an N

Cause: The user entered a value other than a Y or an N in the "Error Characteristics" field.

Solution: The user should enter a Y or an N if appropriate.

Message: Invalid Ada feature, use <Listval> to see a list
of the valid features

Cause: The user entered an Ada feature that does not cor-
respond to any of the Ada feature codes stored in the
database.

Solution: Use the <List Field Values> key to scroll through
a list of the valid values for the Ada feature
fields.

Message: Cannot enter a value in this field if change type
is not ERRCO (see p.1)

Cause: The user entered a value in a field that applies only
to error correction changes, but the change type
field on page 1 was not entered as the error correc-
tion code (ERRCO).

Solution: Examine the CRF. If the programmer did not check
change type of error correction but did fill in
the error information in Section 3 of the CRF,
there is a discrepancy. Contact the DBA to find
out if the change should be an error correction
or not. To change the change type field value,
clear the current error field, and move the cursor
back to the change type field.

Message: A(n) **xxxxx** must be specified for an error correc-
tion change

Cause: The user did not enter a value (specified in place of
the **xxx**) that is necessary for a change that is an
error correction (ERRCO). The change type field
appears on page 1.

Solution: Examine the CRF. Verify that all the fields on
the screen were entered as specified by the CRF.
If a required error information field is missing,
contact the DBA.

Message: Invalid character. Please enter X or blank

Cause: The user entered a character other than an X or a blank in either the "Source of error" or the "Error resources" field.

Solution: Enter an X next to the appropriate selection, or use the <Clear Field> key to blank out the field.

Message: This field cannot be entered unless Ada contributed to the change

Cause: The user entered a value in a field that applies only to changes involving Ada but answered N to the question of whether Ada contributed to the change.

Solution: Examine the CRF. If the form notes that Ada did contribute to the change, all the Ada-related fields should be filled in. If the form states that Ada did not contribute to the change, none of the Ada-related fields should be filled in. If there is a discrepancy, contact the DBA.

Message: Invalid tool name, use <Listval> to see a list of the valid tool names

Cause: The user entered a tool name that does not correspond to any of the tool codes in the database.

Solution: Use the <List Field Values> key to scroll through a list of valid tool names, and select one of these.

Message: Invalid cause of Ada error, use <Listval> to see a list of the valid values

Cause: The user entered an Ada error cause name that does not correspond to any of the Ada error cause codes in the data base.

Solution: Use the <List Field Values> key to scroll through a list of valid Ada error cause names, and select one of these.

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Message: Must enter at least one component name

Cause: The user tried to save a CRF to the data base without entering any component names in the component names fields.

Solution: Enter the component names that appear on the CRF. At least one component name must appear on a CRF. If not, then contact the DBA to find the name of the component(s) that were changed.

Message: Please enter an X

Cause: The user entered a character other than an X in one of the "Class of Error" fields.

Solution: Use the <Clear Field> key to blank out the invalid character; then enter an X next to the appropriate error class.

Message: An Ada error cause statement must be entered

Cause: The user did not enter a value in the "Cause of Ada error" field when the change was an error correction and Ada contributed to the change.

Solution: Enter a valid cause of Ada error value into the field as specified on the current CRF. If no value is specified for this field on the form, contact the DBA.

Message: At least one Ada resource must be entered

Cause: The user did not enter a value in the "Ada Resources" field when Ada contributed to the change.

Solution: Enter a valid Ada resource value into the field as specified on the current CRF. If no value is specified for this field on the form, contact the DBA.

Message: At least one Ada tool must be entered

Cause: The user did not enter a value in the "Ada tool" field when Ada contributed to the change.

Solution: Enter a valid error tool value into the field as specified on the current CRF. If no value is specified for this field on the form, contact the DBA.

Message: An Ada error documentation field must be entered

Cause: The user did not enter a value in the "Ada error documentation" field when the change was an error correction and Ada contributed to the change.

Solution: Enter a valid Ada error documentation value into the field as specified on the current CRF. If no value is specified for this field on the form, contact the DBA.

Message: At least one Ada feature must be entered

Cause: The user did not enter a value in the "Ada feature" field when Ada contributed to the change.

Solution: Enter a valid Ada feature value into the field as specified on the current CRF. If no value is specified for this field on the form, contact the DBA.

Message: The **xxxx** field cannot be entered unless Ada and error

Cause: The user tried to enter a value in the specified field when the change was not an error correction and/or Ada did not contribute to the change.

Solution: If the field is specified on the current CRF but the change was not an error correction and Ada did not contribute to the change, contact the DBA to resolve the discrepancy.

3.2.4 PERSONNEL RESOURCES FORM INSERT

The data should be entered using a SEL PRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 4 (PRF data).

Figure 2-10 shows the PRF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields, fields that are redisplayed after a form is inserted and the screen is cleared, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

Redisplayed Fields

The following fields are redisplayed after the <Clear Block> key has been pressed.

- Project Name
- Date (Friday)

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on

                                Project Name
                                Programmer

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

__Message__: PRF form number starts with a P. Please reenter

__Cause__: The user entered a character other than P as the first character for the PRF form number.

__Solution__: Enter P as the first character for PRF form number.

__Message__: The X position should be a numeric digit. Please reenter

__Cause__: The user entered non-numeric digits in the X position of the PRF form number.

__Solution__: Enter numeric digits for the second to sixth positions of the form number.

__Message__: Must be in range of 0 to 80

__Cause__: A number less than 0 or greater than 80 was entered in the hours column.

__Solution__: Check the number on the form. If this number is greater than 80 or less than 0, check with the DBA; otherwise, reenter the hours as they appear on the form.

Message: A form with the same project, submission date and programmer already exists

Cause: A form with the same project name, submission date, and programmer name already exists in the database. Only one form is allowed to be entered for a given programmer and project for each week.

Solution: Verify that the correct project, date, and programmer name was typed in. If so and a duplicate still exists, this may mean that the form has already been entered. Notify the DBA of the duplicate PRF information for the given week date.

Message: Invalid Friday date; please reenter

Cause: The user entered a date that is not a Friday date.

Solution: Verify that the date was typed in as it appears on the form and that the date is a Friday. If the date is not a Friday, the form must be returned.

Message: Project name has to be entered

Cause: A value of NULL was entered for the project name.

Solution: Enter a valid project name.

Message: Form date has to be entered

Cause: A value of NULL was entered for the date.

Solution: Enter a valid date.

Message: Programmer has to be entered

Cause: A value of NULL was entered for the programmer.

Solution: Enter a valid programmer.

3.2.5 SERVICES/PRODUCTS FORM INSERT

The data should be entered using a SEL SPF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 5 (SPF data).

Figure 2-11 shows the SPF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields, fields that are redisplayed after a form is inserted and the screen is cleared, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Form Number
- Project Name
- Date (Friday)

Redisplayed Fields

The following fields are redisplayed after the <Clear Block> key has been pressed:

- Project Name
- Date (Friday)

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on
Project Name
Computer

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: SPF form number starts with S. Please reenter

Cause: The user entered a character other than S as the first character for the SPF form number.

Solution: Enter S as the first character for SPF form number.

Message: The X position should be a numeric digit. Please reenter

Cause: The user entered non-numeric digits in the X position of the SPF form number.

Solution: Enter numeric digits for the second to sixth positions of the form number.

Message: SPF already exists for this project and sub date. Please reenter

Cause: An SPF with the same project name and submission date already exists in the database. Only one form is allowed to be entered for a given project each week.

Solution: Verify that the correct project and date were typed in. If so, this form may have already been entered. Notify the DBA of possible duplicate SPF information for the given week date.

Message: Must be in the range of 0.0 to 999.9

Cause: A number less than 0.0 or greater than 999.9 was entered in the hours column for service personnel. There should not be any hours out of this range charged for service personnel during a given week.

Solution: Verify that the number entered corresponds to the number on the form. If not, reenter the number. If the number on the form is greater than 999.9 or less than 0.0, verify the number with the DBA.

Message: Computer name not in database

Cause: The computer name must be entered in a coded format.

Solution: Use the <List Field Values> key to see the available computer names.

Message: Must be in the range of 0.0 to 9999999.9

Cause: A number less than 0.0 or greater than 9999999.9 was entered in the computer hours column. There should not be any hours out of this range logged to a computer during a given week.

Solution: Verify that the number entered corresponds to the number on the form. If not, reenter the number. If the number on the form is greater than 9999999.9 or less than 0.0, verify the number with the DBA.

Message: Submission date is not a Friday. Please reenter

Cause: The user entered a date that is not a Friday date.

Solution: Verify that the date was typed in as it appears on the form and that it was a Friday date. If it was not a Friday date, the form must be returned.

3.2.6 PROJECT ESTIMATES FORM INSERT

The data should be entered using a SEL PEF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 6 (PEF data).

Figure 2-12 shows the PEF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Form Number
- Form Date (dd-mmm-yy)
- Project End

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens.

Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen.

Message: Must be in the range of 0.0 to 9999999.9

Cause: A number less than 0.0 or greater than 9999999.9 was entered in the staff hours column. No hours out of this range should be estimated for staff hours for a given project.

Solution: Verify that the number entered corresponds to the number on the form. If not, reenter the number. If the number on the form is greater than 9999999.9 or less than 0.0, verify the number with the DBA.

Message: PEF form number starts with an E. Please reenter

Cause: The user entered a character other than E as the first character for the PEF form number..

Solution: Enter E as the first character for PEF form number.

Message: The X position should be a numeric digit. Please reenter

Cause: The user entered non-numeric digits in the X position of the PEF form number.

Solution: Enter numeric digits for the second to sixth positions of the form number.

Message: A PEF already exists for this project and form date. Record cannot be saved

Cause: A PEF with the same project name and form date already exists in the database. Only one form is allowed to be entered for a given project with a given submission date.

Solution: Verify that the correct project and date were typed in. If they were typed in as they appear on the form and a duplicate still exists, this may mean that this form has already been entered in the database. Notify the DBA of possible duplicate PEF information for the given submission date.

Message: Date is not a Saturday. Please reenter

Cause: The user entered a phase date that is not a Saturday date.

Solution: Verify that the date was typed in as it appears on the form and that it was a Saturday date. If it was not a Saturday date, the form must be returned.

3.2.7 SUBJECTIVE EVALUATION FORM INSERT

The data should be entered using a SEL SEF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 7 (SEF data).

Figure 2-13 shows the SEF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory field, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Form Number

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: SEF already exists for this project

Cause: The user entered a project name that already has an SEF entered.

Solution: Enter a new project name if project name was entered incorrectly. Notify DBA if this is a duplicate form.

Message: Enter a value from 1 to 5

Cause: The user entered an evaluation that was less than the minimum range or greater than the maximum range.

Solution: Reenter a value that is between 1 and 5 inclusive, or leave the evaluation null.

Message: Enter either an X or null

Cause: The user entered an incorrect key to indicate that this tool was used.

Solution: Enter an X to indicate the tool was used, or leave this evaluation as a null field.

3.2.8 PROJECT COMPLETION STATISTICS FORM INSERT

The data should be entered using a SEL PCSF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 8 (PCSF data).

Figure 2-14 shows the PCSF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Form Number
- Project Name
- Date

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following are additional keys that may be used for this screen:

<List Field Values>   This key is available on

Project Name
Computer

<Next Page>   This key is used to move between pages of the PCSF insert screen. The PCSF screen has two pages. The <Next Page> key causes paging in a circular motion. The first time the second page is displayed. From the second screen, the key brings up the first screen.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: Must be in the range 0 to ...

Cause: A number less than 0 was entered in one of the columns for which a positive numeric value is expected.

Solution: Verify that the number entered corresponds to the number on the form. If not, reenter the number. If the number on the form is less than 0, verify the number with the DBA.

Message: Date is not a Saturday. Please reenter

Cause: The user entered a phase date that is not a Saturday date.

Solution: Verify that the date was typed in as it appears on the form and that it was a Saturday date. If it was not a Saturday date, the form must be returned.

Message: A PCSF already exists for this project. Please reenter

Cause: A PCSF with the same project name already exists in the database. Only one form is allowed to be entered for a given project.

Solution: Verify that the correct project was typed in. If it was typed as it appears on the form and a duplicate still exists, this may mean that this form has already been entered in the database. Notify the DBA of possible duplicate PCSF information.

Message: Computer name not in database

Cause: The computer name must be entered in a coded format.

Solution: Use the <List Field Values> key to see the available computer names.

Message: PCSF form number starts with A. Please reenter

Cause: The user entered a character other than A as the first character for the PCSF form number.

Solution: Enter A as the first character for PCSF form number.

Message: The X position should be a numeric digit. Please reenter

Cause: The user entered non-numeric digits in the position of the PCSF form number.

<u>Solution</u>: Enter numeric digits for the second to sixth po-
sitions of the form number.

3.2.9 COMPONENT STATISTICS INSERT

The data are extracted from a <Project Name>.INS file that
contains the results of the component statistics combiner
project closeout tool. The file should be in the format
listed in Table 3-1. To select the Component Statistics
insert screen,

1.   Perform steps 1 and 2 of Section 3.2 to display the
     Insert menu.

2.   Enter option 9 (Component Statistics data).

Table 3-1.   INS File Format

Byte Position	Contents
2-8	Component number
10-19	Component source lines
21-30	Component comment lines
32-41	Component executable statements
43-52	Component statements
54-63	Final origin of component

Figure 2-20 shows the Component Statistics screen as it will
appear on the terminal screen. Note that currently only a
component statistics screen for the insert operation exists.
Section 3.2, steps 4 through 6, contains an explanation of
running an insert screen. The mandatory fields, screen-
specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must
be entered before the data can be stored in the database.
These fields are

●   Project Name

●   ORACLE password

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens.

Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen.

<u>Message</u>: Cannot create an error file

<u>Cause</u>: This means that an error file cannot be created in the user-specified directory.

<u>Solution</u>: Press <Exit/Cancel> to exit and contact the system maintenance personnel.

<u>Message</u>: SQLLOAD host command error

<u>Cause</u>: This means that an error occurs during execution of the SQLLoader software, and this message should not normally be issued.

<u>Solution</u>: Press <Exit/Cancel> to exit and contact the system maintenance personnel.

<u>Message</u>: Lock table COM_STAT error

<u>Cause</u>: This may be caused when the COM_STAT table is locked by another user or other resource.

<u>Solution</u>: Try the operation again later. If the problem per-sists, contact the system maintenance personnel.

<u>Message</u>: Error during insertion

<u>Cause</u>: An error occurs during data insertion into the
       COM_STAT table.

<u>Solution</u>: Press <Exit/Cancel> to exit and contact the system
        maintenance personnel.

3.2.10 CLEANROOM PERSONNEL RESOURCES FORM INSERT

The data should be entered using a SEL Cleanroom PRF. To
select this screen,

1.   Perform steps 1 and 2 of Section 3.2 to display the
      Insert menu.

2.   Enter option number 10 (Cleanroom PRF data).

Figure 2-15 shows the Cleanroom PRF screen as it will appear
on the terminal screen. Section 3.2, steps 4 through 6,
contains an explanation of running an insert screen. The
mandatory fields, fields that are redisplayed after a form
is inserted or the screen is cleared, screen-specific keys,
and screen-specific messages are listed below.

<div align="center"><u>Mandatory Fields</u></div>

Some of the fields on the screen are required fields and must
be entered before the data can be stored in the database.
These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

<div align="center"><u>Redisplayed Fields</u></div>

The following fields are redisplayed after the <Clear Block>
key has been pressed or after a form has been inserted into
the database:

- Project Name
- Date (Friday)

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Programmer.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen.

Message: Invalid FRIDAY date. Please reenter

Cause: The date that was entered is not a valid Friday date.

Solution: Verify that the correct Friday date was entered. The cursor will remain positioned on the date field. To reenter the date, the user may type over the current date or use the <Clear Field> key to clear the field before entering a new date.

Message: Date must be entered

Cause: Either the user pressed the <Next Field> or <Previous Field> key from the Date Field before entering a date or the user pressed the <Commit> key when the date field was blank.

Solution: The Date field must be entered. Enter a valid date.

Message: Programmer must be entered

Cause: Either the user pressed the <Next Field> or <Previous Field> key from the Programmer field before entering a programmer name or the user pressed the <Commit> key when the Programmer field was blank.

Solution: The Programmer field must be entered. Enter a valid programmer name.

Message: Form number must be entered

Cause: Either the user pressed the <Next Field> or <Previous Field> key from the Form Number field before entering a form number or the user pressed the <Commit> key when the Form Number field was blank.

Solution: The form number field must be entered. Enter a valid form number.

Message: Cleanroom PRF form number starts with an 'R'. Please reenter

Cause: The form number entered does not begin with an 'R'.

Solution: Verify that the form number was typed as it appears on the form. It should begin with an 'R' followed by five numeric digits. Reenter the correct form number.

Message: The second position should be a numeric digit. Please reenter

   (NOTE: This message may appear for the third, fourth, fifth, or sixth position of the form number.)

Cause: The form number entered does not contain a numeric digit in the second position.

Solution: Verify that the form number was typed as it appears on the form. It should begin with an 'R' followed by five numeric digits. Reenter the correct form number.

Message: A form with the same project, date, and programmer already exists

Cause: A form with the same project, submission date, and programmer name already exists in the database. Only one form is allowed to be entered for a given programmer and project for each week.

Solution: Verify that the correct project, date, and programmer name were typed in. If so and a duplicate still exists, this may mean that the form has already been entered. Notify the DBA of the duplicate Cleanroom PRF information for the given week date.

Message: Must be in range 0 to 80

Cause: A number less than 0 or greater than 80 was entered in an hours column.

Solution: Check the number on the form. If the number is greater than 80 or less than 0, check with the DBA. Otherwise, reenter the hours as they appear on the form.

3.2.11 WEEKLY MAINTENANCE EFFORT FORM INSERT

The data should be entered using a SEL WMEF. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option number 11 (WMEF data).

Figure 2-16 shows the WMEF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields, fields that are redisplayed after a form is entered and the screen is cleared, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

Redisplayed Fields

The following keys are redisplayed after the <Clear Block> key has been pressed or after a form has been inserted into the database:

- Project Name
- Date (Friday)

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: Invalid FRIDAY date. Please reenter

Cause: The date that was entered is not a valid Friday date.

Solution: Verify that the correct Friday date was entered. The cursor will remain positioned on the date field. To reenter the date, the user may type over the current date or use the <Clear Field> key to clear the field before entering a new date.

Message: Project name must be entered

Cause: The cursor was on the Project name field. The user pressed the <Next Field> key before entering a project name.

Solution: The Project name must be entered. Enter a valid project name.

Message: Please enter a date

Cause: The cursor was on the Date field. The user pressed the <Next Field> key before entering a date.

Solution: If viewing a form by the project-date-programmer specification, all three of these fields must be entered. Enter a valid Friday date.

Message: Please enter a programmer

Cause: The cursor was on the Programmer field. The user pressed the <Next Field> key before entering a programmer name.

Solution: If viewing a form by the project-date-programmer specification, all three fields must be entered. Enter a valid programmer name.

Message: A form with the same project, date, and programmer already exists

Cause: A form with the same project, submission date, and programmer name already exists in the database. Only one form is allowed to be entered for a given programmer and project for each week.

Solution: Verify that the correct project, date, and pro-
grammer name were typed in. If so and a duplicate
still exists, this may mean that the form has al-
ready been entered. Notify the DBA of the dupli-
cate WMEF information for the given week date.

Message: Must be in range 0 to 80

Cause: A number less than 0 or greater than 80 was entered
in an hours column.

Solution: Check the number of the form. If the number is
greater than 80 or less than 0, check with the
DBA. Otherwise, reenter the hours as they appear
on the form.

3.2.12 MAINTENANCE CHANGE REPORT FORM INSERT

The data should be entered using a SEL MCRF. To select this
screen,

1.   Perform steps 1 and 2 of Section 3.2 to display the
Insert menu.

2.   Enter option number 12 (MCRF data).

Figure 2-17 shows the MCRF screen as it will appear on the
terminal screen. Section 3.2, steps 4 through 6, contains
an explanation of running an insert screen. The mandatory
fields, fields that are redisplayed after a form is inserted
and the screen is cleared, screen-specific keys, and screen-
specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must
be entered before the data can be stored in the database.
These fields are

- Form Number
- Form Name
- OSMR Number
- Project Name

- Change Characterization
- Submission Date
- Type of Modification
- Cause of Change
- Time of Isolate Problem
- Time to Complete Change

Redisplayed Fields

No fields are redisplayed after the <Clear Block> key has been pressed.

Keys

Refer to Section 3.2 for a list of keys that are available on all insert screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on the Project Name.

Messages

Message: At least one changed object must be selected

Cause: The user did not select any of the six possible change objects.

Solution: Place an X beside any of the six change objects, clear the block, or exit the form.

Message: At least one entry must appear under lines of code added, changed, or deleted

Cause: The user did not make any entries on the "Number of Lines of Code:" line.

Solution: Enter at least one value under any of the three possible lines of code values (added, changed, or deleted), clear the block, or exit the form.

Message: At least one entry must appear under components added, changed, or deleted

Cause: The user did not make any entries on the. "Number of Components:" line.

Solution: Enter at least one value under any of the three possible number of component values (added, changed, or deleted), clear the block, or exit the form.

Message: Added components that are new, reused, and modified must = components added

Cause: The user entered a value under "Number of Components: Added," and the sum of all entries on the "Number of Added Components:" line do not equal the number of components added.

Solution: Check to ensure the numbers were correctly entered; if values still do not add up, return the form to the originator for correction.

Message: Entry must be between 1 and X; please reenter

Cause: The user entered a value out of the valid range for the current field.

Solution: Enter a value between 1 and the value specified by the X.

Message: Entry must be X or null; please reenter

Cause: The user entered an invalid value when trying to select or bypassed one of the six changed object fields.

Solution: Blank out the current field by entering a space or using the <Clear Field> key. Enter <Next Field> to bypass the current object or enter an X to indicate the object was changed.

3.2.13 DEVELOPMENT STATUS FORM INSERT

The data should be entered using a SEL DSF. Unlike other SEL forms, the DSF is inserted into the DAMSEL PC system residing on the SEL task PC. Section 3.7 provides information on the DAMSEL PC menuing system. To select this screen,

1. Perform steps 1 and 2 of Section 3.2 to display the Insert menu.

2. Enter option 1 (DSF data).

Figure 2-18 shows the DSF screen as it will appear on the terminal screen. Section 3.2, steps 4 through 6, contains an explanation of running an insert screen. The mandatory fields, fields that are redisplayed after a form is inserted and the screen is cleared, screen-specific keys, and screen-specific messages are listed below.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Programmer
- Project Name
- Date (Friday)
- Changes (Y or N)

Redisplayed Fields

The following field is redisplayed after the <Clear Block> key has been pressed:

- Date (Friday)   .

Keys

Refer to Sections 3.2 and 3.7.1 for a list of keys that are available on all insert screens and corresponding keys in the DAMSEL PC system, respectively.

Messages

Refer to Section 3.2 for a list of messages that may appear during all insert screens. Following are additional messages that may appear on this screen:

Message: No previous form exists to change. Please reenter form

Cause: Value of N was entered in change field, but no form exists with same project and submission date 14 days before.

Solution: Verify that the correct project and date were entered or enter value of Y for Changes field to enter changed form data.

Message: A form with the same project and submission date already exists

Cause: A form already exists in the database for the project and date entered.

Solution: Verify that the correct project and date were entered.

Message: Form cannot be inserted without data values

Cause: The <Commit> key was pressed, and no values were entered in the status data fields.

Solution: Enter data values or exit from the form.

Message: Please write form number on DSF form and press <Return>

Cause: DSF number has been automatically generated and should be recorded on the DSF.

Message: Invalid Friday date; please reenter

Cause: A date was entered that is not a Friday date.

Solution: Reenter a Friday date.

3.3 UPDATING DATA

The data update screens are intended to be used for updating data found to be in error during quality assurance or other examination of the data. The update screens correspond to SEL forms. A sample update screen is shown in Figure 3-2. This sample screen is similar to the generic PRF screen format shown in Section 2.2 Figure 2-10, with the exception of an additional field, the mode, which can have the values of SAVED, SELECT, or UPDATE. A sample update session is shown in Appendix A. The general procedure to be followed when updating data is as follows:

1.   Select option 1 (Form function) from the Main menu.

2.   Select option 3 (Update existing data) from the Form Functions menu.

3.   When the Update menu is displayed, select the option number associated with the type of data to be inserted.

4.   Enter the key field(s) as specified for the particular screen. In all cases except subsystem update, the form number can be used as the key for viewing the data. In addition, form data can be viewed by any key field(s) that make that form unique. At this point the screen is in SELECT mode, meaning that data have not been retrieved for update. The mode is displayed in the lower right-hand corner.

5.   Press the <Next Field> key to retrieve data.

PERSONNEL RESOURCE DATA UPDATE SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	███
Rework Enhancing/Refining /Optimizing Documenting Reuse	██

Project Name: ██████████

Date(Friday): ███████ ˙

Programmer: █████████

Form No: █ ██████

Char Mode: Replace   Page 1   Count: *0

Figure 3-2.   Sample Update Screen

6.   Now the screen is in UPDATE mode. Use the keys
     described as follows to move to the field(s) to be
     updated. Update the field by either typing over
     existing data, or use the <Clear Field> key to
     clear out the field and enter the new data. The
     new data will be validated as they are entered.

7.   After all the updates have been made, press the
     <Commit> key to save the data to the database.

8.   The user may exit from the update screen at any
     point by pressing the <Exit/Cancel> key.

     NOTE: Data not yet saved by the <Commit> key will
             not be saved to the database.

The keypad diagram shown in Figure 3-3 highlights the keys
that are available for the update screens. Many keys are
used by each of the update screens; these keys are listed
and explained below. Keys that are specific to a given
update screen will be described in the section describing
the individual update screen.
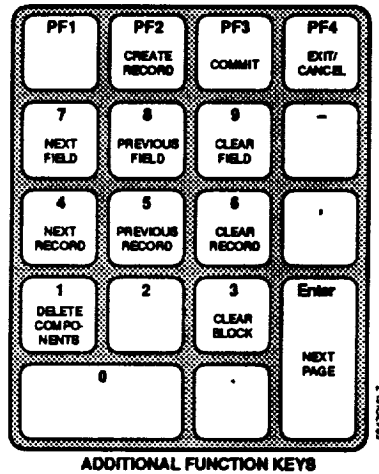
Figure 3-3.   Update Keypad

General Keys

<Next Field>

This key serves two purposes,
depending on the MODE. When the
MODE field is set to SELECT (that
is, data have not yet been retrieved
to be updated), this key will re-
trieve data when pressed after
entering a key field value. This
key may also be used to move between
fields in multifield keys while in
SELECT mode. When the MODE field is
set to UPDATE and data have been
retrieved to be updated, the key
allows the user to move from one
field to the next. When the cursor
is positioned on the last field on
the screen, this key will cause the
cursor to loop back to the first
field on the screen.

\<Previous Field\>	This key allows the user to move from one field to the previous field. When the cursor is positioned on the first field, this key will move the cursor to the last field on the screen.
\<Commit\>	This key causes the data currently on the screen to be stored to the database. Additional validations are performed on the data at this time. If an error is found, the user will be notified, and the data will not be saved. See the list of General Messages below for additional information. This key is only available in UPDATE mode.
	NOTE: It is good practice to press the \<Next Field\> key after the last field is entered before pressing the \<Commit\> key. This ensures that the field is validated before an attempt is made to save the data to the database. The fields are validated during execution of the \<Commit\> key, but the validation is much quicker when performed with the \<Next Field\> key.
\<Clear Block\>	This key will clear the entire screen in preparation for updating another form. This key should be used if the wrong form was retrieved by mistake.
	NOTE: Any data on the screen when this key is pressed will not be saved in the database.
\<Clear Field\>	This key will clear the field where the cursor is currently positioned. The first time this key is pressed, any data after the cursor is erased. The second time this key is pressed, the entire field is cleared.
\<Exit/Cancel\>	This key exits from the screen and returns to the Update menu.
	NOTE: Any data on the screen when this key is pressed will not be saved in the database.

<List Field Values>   This key will cause all the values
                          that are valid for the current field
                          to be displayed. The values are
                          displayed one at a time.. A message
                          is displayed instructing the user
                          how to move through the list of val-
                          ues and select a value. This key is
                          only available on certain fields on
                          each screen. These specific field
                          names will be listed in the section
                          that describes the particular screen.

General Messages

A number of messages may be displayed while running the up-
date screens. Messages without a solution are informational.
General messages that may be displayed while the data are
updated are listed below. Messages that are specific to a
given screen are described in the section associated with
that screen.

Message: Field must be entered

Cause: A mandatory field was not entered.

Solution: Enter a value for this field. If you are unsure
            of a value, use the <List Field Values> key if
            available for the field. If you are still unsure
            after viewing the available values, contact the
            DBA.

Message: Do you want to commit the change you have made? Y

Cause: This message is displayed if the user presses the
         <Clear Block> or <Exit/Cancel> key after an error
         occurred while attempting to store data in the
         database.

Solution: The user should always answer No to this question.
            This requires typing N over the default Y and
            pressing the <Next Field> key.

Message: Transaction completed -- x records processed

Cause: This message appears after the <Commit> key is pressed, and data have been successfully.updated in the database.

Message: Press RETURN to retrieve next value, PF4 to stop

Cause: This message appears while using the <List Field Values> key.

Solution: Do as the message suggests. If the value you want is currently displayed, press the <Exit/ Cancel> key; otherwise, press the <Return> key to display the next valid value.

Message: Last value retrieved

Cause: This message is displayed while using the <List Field Values> key. There are no more values to be displayed.

Solution: To see the values again, press the <List Field Values> key again.

Message: Unrecognized command

Cause: You have pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described above.

Message: The form was NOT updated in the database

Cause: The user pressed the <Clear Block> key and cleared the data from the screen.

Solution: The data that were displayed before the <Clear Block> were not saved to the database. Enter a form number to be updated or exit from the screen.

<u>Message</u>: Press any function key to acknowledge message

<u>Cause</u>: The processing is complete and acknowledgment is
        being requested.

<u>Solution</u>: To see the second message, press any one of the
        function keys (the <Enter Query> key is one
        choice).

<u>Message</u>: The form was updated in the database

<u>Cause</u>: The updates made to the form have been successfully saved
        in the database.

<u>Message</u>: Must retrieve data first

<u>Cause</u>: The user attempted to use the <Commit> key while in
        SELECT mode (that is, before data were retrieved).

<u>Solution</u>: To update a form, enter the form number and use
        the <Next Field> key to retrieve the data; proceed
        to update the data and <Commit> the changes.

Each of the following sections describes a different update
screen. The screen-specific keys that can be used in each
screen are listed along with the action they cause. Key
fields and required fields are listed. Screen-specific error
and information messages will be discussed, along with the
appropriate responses to them.

3.3.1 SUBSYSTEM UPDATE

The data on the screen correspond to one subsystem from a
SIF. To select the screen,

1.   Perform steps 1 and 2 of Section 3.3 to display the
      Update menu.

2.   Enter option 1 (Subsystem data).

Figure 2-7 shows the Subsystem screen as it will appear on
the terminal screen. Section 3.3, steps 4 through 8,
contains an explanation of running an update screen. The

key fields, mandatory fields, screen-specific keys and screen-specific messages are listed below.

Key Fields To Retrieve Data

- **Project Name:** Upon entry to this form, the cursor will be positioned at this field. The user should enter the name of the project that corresponds to the subsystem to be updated. If an invalid name is entered, the user will be prompted to enter a valid name.

- **Subsystem Prefix:** Enter the subsystem prefix that is to be updated. If an invalid subsystem prefix is entered (the subsystem prefix does not exist in the database associated with the specified project), the user will be prompted for another prefix.

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Submission Date
- Subsystem Prefix
- Subsystem Function

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Subsystem Function.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.1 for

a list of messages that may appear while subsystem data are
entered. Following is an additional message that may appear
on this screen:

Message: Subsystem does not exist for this project in data-
          base

Cause: The user entered a subsystem prefix that does not
        exist in the database for the current project.

Solution: Verify that the prefix was typed correctly and the
           correct project name was entered. Contact the DBA
           if a subsystem prefix to be updated does not exist
           in the database.

3.3.2 COMPONENT ORIGINATION FORM UPDATE

The data on the screen corresponds to a COF. To select the
screen,

1. Perform steps 1 and 2 of Section 3.3 to display the
    Update menu.

2. Enter option 2 (COF data).

Figure 2-8 shows the COF screen as it will appear on the
terminal screen. Section 3.3, steps 4 through 8, contains
an explanation of running an update screen. The key fields,
mandatory fields, screen-specific keys, and screen-specific
messages are listed below.

Key Fields To Retrieve Data

(Refer to the COF view screen described in Section 2.3.2 for
a description of the key fields.)

- Form Number
     OR
- Project Name
- Subsystem Prefix
- Component Name

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Subsystem Prefix
- Component Name

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following are additional keys that may be used for this screen:

<List Field Values>   This key is available on

Project Name
Origin

<Next Page>   This key is used to move between pages of the COF Update screen. The COF screen has two pages. The <Next Page> key causes paging in a circular motion. The first time the second page is displayed. From the second screen, the key brings up the first screen.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.2 for a list of messages that may appear while COF data are entered. Following is an additional message that may appear on this screen:

Message: Component name not found in database for this project and subsystem

Cause: The user entered a component name that does not exist in the database in association with the subsystem prefix and project name entered on the COF.

<u>Solution</u>: Verify that the component name was typed in as it appears on the COF. If not, reenter the name as it appears on the form. If the name was entered correctly, contact the DBA.

3.3.3 CHANGE REPORT FORM UPDATE

The data on the screen correspond to a CRF. To select the screen,

1.   Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2.   Enter option 3 (CRF data).

Figure 2-9 shows the CRF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The key fields, mandatory fields, screen-specific keys, and screen-specific messages are listed below.

<u>Key Fields To Retrieve Data</u>

(Refer to the CRF view screen described in Section 2.3.3 for a description of the key fields.)

- Form Number

<u>Mandatory Fields</u>

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (DD-MMM-YY)
- Programmer
- Form Number
- At least one subsystem/component name

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following are additional keys that may be used for this screen:

<Next Page>   This key may be used to move between pages of the update screen. The screen consists of three pages. If the user is positioned on the first screen and presses the <Next Page>, either the second or third screen will be displayed. The second screen will be displayed only if the "Type of change" field is ERRCO (an error correction) since the second screen contains only error information. Otherwise, the second screen will not be displayed, and the cursor will move to the third screen. From the third screen, the cursor moves to the first screen. When the cursor is positioned on the component name page, this key will move the cursor to page 1.

<Next Record>   This key may be used to scroll through the subsystem prefix/ component names associated with the current CRF. This key is only active on the component page. It will move the cursor from the current subsystem/component entry to the sub-system field below the current entry.

<Previous Record>   This key may be used to scroll to a previous subsystem prefix/component name associated with the current CRF. This key is only active on the com-ponent page. It will move the cursor from the current subsystem/component entry to the subsystem field above the current entry.

<Delete Components>   This key deletes all the components associated with this CRF. The key is only available on the component name page. It is useful when it is ne-cessary to delete all the components at once.

<Create Record>   This key creates a new space for a
                         subsystem/component name to be en-
                         tered. This allows the user to enter
                         a new component without having to
                         scroll through all the components
                         first.

<Delete Record>   This key deletes the subsystem/
                         component name combination from the line
                         on which the cursor is positioned.

<Clear Record>   This key also deletes the subsystem/
                         component name combination from the
                         line on which the cursor is posi-
                         tioned.

<Next Set>   This key retrieves the next set of
                         component names and displays them to
                         the screen. This is only useful when
                         there are more than 15 components for
                         the CRF (since that is the maximum
                         that will be displayed on a screen).

<List Field Values>   This key is available on

                         Project Name
                         Effort to isolate the change
                         Effort to implement the change
                         Type of change
                         Features
                         Statement that is most true
                         Tools

Messages

Refer to Section 3.3 for a list of messages that may appear
while the data are updated. See Sections 3.2 and 3.2.3 for
a list of messages that may appear while CRF data are
entered. Following are additional messages that may appear
on this screen:

Message: Press <Return> to retrieve the component names

Cause: The user is in the process of retrieving data. Most
         of the data have been retrieved, and now the compo-
         nent names are about to be retrieved.

Solution: Press the <Return> key to retrieve the
           component names.

<u>Message</u>: Invalid component(s) found for this project

<u>Cause</u>: The user attempted to change the project name, but a
component had been previously entered that is not
valid for the new project name.

<u>Solution</u>: The user will be positioned on the component page
and given the opportunity to delete all the com-
ponent names. Alternatively, the user can move to
specific records and delete only those components
that are not associated with the new project.

<u>Message</u>: Press the <Delete Components> key (<1>) to delete
all the components

<u>Cause</u>: The user attempted to change the project name, but a
component had been previously entered that is not
valid for the new project name. The user was then
positioned on the component name page.

<u>Solution</u>: The user may press the <Delete Components> key to
delete all the components associated with this CRF.

3.3.4 PERSONNEL RESOURCES FORM UPDATE

The data on the screen correspond to a PRF. To select the
screen,

1. Perform steps 1 and 2 of Section 3.3 to display the
Update menu.

2. Enter option 4 (PRF data).

Figure 2-10 shows the PRF screen as it will appear on the
terminal screen. Section 3.3, steps 4 through 8, contains
an explanation of running an update screen. The key fields,
mandatory fields, screen-specific keys and screen-specific
messages are listed below.

Key Fields To Retrieve Data

(Refer to the PRF view screen described in Section 2.3.4 for a description of the key fields.)

- Form Number
    - OR
- Project Name
- Date
- Programmer

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on
                          Project Name
                          Programmer

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.4, PRF insert, for a list of messages that may appear while PRF data

are entered. Following are additional messages that may appear on this screen:

Message: Data is not displayed for this form - it has sub-system activity hours

Cause: The form being retrieved has associated subsystem activity hours.

Solution: Contact the DBA for assistance in retrieving this data.

Message: Must supply a project name or use <PRVFLD> to retrieve by form number

Cause: A value of NULL was entered for the project name.

Solution: Enter a valid project or use the <Previous Field> key to retrieve by form number.

Message: Must supply a date or use <prvrec> two times to retrieve by form number

Cause: A value of NULL was entered for the date.

Solution: Enter a valid date or use the <Previous Field> key twice to retrieve by form number.

Message: Form for this project, date, and programmer not found

Cause: The project, date, and programmer combination entered does not have an associated form existing in the database.

Solution: Verify that the correct project, date, and programmer were entered. To reenter the fields, use the <Clear Block> key to clear the fields before entering new values. To exit and return to the main menu, press the <Exit/Cancel> key.

Message: Must supply a programmer or use <prvrec> three times to retrieve by form number

Cause: A value of NULL was entered for the programmer.

Solution: Enter a valid programmer or use the <Previous Field> key three times to retrieve by form number.

3.3.5 SERVICES/PRODUCTS FORM UPDATE

The data on the screen corresponds to a SPF. To select the screen,

1. Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2. Enter option 5 (SPF data).

Figure 2-11 shows the SPF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The key fields, mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields To Retrieve Data

(Refer to the SPF view screen described Section 2.3.5 for a description of the key fields.)

- Form Number

  OR
- Project
- Date

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Form Number
- Project Name
- Date (Friday)

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

\<List Field Values\>   This key is available on Project Name.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.5 for a list of messages that may appear while entering SPF data. Following are additional messages available on this screen:

Message: Function not permitted in SELECT mode

Cause: The user attempted to use the \<Commit\> key while in SELECT mode (that is, before data were retrieved).

Solution: To update a form, enter the form number and use the \<Next Field\> key to retrieve the data; then proceed to update the data, and \<Commit\> the changes.

Message: Must supply a project name or use \<PRVFLD\> to retrieve by form number

Cause: The user entered without supplying a project name when the form number was null.

Solution: Enter a valid project name, use the \<List Field Values\> key, or use the \<Previous Field\> key to retrieve form by number.

Message: Date is not a Friday – Please reenter

Cause: The user entered a date that was not a Friday.

Solution: Enter a valid Friday date.

Message: Form for this project and date not found

Cause: The user entered a project name and date combination
         that does not have an SPF associated with it.

Solution: Enter a valid project name and date combination,
           retrieve the form by form number, or exit.

Message: Must supply a date or use <PRVREC> two times to
           retrieve by form number

Cause: The user entered <Next Field> without supplying a
         Friday date after entering a valid project name.

Solution: Enter a valid Friday date or retrieve form by form
           number.

Message: First character of form number must be an 'S' or
           NULL

Cause: The user entered a character that is invalid.

Solution: Clear the field, enter an S or space; clear the
           block; or exit the form.

3.3.6 PROJECT ESTIMATES FORM UPDATE

The data on the screen correspond to a PEF. To select the
screen,

   1.   Perform steps 1 and 2 of Section 3.3 to display the
        Update menu.

   2.   Enter option 1 (PEF data).

Figure 2-12 shows the PEF screen as it will appear on the
terminal screen. Section 3.3, steps 4 through 8, contains
an explanation of running an update screen. The key fields,
mandatory fields, screen-specific keys, and screen-specific
messages are listed below.

Key Fields To Retrieve Data

(Refer to the PEF view screen described in Section 2.3.6 for a description of the key fields)

- Form Number

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project name
- Form date (DD-MMM-YY)
- Form number
- Project end

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.6 for a list of messages that may appear while PEF data are entered.

3.3.7 SUBJECTIVE EVALUATION FORM UPDATE

The data on the screen correspond to an SEF. To select the screen,

1. Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2. Enter option 7 (SEF data).

Figure 2-13 shows the SEF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The key fields, mandatory field, screen-specific keys, and screen-specific messages are listed below.

Key Fields To Retrieve Data

(Refer to the SEF view screen described in Section 2.3.7 for a description of the key fields)

- Form Number

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project name
- Form date (DD-MMM-YY)
- Form number
- Project end

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.7 for a list of messages that may appear while SEF data are

entered. Following are additional messages that may appear on this screen:

Message: SEF data already exist for project and form number

Cause: The user tried to update the form number to a form number that already exists in the database, or the form was not correctly deleted before committing the update for this form.

Solution: Reenter correct form and project name if entered incorrectly. If problem is not resolved, return form to DBA for assistance.

Message: Error updating form

Cause: The updates for the form could not be entered into the database.

Solution: Return the form to the DBA for assistance in correcting this form.

Message: Enter a value from 1 to 5

Cause: The user entered an evaluation that was less than the minimum range or greater than the maximum range.

Solution: Reenter a value that is between 1 and 5 inclusive, or leave the evaluation null.

Message: Enter either an X or null

Cause: The user entered an incorrect key to indicate that this tool was used.

Solution: Enter an X to indicate the tool was used, or leave this evaluation as a null field.

3.3.8   PROJECT COMPLETION STATISTICS FORM UPDATE

The data on the screen correspond to a PCSF. To select the
screen,

1.   Perform steps 1 and 2 of Section 3.3 to display the
     Update menu.

2.   Enter option 8 (PCSF data).

Figure 2-14 shows the PCSF screen as it will appear on the
terminal screen. Section 3.3, steps 4 through 8, contains
an explanation of running an update screen. The key fields,
mandatory fields, screen-specific keys, and screen-specific
messages are listed below.

Key Fields To Retrieve Data

(Refer to the PCSF view screen described in Section 2.3.8 for
a description of the key fields.)

   ●   Form Number

Mandatory Fields

Some of the fields on the screen are required fields and must
be entered before the data can be stored in the database.
These fields are

   ●   Project name
   ●   Form date (DD-MM-YY)
   ●   Form number

Keys

Refer to Section 3.3 for a list of keys that are available on
all update screens. Following are additional keys that may
be used for this screen:

\<List Field Values\>   This key is available on
                          Project Name
                          Computer

<Next Page>	This key is used to move between pages of the PCSF update screen. The PCSF screen has two pages. The <Next Page> key causes paging in a circular motion. The first time the second page is displayed. From the second screen, the key brings up the first screen.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.8 for a list of messages that may appear while PCSF data are entered. Following are additional messages that may appear on this screen.

Message: Mandatory fields must be entered before going to the next page

Cause: The user has pressed the <Enter> key without entering the fields required to retrieve data.

Solution: Enter form number or project name to retrieve data before attempting to go to the next page.

Message: Computer name already on this form

Cause: The user has entered the same computer name two times.

Solution: Remove one of the entries.

Message: Must supply a project name or retrieve by form number

Cause: The user has pressed the <Next Field> key without supplying a project name while in the INSERT mode.

Solution: Enter a valid project name, retrieve data by form number, or exit.

Message: PCSF for this project not found

Cause: The user is attempting to retrieve information for a project that does not have PCSF data in the database.

Solution: Select a different project or exit.

Message: First character of form number must be 'A' or NULL

Cause: The user is attempting to enter an invalid first character in the form number.

Solution: Enter an 'A' or make the field NULL.

3.3.9 CLEANROOM PERSONNEL RESOURCES FORM UPDATE

The data that are displayed on this screen were entered using data from a SEL Cleanroom PRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2. Enter option number 9 (Cleanroom PRF data).

Figure 2-15 shows the Cleanroom PRF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The mandatory fields, key fields, screen-specific keys, and screen-specific messages are listed below.

<u>Key Fields to Retrieve Data</u>

(Refer to the Cleanroom PRF view screen described in Section 2.3.9 for a description of the key fields.)

● Form Number

  OR

● Project

● Date

● Programmer

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Programmer.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.10 for a list of messages that may appear while Cleanroom PRF data are entered. Following are additional messages that may appear on this screen.

Message: A Cleanroom PRF already exists with this form number

Cause: In UPDATE mode, the user has attempted to change the form number to a form number of a Cleanroom PRF that already exists in the database.

Solution: Verify that the form number was entered as it appears on the form. If so, contact the DBA.

Message: No form found associated with this project, date, and programmer

Cause: The user tried to view a form by the project-date-programmer specification, but no form was found in the database with the project, date, and programmer values entered.

Solution: Verify that the project, date, and programmer were typed just as they appear on the form. If the values were entered correctly but this message still appears, press the <Clear Block> key and try viewing the form by the form number specification.

Message: The date, programmer, and form number fields must be entered

Cause: The user pressed the <Commit> key when the Date, Programmer, or Form Number field was blank.

Solution: Enter valid values in these mandatory fields that are blank.

3.3.10 WEEKLY MAINTENANCE EFFORT FORM UPDATE

The data on the screen correspond to a SEL WMEF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2.   Enter option number 11 (WMEF data).

Figure 2-16 shows the WMEF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The key fields, mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields to Retrieve Data

(Refer to WMEF view screen described in Section 2.3.10 for a description of the key fields.)

- Form Number

  OR

- Project
- Date
- Programmer

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Project Name
- Date (Friday)
- Programmer
- Form Number

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.11 for a list of messages that may appear while WMEF data are entered.

Following are additional messages that may appear on this screen.

Message: No form found associated with this project, date, and programmer

Cause: The user tried to view a form by the project-date-programmer specification, but no form was found in the database with the project, date, and programmer values entered.

Solution: Verify that the project, date, and programmer were typed just as they appear on the form. If the values were entered correctly but this message still appears, the user can press the <Clear Block> key and try viewing the form by the form number specification.

Message: The date, programmer, and form number fields must be entered

Cause: The user pressed the <Commit> key when the Date, Programmer, or Form Number field was blank.

Solution: Enter valid values in these mandatory fields that are blank.

3.3.11 MAINTENANCE CHANGE REPORT FORM UPDATE

The data on the screen correspond to a SEL MCRF. To select the screen,

1. Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2. Enter option number 12 (MCRF data).

Figure 2-17 shows the MCRF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains the explanation of running an update screen. The key fields, mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields To Retrieve Data

(Refer to MCRF view screen described in Section 2.3.11 for a description of the key fields.)

- Form Number

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Form Number
- Form Name
- OSMR Number
- Project Name
- Change Characterization
- Submission Date
- Type of Modification
- Cause of Change
- Time to Isolate Problem
- Time to Complete Change

Keys

Refer to Section 3.3 for a list of keys that are available on all update screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.12 for a list of messages that may appear while MCRF data are entered.

3.3.12 DEVELOPMENT STATUS FORM UPDATE

The data on the screen correspond to a SEL DSF. Unlike other SEL forms, the DSF is updated using the DAMSEL PC system residing on the SEL task PC. Section 3.7 provides information on the DAMSEL PC menuing system. To select this screen,

1.   Perform steps 1 and 2 of Section 3.3 to display the Update menu.

2.   Enter option 1 (DSF data)

Figure 2-18 shows the DSF screen as it will appear on the terminal screen. Section 3.3, steps 4 through 8, contains an explanation of running an update screen. The key fields, mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields To Retrieve Data

(Refer to the DSF view screen described in Section 2.3.12 for a description of the key fields.)

- Form Number
        OR
- Project Name
- Date

Mandatory Fields

Some of the fields on the screen are required fields and must be entered before the data can be stored in the database. These fields are

- Programmer
- Project Name
- Date (Friday)

Keys

Refer to Sections 3.3 and 3.7.1 for a list of keys that are available on all update screens and corresponding keys in the DAMSEL PC system, respectively.

Messages

Refer to Section 3.3 for a list of messages that may appear while the data are updated. See Sections 3.2 and 3.2.13 for a list of messages that may appear while DSF data are entered. Following are additional messages that may appear on this screen:

Message: Must supply a programmer or use <Prvfld> to re-trieve by form number

Cause: The user entered <Next Field> without entering a programmer.

Solution: Enter a programmer or retrieve by form number.

Message: Must supply a project name or use <Prvfld> twice to retrieve by form number

Cause: The user entered <Next Field> without entering a project.

Solution: Enter a project or retrieve by form number.

Message: Must supply a date or use <Prvfld> to retrieve by form number

Cause: The user entered <Next Field> without entering a date.

Solution: Enter a date or retrieve by form number.

Message: No form found associated with this project and date

Cause: No form exists in the database for the entered proj-ect and date.

<u>Solution</u>: Verify that the correct project and date were en-
tered.

3.4 <u>DELETING DATA</u>

The data deletion screens are intended to be used for de-
leting invalid data from the database. Most of the screens
correspond to a SEL data collection form. A sample delete
screen in shown in Figure 3-4. This sample screen is similar
to the generic PRF screen format shown in Section 2.2, Fig-
ure 2-10, with the exception of two additional fields, a form
status field and a confirm delete field. A sample delete
session is shown in Appendix A. The general procedure for
deleting data is as follows:

1. From the Main menu, select option 1 (Form function).

2. Select option 4 (Delete existing data) from the Form
    Functions menu.

3. From the Delete menu, select the option number
    associated with the type of data to be deleted.

4. Enter the key field(s). In all cases, except Sub-
    system delete, the form number can be used as the
    key for deleting data. In addition, forms can also
    be deleted by any key field(s) that make that form
    unique.

5. Press the <Next Field> key to retrieve data.

6. Verify that these are the data to be deleted. If
    it is, answer Y to the "Enter Y to delete or N to
    cancel request" request. If the data displayed do
    not correspond to the data to be deleted, enter N.

7. Press the <Commit> key to process the delete
    response.

8. Exit from the delete screen at any point by pressing
    the <Exit/Cancel> key.

PERSONNEL RESOURCE FORM DELETE SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name: ▮▮▮▮▮▮

Date(Friday): ▮▮▮▮

Programmer: ▮▮▮▮▮

Form No: ▮ ▮▮▮

STATUS

▮▮▮▮ ▮ Enter 'Y' to delete
      or 'N' to cancel request
      Then : Press PF3 to save
      in database

Char Mode: Replace Page 1   Count: *0

Figure 3-4. Sample Delete Screen

> NOTE: Data appearing on the screen that have not
> yet been deleted from the database with the
> <Commit> key will remain in the database upon
> exiting.

The keypad diagram shown in Figure 3-5 highlights the keys
that are available for the delete screens. Many keys are
used by each of the delete screens. These keys are listed
and explained below.

Keys that are specific to a given delete screen will be de-
scribed in the section describing the individual delete
screen.

General Keys

<Next Field>   This key allows the user to retrieve
                        the data that are to be deleted from
                        the database. It is also used to
                        move between key fields on multiple
                        key screens.

<Commit>   This key is pressed after answering
                        whether the data currently displayed
                        should be deleted from the database.
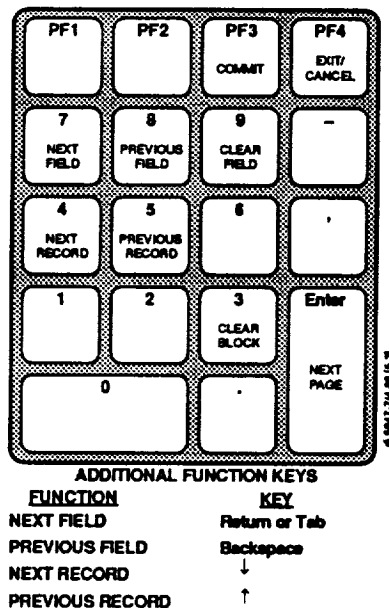
Figure 3-5. Delete Keypad

<Clear Block>

This key will clear the entire screen in preparation for entering a new screen of information.

NOTE: Any data on the screen when this key is pressed will not be deleted from the database.

<Clear Field>

This key will clear the field where the cursor is currently positioned. The first time this key is pressed, any data after the cursor is erased. The second time this key is pressed, the entire field is cleared.

<Exit/Cancel>

This key exits from the screen and returns to the Delete menu.

NOTE: Any data on the screen when this key is pressed will not be deleted from the database.

General Messages

A number of messages may be displayed while running the delete screens. Messages without a solution are informational. General messages that may be displayed while data are deleted

are listed as follows. Messages that are specific to a given screen are described in the section associated with that screen.

Message: Unrecognized command

Cause: The user pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described previously.

Message: Form was NOT deleted

Cause: The user pressed the <Clear Block> key or answered N to the question of whether to delete the form. The data that were displayed on the screen were not deleted from the database.

Message: Form has been DELETED

Cause: The user answered Y to the question of whether to delete the form. The form was deleted from the database.

Message: Enter either Y or N

Cause: The user entered a character other than a Y or an N in response to the question of whether to delete the form.

Solution: Enter a Y to delete the form or an N to keep the form in the database.

Message: Data must first be retrieved

Cause: The user pressed the <Next Page> key to move to the second page before data were retrieved for deletion.

> Solution: Enter values in the key fields and press the <Next
>   Field> key to retrieve data to be updated. Now
>   the <Next Page> key may be used to move to the
>   second page.

Each of the following sections describes a different delete
screen. The screen-specific keys that can be used in each
screen are listed along with the actions they cause. Key
fields are listed. Screen-specific error and information
messages will be discussed, along with the appropriate re-
sponses to them.

3.4.1 SUBSYSTEM DELETE

The data on the screen correspond to one subsystem from a
SIF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.4 to display the
     Delete menu.

2.   Enter option 1 (Subsystem data).

Figure 2-7 shows the Subsystem screen as it will appear on
the terminal screen. Section 3.4, steps 4 through 8, con-
tains an explanation of running a delete screen. The key
fields, screen-specific keys, and screen-specific messages
are listed below.

<div align="center">

Key Fields

</div>

(Refer to the Subsystem update screen described in Sec-
tion 3.3.1 for a description of the key fields.)

- Project Name
- Subsystem Prefix

<div align="center">

Keys

</div>

Refer to Section 3.4 for a list of keys that are available
on all delete screens. Following is an additional key that
may be used for this screen:

<List Field Values>   This key is available on Project
                          Name.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Sections 2.3 and 2.3.1, SIF view, contain messages that may appear while SIF data are retrieved to be deleted. Following is an additional message that may appear on this screen:

<u>Message</u>: Subsystem does not exist for this project in database

<u>Cause</u>: The user entered a subsystem name that does not exist in the database for the project specified on the form.

<u>Solution</u>: Verify the spelling of the subsystem prefix. Verify that the correct project name was entered. Use the <Clear Field> key to reenter the project name or <Clear Block> to reenter the project name.

3.4.2 COMPONENT ORIGINATION FORM DELETE

The data on the screen correspond to a COF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option 2 (COF data).

Figure 2-8 shows the COF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the COF view screen described in Section 2.3.2 for a description of the key fields.)

- Form Number

    OR

- Project Name
- Subsystem Prefix
- Component Name

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens. Following are additional keys that may be used for this screen:

<Next Page>   This key may be used to move between pages of the COF delete screen. The screen consists of two pages. If the user is positioned on the first screen and presses the <Next Page>, the second screen will be displayed. From the second screen, the cursor will move to the first screen. The cursor must be on page 2 to respond to the delete question.

<Previous Field>   This key allows the user to move among the key fields. The key blanks out the current field value and moves to the previous field.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Sections 2.3 and 2.3.2, COF view, contain a list of messages that may appear while COF data are retrieved to be deleted. Following are additional messages that may appear on this screen:

Message: Component has been DELETED

Cause: This COF was deleted from the database.

<u>Message</u>: Component was NOT deleted

<u>Cause</u>: This COF was not deleted and remains in the database.

3.4.3 CHANGE REPORT FORM DELETE

The data on the screen correspond to a CRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option 3 (CRF data).

Figure 2-9 shows the CRF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the CRF view screen described in Section 2.3.3 for a description of the key fields.)

● Form Number

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens. Following are additional keys that may be used for this screen:

<Next Page>   This key is used to move among the three pages that make up the CRF delete screen. Press the <Next Page> key while on page 1 to move to page 2, while on page 2 to move to page 3, and while on page 3 to move to page 1.

<Next Record>   This key allows the user to scroll down through the list of component names to verify the names before deleting the form.

<Previous Record>   This key allows the user to scroll up
                           to see component names that have been
                           scrolled off the screen by the <Next
                           Record> key.   .

Messages

Refer to Section 3.4 for a list of messages that may appear
while data are deleted. Sections 2.3 and 2.3.3, CRF view,
contain a list of messages that may appear while in CRF.

3.4.4   PERSONNEL RESOURCES FORM DELETE

The data on the screen correspond to a PRF. To select this
screen,

> 1.   Perform steps 1 and 2 of Section 3.4 to display the
>   Delete menu.
>
> 2.   Enter option 4 (PRF data).

Figure 2-10 shows the PRF screen as it will appear on the
terminal screen. Section 3.4, steps 4 through 8, contains
an explanation of running a delete screen. The key fields,
screen-specific keys, and screen-specific messages are
listed below.

Key Fields

(Refer to the PRF view screen described in Section 2.3.4 for
a description of the key fields.)

- Form Number
     OR
- Project Name
- Date
- Programmer

Keys

Refer to Section 3.4 for a list of keys that are available on
all delete screens.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Sections 2.3 and 2.3.4, PRF view, contain a list of messages that may appear while PRF data are retrieved to be deleted. Following is an additional message that may appear on this screen:

Message: First character of form number must be 'P' or NULL

Cause: A value other than P or NULL was entered as the first character of the form number.

Solution: Enter a value of P or NULL as the first character of the form number.

3.4.5 SERVICES/PRODUCTS FORM DELETE

The data on the screen correspond to a SPF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2.   Enter option 5 (SPF data).

Figure 2-11 shows the SPF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed on the following pages.

Key Fields

(Refer to the SPF view screen described in Section 2.3.5 for a description of the key fields.)

- Form Number
      OR
- Project Name
- Submission Date

Refer to Section 3.4 for a list of keys that are available on all delete screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on Project
                           Name.

Messages

Refer to Section 3.4 for a list of messages that may appear while the data are deleted. Sections 2.3 and 2.3.5, SPF view, contain a list of messages that may appear while SPF data are retrieved to be deleted.

3.4.6 PROJECT ESTIMATES FORM DELETE

The data on the screen correspond to a PEF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2.   Enter option 6 (PEF data).

Figure 2-12 shows the PEF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the PEF view screen described in Section 2.3.6 for a description of the key fields.)

●   Form Number

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Section 2.3 contains a list of messages that may appear while PEF data are retrieved to be deleted.

3.4.7 SUBJECTIVE EVALUATION FORM DELETE

The data on the screen correspond to a SEF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option 7 (SEF data).

Figure 2-13 shows the SEF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the SEF view screen described in Section 2.3.7 for a description of the key fields.)

- Form Number

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Section 2.3 contains a list of messages that may appear while SEF data are retrieved to be deleted.

3.4.8 PROJECT COMPLETION STATISTICS FORM DELETE

The data on the screen correspond to a PCSF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option 8 (PCSF data).

Figure 2-14 shows the PCSF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the PCSF view screen described in Section 2.3.8 for a description of the key fields.)

● Form Number

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens. Following are additional keys that may be used for this screen:

<Next Page>	This key may be used to move among pages of the PCSF delete screen. The screen consists of two pages. If the user in positioned on the first screen and presses the <Next Page>, the second screen will be displayed. From the second screen, the cursor will move to the first screen. The cursor must be on page 2 to respond to the delete question.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Section 2.3 contains a list of messages that may appear while PCSF data are retrieved to

be deleted. Following is an additional message that may appear on this screen:

Message: Form number may not be null

Cause: The user pressed the <Next Field> key to retrieve data from the database but the Form Number field was blank.

Solution: Enter a valid form number or use the <Exit/Cancel> key to return to the menu.

3.4.9 CLEANROOM PERSONNEL RESOURCES FORM DELETE

The data on the screen correspond to a SEL Cleanroom PRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option number 9 (Cleanroom PRF data).

Figure 2-15 shows the Cleanroom PRF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Keys Fields To Delete Data

(Refer to the Cleanroom PRF view screen described in Section 2.3.9 for a description of the key fields.)

- Form Number
    - OR
- Project
- Date
- Programmer

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens. Following is an additional key available on the Cleanroom PRF delete screen.

<Previous Field>   This key allows the user to move from one field to the previous field. The current field is cleared before the cursor is placed on the previous field.

Messages

Refer to Section 3.4 for a list of messages that may appear while the data are deleted. Sections 2.3 and 2.3.9, Cleanroom PRF view, contain a list of messages that may appear while the Cleanroom PRF data are retrieved to be deleted.

3.4.10 WEEKLY MAINTENANCE EFFORT FORM DELETE

The data on the screen correspond to a SEL WMEF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2.   Enter option number 11 (WMEF data).

Figure 2-16 shows the WMEF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed blow.

Key Fields To Delete Data

(Refer to the WMEF view screen described in Section 2.3.10 for a description of the key fields.)

- Form Number
     OR
- Project
- Date
- Programmer

Messages

Refer to Section 3.4 for a list of messages that may appear while the data are deleted. Sections 2.3 and 2.3.10, WMEF view, contain a list of messages that may appear while WMEF data are retrieved to be deleted.

3.4.11 MAINTENANCE CHANGE REPORT FORM DELETE

The data on the screen correspond to a SEL MCRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the Delete menu.

2. Enter option number 12 (MCRF data).

Figure 2-17 shows the MCRF screen as it will appear on the terminal screen. Section 3.4, steps 4 through 8, contains an explanation of running a delete screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the MCRF view screen described in Section 2.3.11 for a description of the key fields.)

● Form Number

Keys

Refer to Section 3.4 for a list of keys that are available on all delete screens.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Section 2.3.11, MCRF view, contains

a list of messages that may appear while MCRF data are re-
trieved to be deleted.

<u>Message</u>: Form number not found in database   ·

<u>Cause</u>: The form number that was entered does not exist in
the database for an MCRF.

<u>Solution</u>: Verify that the correct form number was entered.
The cursor will remain positioned on the form num-
ber field. To reenter the form number, the user
may type over the current form number or use the
<Clear Field> key to clear the field before
entering a new form number. To exit and return
to the Main menu, the user should press the <Exit/
Cancel> key.

3.4.12 DEVELOPMENT STATUS FORM DELETE

The data on the screen correspond to a SEL DSF. Unlike other
SEL forms, the DSF is deleted using the DAMSEL PC system re-
siding on the SEL task PC. Section 3.7 provides information
on the DAMSEL PC menuing system. To select this screen,

1. Perform steps 1 and 2 of Section 3.4 to display the
Delete menu.

2. Enter option 1 (DSF data).

Figure 2-18 shows the DSF screen as it will appear on the
terminal screen. Section 3.4, steps 4 through 8, contains
an explanation of running a delete screen. The key fields,
screen-specific keys, and screen-specific messages are
listed below.

<u>Key Fields</u>

(Refer to the DSF view screen described in Section 2.3.12
for a description of the key fields.)

● Form Number

OR

● Project Name

● Date

Keys

Refer to Sections 3.4 and 3.7.1 for a list of keys that are available on all delete screens and corresponding keys in the DAMSEL PC system, respectively.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are deleted. Section 2.3.12, DSF view, contains a list of messages that may appear while DSF data are retrieved to be deleted. Following are additional messages that may appear on this screen:

Message: Please enter a project name or use <Previous Field> to retrieve by form number

Cause: The user entered <Next Field> without entering a project name.

Solution: Enter a project or retrieve by form number.

Message: Please enter form date or use <Prvfld> three times to retrieve by form number

Cause: The user entered <Next Field> without entering a date.

Solution: Enter a date or retrieve by form number.

Message: Invalid Friday date; please reenter

Cause: A date was entered that is not a Friday date.

Solution: Reenter a Friday date.

Message: No form found associated with this project and date

Cause: No form exists in the database for the entered project and date.

Solution: Verify that the correct project and date were entered.

3.5 QUALITY ASSURING DATA

The quality assurance (QA) screens are used by the QA personnel to verify that the data entered in the database correspond to the data written on the completed SEL form. Each QA screen corresponds to a SEL form. The layout of each of the QA screens is designed to look like the related SEL form. A sample QA screen is shown in Figure 3-6. This sample screen is similar to the generic PRF screen format shown in Section 2.2, Figure 2-10, with the exception of two additional fields, a QA status field and a QA input field to change the form status. A sample QA session is shown in Appendix A. The general procedure to be followed when quality assuring data is as follows:

1.   From the Main menu, select option 1 (Form function).

2.   Select option 5 (Quality assure data) from the Form Functions menu.

3.   From the Quality Assurance menu, select the option number associated with the type of data to be quality assured.

4.   Enter the key field(s) as specified for the particular screen. In all cases, except the Subsystem QA screen, the form number is used as the key for quality assuring data. In addition, forms may be quality assured by any key field(s) that make that form unique.

5.   Press the <Next Field> key to retrieve data.

6.   Compare the data on the screen with the data written on the SEL form. If the data appear correct, enter C. If the data displayed have errors, enter E.

7.   Press the <Commit> key to update the QA status flag in the database.

8. The user may exit from the QA screen at any point by pressing the <Exit/Cancel> key.

   NOTE: The status flag for data appearing on the screen will not be updated.

The keypad diagram shown in Figure 3-6 highlights the keys that are available during the QA screens. Keys that are used on all the QA screens are described below. Some QA screens allow the use of additional keys. These special cases will be described in the section associated with the specific QA screen.
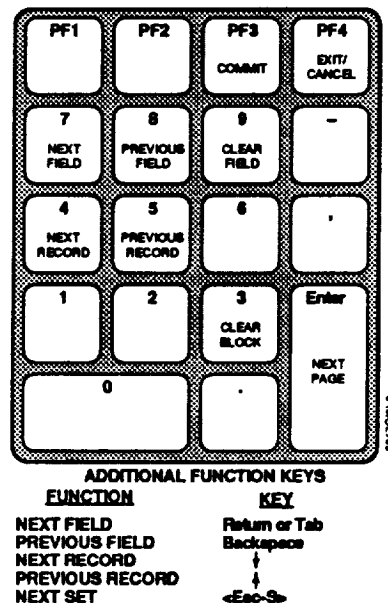

ADDITIONAL FUNCTION KEYS

FUNCTION	KEY
NEXT FIELD	Return or Tab
PREVIOUS FIELD	Backspace
NEXT RECORD	↑
PREVIOUS RECORD	↓
NEXT SET	<Esc-S>

Figure 3-6.   QA Keypad

General Keys

<Next Field>   This key is used to retrieve data from the database. When the user enters the screen, the cursor will be positioned on the key field. The user should enter a valid key and press the <Next Field> key to retrieve the data associated with that form number to perform quality assurance on the data.

5648   3-99

\<Clear Block>	This key will clear the entire screen in preparation for entering a new screen of information.
	<u>NOTE</u>: The QA status field will not be updated to reflect any changes currently on the screen.
\<Clear Field>	This key will clear the field where the cursor is currently positioned. The first time this key is pressed, any data after the cursor are erased. The second time this key is pressed, the entire field is cleared.
\<Commit>	This key saves the quality assurance status of the form into the database. The cursor must be on the "Enter C for correct or E for error" field, and the user should have entered a C or an E, depending on the results of the quality assurance check.
\<Exit/Cancel>	This key exits from the screen and returns to the Quality Assurance menu.
	<u>NOTE</u>: The QA status field will not be updated to reflect any changes currently on the screen.

<u>General Messages</u>

A number of messages may be displayed while running the QA screens. Messages without a solution are informational. General messages that may be displayed while data are quality assured are listed below. Messages that are specific to a screen are described in the section associated with that screen.

<u>Message</u>: Unrecognized Command

<u>Cause</u>: The user has pressed an invalid key.

<u>Solution</u>: This key does not have any effect on this screen. Simply select one of the keys described above.

Message: Form number not found in database

Cause: The user entered a form number that does not exist in the database.

Solution: Verify that the form number was typed in correctly.

Message: Status field was NOT updated

Cause: The user pressed the <Clear Block> key to clear the screen. The value that currently appears on the screen in response to the "Enter C for correct or E for errors" question was not saved in the database.

Solution: Enter a form number to be quality assured or exit from the screen.

Message: Enter either C or E

Cause: The user entered a value other than C or E in the QA status field.

Solution: Enter a C if the data on the screen match that on the form or an E if there are errors in the data on the screen.

Message: Transaction completed--1 record processed

Cause: The status entered on the screen has been saved to the database.

Message: Status field has been updated. Ready for next form to QA

Cause: The status entered on the screen has been saved to the database.

Message: Data must first be retrieved

Cause: The user pressed the <Next Page> key to move to the second page before data were retrieved.

<u>Solution</u>:   Enter values in the key fields and press the <Next Field> key to retrieve data to be quality assured. After the data have been retrieved, the <Next Page> key may be used to move to the second page.

Each of the following sections describes a different QA screen. The key field(s) required to retrieve the data for quality assuring are described as well as the screen-specific keys that may be used while in the screen. Screen-specific error and information messages are discussed, along with the appropriate responses to them.

3.5.1 COMPONENT ORIGINATION FORM QA

The data on the screen correspond to a COF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2.   Enter option 1 (COF data).

Figure 2-8 shows the COF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

<div align="center"><u>Key Fields</u></div>

(Refer to the COF view screen described in Section 2.3.2 for a description of the key fields.)

●   Form Number

<div align="center"><u>Keys</u></div>

Refer to Section 3.5 for a list of keys that are available on all QA screens. Following is an additional key that may be used for this screen:

<Next Page>   This key is used to move between the two pages that make up the COF QA screen. Press the <Next Page> key while on page 1 to move to page 2 and while on page 2 to move to page 1.

<u>Messages</u>

Refer to Section 3.5 for a list of messages that may appear while data are quality assured.

3.5.2 CHANGE REPORT FORM QA

The data on the screen correspond to a CRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option 2 (CRF data).

Figure 2-9 shows the CRF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

<u>Key Fields</u>

(Refer to the CRF view screen described in Section 2.3.3 for a description of the key fields.)

● Form Number

<u>Keys</u>

Refer to Section 3.5 for a list of keys that are available on all QA screens. Following are additional keys that may be used for this screen:

<Next Page>   This key is used to move among the four pages that make up the CRF QA screen. Press the <Next Page> key while on page 1 to move to page 2, while on page 2 to move to page 3, while on page 3 to move to page 4, and while on page 4 to move to page 1.

<Next Record>   This key may be used to scroll
                       through the subsystem prefix/
                       component names associated with the
                       current CRF. This key is only
                       active on the component page. It
                       will move the cursor from the current
                       subsystem/component entry to the
                       subsystem field below the current
                       entry.

<Previous Record>   This key may be used to scroll to a
                       previous subsystem prefix/component
                       name associated with the current CRF.
                       This key is only active on the com-
                       ponent page. It will move the cursor
                       from the current subsystem/component
                       entry to the subsystem field above
                       the current entry.

Messages

Refer to Section 3.5 for a list of messages that may appear
while data are quality assured. Following are additional
messages that may appear on this screen:

Message: At last component name. Cannot scroll forward

Cause: The user pressed the <Next Record> key when the last
        component was displayed. There are no more compo-
        nent names to be displayed.

Solution: The user may want to use the <Previous Record> key
           to view previously displayed components that have
           been scrolled out of the scrolling area.

Message: At first component name. Cannot scroll backward

Cause: The user pressed the <Previous Record> key when the
        first component was displayed. There are no previous
        components to be displayed.

Solution: If the current component scrolling area is filled
           the user may want to use the <Next Record> key to
           see if additional components may be viewed.

Message: Press <Next Field> to retrieve component names

Cause: The user is in the process of retrieving data. Most of the data have been retrieved, and now the component names are about to be retrieved.

Solution: Use the <Next Field> key to retrieve the component names.

Message: Record must be entered or deleted first

Cause: The user pressed the <Next Record> key, but there were no more component names to be displayed.

Solution: Use the <Previous Record> key to scroll up, or use <Next Page> to go to the next page.

3.5.3 PERSONNEL RESOURCES FORM QA

The data on the screen correspond to a PRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option 4 (PRF data).

Figure 2-10 shows the PRF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the PRF view screen described in Section 2.3.4 for a description of the key fields.)

- Form Number

    OR

- Project Name
- Date
- Programmer

Keys

Refer to Section 3.5 for a list of keys that are available on all QA screens.

Messages

Refer to Section 3.5 for a list of messages that may appear while data are quality assured. Sections 2.3 and 2.3.4, PRF view, contain messages that may appear while PRF data are retrieved to be quality assured.

3.5.4 SERVICES/PRODUCTS FORM QA

The data on the screen correspond to a SPF. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option 4 (SPF data).

Figure 2-11 shows the SPF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Field(s)

(Refer to the SPF view screen described in Section 2.3.5 for a description of the key fields.)

- Form Number
     OR
- Project Name
- Submission Date

Refer to Section 3.4 for a list of keys that are available while data are quality assured.

<List Field Values>   This key is available on Project Name.

Messages

Refer to Section 3.4 for a list of messages that may appear while data are quality assured. Sections 2.3 and 2.3.5, SPF view, contain messages that may appear while SPF data are retrieved to be quality assured.

3.5.5 PROJECT ESTIMATES FORM QA

The data on the screen correspond to a PEF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2.   Enter option 5 (PEF data).

Figure 2-12 shows the PEF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Field(s)

(Refer to the PEF view screen described in Section 2.3.6 for a description of the key fields.)

●   Form Number

Keys

Refer to Section 3.5 for a list of keys that are available on all QA screens.

· <u>Messages</u>

Refer to Section 3.5 for a list of messages that may appear while data are quality assured.

3.5.6 SUBJECTIVE EVALUATION FORM QA

The data on the screen correspond to the SEF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2.   Enter option 6 (SEF data).

Figure 2-13 shows the SEF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

<div align="center"><u>Key Fields</u></div>

(Refer to the SEF view screen described in Section 2.3.7 for a description of the key fields.)

●   Form Number

<div align="center"><u>Keys</u></div>

Refer to Section 3.5 for a list of keys that are available on all QA screens.

<div align="center"><u>Messages</u></div>

Refer to Section 3.5 for a list of messages that may appear while data are quality assured.

3.5.7 PROJECT COMPLETION STATISTICS FORM QA

The data on the screen correspond to the PCSF. To select this screen,

1.   Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2.   Enter option 7 (PCSF data).

Figure 2-14 shows the PCSF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key fields, screen-specific keys, and screen-specific messages are listed below.

Key Fields(s)

(Refer to the PCSF view screen described in Section 2.3.8 for a description of the key fields.)

● Form Number

Keys

Refer to Section 3.5 for a list of keys that are available on all QA screens. Following is an additional key that may be used for this screen:

<Next Page>   This key is used to move between the two pages that make up the PCSF QA screen. Press the <Next Page> key while on page 1 to move to page 2 and while on page 2 to move to page 1.

Messages

Refer to Section 3.5 for a list of messages that may appear while data are quality assured. Following are additional messages that may appear on this screen:

Message: Must supply a project name or use <PRVFLD> to retrieve by form number

<u>Cause</u>: The user pressed the <Next Field> key without supplying a project name while in insert mode.

<u>Solution</u>: Enter a valid project name, retrieve data by form number, or exit.

<u>Message</u>: Invalid project name - Please reenter

<u>Cause</u>: The user has entered a project name that is not in the database.

<u>Solution</u>: Enter a valid project name, retrieve data by form number, or exit.

<u>Message</u>: A PCSF does not exist for this project

<u>Cause</u>: The user is attempting to retrieve information for a project that does not have PCSF data in the database.

<u>Solution</u>: Select a different project or exit.

<u>Message</u>: First character of form number must be 'A' or NULL

<u>Cause</u>: The user has entered an invalid first character in the form number.

<u>Solution</u>: Enter an 'A' or make the field NULL.

3.5.8 CLEANROOM PERSONNEL RESOURCES FORM QA

The data that are displayed on this screen were entered using data from a SEL Cleanroom PRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option number 8 (Cleanroom PRF data).

Figure 2-15 shows the Cleanroom PRF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key

fields, screen-specific keys, and screen-specific messages
are listed below.

<u>Key Fields</u>

(Refer to the Cleanroom PRF view screen described in Section 2.3.9 for a description of the key fields.)

● Form Number

<u>Keys</u>

Refer to Section 3.5 for a list of keys that are available
on all QA screens. Following is an additional key that is
available on the Cleanroom PRF QA screen.

<Previous Field>   This key allows the user to move
                          from one field to the previous field.
                          The current field is cleared before
                          the cursor is placed on the previous
                          field.

<u>Messages</u>

Refer to Section 3.5 for a list of messages that may appear
while data are quality assured. Sections 2.3 and 2.3.9,
CLPRF view, contain messages that may appear while cleanroom
PRF data are retrieved to be quality assured.

3.5.9 WEEKLY MAINTENANCE EFFORT FORM QA

The data on the screen correspond to a SEL WMEF. To select
this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the
    QA menu.

2. Enter option number 9 (WMEF data).

Figure 2-16 shows the WMEF screen as it will appear on the
terminal screen. Section 3.5, steps 4 through 8, contains
an explanation of running a QA screen. The key fields for
the screen, screen-specific keys, and screen-specific
messages are listed below.

Key Fields

(Refer to the Weekly Maintenance Effort Form view screen description in Section 2.3.10 for a description of the key fields.)

- Form Number

> OR

- Project
- Date
- Programmer

Keys

Refer to Section 3.5 for a list of keys that are available on all QA screens. Following is an additional key that may be used for this screen:

<Previous Field>   This key allows the user to move from one field to the previous field. The current field is cleared before the cursor is placed on the previous field.

Messages

Refer to Section 3.5 for a list of messages that may appear during all QA screens. Sections 2.3 and 2.3.10, WMEF view, contain messages that may appear while WMEF data are retrieved to be quality assured.

3.5.10 MAINTENANCE CHANGE REPORT FORM QA

The data on the screen correspond to a SEL MCRF. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option number 12 (MCRF data).

Figure 2-17 shows the MCRF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains

an explanation of running a QA screen. The key field for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field

(Refer to the MCRF view screen described in Section 2.3.11 for a description of the key fields.)

- Form Number

Keys

Refer to Section 3.5 for a list of keys that are available on all QA screens.

Messages

Refer to Section 3.5 for a list of messages that may appear while data are quality assured.

3.5.11 DEVELOPMENT STATUS FORM QA

The data on the screen correspond to a SEL DSF. Unlike other SEL forms, the DSF is quality assured using the DAMSEL PC system residing on the SEL task PC. Section 3.7 provides information on the DAMSEL PC menuing system. To select this screen,

1. Perform steps 1 and 2 of Section 3.5 to display the QA menu.

2. Enter option 1 (DSF data).

Figure 2-18 shows the DSF screen as it will appear on the terminal screen. Section 3.5, steps 4 through 8, contains an explanation of running a QA screen. The key field, screen-specific keys, and screen-specific messages are listed below.

Key Fields

(Refer to the DSF view screen described in Section 2.3.12 for a description of the key fields.)

- Form Number

    OR

- Project Name
- Date

Keys

Refer to Sections 3.5 and 3.7.1 for a list of keys that are available on all QA screens and corresponding keys in the DAMSEL PC system, respectively.

Messages

Refer to Section 3.5 for a list of messages that may appear while data are quality assured. Section 2.3, DSF view, contains messages that may appear while DSF data are retrieved to be quality assured. Following are additional messages that may appear on this screen:

Message: Must supply a project name or use <Prvfld> two times to retrieve by form number

Cause: The user entered <Next Field> without entering a project name.

Solution: Enter a project or retrieve by form number.

Message: Supply a date or use <Previous Field> three times to retrieve by form number

Cause: The user entered <Next Field> without entering a date.

Solution: Enter a date or retrieve by form number.

Message: Date is not a Friday. Please reenter

Cause: A date was entered that is not a Friday date.

Solution: Reenter a Friday date.

Message: No form found associated with this project and date

Cause: ˙No form exists in the database for the entered
        project and date.

Solution: Verify that the correct project and date were
           entered.

3.6 GENERAL DATABASE SUPPORT FUNCTION

The general database support screens are intended to be used
for database support operations, such as generating a dis-
tribution tape. A sample database support function session
is shown in Appendix A. The general procedure to be followed
when performing database support functions is as follows:

1. From the Main menu, select option 5 (General
    database support function).

2. Select the option number associated with the type of
    support function you would like to perform.

3. When the specific database support function screen
    is displayed, press the <Commit> key to process the
    request.

4. The user may exit from the database support screen
    by pressing the <Exit/Cancel> key.

The keypad diagram shown in Figure 3-7 highlights the keys
that are available during the general database support
screens. Keys that are used on all the database support
screens are described as follows. Some database support
screens allow the use of additional keys. These special
cases will be described in the section associated with the
specific database support screen.

General Keys

<Commit>   This key is used to start processing
                                 the database support function. The
                                 current screen will be cleared while
                                 a command file is run. When proc-
                                 essing is completed, the screen will
                                 be redisplayed.

<Exit/Cancel>   This key causes the user to exit from
                                 the screen and return to the General
                                 -Database Support Functions Menu.

General Messages

A number of messages may be displayed while the general
database support functions screens are run. Messages with-
out a solution are informational. General messages that may
be displayed while the database support function is used are
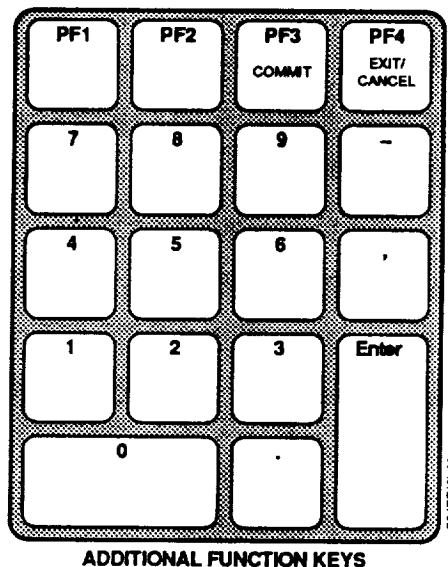
Figure 3-7.   Database Support Function Keypad

listed below. Messages that are specific to a given screen
are described in the section associated with that screen.

<u>Message</u>: Unrecognized command

<u>Cause</u>: The user has pressed an invalid key.

<u>Solution</u>: This key does not have any effect on this screen. Simply select one of the keys described above or in the screen-specific key section.

Each of the following sections describes a different general database support function screen. The screen-specific keys that may be used while in the screen are described in each section. Screen-specific error and information messages and the appropriate response to them are discussed.

3.6.1 GENERATE DISTRIBUTION TAPE

This screen allows the user to generate a distribution tape of the SEL database. The user is required to mount a tape before processing may proceed. To select this screen,

1. Perform step 1 of Section 3.6 to display the General Database Support Function menu.

2. Enter option 1 (Generate distribution tape).

Figure 3-8 shows the Generate Distribution Tape screen as it will appear on the terminal screen. (Refer to Section 3.6, steps 3 and 4, for an explanation of running a database support function screen.) The screen-specific keys and screen-specific messages are listed below.

Generate Distribution Tape
_____

Press <PF3> to start the generating process
      <PF4> to exit

Figure 3-8. Generate Distribution Tape Screen

Keys

Refer to Section 3.6 for a list of keys that are available on all general database support function screens.

Messages

Refer to Section 3.6 for a list of messages that may appear in the general database support screens. Following are additional messages that may appear on this screen:

<u>Message</u>: The data files are not there

<u>Cause</u>: Some or all of the files to be written to tape were not generated correctly.

<u>Solution</u>: This may signal a number of problems. The user may have exceeded the available disk quota. The user should contact the DBA.

3.7 DAMSEL PC SYSTEM

The DAMSEL PC system resides on the SEL task PC and is currently used for processing Development Status Form (DSF) data only. However, other types of data can easily be added in the future. The DAMSEL PC system provides DSF form functions (view, insert, update, delete, and quality assurance), a DSF report function, and DSF upload/download data functions. DSF insert, update, delete, and QA functions are discussed in Sections 3.2, 3.3, 3.4, and 3.5, respectively. The four main topics are discussed in this section:

- Section 3.7.1 describes the menu screens available in the DAMSEL PC system.

- Section 3.7.2 describes the DAMSEL PC upload/ download function.

- Section 3.7.3 describes the DAMSEL PC view screens.

- Section 3.7.4 describes the DAMSEL PC report generation subsystem.

3.7.1 DAMSEL PC MENU SYSTEM

The DAMSEL PC menu system provides access to various DSF data access functions on the PC. Figure 3-9 shows the structure of the menu system. A PC ORACLE account must be set up for the user to allow the user to access the DAMSEL PC menu system. To access the system,

1. Boot the SEL task PC and enter ORACLE at the prompt.

2. Run the DAMSEL PC system: DAMSELPC.

3. Enter ORACLE user name and password (Figure 3-10) and press the <Next Field> key to bring up the DAMSEL PC Main menu. Figure 3-11 shows a picture of the DAMSEL PC Main menu as it will be displayed on the PC screen.

4. Enter the number associated with the desired operation and press the <Next Field> key to display the selected menu.

5. Figures 3-12 and 3-13 show the second- and third-level menu screens. The third-level menu screens (view, insert, update, delete, and QA) are similar; therefore, only one is shown in Figure 3-13. These screens are explained in more detail in the sections that follow.

The PC keyboard shown in Figure 3-14 and the keystroke description shown in Figure 3-15 highlight the keys that are available throughout the DAMSEL PC system.
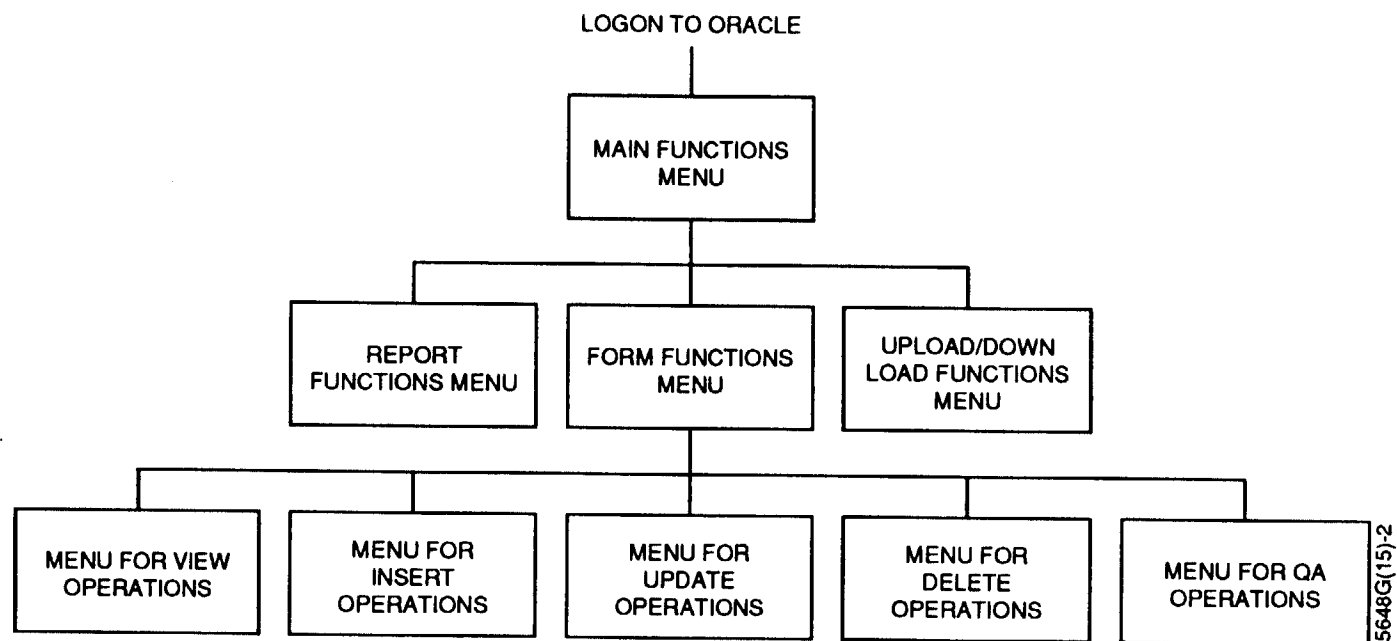
LOGON TO ORACLE

MAIN FUNCTIONS
MENU

REPORT
FUNCTIONS MENU

FORM FUNCTIONS
MENU

UPLOAD/DOWN
LOAD FUNCTIONS
MENU

MENU FOR VIEW
OPERATIONS

MENU FOR
INSERT
OPERATIONS

MENU FOR
UPDATE
OPERATIONS

MENU FOR
DELETE
OPERATIONS

MENU FOR QA
OPERATIONS

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Figure 3-9.   DAMSEL PC Menu System

SQL*Forms (Run Form): Version 2.3.22.1 - Production on Wed Jan 24 10:30:55 1990

Copyright (c) 1987, Oracle Corporation, California, USA. All rights reserved.

SECURE DATABASE: ENTER NAME AND PASSWORD

Username: ███████████████████
Password: ███████████████████

Press F8 at any time to show function keys.

Char Mode: Replace

Figure 3-10. ORACLE User Name and Password

DAMSEL PC MAIN MENU
─────────────────────

What type of function do you want to perform?

      1 - Form Function
      2 - Report Function
      3 - DBA Function
      4 - Upload/Download Data

    <F4> - Exit

Please enter your selection number: ████████

Char Mode: Replace Page 1   Count: *0

Figure 3-11. DAMSEL PC Main Menu

```
                    FORM FUNCTIONS MENU
                    ───────────────────

          What type of operation do you want to perform ?

                    1 - View existing data
                    2 - Insert new data
                    3 - Update existing data
                    4 - Delete existing data
                    5 - Quality assure data


               <F4> - Previous menu

          Please enter your selection number:    ░░░░░



    Char Mode: Replace    Page 5                    Count: *0
```

Figure 3-12.   Second-Level Menus (1 of 3)

```
                    REPORT FUNCTION MENU
                    ────────────────────

               1 - DSF Report


               <PF1>- Top menu
               <PF4>- Previous menu

          Please enter your selection number:    ░░░░

          Please enter the project name:    ░░░░░░░

          Please enter your ORACLE password:    ░░░░░░░

The report output will be in a file in C:\USERS\DAMSEL\<Project>.OUT

          Do you want the file printed automatically? Y
          ** The file is deleted after printing.

          (Press <Commit> to generate the report)


    Char Mode: Replace    Page 3                    Count: *0
```

Figure 3-12.   Second-Level Menus (2 of 3)

```
              UPLOAD/DOWNLOAD DATA MENU
              _____


     What type of function do you want to perform?

            1 - Upload DSF data to the VAX
            2 - Download validation data to the PC

            <F4> - Exit


        Please enter your selection number:

        Please enter your PC ORACLE password:

        Please enter your VAX ORACLE user name:

        Please enter your VAX ORACLE password:


        (Press <Commit> to start processing)

  Char Mode: Replace   Page 2                    Count: *0
```

Figure 3-12. Second-Level Menus (3 of 3)


```
              MENU FOR VIEW OPERATIONS
              _____

     What type of data do you want to operate on ?


              1 - DSF data

            <F1> - Top menu
            <F4> - Previous menu

        Please enter your selection number:




  Char Mode: Replace   Page 6                    Count: *0
```

Figure 3-13. Sample Third-Level Menu
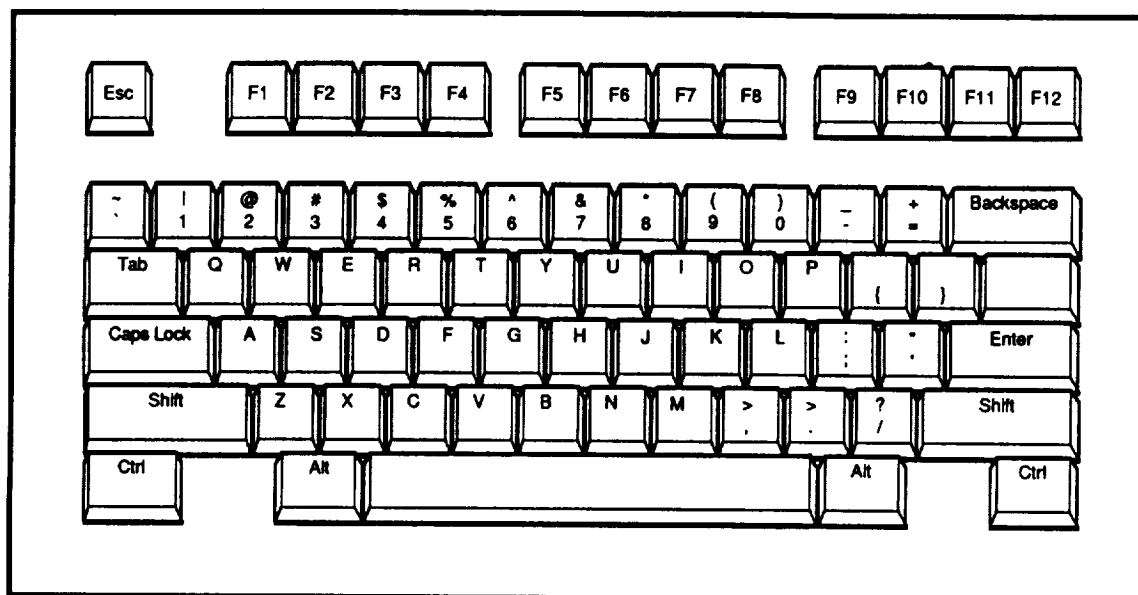
Figure 3-14. DAMSEL PC Keyboard

FUNCTION	KEYSTROKE(S)	FUNCTION	KEYSTROKE(S)
Right	-> Arrow	Clear Block	Shift-F3
Scroll Right	Ctrl ->	Clear Form/Rollback	Shift-F7
Next Primary Key Fld	Shift-F5	Delete Record	Shift-F6
Next Record	PgDn	Create Record	F6
Down	Down Arrow	Duplicate Field	F10
Scroll Down	Ctrl-Enter	Duplicate Record	Shift-F10
Next Set of Records	Ctrl-N	Enter Query	F7
Next Block	Ctrl-PgDn	Count Query Hits	Shift-F2
Left	<- Arrow	Execute Query	F1
Scroll Left	Ctrl <-	Commit Transaction	F3
Previous Field	Shift-F8	Exit/Cancel	F4
	Back Tab		Esc
Previous Record	PgUp	Redisplay Page	Ctrl-End
Up	Up Arrow	Help	F2
Scroll Up	Ctrl-Backspace	List Field Values	F9
Previous Block	Ctrl-PgUp	Display Error	Shift-F1
Insert/Replace	Ins	Block Menu	F5
Delete Character	Del	Show Function Keys	F8
Delete Backward	Backspace		
Clear Field	Shift-F9		
Clear Record	Shift-F4		

Press any function key to return to form.

Figure 3-15. DAMSEL PC Keystrokes

Messages

A number of messages may be displayed while at the menu level. Messages without a solution are informational. General messages that may be displayed while the DSF is run are listed below. Messages specific to a given screen are described in the section associated with that screen.

Message: You do not have access to xxxx

Cause: The user selected an option (specified in place in the xxx) for which he/she does not have the required privilege.

Message: xxx functions are not currently available

Cause: This function (specified in place of the xxx) is not currently available but will be available in a later release.

Message: Undefined function key. Press F8 for list of valid keys

Cause: The user pressed a key that is not valid on this menu screen.

Solution: This will not cause any problems; simply press a valid key.

Message: Invalid selection. Please enter a number between xx and yy

Cause: The user selected an option number that is less than the first available option number (xx) or greater than the last option number (yy).

Solution: Enter a valid option number, or use the <Previous Menu> or <Top Menu> keys to exit from the menu screen.

3.7.2 DAMSEL PC UPLOAD/DOWNLOAD FUNCTION

The upload/download function is intended to be used for transporting DSF and validation data between the VAX and PC ORACLE databases. To upload/download data, the user must first obtain a data line by pressing the telephone's data line button and then dialing 5020 or 5045. If the signal is busy, the user should try again later. Then the user selects option 4 from the DAMSEL PC Main menu (Figure 3-11), which brings up the Upload/Download Data menu (Figure 3-12). From this menu, the user must select either option 1 (upload) or option 2 (download) and supply a PC ORACLE password, VAX ORACLE user name, and password. Once these are entered, the user must press <Commit> to start the processing. Once the processing is complete (it will take at least 15 minutes) the Upload/Download Data menu will reappear. The following section describes available keys and messages that may appear during execution.

3.7.2.1 Upload/Download Data Menu Screen

This screen is used to upload/download data. To select this screen, the user should choose option 4 from the DAMSEL PC Main menu.

Figure 3-12 shows the Upload/Download Data menu screen as it will appear on the terminal screen. The keys and screen-specific messages are listed below.

Keys

Refer to Figures 3-14 and 3-15 to identify the keys that are available on all DAMSEL PC screens.

Messages

Refer to Section 3.7.1 for a list of messages that may appear during all DAMSEL PC screens. Following are additional messages that may appear on this screen:

Message: Invalid response. Enter a 1 or 2

Cause: The user entered an invalid option number.

Solution: Enter a 1 or a 2 to upload or download.

Message: You must enter your PC password

Cause: The user entered a blank PC password.

Solution: Enter your valid PC password to continue processing the upload or download.

Message: You must enter your VAX ORACLE user name

Cause: The user entered a blank VAX ORACLE user name.

Solution: Enter your valid VAX ORACLE user name to continue processing the upload or download.

Message: You must enter your VAX ORACLE password

Cause: The user entered a blank VAX ORACLE password.

Solution: Enter your valid VAX ORACLE password to continue processing the upload or download.

Message: Press <Commit> to continue processing

Cause: The user pressed return after the last field on the screen.

Solution: Press the <Commit> key to process the upload or download.

3.7.3 DAMSEL PC VIEW SCREENS

Viewing screens are intended to be used for looking at data. No data can be added, deleted, or changed in the database by using the view screens. The general procedure to be followed when viewing data is as follows.

1. From the DAMSEL PC Main menu, select option 1 (Form function) (Figure 3-11).

2. Select option 1 (View existing data) from the Form Functions menu (Figure 3-12).

3. Select the option number associated with the type of data you would like to view.

4. Enter the key field(s) as specified for the particular screen. In most cases the form number is used as the key for viewing the data.

5. Press the <Next Field> key to retrieve data.

6. After data have been viewed, press the <Clear Block> key to clear the screen and ready the screen for viewing another form.

7. You may exit from the view screen at any point in the viewing process by pressing the <Exit/Cancel> key.

The keystroke description shown in Figure 3-15 lists the keys that are available during the view screens. Most commonly used keys are described as follows.

General View Keys

<Next Field>   After the key field has been entered, the user should press the <Next Field> key. This will cause the data to be retrieved and displayed to the screen.

<Clear Block>   This key clears the screen in preparation for viewing another form.

<Clear Field>	This key may be used to clear the key field(s) in preparation for entering a new key.
<List Field Values>	This key will cause all the values that are valid for the current field to be displayed. The values are displayed one at a time. A message is displayed instructing the user how to move through the list of values and select one. This key is only available on certain fields on each screen. These specific field names will be listed in the section that describes the particular screen.
<Exit/Cancel>	This key causes the user to exit from the screen and return to the View menu.

General Messages

A number of messages may be displayed while running the view screens. Messages without a solution are informational. General messages that may be displayed while data are viewed are shown below. Messages that are specific to a given screen are described in the section associated with that screen.

Message: Unrecognized Command

Cause: The user has pressed an invalid key.

Solution: This key does not have any effect on this screen. Simply select one of the keys described above.

The following section describes the DSF view screen. Currently, the DSF view screen is the only existing view screen in the DAMSEL PC system. The key field(s) required to view the data is described as well as the screen-specific keys that may be used while in the screen. Screen-specific error and information messages and the appropriate responses to them are discussed.

3.7.3.1 Development Status Form View

The data displayed on this screen were entered using data from a SEL DSF. To select this screen,

1. Perform steps 1 and 2 of Section 3.7.3 to display the View menu.

2. Enter option number 1 (DSF data).

Figure 2-18 shows the DSF screen as it will appear on the terminal screen. Section 3.7.3, steps 4 through 7, contains an explanation of running a DAMSEL PC view screen. The key field(s) for the screens, screen-specific keys, and screen-specific messages are listed below.

Key Field To View Data

Form Number--Upon entry to the screen, the user will be positioned at this field. The user should enter a valid DSF number. If the form number does not exist in the database, the user will be prompted to enter a valid form number.

or

Development Status Specification--The development status specification consists of two parts. Both parts must be entered. Upon entry to the screen, the cursor will be placed on the Form Number field. To enter a development status specification as the key, press the <Next Field> key to move to the Project Name field (the first part of this two part key).

Project Name--The user should enter a valid project name. If the project name does not exist in the database, the user will be prompted to enter a valid project name.

Date--The user should enter a valid submission date, a Friday. If the date is not a Friday, the user will be prompted to enter a valid date.

Keys

Refer to Section 3.7.3 for a list of keys that are available on all views.

Messages

Refer to Sections 2.3, 2.3.12, and 3.7.3 for a list of messages that may appear while data are viewed.

3.7.4 DAMSEL PC REPORT GENERATION

This section describes the procedures for generating reports of SEL data on the SEL task PC. Currently, the DSF report is the only report that exists.

3.7.4.1 Report Function Menu Screen

This screen is used to run the DAMSEL PC reports. This screen is selected by choosing option 2 from the DAMSEL PC Main menu.

Figure 3-12 shows the Report Function menu screen as it will appear on the terminal screen. The screen-specific messages are listed below.

Keys

Refer to Figure 3-14 and 3-15 to identify the keys that are available on all DAMSEL PC screens.

Messages

Refer to Section 3.7.1 for a list of messages that may appear during all DAMSEL PC screens. Following are additional messages that may appear on this screen:

Message: Invalid selection

Cause: The user entered an invalid option number.

Solution: Enter 1 to generate a DSF report.

Message: Invalid project name. Please reenter

Cause: The user entered an invalid project name.

Solution: Enter a valid SEL database project name.

Message: A password must be entered

Cause: The user entered a blank PC ORACLE password.

Solution: Enter your valid PC ORACLE password.

Message: Please enter Y or N

Cause: The user entered an invalid response to the print question.

Solution: Enter Y to print the report automatically (the output file will be deleted after printing) or N to save the file instead of printing.

3.7.4.2 DSF Report (PC)

This report produces output that details the contents of the DSFs submitted for a given project.

Option Number	Description	Sample Output
1	Entire report	Figure 2-68 (Part 6)

Possible Message

Message: No data for project: <Project Name>

Explanations: This message will appear on the DSF report if there are no DSF data for the project.

SECTION 4 - DATABASE ADMINISTRATOR

4.1 INTRODUCTION

The SEL DBA is responsible for entering new projects into the database, entering new programmer and computer names into the database, maintaining the VALIDATION table of encoded values, and performing various database maintenance tasks. The DBA also has access to the functions available to the general user as described in Section 2.

4.2 DBA FUNCTION SCREENS

This section contains descriptions of the operation of each of the DBA screens. The DBA function screens correspond to specific DBA functions rather than to SEL forms. For each type of function, the same screen is used to insert, view, update, or delete data. (Section 2.2 describes the menu system.) A sample DBA session is shown in Appendix A. The general procedure to be followed when running a DBA function screen is as follows:

1. Select option 4 (DBA Function) from the Main menu.

2. When the DBA Functions menu is displayed, select the option number associated with the type of operation to be performed.

3. To view data, press the <Enter Query> key to prepare for performing a query. Use the <Execute Query> key to retrieve data from the database; then use the <Next Record> and <Previous Record> keys to scroll through the data. To view a particular record, the user may enter the key field and then press the <Execute Query> key.

4. To insert data, verify that the screen is not in the Enter Query mode. The words Enter Query would appear at the bottom of the page. The <Exit/Cancel>

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key may have to be used to cancel the Enter Query mode and put the screen in Insert mode. Use the <Next Field> and <Previous Field> keys to move around the screen and enter new data; then press the <Commit> key to save the changes in the database. Any computer-generated fields will be filled in at this time.

5.   To update data, use the <Enter Query> key to prepare for performing a query. Enter the key field of the record to be updated. Use the <Execute Query> key to retrieve the data from the database. If necessary, use the <Next Record> and <Previous Record> keys to move to the record(s) to be updated. Then, use the <Next Field> and <Previous Field> keys to move to the correct field(s) in the record. After the data have been updated, press the <Commit> key to save the changes in the database.

6.   To delete data, use the <Enter Query> key to prepare for performing a query. Enter the key field of the record to be deleted. Press the <Execute Query> key to retrieve the data to be deleted. Use the <Delete Record> key to delete the record from the screen and press the <Commit> key to delete the record from the database.

7.   The user may exit from the DBA screens at any point by pressing the <Exit/Cancel> key.

    NOTE: Data not yet saved by the <Commit> key will not be saved to the database.

The keypad diagram shown in Figure 4-1 highlights the keys that are available for the DBA screens. There are many keys used by each of the DBA screens. These keys are listed and explained as follows. Keys that are specific to a given DBA screen will be described in the section describing the individual DBA screen.

DBA KEYPAD
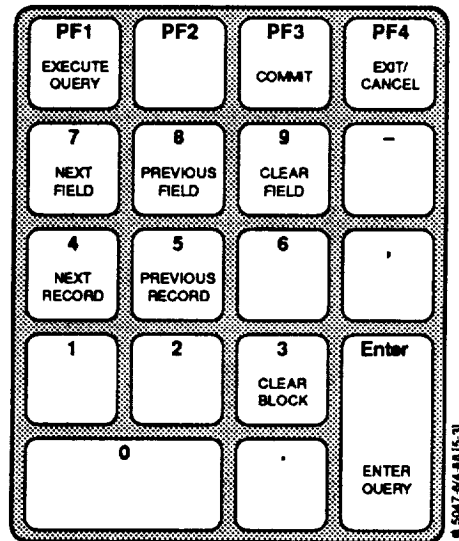
ADDITIONAL FUNCTION KEYS

FUNCTION	KEY
LIST FIELD VALUES	<Esc-V>
NEXT FIELD	Return or Tab
PREVIOUS FIELD	Backspace
DELETE RECORD	<Esc-D>
NEXT RECORD	↓
PREVIOUS RECORD	↑

Figure 4-1. DBA Keypad

General Keys

<Execute Query>

This key retrieves data from the database and displays it to the screen. Some of the DBA screens display multiple lines of data, while others display only one line at a time. If the <Execute Query> key is pressed without specifying any key field data, all the applicable data from the database will be displayed. If a key field is specified, just that record will be displayed.

<Clear Field>

This key clears the current field. The first time the key is pressed, data at and after the cursor are erased. The next time the key is pressed the entire field is cleared.

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<Clear Block>	This key clears the screen, without saving the data in the database.
<Next Record>	This key causes a new row of data to be displayed. On multiple-line screens, the cursor will move down one line until it reaches the bottom of the screen; then data will begin to be scrolled off the top as new data are displayed on the bottom line of the screen. For screens where just one record is displayed at a time, new data are displayed on the screen, replacing the data currently displayed.
<Previous Record>	This key causes a previously displayed row of data to be redisplayed after it was scrolled off the page. On multiple-line screens, the cursor will move up one line until it reaches the top of the screen; then data will begin to be scrolled off the bottom as old data are displayed on the top line of the screen. For screens where just one record is displayed at a time, old data are redisplayed on the screen, replacing the data currently displayed.
<Next Field>	This key allows the cursor to move between fields in a forward motion from one field to the next.
<Previous Field>	This key allows the cursor to move between fields in a backward motion from one field to the previous field.
<Commit>	This key saves the data currently displayed on the screen to the database.
<Exit/Cancel>	This key allows the user to exit from the current DBA screen and return to the DBA menu screen.
	NOTE: Any updates to the database should be saved with the <Commit> key before exiting from the screen.
<List Field Values>	This key will cause all the values that are valid for the current field to be displayed. The values are displayed one at a time. A message

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is displayed instructing the user how to move through the list of values and select a value. This key is only available on certain fields on each screen. These specific field names will be listed in the section that describes the particular screen.

<Delete Record>   This key clears a record from the screen in preparation for deleting the record from the database (by pressing the <Commit> key).

<Enter Query>   This key prepares the screen for a query operation. The screen is cleared, and the user is instructed how to perform the query.

<u>General Messages</u>

Some messages may be displayed while running the DBA screens. Messages without a solution are informational. General messages that may be displayed during any of the screens are listed as follows. Messages that are specific to a given screen are described in the section associated with that screen.

<u>Message</u>: Do you want to commit the changes you have made? <u>Y</u>

<u>Cause</u>: This message is displayed when the user attempts to clear the screen or exit from the screen without saving the data.

<u>Solution</u>: Answer Y to save the data that are currently displayed on the screen or N to continue with clearing the screen or exiting without saving the data.

<u>Message</u>: No changes to commit

<u>Cause</u>: The user pressed the <Commit> key to save the data to the database, but no changes have been made to the data on the screen since they were retrieved from the database.

<u>Solution</u>: Make any changes necessary to the data, or use the <Clear Block> or <Exit/Cancel> keys after viewing the data.

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Message: List of values not available on this field

Cause: The user pressed the <List Field Values> key, but the current field does not have a list of values that can be displayed.

Solution: Determine the correct value to enter without using the <List Field Values> key.

Message: Field must be entered

Cause: The user tried to use the <Next Field> key to skip over a mandatory field.

Solution: Data must be entered in this field before the information can be saved in the database.

Message: Query caused no records to be retrieved, reenter

Cause: The user attempted to perform a query, and no data were found.

Solution: If a specific key field was used when performing the query, the user may want to blank out that field and perform a query on all possible values in the database. This will let the user know what values are available.

Message: Transaction completed, xx record processed

Cause: A change was made to the database. The modification could be an insert, update, or delete.

Each of the following sections describes a different DBA screen. The screen-specific keys that can be used in each screen are listed along with the actions they cause. Required fields and software-generated fields are listed. Screen-specific error and information messages will be discussed, along with the appropriate responses to them.

4.2.1 NEW PROJECT

This screen is used to enter a new project into the database, view current project information, update current project information, or delete current project information. To select this screen,

1.   Perform step 1 of Section 4.2 to display the DBA menu.

2.   Enter option 1 (New project data).

Figure 4-2 shows the New Project Data screen as it will appear on
the terminal screen. Section 4.2, steps 3 through 7, contains an explanation of running the screen (viewing data, inserting data, updating data, deleting data). The mandatory fields, computer-generated fields, screen-specific keys, and screen-specific messages are listed below.

```
┌──────────────────────────────────────────────────────────────┐
│                      NEW PROJECT DATA                          │
├──────────────────────────────────────────────────────────────┤
│  PROJECT        PROJECT         PROJECT           ACTIVE       │
│  NAME           NO.             TYPE              STATUS       │
│  ▓▓▓▓▓▓▓        ▓▓▓▓▓▓▓         ▓▓▓▓▓▓▓           ▓▓▓▓▓▓▓       │
│  ▓▓▓▓▓▓▓        ▓▓▓▓▓▓▓         ▓▓▓▓▓▓▓           ▓▓▓▓▓▓▓       │
│  ▓▓▓▓▓▓▓        ▓▓▓▓▓▓▓         ▓▓▓▓▓▓▓           ▓▓▓▓▓▓▓       │
│                                                                │
└──────────────────────────────────────────────────────────────┘
```

Char Mode: Replace   Page 1   Count: *0

Figure 4-2.   New Project Data Screen

Mandatory Field

●   Project Name

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Computer-Generated Field

●   Project Number

Keys

Refer to Section 4.2 for a list of keys that are available on all DBA screens. Following is an additional key that may be used for this screen:

<List Field Values>   This key is available on

                                Project type
                                Active Status

Messages

Refer to Section 4.2 for a list of messages that may appear during all DBA screens. Following are additional messages that may appear on this screen:

Message: Project name exists in database <Reenter>

Cause: The user entered a project name while in insert mode, but the name already exists in the database.

Solution: Verify that the name was typed in correctly. If the name was entered already, view the information, and resolve any conflicts between what is in the database and the information to be added.

Message: Invalid project type entered (use <Esc-V> to see valid codes)

Cause: The user entered an invalid project type.

Solution: Use the <List Field Values> key to view a list of the valid project types. Select one of these project types.

Message: Invalid status code entered (use <Esc-V> to see valid status codes)

Cause: The user entered an invalid status code.

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Solution: Use the <List Field Values> key to view a list of
            the valid status codes. Select one of these
            status codes.

Message: Project number exists in table **xxx** (DO NOT DELETE
            PROJECT DATA.)

Cause: The user attempted to delete a project from the
            database while data currently exist for that
            project in the table specified.

Solution: Verify that this project is to be deleted from the
            database. No data should **exist** in the database
            for a project to be deleted unless they are in-
            valid data that were entered by mistake and should
            be deleted.

4.2.2 ENCODING DATA

This screen is used to enter new coded values into the data-
base, view current coded values, update current coded values,
or delete current coded values. To select this screen,

1.   Perform step 1 of Section 4.2 to display the DBA
     menu.

2.   Enter option 2 (Encoding data).
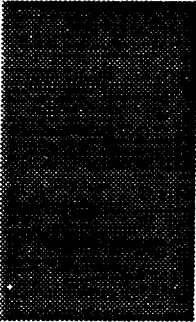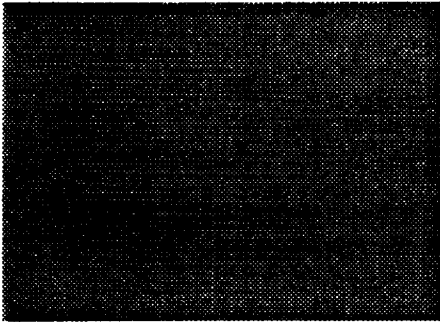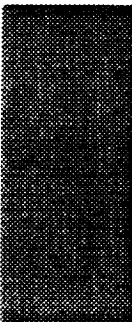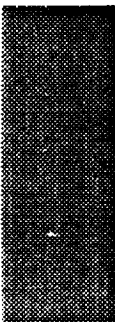
Figure 4-3 shows the Encoding Data screen as it will appear
on the terminal. Section 4.2, steps 3 through 7, contains
an explanation of running the screen (viewing data,
inserting data, updating data, deleting data). The mandatory
fields, screen-specific keys, and screen-specific messages
are listed below.

<u>Mandatory Fields</u>

● Name of field
● Code
● Value

```
┌──────────────────────────────────────────────────────────────┐
│                        ENCODING DATA                          │
├──────────────────────────────────────────────────────────────┤
│ Please enter the name of the field in which the encoded values│
│ are used: ████████████████████                         .      │
│                                                               │
│                                                               │
│    Code: ████████████████████             .                   │
│                                                               │
│   Value: ████████████████████████████                         │
│                                                               │
│                                                               │
│                         .                                     │
│                                                               │
│                                                               │
│                             .                                 │
│                                                               │
│                                                               │
└──────────────────────────────────────────────────────────────┘
```

Char Mode: Replace Page 1   Count: *0

Figure 4-3.   Encoding Data Screen

<u>Keys</u>

Refer to Section 4.2 for a list of keys that are available
on all DBA screens.

<u>Messages</u>

Refer to Section 4.2 for a list of messages that may appear
during all DBA screens. Following are additional messages
that may appear on this screen:

<u>Message</u>:   Incorrect field name entered <enter correct field
           name>

<u>Cause</u>:   The user entered a field name that does not corre-
          spond to a field in the database and that requires
          entries in the validation table.

<u>Solution</u>:   Enter a field name that corresponds to a database
            field that requires entries in the validation
            table.

<u>Message</u>:   Record cannot be deleted

<u>Cause</u>:   The user pressed the <Delete Record> key to
          delete an encoded value from the database.

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Solution: Encoded values cannot be deleted from the database.

Message: Code already exists <Reenter new code>

Cause: The user entered a code for a given field, but that code already exists in the database for that field.

Solution: Verify that the code was typed in correctly. If the code already exists in the database, view the information that is currently stored in the database for that code and field. Resolve any differences between the information currently in the database and the information to be stored in the database.

4.2.3 PROGRAMMER DATA

This screen is used to enter a new programmer name into the database, view current programmer information, update current programmer information, or delete current programmer information. To select this screen,

1.   Perform step 1 of Section 4.2 to display the DBA menu.

2.   Enter option 3 (Programmer data).

Figure 4-4 shows the Personnel Data screen as it will appear on the terminal screen. Section 4.2, steps 3 through 7, contains an explanation of running the screen (viewing data, inserting data, updating data, deleting data). The mandatory fields, computer-generated fields, screen-specific keys, and screen-specific messages are listed below.

<u>Mandatory Field</u>

●   None

<u>Computer-Generated Fields</u>

●   Entry date
●   Programmer id

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PERSONNEL DATA			
Form Name	Full Name	Entry Date	Id

Char Mode: Replace Page 1   Count: *0

Figure 4-4. Personnel Data Screen

Keys

Refer to Section 4.2 for a list of keys that are available on all DBA screens.

Messages

Refer to Section 4.2 for a list of messages that may appear during all DBA screens. Following are additional messages that may appear on this screen:

Message: Programmer id exists in table xxx

Cause: The user attempted to delete a programmer from the database while data currently exist for that programmer in the table specified (in place of the xxx).

Solution: Verify that this programmer is to be deleted from the database. No data should exist in the database for a programmer to be deleted unless invalid data were entered by mistake and, therefore, should be deleted.

Message: Programmer name already exists <Reenter>

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<u>Cause</u>: The user entered a programmer name while in insert mode, but the name already exists in the database.
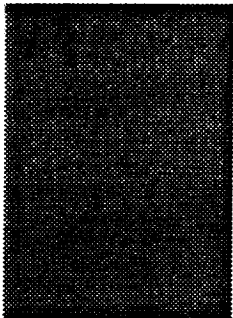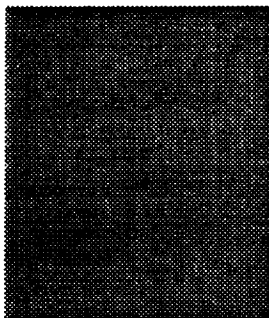
<u>Solution</u>: Verify that the name was typed in correctly. If the name was entered already, view the information, and resolve any conflicts between what is in the database and the information to be added.

4.2.4 COMPUTER DATA

This screen is used to enter new computer data into the database, view current computer information, or update current computer information. To select this screen,

1. Perform step 1 of Section 4.2 to display the DBA menu.

2. Enter option 4 (Computer data).

Figure 4-5 shows the Computer Data screen as it will appear on the terminal screen. Section 4.2, steps 3 through 7, contains an explanation of running the screen (viewing data, inserting data, updating data). The mandatory fields, screen-specific keys, and screen-specific messages are listed below.

Char Mode: Replace Page 1   Count: *0

Figure 4-5. Computer Data Screen

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Mandatory Fields

- CPU short name
- CPU full name

Keys

Refer to Section 4.2 for a list of keys that are available on all DBA screens.

Messages

Refer to Section 4.2 for a list of messages that may appear during all DBA screens.

4.2.5 STATUS FLAGS

This screen is used to update status values for a particular form type or all form types in a project. To select this screen,

1. Perform step 1 of Section 4.2 to display the DBA menu.

2. Enter option 5 (Status flags).

Figure 4-6 shows the Status Flag screen as it will appear on the terminal screen. To update the data, first enter the project name. Use the <Next Field> key to move to the next field to enter the form type for which status values are to be updated. ALL is used to indicate all the form types
existing for the project. Then use <Next Field> key again to go to the status field and enter the new status value.

Mandatory Fields

- Project name
- Form type
- Status

```
                        STATUS FLAG
                        ──────────

        Please enter

            Project Name: ░░░░░░░░░░░░░░░░░░░░

            Form type/ All: ALL ░░░░░░░░░░░░░░░░

            Status flag value: ░░░░░░░░░░░░░░░░

        Press <PF3> to commit the changes
              or <PF4> - Previous menu




        Char Mode: Replace  Page 1               Count: *0
```

Figure 4-6. Status Flag Screen

Keys

Refer to Section 4.2 for a list of keys that are available
on all DBA screens. Following is an additional key that may
be used for this screen:

<List Field Values>   This key is available on

                           Project name
                           Status

Messages

Refer to Section 4.2 for a list of messages that may appear
during all DBA screens. Following are additional messages
that may appear on this screen:

<u>Message</u>: Invalid project. Please reenter

<u>Cause</u>: This means that a project name was entered that does
        not exist in the database.

<u>Solution</u>: The cursor will be positioned on the project name.
          A new project name can be entered over the cur-
          rent name.

Message: There is no COF data for this project. STATUS not updated

Cause: This means that the user wants to update·the status values for the COF, but there are no data for the form type.

Solution: Verify the form type is the correct one. If it is, press <Exit/Cancel> to exit. Log onto ORACLE using SQL*Plus and investigate further.

Message: There is no CRF data for this project. STATUS not updated

Cause: This means that the user wants to update the status values for the CRF, but there are no data for the form type.

Solution: Verify the form type is the correct one. If it is, press <Exit/Cancel> to exit. Log onto ORACLE using SQL*Plus and investigate further.

Message: There are no PCSF data for this project. STATUS not updated

Cause: This means that the user wants to update the status values for the PCSF, but there are no data for the form type.

Solution: Verify the form type is the correct one. If it is, press <Exit/Cancel> to exit. Log onto ORACLE using SQL*Plus and investigate further.

Message: There are no PEF data for this project. STATUS not updated

Cause: This means that the user wants to update the status values for the PEF, but there are no data for the form type.

Solution: Verify the form type is the correct one. If it is, press <Exit/Cancel> to exit. Log onto ORACLE using SQL*Plus and investigate further.

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Message: There are no PRF data for this project. STATUS not
             updated

Cause: This means that the user wants to update·the status
           values for the PRF, but there are no data for the
           form type.

Solution: Verify the form type is the correct one. If it
             is, press <Exit/Cancel> to exit. Log onto
             ORACLE using SQL*Plus and investigate further.

Message: There are no SEF data for this project. STATUS not
             updated

Cause: This means that the user wants to update the status
           values for the SEF, but there are no data for the
           form type.

Solution: Verify the form type is the correct one. If it
             is, press <Exit/Cancel> to exit. Log onto
             ORACLE using SQL*Plus and investigate further.

Message: There are no SPF data for this project. STATUS not
             updated

Cause: This means that the user wants to update the status
           values for the SPF, but there are no data for the
           form type.

Solution: Verify the form type is the correct one. If it
             is, press <Exit/Cancel> to exit. Log onto
             ORACLE using SQL*Plus and investigate further.

APPENDIX A - SAMPLE SESSIONS

PERSONNEL RESOURCE FORM VIEWING SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:

Date(Friday):

Programmer:

Form No:

Char Mode: Replace   Page 1   Count: *0

Figure A-1.   Sample Viewing Session (1 of 3)

PERSONNEL RESOURCE FORM VIEWING SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:

Date(Friday):

Programmer:

Form No: 23

Char Mode: Replace   Page 1   Count: *0

Figure A-1.   Sample Viewing Session (2 of 3)

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Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:

Date(Friday):

Programmer:

Form No:

Char Mode: Replace   Page 1   Count: *0

Figure A-1.   Sample Viewing Session (3 of 3)

REPORT FUNCTION MENU

What type of report operation do you want to perform?

    1 - Create a report script

    2 - Retrieve an existing report script to run or modify

    3 - View or delete existing report scripts

        <PF1>- Top menu
        <PF4>- Previous menu

Please enter your selection number: ▓

Please enter script name to be retreived or <ESC V> to list:

Char Mode: Replace   Page 1   Count: *0

Figure A-2.   Sample Create Script Session (1 of 5)

```
                    MAIN REPORT MENU
                    _____

              What would you like to do to a script?

      1 - Run current report script (script will be deleted upon completion
                              of report if it has not been saved)
      2 - View/Edit current report script
      3 - Add report to the current report script
      4 - Save current report script
      5 - Change routing of report script (current routing: STL_GRAPHIC    )


                    <PF4>- Previous menu


              Please enter your selection number: █

      NOTE: For creating a new script use option 3 to populate.

      The current script will no longer be available if <PF4> is
                  is pressed prior to saving script
      ████████████████████████████████████████████
                Char Mode: Replace  Page 2                    Count: *0
```

Figure A-2.   Sample Create Script Session (2 of 5)

```
                    REPORT CATEGORIES MENU
                    _____

        What type of report would you like to add?

                1 - Multiple Project

                2 - Single Project

                3 - Miscellaneous

                <PF4>- Previous menu

        Please enter your selection number: █




          Char Mode: Replace   Page 8                    Count: *0
```

Figure A-2.   Sample Create Script Session (3 of 5)

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```
                SINGLE PROJECT REPORTS MENU
         ───────────────────────────────────────
        Which Single Project Report would you like to run?
             Press <PF3> to save your selection.


   1 - Activity Hours                 9 - GSFC Form Counts
   2 - Actual Statistics to Date     10 - GSFC Manpower Hours
   3 - Component Names               11 - Maintenance Activity Hours
   4 - Computer Resources            12 - Manpower Hours
   5 - Estimated Statistics          13 - SEL Forms (COF, CRF, PRF, SPF, DSF)
   6 - Form Counts                   14 - SEL Maintenance Forms (MCRF and WMEF
   7 - General Project Data          15 - Services Hours
   8 - Growth History

                    <PF4>- Previous menu



          Please enter your selection number: ▓▓
          Please enter project name or <ESC-V> to list: ▓▓▓▓▓

      Char Mode: Replace   Page 1                    Count: *0
```

Figure A-2.   Sample Create Script Session (4 of 5)

```
        ACTUAL STATISTICS TO DATE REPORT SELECTION SCREEN
        ─────────────────────────────────────────────────

          Please place an X beside all desired reports.
             Press <PF3> when selection is complete.

              ▓ - Project Statistics

              ▓ - Resource Statistics

              ▓ - SAP Data


             <PF4> - Previous Menu
```

Figure A-2.   Sample Create Script Session (5 of 5)

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```
                    FORM FUNCTIONS MENU
                    ───────────────────

        What type of operation do you want to perform?

                1 - View existing data
                2 - Insert new data
                3 - Update existing data
                4 - Delete existing data
                5 - Quality assure data

             <PF1>- Top menu
             <PF4>- Previous menu



        Please enter your selection number: ▓


    Char Mode: Replace   Page 1                    Count: *0
```

Figure A-3.   Sample Insert Session (1 of 4)

```
        PERSONNEL  RESOURCE  DATA  INPUT  SCREEN
        ─────────────────────────────────────────

┌─────────────────────────┬────────┐   Project Name: ▒▒▒▒▒▒▒▒
│       Activity          │ Hours  │
├─────────────────────────┼────────┤   Date(Friday): ▒▒▒▒▒▒▒▒
│ Predesign               │ ▒▒▒▒▒  │
│ Create Design           │ ▒▒▒▒▒  │   Programmer:   ▒▒▒▒▒▒▒▒
│ Read/Review Design      │ ▒▒▒▒▒  │
│ Write Code              │ ▒▒▒▒▒  │   Form No: ▓▓   ▒▒▒▒▒▒
│ Read/Review Code        │ ▒▒▒▒▒  │
│ Test Code Units         │ ▒▒▒▒▒  │
│ Debugging               │ ▒▒▒▒▒  │
│ Integration Test        │ ▒▒▒▒▒  │
│ Acceptance Test         │ ▒▒▒▒▒  │
│ Other                   │ ▒▒▒▒▒  │
├─────────────────────────┼────────┤
│ Rework                  │ ▒▒▒▒▒  │
│ Enhancing/Refining      │ ▒▒▒▒▒  │
│          /Optimizing    │ ▒▒▒▒▒  │
│ Documenting             │ ▒▒▒▒▒  │
│ Reuse                   │ ▒▒▒▒▒  │
└─────────────────────────┴────────┘

    Char Mode: Replace   Page 1                    Count: *0
```

Figure A-3.   Sample Insert Session (2 of 4)

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PERSONNEL RESOURCE DATA INPUT SCREEN

Activity	Hours
Predesign	
Create Design	20
Read/Review Design	4
Write Code	
Read/Review Code	5.5
Test Code Units	
Debugging	10.5
Integration Test	
Acceptance Test	
Other	
Rework	
Enhancing/Refining	25
/Optimizing	
Documenting	
Reuse	

Project Name: ACME

Date(Friday): 02-FEB-90

Programmer: GHILLER

Form No: R 09090

Figure A-3.   Sample Insert Session (3 of 4)

PERSONNEL RESOURCE DATA INPUT SCREEN

Activity	Hours
Predesign	
Create Design	
Read/Review Design	
Write Code	
Read/Review Code	
Test Code Units	
Debugging	
Integration Test	
Acceptance Test	
Other	
Rework	
Enhancing/Refining	
/Optimizing	
Documenting	
Reuse	

Project Name: ACME

Date(Friday): 02-FEB-90

Programmer:

Form No: R

Transaction completed — 1 records processed
Char Mode: Replace   Page 1   Count: *0

Figure A-3.   Sample Insert Session (4 of 4)

PERSONNEL RESOURCE DATA UPDATE SCREEN

Activity	Hours
Predign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:
Date(Friday):
Programmer:
Form No:

SELECT

Char Mode: Replace   Page 1   Count: *0

Figure A-4.   Sample Update Session (1 of 4)

PERSONNEL RESOURCE DATA UPDATE SCREEN

Activity	Hours
Predign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name:
Date(Friday):
Programmer:
Form No:

UPDATE

Char Mode: Replace   Page 1   Count: *0

Figure A-4.   Sample Update Session (2 of 4)

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PERSONNEL RESOURCE DATA UPDATE SCREEN

Activity	Hours
Predign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining 　　　　/Optimizing Documenting Reuse	

Project Name: ▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

Char Mode: Replace　Page 1　　　　　　Count: *0

Figure A-4.　Sample Update Session (3 of 4)

PERSONNEL RESOURCE DATA UPDATE SCREEN

Activity	Hours
Predign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining 　　　　/Optimizing Documenting Reuse	

Project Name: ▓▓▓▓▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓▓

Char Mode: Replace　Page 1　　　　　　Count: *0

Figure A-4.　Sample Update Session (4 of 4)

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PERSONNEL RESOURCE FORM DELETE SCREEN

Activity	Hours
Predesign Create Desin Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining 　　　　/Optimizing Documenting Reuse	

Project Name: ▓▓▓▓▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

STATUS
▓▓▓▓▓　　　　　▓ Enter 'Y' to delete
　　　　　　　　　　or 'N' to cancel request
　　　　　　　　Then : Press PF3 to save
　　　　　　　　　　in database

Char Mode: Replace   Page 1   Count: *0

Figure A-5.   Sample Delete Session (1 of 4)

PERSONNEL RESOURCE FORM DELETE SCREEN

Activity	Hours
Predesign Create Desin Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining 　　　　/Optimizing Documenting Reuse	

Project Name: ▓▓▓

Date(Friday): ▓▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

STATUS
▓▓▓▓▓　　　　　▓ Enter 'Y' to delete
　　　　　　　　　　or 'N' to cancel request
　　　　　　　　Then : Press PF3 to save
　　　　　　　　　　in database

Char Mode: Replace   Page 1   Count: *0

Figure A-5.   Sample Delete Session (2 of 4)

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PERSONNEL RESOURCE FORM DELETE SCREEN

Activity	Hours
Predesign Create Desin Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name: ▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓

Form No: ▓▓▓▓▓

STATUS
▓▓▓▓▓   ▓ Enter 'Y' to delete
                    or 'N' to cancel request
                Then : Press PF3 to save
                    in database

Char Mode: Replace   Page 1   Count: *0

Figure A-5.   Sample Delete Session (3 of 4)

PERSONNEL RESOURCE FORM DELETE SCREEN

Activity	Hours
Predesign Create Desin Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name: ▓▓▓▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓

Form No: ▓▓▓▓▓

STATUS
▓▓▓▓▓   ▓ Enter 'Y' to delete
                    or 'N' to cancel request
                Then : Press PF3 to save
                    in database

Char Mode: Replace   Page 1   Count: *0

Figure A-5.   Sample Delete Session (4 of 4)

PERSONNEL RESOURCE FORM QUALITY ASSURANCE SCREEN

Activity	Hours
Predesign	
Create Design	
Read/Review Design	
Write Code	
Read/Review Code	
Test Code Units	
Debugging	
Integration Test	
Acceptance Test	
Other	
Rework	
Enhancing/Refining /Optimizing	
Documenting	
Reuse	

Project Name: ▓▓▓▓▓▓▓▓

Date(Friday): ▓▓▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

QA-STATUS
▓▓▓▓▓

▓ Enter 'C' for correct
   or 'E' for errors
Then : Press PF3 to save
          in database

Char Mode: Replace   Page 1   Count: *0

Figure A-6.   Sample QA Session (1 of 4)

PERSONNEL RESOURCE FORM QUALITY ASSURANCE SCREEN

Activity	Hours
Predesign	
Create Design	
Read/Review Design	
Write Code	
Read/Review Code	
Test Code Units	
Debugging	
Integration Test	
Acceptance Test	
Other	
Rework	
Enhancing/Refining /Optimizing	
Documenting	
Reuse	

Project Name: ▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

QA-STATUS
▓▓▓▓

▓Enter 'C' for correct
   or 'E' for errors
Then : Press PF3 to save
          in database

Char Mode: Replace   Page 1   Count: *0

Figure A-6.   Sample QA Session (2 of 4)

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PERSONNEL RESOURCE FORM QUALITY ASSURANCE SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name: ▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓▓

Form No: ▓▓▓▓▓

QA-STATUS
▓▓▓▓▓▓   ▓▓   Enter 'C' for correct
                     or 'E' for errors
                Then : Press PF3 to save
                        in database

Char Mode: Replace   Page 1   Count: *0

Figure A-6.   Sample QA Session (3 of 4)

PERSONNEL RESOURCE FORM QUALITY ASSURANCE SCREEN

Activity	Hours
Predesign Create Design Read/Review Design Write Code Read/Review Code Test Code Units Debugging Integration Test Acceptance Test Other	
Rework Enhancing/Refining /Optimizing Documenting Reuse	

Project Name: ▓▓▓▓▓▓▓

Date(Friday): ▓▓▓▓▓▓

Programmer: ▓▓▓▓▓

Form No: ▓▓▓▓▓

QA-STATUS
▓▓▓▓▓▓   ▓Enter 'C' for correct
                     or 'E' for errors
                Then : Press PF3 to save
                        in database

Char Mode: Replace   Page 1   Count: *0

Figure A-6.   Sample QA Session (4 of 4)

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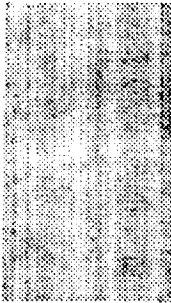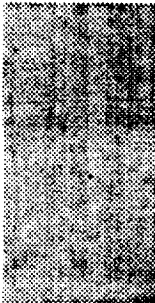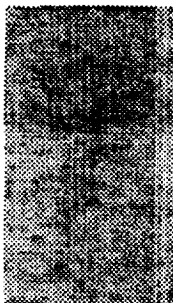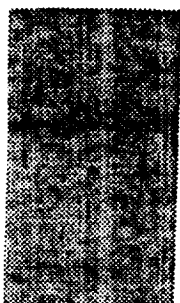
```
What type of function do you want to perform?

        1 - Generate distribution tape


    <PF4> - Previous menu


Please enter your selection number:▓▓|




    Char Mode: Replace   Page 1                    Count: #0
```

Figure A-7. **Sample Database Support Function Session (1 of 2)**

```
            Generate Distribution Tape
            _____

    Press <PF3> to start the generating process
          <PF4> to exit
```
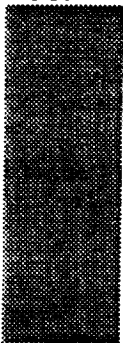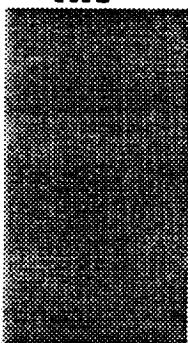
Figure A-7. **Sample Database Support Function Session (2 of 2)**

NEW PROJECT DATA

PROJECT NAME	PROJECT NO.	PROJECT TYPE	ACTIVE STATUS

Cnar Mode: Replace   Page 1   ENTER QUERY   Count: *0

Figure A-8.   Sample DBA Viewing Data Session (1 of 3)

NEW PROJECT DATA

PROJECT NAME	PROJECT NO.	PROJECT TYPE	ACTIVE STATUS

Char Mode: Replace   Page 1   ENTER QUERY   Count: *0

Figure A-8.   Sample DBA Viewing Data Session (2 of 3)

```
                      NEW  PROJECT  DATA
PROJECT          PROJECT          PROJECT           ACTIVE
NAME             NO.              TYPE              STATUS
```

Char Mode: Replace   Page 1   Count: *1

Figure A-8.   Sample DBA Viewing Data Session (3 of 3)

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GLOSSARY

CCF	Component Change Form
COF	Component Origination Form
CRF	Change Report Form
DAMSEL	Database Access Manager for the SEL
DBA	Database Administrator
DSF	Development Status Form
GSFC	Goddard Space Flight Center
MCRF	Maintenance Change Report Form
PC	personal computer
PCSF	Project Completion Statistics Form
PDR	preliminary design review
PEF	Project Estimates Form
PRF	Personnel Resource Form
QA	quality assurance
SAP	Source Code Analyzer Program
SEF	Subjective Evaluation Form
SEL	Software Engineering Laboratory
SIF	Subsystem Information Form
SPF	Services/Products Form
STL	Systems Technology Laboratory
WMEF	Weekly Maintenance Effort Form

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