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**Technical Information Division (TID) Publishing
Management Information System (MIS)**
Description and Operating Information

E. R. Ratliff

Naval Command, Control and
Ocean Surveillance Center
RDT&E Division

San Diego, CA
92152-5001

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OCEAN SURVEILLANCE CENTER
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ADMINISTRATIVE INFORMATION

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Chapter 1. The TID Publishing Management Information System

This chapter describes the TID Publishing Management Information System (MIS) and provides instructions for program installation, setup, and data entry. It lists operator and supervisor responsibilities with regard to the MIS and provides definitions of MIS terms.

What is the TID Publishing MIS?

The TID Publishing Management Information System (MIS) is a menu-driven tool used to maintain information on products related to a publishing effort. It is also used to facilitate operation of a service center. The MIS consists of database files and application programs written using the Foxpro™ commercial database software program. The MIS is used by the Technical Information Division (TID); its Publications Branch; and its Presentations, Multimedia, and Photography Branch, groups that produces written and visual communications products at the Naval Command, Control and Ocean Surveillance Center (NCCOSC) RDT&E Division (NRaD).

The TID Publishing MIS allows TID personnel to maintain statistical information and generate reports, lists, and other product information. It is designed for data entry from existing route sheets, time sheets, and worksheets so that clerks and aides with minimal computer experience can keep publishing records current.

The MIS is designed for menu-driven data retrieval so that the casual user can view and print information. Several menus allow the user to tailor the content of the report.

The TID Publishing MIS has been in use at NRaD and its predecessor laboratories since 1986. It was originally designed as a tool used to maintain information on the type of camera-ready-copy (CRC) pages (text, art, math, tables) produced in the Publications Branch. Over the years, databases have been added, and the program has been modified to track product status and fiscal year costs and revenue. The program has also been modified to facilitate fund transfers between customers and service centers. New report formats have been added as required.

Contents of This Manual

This manual describes the TID Publishing MIS and lists MIS operator and supervisor responsibilities. The following information is listed.

- Installing the required programs and files and preparing the MIS for initial use
- Recording initial information on products
- Recording labor and service center units against products
- Changing product information
- Viewing information
- Printing information

Sending electronic files to accounting for fund transfer
Performing regular housekeeping tasks

Conventions

Table 1 lists the typographic conventions to help you install and use the TID Publishing MIS.

Table 1. Conventions.

Type style	Used for
Bold	Command names and any text that must be typed exactly as shown.
ALL CAPITALS	Directory and file names
SMALL CAPITALS	Identifying blanks for data entry
<u>UNDERLINED SMALL CAPITALS</u>	Identifying information to be typed in data entry screen reverse video blanks
<i>italics</i>	General emphasis

TID Special Publishing MIS Terms

TID special publishing MIS terms that may be unfamiliar to the casual user are defined below.

Publishing Product. Publishing products can be documents and writing or editing projects. They can also be graphic products such as viewgraphs, posters, displays, and multimedia presentations. In this manual, *product* refers to the product resulting from an effort.

Publications Document. A document is a product prepared and distributed using normal TID publication procedures. A document is identified by a formal product identification number (a document number), title, and date. Examples of documents are technical reports, technical documents, technical notes, technical manuals, software documents, specifications, technical briefs, brochures, and flyers.

Publications Project. A publication project is a product that is prepared using special publication procedures. It requires publication effort but may not have a formal document number or title. It does have an information but unique product identification number or phrase and an identifying title that describes the work. It may or may not be distributed. Examples of projects are certificates, awards, unpublished bibliographies, draft or preliminary reports, canceled documents, viewgraphs, disk conversion files, and art work not identified with a specific document.

Graphic Product. A graphic product is the result of any labor expended by graphic personnel in the formulation and production of a product.

Product Identification Number. The product identification number is a short number or identifying phrase assigned to the product. Examples of formal document product identification numbers are TR100, TD150, and TN4040. Examples of product identification numbers that are not formal document numbers are PRELIM. TD1179, RECRUITMENT BROCHURE, JOURNAL ARTICLE-SCHROEDER 12-23-88, and TID NEWS JANUARY 89. A work order number may also be used as the product identification number. To speed information retrieval, the product identification number must be unique.

Service Center. A service center is an accounting vehicle for transferring funds from one account to another. At NRaD, TID uses service centers to transfer funds from a customer's account to a service center account. Funds are transferred from a customer's account into service center accounts by *category* depending on the work performed. An accounting form, the *Service Center Weekly Summary Report*, lists the specific job order numbers and funds to be transferred.

Service Center Number. The service center number is a unique identifying number assigned to a product. Each product processed must have its own service center number. The service center number consists of the fiscal year designation and a numeric designation. For example, in fiscal year 1989, service center numbers assigned may have been 89001 through 89301. The MIS operator assigns the service center number on receipt of the manuscript or initial project instructions.

Service Center Category. Service center work is identified by category or effort description. Examples of categories are editing, art, composition, proofreading, disk conversion and processing. Each service center category is a separate account within the service center with separate labor and revenue job order numbers.

Service Center Rates. Each service center category is assigned a rate at which the customer is charged for a *unit* effort. For example, writing may be charged to the customer at \$45.00 per unit, while proofreading may be charged at \$35.00 per unit.

Service Center Unit. A service center unit can be an hour, an item, or a process. Each unit has an associated *rate* for charging the customer.

Service Center Revenue. Service center revenue refers to funds generated by editing, illustrating, production, and support efforts. Revenue is transferred from a customer's account into the service center category accounts. A service center category revenue job order number is used to in the transfer of funds between the customer and the service center.

Service Center Cost. Service center cost refers to the cost of labor to the service center. It reflects amounts that will be taken from the service center category accounts to pay for labor entered on regular time cards against those accounts. When labor hours are recorded against a product, the MIS automatically records the costs associated with that labor.

Employees use service center category labor job order numbers on time cards to effect transfer of funds from the service center to pay for labor.

Fund transfer. Fund transfer is the process of transferring funds between a customer's job order number account and the Publishing Service Center. In creating accounting information for fund transfer, the MIS uses a 2-step process.

The first step initiates the fund transfer and occurs when the MIS operator records service center units. If the operator bills the customer for work expended against a product, the fund transfer is considered *positive*. If the operator backs out units that have been previously charged to the customer, the fund transfer is considered *negative*. In either case, the MIS writes individual unit cost information to a *BILL.TXT* file.

The second step in the fund transfer process is taken when you use Main Menu selection E to create an EMAIL.BIL file that will be sent to Accounting. Accounting processes the information so that their computers can effect the actual transfer of funds. Fund transfers are listed on customer's job order status reports as transfers rather than labor or material. The amount of each transfer is rounded in the accounting process.

BILL.TXT file. The BILL.TXT file is located in the C:\MAIL directory. Each time units are recorded or backed out, two lines of information are added to the BILL.TXT file. This initiates the *fund transfer* process. The BILL.TXT file lists fund transfer information for each unit or multiples of units to be charged to the customer or returned (backed out) to the customer. The BILL.TXT file is deleted when its information is written to the EMAIL.BIL file. A new BILL.TXT file is created the next time you record or back out service center units.

EMAIL.BIL file. The EMAIL.BIL fund transfer file lists information that will effect the transfer of funds between the customer's account and the service center account. Information for this file is written to the BILL.TXT file each time you record service center units against a product. When you select E (create e-mail) at the Main Menu, the EMAIL.BIL file is created in the C:\MAIL director from number and date information stored in the computer memory and the BILL.TXT file. The EMAIL.BIL file will be created only if the electronic mail function is initialized and a BILL.TXT file is available. Only the MIS *primary operator* can send EMAIL.BIL files.

The EMAIL BIL files are numbered consecutively as they are created. The first EMAIL.BIL file created during a fiscal year will be number 1. The filename will be EMAIL1.BIL. The Housekeeping and Management Menu displays the number of the next EMAIL.BIL file that will be created and the current value of the fund transfers that will be listed in that file.

Electronic Mail Function. The electronic mail function can be set to *off* or *on*. If it is set to *on*, the MIS will create write fund transfer file information to the BILL.TXT file. If it is set to *off*, this information will not be written to the BILL.TXT file, but the *Service Center Weekly Summary Report* will still be printed.

Service Center Weekly Summary Report. The weekly summary report is a single-sheet form that lists information required to transfer funds from a customer's account to a

service center account. This is the paper-copy record of the fund transfer information that is written to the BILL.TXT file. The MIS creates information for a weekly summary report and prints the report when the operator records units against a product. Before the MIS was programmed to create and send fund transfer files, the weekly summary report was used to manually effect the transfer of funds between customer accounts and the service center accounts.

Primary Operator. The primary operator is the operator who can use an electronic mail program to send files. The mail program on the MIS PC is configured with the primary operator's user identification information, so only that operator can send the EMAIL.BIL files to cognizant accounting personnel. The primary operator can also send product information files and status report using the electronic mail program. Other operators and casual users can send other files from within the MIS, but must use programs other than the mail program configured with the primary operator's user identification. Files can also be transferred to disk and sent from another terminal.

Customer. The customer is an author or other person requiring documentation or graphic support services. For in-house documents and all projects, the customer's name is recorded as the author. For contractor-produced documents, the customer's name is recorded as the Contracting Officer's Representative (COR) if he is not listed as the author of the document.

Editor. The MIS editor is the employee responsible for the product. The editor's actual position classification may not be listed as editor. The editor may be a writer, editor, illustrator, computer operator, or another branch employee who is in charge of the document or project.

Employee Rates. Employee overhead and project labor rates are stored in the RATES.DBF database file. They are used in calculating the cost of labor hours. These rates reflect what the employee's labor costs the Publishing Service Center and must be changed as required.

Employee Identification Initials. To speed data entry, the MIS identifies employees by three initials. The initials must be unique to the specific employee. Do not use the same initials for more than one employee.

MIS Forms

The MIS was designed to allow data entry from forms. If the product is a document, information for initial product information entry can be found on the document route and approval form. Labor hours are recorded from standard time sheets. For each graphic product, the MIS prints a Graphic Product Information Form. For each publishing product recorded, the MIS prints the worksheet forms described below. These forms stay with the product all through the editing, production, and quality assurance (QA) cycle. They will return with the camera-ready-copy when it is ready for print.

Publications or Graphic Product Information Form. This form lists product type, title, classification, customer, editor, and print request information. It also lists the first

service center units that were recorded and blanks for supervisor comments and provides blanks for quality assurance information.

Editor Worksheet. This form lists blanks for the publications editor to fill in manuscript and CRC review cycle and quality assurance information. It also contains blanks for special instructions from the editor.

Production Worksheet. This form lists blanks for publications production personnel to fill in production information.

Final Worksheet. This form lists blanks for publications administrative personnel to fill in CRC, print, and distribution information.

Print Specification. The print specification form gives instructions to the printing personnel regarding publications product size, cover, ink, binding, and distribution.

Operator Responsibilities

The operator uses the MIS to perform the following functions.

Record product descriptive information from route sheets or information provided by editors. Record product descriptive information as soon as it is received. You can not record labor hours or service center units against a product until descriptive information has been recorded.

Record product statistical information from worksheets. For publications documents and products, record worksheet information as soon as the product has been completed or distributed. Many statistical reports include information only on completed or distributed products. Many are limited to products finished during a particular fiscal year. To ensure that products are included in the proper reports, worksheet information must be recorded accurately.

Record labor hours from time sheets. Record labor hours from time sheets each week. Labor hours recorded against a product allow the MIS to track the cost of the product to the service center.

Record service center units as directed by the supervisor. When you record service center units against a product, you are generating funds to pay for the labor recorded against the product.

Send EMAIL.BIL files to accounting personnel (primary operator only). The EMAIL.BIL file that contains current billing information should be sent to accounting each week. Always check to ensure that the EMAIL.BIL was sent properly. List yourself and the supervisor as "copy to" recipients of the electronic mail file. When you receive your copy, double check the recipient address.

Maintain service center information (rates, units, descriptions) as directed by the supervisor. Service center rates are usually changed each year. Get new fiscal year service center rates from the supervisor each September. Record the new rates on the first work day in October. Change service center units and descriptions only as directed by the supervisor.

Maintain employee labor rates as directed by the supervisor. Employee labor rates can change twice each year. Enter new rate information for each employee on the first work day of October and as directed by the supervisor.

Create and send status reports. Send status reports to supervisors as directed.

Create and send customer information reports. Send a customer information report to the editor when a product has been marked distributed or completed. Send reports to customers as requested. Reports that may be of interest to the customer include

Provide a checklist of work in process to the supervisor each week.

Provide a list of products without labor hours to the supervisor each month.

Print reports and lists as directed by the supervisor.

Supervisor Responsibilities

The supervisor must perform the following functions related to the MIS.

Give service center rate changes to the MIS operator in September.

Give employee labor rate information to the MIS operator as rates are changed.

Examine MIS checklists and reports for products that should be canceled, marked complete, or marked as preliminary. Provide this information to the MIS operator.

Provide MIS statistical reports to TID administrative personnel as required.

MIS Data Entry

Data entry for the MIS involves menus, data entry screens, and confirmation prompts. The program was designed to provide on-screen instructions for all functions. Each screen contains instructions. A menu with the *CHOICE ?* prompt or an instruction box is displayed. The instruction box includes instructions for proceeding with the current function or exiting the current function.

Menus

When a menu is displayed, select the action you wish to take and press the corresponding letter. You do not have to press Enter after a menu selection. If you press X, you will be returned to the previous menu. Pressing X at the Main Menu will return you to the DOS prompt.

Data Entry Screens

Data entry screens are displayed when the operator is recording information or locating information. Always read the instructions displayed at the bottom of the data entry screen. The instructions give information regarding required information and exit procedures. When a data entry screen is displayed, use the arrow or Enter keys to position the cursor as required. Enter information in all applicable blanks on the screen and press Enter after each blank is filled in. Use the arrow keys or the Enter key to move between blanks if required. Pressing PgDn, PgUp, or Esc will allow you to exit the current screen.

The MIS Locating Product Information data entry screen provides fast access to product information. It is used when the operator is recording hours, costs, and changes. The MIS also uses it to locate individual product information for viewing and printing. At this data entry screen, enter the service center number or the product identification number and press Enter.

Confirmation Prompts

Confirmation prompts require that you confirm the information you have recorded or changed. You will be prompted to confirm the information or exit without recording the information.

The Help Menu

You can access information on many MIS functions from the Help Menu. Press ? at most other menus to access the Help Menu.

Program Installation

The following paragraphs contain installation instructions and the procedures required to set up the MIS for normal use.

Hardware Requirements

Minimum hardware required is a 386 PC with 8 MB memory, a minimum 90 MB hard drive designated drive C, and a minimum 90 MB hard drive designated drive D. Drive D is used for the daily automatic backup.

Installing the Applicable Programs and Files

The MIS and all other applicable programs and files are currently installed and in use. The installation instructions are for use if the program must be re-installed or installed at another location.

Installing Foxpro. Follow the manufacturer's instructions for installing Foxpro for DOS on your hard disk. The program will run under FoxPro version 2 or later versions. Modify your autoexec.bat and config.sys files as required

Installing the MIS Programs. You must set up several directories (DBDATA, DBHBU, AND MAIL) in the root (C:\) directory.

The MIS program files must be located in a directory named DBDATA on the hard disk designated as C. At the root directory type

md dbdata

and press Enter.

The MIS program files are stored on several disks. For each disk, place the disk in drive a.

At the root directory (C:\) prompt, type

copy a:*. * c:\dbdata

and press Enter.

The program and database files will be copied to your C:\DBDATA directory.

You can insert the disks containing the MIS programs in drive b if required. Follow the same procedure, substituting *b* for *a* in the instructions.

The MIS writes automatic backup files to a directory called DBHBU on your hard disk. Create this directory under your root directory. At the root directory prompt, type

md dbhbu

and press Enter.

The MIS writes files to a directory called MAIL on your hard disk. Create this directory under your root directory. If you do not have this directory, at the root directory prompt, type

md mail

and press Enter.

Modifying Your AUTOEXEC.BAT File. If the computer used for the MIS will not be used for other purposes, you can modify your AUTOEXEC.BAT file so that a menu allowing fast access to the MIS and a DOS-based electronic mail program will be executed on power up. To do this, first copy the batch (BAT) programs to your root directory or other directory in your computer path, then add the following lines to the end of your AUTOEXEC.BAT file.

call menu

Other Programs and Equipment Required. The operator can use electronic mail and terminal programs and a selected editor or word processing program to send fund transfer files. Install these programs in the conventional manner. Status reports and information files can also be written to floppy disk for transfer. Equipment and software is required for using electronic mail or the terminal.exe program from the MIS. A printer is required for many MIS operations.

Accessing the MIS

The current **MIS** is set to launch the menu.bat batch file that provides immediate access to the MIS or the NRaD Micromail program when power is turned on. The following information may be used if the MIS has been re-installed or installed at another location.

If you have not installed the menu.bat batch file that allows immediate access to the **MIS** on PC power-up, access the **MIS** by changing to the DBDATA working directory and executing the Foxpro program. The FoxPro CONFIG.FP program file provided with the MIS is set to call the **MIS** on execution of the MIS. Type

cd dbdata

and press Enter. Then type

foxpro

and press Enter.

The MIS Entry Screen will be displayed. Note instructions at the bottom of the screen. Type your password and press Enter. For the first use, type **new user** and press Enter. A data entry screen for adding a MIS user will be displayed. Add yourself as a new user and choose your password. Note instructions at the bottom of the screen. Type the required information in all blanks and press Enter.

The Main Menu (figure 1) will be displayed.

EMAIL INITIALIZED	
TID PUBLISHING MIS MAIN MENU	
R	RECORD Record new documents, projects and information from forms
L	LABOR Record LABOR from time sheets and record SC units
S	WEEKLY SUMMARY REPORT Record extra SC units
C	CHANGE Change recorded information/back out information
F	FORMS Record information from worksheet forms
B	BILLS Record or back out any charges to customer
V	VIEW INFORMATION
P	PRINT MENUS
H	HOUSEKEEPING
X	EXIT MIS
E	CREATE E-MAIL FILE
Q	CUSTOMER QUERY
?	HELP
CHOICE ?	

Figure 1. MIS Main Menu.

The TID Publishing MIS Main Menu

From the MIS Main Menu you can:

Record new product information
 Change existing product information
 Access Print, View, Help, and Housekeeping and Management Menus
 Record or back out labor hours and their costs
 Record or back out service center units
 Create a customer status report for view, print, or electronic mail
 Create an electronic mail file for fund transfer
 Access the Help Menu
 Access other menus

Setting Up the MIS for Use

Before you use the MIS to record and track product information, use the Housekeeping and Management Menu (figure 2) to record initial personnel and fiscal information. The

HOUSEKEEPING & MANAGEMENT MENU			
EMPLOYEE	A	ADD EMPLOYEE	B DELETE EMPLOYEE
FUNCTIONS	C	CHANGE EMPLOYEE RATE	D CHANGE EMPLOYEE ID
	E	VIEW/PRINT INFO	K ADD/DELETE OPERATOR
SERVICE	H	CHANGE SERVICE CENTER RATES, SIGNATURE, ACTIVITY INFO	
CENTER	S	CHANGE SERVICE CENTER EFFORT DESCRIPTIONS	
	P	PRINT SC INFO	V VIEW SC INFO
	M	ACCESS MAIL/ARCHIVED MAIL	Z RETURN SC FY TOTALS TO ZERO
BACKUP/ RECALL	I	BACK UP PRODUCT INFORMATION	R RE-INDEX INFORMATION
	J	RECALL PRODUCT INFORMATION	
DELETE/ CONFIGURE	N	DELETE/CANCEL ONE PRODUCT	
	G	SET PRINT, PRINTER, MAIL, WEEK #	
EXIT	X	EXIT	F - EXPIRING JO REPORT
			AS OF 10/04/90
			CUM. SC REVENUE: \$00.00
			CUM SC COSTS : \$00.00
			BALANCE \$00.00
			(NEXT BILL #: 69)
			(CUR. TOTAL: \$541.38)
		CHOICE ?	

Figure 2. MIS Housekeeping and Management Menu.

MIS uses this personnel and fiscal information to calculate costs and prepare service center fund transfer files. All housekeeping functions provide on-screen instructions. The following paragraphs contain instructions for initial MIS setup. Chapter 9 describes additional functions available at the Housekeeping and Management Menu.

1. At the Main Menu, press H to access the Housekeeping and Management Menu.

2. At the Housekeeping and Management Menu, press A to add employee information. Follow the instructions displayed on the screens. Add information for all employees who will be editing or processing products. Include editing, illustrating, production, and support personnel. Record employee name, identification initials, labor rates, and labor type.
3. At the Housekeeping and Management Menu, press H to record the initial service center information. Follow the instructions displayed at the bottom of the screens. Record service center account descriptions, effort units, job order numbers for editing and production work, and effort unit costs (the amount to be charged for one unit). Identify account descriptions as C (composition), I (illustration), E (editing), or S (support) functions. Figure 3 shows examples of account information for editing (E) and illustration (I) functions.

ACCOUNT NUMBER/DESCRIPTION		UNIT	JOB ORDER	UNIT COST (\$)
A01	E- WRITE/EDIT	HOURL	4027199A01	46.00
B01	I- ART	HOURL	4027199A02	38.05

Figure 3. Example of MIS Service Center Account Information.

4. After you have entered the service center account information, a service center administrative information data entry screen will be displayed. Enter administrative information (activity name, address, and acronym) and information required for the creation of fund transfer files (contra account, type, and service center name).
5. At the Housekeeping and Management Menu, press G to access the Configure Printer and E-Mail Capability Menu. Following instructions displayed on the screens, configure the printer and set electronic mail option and week number. You may use an Epson dot matrix or HP laser printer emulation configuration.

Select the port configuration that matches your computer setup. Your printer may be connected to LPT1, LPT2, COM1, or COM2.

Set the electronic mail capability to *on* or *off*. If the electronic mail capability is set to on, fund transfer files for transferring customer funds to service center accounts will be created when you record service center units. The message, *E-MAIL INITIALIZED*, will be displayed at the top of the Main Menu. If it is set to off, the fund transfer files will not be created and the message, *E-MAIL NOT INITIALIZED*, will be displayed at the top of the Main Menu.

Set the week number to the current week. At the beginning of the fiscal year, the MIS will prompt you to set the week number to 1.

Customizing and Modifying the MIS Program

Because a fully functional Foxpro application program is stored on the MIS PC, the application program files can be modified as required to provide different capabilities and additional reports. The MIS functions are performed by complex modular programs that should be modified only by programmers familiar with the FoxPro programming language. Appendix A lists the database structure and Appendix B lists the program flow.

Chapter 2. Recording and Changing Product General Information

This chapter lists instructions for recording and changing product general information. For publications documents and products, the required information may be found on publication route and approval sheets or obtained from the cognizant editor. For graphic products, the required information may be found on the graphics log sheet. The MIS does not generate the service center number.

Recording Product Information

At the Main Menu, press R. The MIS Record New Information Menu will be displayed. For publications work, press D to record a *document*; press O to record a *project*. For graphics work, press G to record *graphics product* information.

Recording Publications Document and Product Information

Several data entry screens will be displayed. Follow the instructions displayed at the bottom of the screens. Record the service center number and other information about the product in the appropriate blanks. Information that is required will be identified by the term, **required**, displayed next to the blank. If you page through all the data entry screens and have not filled in all of the required blanks, an operator notice will be displayed. You will be prompted to try again or exit without recording.

A service center revenue data entry screen will be displayed. You can initiate a fund transfer to bill the customer for service center processing units at this time. Follow the instructions displayed at the bottom of the screen.

The next few data entry screens will allow you to record product page count, editor assignment, and product form. It is important to identify the product form or type using the categories listed on the screen (figure 4). Note the message at the bottom of the screen. The MIS examines the title of the product and displays a product form suggestion.

After you have recorded all required information, the MIS will print the publication worksheet forms described in chapter 1. These forms stay with the product all through the editing, production, and quality assurance cycle. They will return to the MIS operator with the camera-ready-copy when it is ready for print.

Recording Graphics Product Information

Several data entry screens will be displayed. Follow the instructions displayed at the bottom of the screens. Record the service center number and other information about the product in the appropriate blanks. Information that is required will be identified by the term, **required**, displayed next to the blank. If you page through all the data entry screens and have not filled in all of the required blanks, an operator notice will be displayed. You will be prompted to try again or exit without recording.

IDENTIFY THE FORM/SUBSTANCE OF THE PUBLISHING PRODUCT	
Title: AS/UWQX-491, Functional Description	
1 FORMAL TR ON RESEARCH WORK	K TID NEWS/VIEWS
2 FORMAL TD ON RESEARCH WORK	L IR/IED PAPER/DOCUMENT
3 TECHNICAL NOTE	M ART WORK ON
4 IN-HOUSE TECHNICAL MANUAL	N MANAGEMENT PR WORK
5 SOFTWARE WITH DOCUMENT	O CERTIFICATE/AWARD
6 SPECIFICATION	P SPEECH/BRIEFING/PRESENTATION
A TECHNICAL BRIEF	Q INDEX/LIST
B JOURNAL ARTICLE	R BIBLIOGRAPHY
C TECHNICAL BROCHURE/FLYER	S OVERVIEW/HIGHLIGHTS
D TECHNICAL PUBLICATION/REPORT	T ASSESSMENT REPORT
E ABSTRACT/MISC. TECHNICAL INFO	U DRAFT/PRELIMINARY (NOT PUBLISHED)
F INSTRUCTIONS/PROCEDURES MANUAL	(ALSO USED FOR CANCELLATIONS)
G MANAGEMENT BROCHURE/FLYER	V TEST PLAN/TEST REPORT
H MANAGEMENT PUBLICATION/REPORT	W ADMIN (FUND TRANSFER ONLY)
I VIEWGRAPHS	X OTHER (MISCELLANEOUS)
J DISK FILES	7 REPRINT
X EXIT	8 VIDEO
CHOICE ?	
*NOTE TITLE! This document may be a specification (6)	

Figure 4. Product Form Selection Menu.

For the title/subtitle blank, enter a brief description of the project or product. In the customer name blank, enter the customer's last name first, followed by initials. In the cognizant organizational code blank, enter the customer's organizational code. Enter the classification of the product or project in the classification blank and the job order number that will be used for service center billing in the JO for services blank. Enter the three initials of the person who will be responsible for completing the task.

On the following screens, enter information if it is available. If the customer has placed a limit on the dollar amount to be billed in service center charges, ENTER that number in the specified blank.

Changing or Adding to Existing Product Information

Change product information as directed by editors, illustrators, or supervisors and when the worksheet forms have been returned with the CRC for print. Use the Change and Back Out Information Menu to change general product information. Use the Main Menu selection F when publications worksheet forms have been returned.

Changing Product General and Administrative Information

At the Main Menu, press C. The Change and Back Out Information Menu will be displayed.

Change General Information. At the Change and Back Out Information Menu, press G. Locate the product information by entering the product service center number or the product identification number. Follow the instructions displayed on the screen. You can

change the product identification number, service center number, classification, distribution statement, title, page count, customer information, print request information, contract and COR information, production information, work form and type, job order, and comments.

Change Editor Assignment. At the Change and Back Out Information Menu, press E. Locate the product information by entering the product service center number or the product identification number. Follow the instructions displayed on the screen. Editors are identified by unique employee identification initials assigned during MIS setup (chapter 1). Changing the editor assignment will assign a different primary editor for the product. The previous editor will remain listed as a secondary editor.

Change Comments. You can add or change general comments and comments on editing and production. At the Change and Back Out Information Menu, press C. Locate the product information to be changed by entering the product service center number or product identification number. Follow the instructions displayed on the screen.

Recording Product Information from Worksheet Forms

At the Main Menu, press F. You will be prompted to locate the product information to be changed by entering the product service center number or product identification number. An operator message with a checklist showing current product status will be displayed. Follow the instructions displayed on the data entry screens. You can record or change information on the worksheet forms. You can change manuscript, CRC, and product page count, cover dates; print request, receipt, and distribution information; editing and production cycle information; quality assurance information; customer information; and management, editor, and production comments and completion date.

Marking a Product Complete or Distributed

For some products, MIS worksheets will not be returned. Use Change and Back Out Information Menu selection F to mark these products complete.

Deleting Product Information

You can delete product information if no service center units have been recorded against the product. If units have been recorded against the product, it can be marked complete and the product form can be marked *preliminary* or *canceled* to identify the effort as one that did not result in a product.

At the Main Menu, press H. The Housekeeping and Management Menu will be displayed. At the Housekeeping and Management Menu, press N. Follow the instructions displayed on the screen. If service center units have been recorded against the product, enter a brief reason for the cancellation and confirm marking the product as preliminary. If there have been no units recorded against the product, you can delete it. All previously recorded information on the product will be removed from the database files.

Chapter 3. Recording Labor Hours and Costs

This chapter lists procedures for recording and backing out labor hours and costs associated with products. To record labor hours charged by an employee, information on that employee must have been previously recorded using the Housekeeping *Add Employee* function. Each time labor is recorded against a product, service center units may also be recorded. That will initiate a fund transfer to bill the customer for the labor hours recorded. If you record service center units, fund transfer information will be written to the BILL.TXT file and a *Service Center Weekly Summary Report Form* will be printed.

Recording Hours from Time Sheets

The MIS labor entry function was designed to allow you to record labor hours from standard time sheets. For each employee, you can record hours against several products before proceeding to record hours for another employee. If editor initials were not recorded at initial product entry, the first editor for whom you record hours will be recorded as the primary editor of that product. If you record a second editor's labor against the product, the second editor will be listed as a secondary editor. Each time you record hours for a new editor, that editor is added as a secondary editor. The MIS can maintain a list of five editors for each product. The MIS maintains information on up to 10 separate employees who record labor against the product

1. At the Main Menu, press L. Follow the instructions displayed on the screen.
2. Identify the employee by employee identification initials.
3. Enter a service center number listed on the time sheet. When the information is located, a recording hours data entry screen will be displayed.
4. Record hours in specific categories as shown on the time sheet. For reference, the data entry screen will display the number of hours previously recorded in each labor category.
5. A recording service center units data entry screen will be displayed. Record units in specific categories as directed by the supervisor. Normally, you will record units corresponding to the hours listed on the time sheet. If you record units, fund transfer information will be written to a file for electronic mail and a *Service Center Weekly Summary Report Form* will be printed. The file is referred to as a *positive* file. It will effect transfer of funds *into* the service center. If you have been directed not to bill a customer for labor performed on a task, record the labor hours, but do not record corresponding service center units.
6. A selection menu will be displayed. You can exit, continue recording hours for the employee, record hours for another employee, or exit. If you choose to continue recording hours for the employee, return to step 3. If you choose to record hours for another employee, return to step 2.

Backing Out Hours

The procedure for backing out hours is similar to the procedure for recording hours. You can back out hours if they have been previously recorded against a product. You can not back out more hours than have been recorded against a product. When you back out hours, you can also back out the associated service center units, returning funds to the customer. If you do, *negative* information will be written to the BILL.TXT fund transfer file. The information will be used to return money from the service center account to the customer's account.

1. At the Main Menu, press C. The Change and Back Out Information Menu will be displayed.
2. At the Change and Back Out Information Menu, press L. Follow the instructions displayed on the screens.
3. Enter employee identification initials.
4. Enter the service center number associated with the product. When the information is located, a backing out hours data entry screen will be displayed.
5. Enter the number of hours to back out in specific categories. For reference, the total number of hours previously recorded in each labor category will be displayed. Do not attempt to back out more hours than have been recorded.
6. A backing out service center units data entry screen will be displayed. Enter the number of units in categories corresponding to the hours backed out. At the next data entry screen, record the name of the person who authorized backing out the units and the reason for the procedure. If you back out units, negative fund transfer information will be written to the BILL.TXT file and a negative *Service Center Weekly Summary Report Form* will be printed.
7. A selection menu will be displayed. You can exit, continue backing out hours for the employee, or back out hours for another employee. If you choose to continue backing out labor for the employee, return to step 4. If you choose to back out labor for another employee, return to step 3.

Chapter 4. Billing the Customer

This chapter discusses options available for transferring funds between the customers account and the Publishing Service Center accounts. A Main Menu selection allows you to initiate fund transfers to pay for labor expended against a product. You can also initiate fund transfers when initial product information is recorded as described in chapter 2 and when labor is recorded against the product as described in chapter 3.

Fund Transfers

Each time you record or back out service center units, two lines are written to the BILL.TXT ASCII file in your C:\MAIL directory. Creation of the lines is the first step in the fund transfer process. The BILL.TXT file list fund transfer information for each unit or multiples of units you record or back out. Figure 5 shows examples of BILL.TXT file lines created when units are recorded and backed out. In the first example, the amount shown at the end of the first line is the total amount to be charged to the customer for A01 units (identified in the last 3 digits of the 6th column). This will be a *positive* fund transfer.

The second example shows lines written to a file when units are backed out and funds are returned to the customer's job order number. This will be a *negative* fund transfer. The BILL.TXT file will be written to an *EMAIL.BIL* file and sent to accounting using electronic mail as described in chapter 7. A *Service Center Weekly Summary Report Form* will be printed. This form describes the fund transfer and must be retained.

BILL.TXT file lines listing accounting information required for billing the customer:									
WK41	91005	1	40	4	4027199A01	96100	1541	PUBLICATIONS SC	46.83
WK41	91005	1	40	4	XT21101300	01440	1541	PUBLICATIONS SC	-46.83
BILL.TXT file lines listing accounting information required for backing out charges to the customer:									
WK41	91005	1	40	4	XT21101300	01440	1541	PUBLICATIONS SC	46.83
WK41	91005	1	40	4	4027199A01	96100	1541	PUBLICATIONS SC	-46.83

Figure 5. Examples of BILL.TXT Fund Transfer File Lines for A01 Units.

Billing Using the Main Menu Option

1. At the Main Menu, press B. The Billing the Customer Menu will be displayed. At this menu, you can initiate a fund transfer to bill a customer or return funds to a customer.
2. To initiate a fund transfer that bills the customer, press B.

3. Enter the service center number for the applicable product. When the information is located, a data entry screen will be displayed. Total product service center revenue and costs will be displayed. The date that the last unit was recorded against this product will also be displayed.
4. Record service center units in specific categories as directed by the supervisor. If you record units, accounting information will be written to the BILL.TXT file and a *Service Center Weekly Summary Report Form* will be printed.
5. A selection menu will be displayed. You can exit or continue the billing procedure. If you choose to continue, return to step 3. If you exit, you will be returned to the Billing the Customer Menu. Press X to return to the Main Menu.

Billing When Initial Product Information is Recorded

You can initiate a fund transfer to bill the customer for efforts expended when initial product information is recorded as described in chapter 2. After initial product information has been entered, a service center revenue data entry screen will be displayed. Follow the instructions displayed at the bottom of the screen. Record units in specific categories as directed by the supervisor. If you record units, fund transfer information will be written to the BILL.TXT file and a *Service Center Weekly Summary Report Form* will be printed.

Billing When Labor Hours are Recorded

You can initiate a fund transfer when hours are recorded as described in chapter 3. After hours have been recorded, a data entry screen will be displayed. Enter the number of specific category units to record. Normally, you will record units corresponding to the hours listed on the time sheet. If you record or back out units, fund transfer information will be written to the BILL.TXT file and a *Service Center Weekly Summary Report Form* will be printed.

Backing out Service Center Units

You can back out service center units that have been recorded against a product. Use the Change and Back Out Information Menu, or the Billing the Customer Menu. Both options are described below. Both option access the same function.

When you back out service center units, you return funds to the customer and reduce the product *revenue*. That means that the funds used to pay for work on the product will be reduced. You can not reduce product revenue below the amount that has been generated for the product. When you reduce revenue, you must record the name of the person authorizing the reduction and the reason for returning funds to the customer.

Backing out Service Center Units Only

Occasionally you may be asked to back out service center units without backing out labor hours and costs. This procedure will give revenue back to the customer without removing the records of labor expended against the task. At the Main Menu, press C to access the Change and Backout Information Menu or B to access the Billing the Customer Menu. Use the Change and Backout Information Menu selection B or the Billing the Customer Menu selection R to back out service center revenue only. Follow the instructions displayed on the screen and perform the following procedure.

1. Enter the service center number for the applicable product. When the information is located, a data entry screen will be displayed. Total product service center revenue and costs for each category will be displayed. The date of the last unit charge against the product will also be displayed.
2. Record the number of units in specific categories to be backed out. If you back out service center revenue units, enter the name of the person authorizing the function and the reason for backing out the revenue. After the information has been recorded, negative fund transfer information will be written to the BILL.TXT file and a negative *Service Center Weekly Summary Report Form* will be printed.
3. A selection menu will be displayed. You can exit or continue the backing out procedure. If you choose to continue, return to step 1. If you exit, you will be returned to the last menu.

Backing out Units When Backing Out Labor

To back out labor as well as service center hours and costs follow the instructions listed in Chapter 3 under *Backing Out Hours*. Do not back out labor hours that have already been submitted on an employee time card without submitting a corrected time card. If you back out units, enter the name of the person who authorized the procedure and the reason for returning funds to the customer.

Chapter 5. Viewing Information

You can view product, service center, administrative, and employee information in a variety of formats. This chapter describes the options available at the View Information Menu (figure 6) and selected options available at other menus.

VIEW INFORMATION MENU	
VIEW INFORMATION BY:	
A	AUTHOR
B	DOCUMENT/PROJECT NUMBER
C	SERVICE CENTER NUMBER
D	AUTHOR CODE
E	EDITOR
J	JOB ORDER NUMBER
G	KEY WORD IN TITLE
O	VIEW FISCAL YEAR REVENUE/HOURS FOR ONE PRODUCT
M	VIEW CONTENTS OF YOUR MAIL DIRECTORY
L	VIEW LIST OF DOCUMENTS/PROJECTS IN DATABASE
X	EXIT

Figure 6. View Information Menu.

Viewing Product Information

The following paragraphs describe the options available for viewing product information from the View Information Menu. To access the View Information Menu, press V at the Main Menu. With most selections you can choose to view brief or detailed information on each product accessed. Detailed information will be displayed on 10 separate screens and will include administrative, fiscal information, and statistical information. Brief information will include content, customer, editor, production, and distribution information and revenue by fiscal year. Press Esc to exit viewing and return to the View Information Menu.

View by Author or Customer

Press A at the View Information Menu. Enter the full or partial author or customer name. Since author names are sometimes recorded differently for different products, enter smith to view all products authored by BJ Smith, B. Smith, B.J. Smith or Bernard Smith.

View by Service Center or Product Identification Number

To view by product identification number, press B. To view by service center number, press C. You can view information on one product or on several products with similar

product identification numbers. Follow the instructions displayed on the screen. You can view detailed or brief information.

View by Author or Customer Code

At the View Information Menu, press D. Enter the author or customer organizational code or partial code. You can view brief or detailed information.

View by Editor

At the View Information Menu, press E. Enter the applicable editors employee identification initials. You can view brief or detailed information. Information on all products for which the editor has been primary or secondary editor will be displayed.

View by Job Order Number

At the View Information Menu, press J. Enter the full or partial job order number. Job order information on all products for which the job order number has been used will be displayed. The job order number, job order start date, end date, last labor date, and total revenue generated will be shown. If more than one job order number has been used for a product, information on all job order numbers used for the product will be displayed.

View by Key Word in Title

At the View Information Menu, press G. Enter the key word or phrase. You can view brief or detailed information. Information on all products that contain the key word or phrase in the title will be displayed.

View Fiscal Year Revenue/Hours for One Product

At the View Information Menu, press O. Enter the service center number or product identification number. Fiscal year revenue and hours recorded for up to 10 years will be displayed. Note that the MIS began recording hours by fiscal year in 1994. Hours for years previous to FY 1995 may not be accurately recorded.

Viewing Other Information

View Contents of your MAIL directory.

You can view the contents of your MAIL directory from the View Information Menu or the Housekeeping and Management Menu. At the View Information Menu, press M. The names of all files in your MAIL directory will be displayed first. Press Enter. The Print/View Mail Menu will be displayed. Press X to return to the View Information Menu.

You can also view Mail information from the Housekeeping and Management Menu. At that menu, press M. The Print/View Mail Menu will be displayed. You can view individual mail files from this menu.

View List of All Products

At the View Information Menu, press L. This selection displays product number, service center number, status, and type of product for all products listed in the database. Products are displayed by service center number. Press Enter to view the next screen. Press Esc to return to View Information Menu.

View Employee Information

At the Housekeeping and Management Menu, press E. The View Employee Information Menu will be displayed. You can view or print employee and user information from this menu.

View Current Service Center Rates and Administrative Information

At the Housekeeping and Management Menu, press V. Current service center unit descriptions, job order numbers, and unit costs will be displayed first. Administrative information recorded during setup will then be displayed.

View Customer Query Information

Customer Query Information is information pre-formatted for inclusion in a printed report. The report can be viewed, printed, or sent via electronic mail. At the Main Menu, press Q. Follow the instructions displayed on the screen.

Chapter 6. Printing Information

The TID Publishing MIS Print Menus provide access to many pre-formatted reports. Data entry screens guide the user through the process of selecting information for inclusion in the lists and reports. This chapter lists brief descriptions menus and selections available.

The Print Menus

The print menus are shown in figures 7, 8, and 9. Other print menus can be accessed from the first print menus. You can also print selected information from the Main Menu and the Housekeeping and Management Menu.

PRINT MENU - 1	
A	REPORT BY AUTHOR
B	REPORT BY CODE
C	EDITOR WORKLOAD
D	DISTRIBUTED PRODUCTS
E	NO LABOR RECORDED FOR A YEAR
F	LOG OF WORK
I	REPORT ON ONE PRODUCT
S	SHORT REPORT ON ONE PRODUCT
Z	EXPIRING JO REPORT
9	CODE/LABOR HOUR PRINT
X	EXIT
OTHER PRINT MENUS	
G	CRC PAGE COUNT MENU
Y	FISCAL YEAR REPORTS MENU
M	MAIL MENU
W	STATUS REPORTS MENU
B	BIBLIOGRAPHY MENU
L	DUPLICATE FORMS MENU
J	PRODUCTION REPORTS MENU
K	PAGE COST REPORTS MENU
2	PRINT MENU 2
3	PRINT MENU 3
(To stop print, press Esc)	
CHOICE ?	

Figure 7. Print Menu 1.

PRINT MENU - 2	
A	LABOR COST BY EDITOR
F	FINAL PRODUCT FORM
T	TIME IN TID REPORT
H	HOURS/REVENUE PERCENTAGE
E	EDITING SC REPORT
P	PRODUCTION SC REPORT
S	SC YEAR REPORT WITH DIP
B	SC YEAR REPORT
J	AUTHOR'S JOB ORDER
X	EXIT - RETURN TO FIRST PRINT MENU
D	DISTRIBUTION STATEMENT
1	PRODUCTION PAGE COUNT
W	DISTRIBUTION DATE
2	ONE SC CATEGORY CHARGE
7	LIST OF CLASSIFIED PRODUCTS
8	DIST/CLASS STATEMENTS
Z	LOGIN DATE REPORT
3	PRINT MENU 3
(To stop print, press Esc)	
CHOICE ?	

Figure 8. Print Menu 2.

PRINT MENU - 3	
N	LIST OF NEWSLETTER PRODUCTS
L	PRODUCTS WITH LAST LABOR CHARGED ON A SPECIFIC DATE
X	EXIT - RETURN TO PREVIOUS PRINT MENU
CHOICE ?	
(To stop print, press Esc)	

Figure 9. Print Menu 3.

Print Menu 1 Choices

Report by Author

At Print Menu 1, press A. This report lists general information, milestone dates, and author (customer) costs for products. Enter a full or partial author name.

Report by Code

At Print Menu 1, press B. You can print brief or complete information on products from all organizational codes or from one organizational code only. Follow the instructions displayed on the screen. You can restrict the report to products with receipt, cover, or distribution dates between any two dates. You can also restrict the type of product included in the list.

Editor Workload

At Print Menu 1, press C. You can print a list of products edited by one primary editor or a list of all products arranged by primary editor. You can restrict the list to include only products provided to an editor after a specific date, product worked on between two dates, or products with revenue recorded during a particular fiscal year. This list will include basic tracking and service center information for each product listed. The number of days in process (from receipt to distribution) will be shown for completed products.

Distributed Products

At Print Menu 1, press D. You can print a list of products distributed within two dates or during any calendar year. The list of products distributed during a calendar year may also be written to floppy disk.

No Labor Recorded for Year

At Print Menu 1, press E. You can print a list of products for which there have been no labor hours recorded within the last year. Use this report to check the status of products before page cost reports are printed.

Log of Work

At Print Menu 1, press F. You can print a log of products currently in process, entered during a fiscal year, entered since a specific date, or completed between two dates.

Report on One Product

At Print Menu 1, press I. This report lists complete product information. Enter the service center or product identification number.

Short Report on One Product

At Print Menu 1, press S. This report lists brief product information. Enter the service center or product identification number.

Expiring Job Order Number Report

At Print Menu 1, press Z. You can print a list of all products currently in process with job orders expiring on or before a selected date. This selection is also available at the Housekeeping and Management Menu.

Code/Labor Hour Print

At Print Menu 1, press 9. You can print a brief or detailed report on labor hours. Products can be listed for one code or for all codes are listed by organizational code and the hours are totaled for each code. You can restrict the list to specific product types and to products received or distributed between two dates.

Print Menu 2 Choices**Labor Cost by Editor**

At Print Menu 2, press A. This report lists labor hours and costs by editor for products distributed between any two dates. The recap at the end of the report lists the average editing and production support cost to the division per CRC page.

Final Product Form

At Print Menu 2, press F. This report lists products of a specific form. It can be restricted to include only products added or distributed between any two dates. Product types are shown in figure 4. The report includes cover and author information and manuscript and

CRC page count for all products that fall into the specific form you specify. You can limit the list to products added or distributed between two dates.

Time in TID Report

At Print Menu 2, press T. This report lists products and the time required for full editing and production of the products. Total time will be listed for distributed documents. Total time to current date will be listed for others. You can limit the list to completed products only, to specific types of products, and to products distributed between two dates.

Hours/Revenue Percentage

At Print Menu 2, press H. This report lists statistical information on products distributed within two dates. Separate reports are printed for Technical Reports, Technical Documents, and Technical Notes product types. Other products are grouped together as *other*. A breakdown of service center revenue and costs, and labor hours by type is listed for each product type. Percentages of totals for revenue, costs, and hours are listed.

Editing SC Report

At Print Menu 2, press E. The Editing SC report lists products recorded during a specific service center (fiscal) year. Several options allow you to structure the report to include specific products. For each product, editing hours, revenue, and costs are listed along with number of editing days, and average editing costs to the customer by manuscript and CRC page. A recap shows totals and averages.

Production SC Report

At Print Menu 2, press P. The Production SC reports products recorded during a specific service center (fiscal) year. Several options allow you to structure the report to include specific products. For each product, production and support hours, revenue, and costs are listed along with number of production days and average costs to the customer for manuscript and CRC pages. A recap shows totals and averages.

SC Year Report with Days in Process

At Print Menu 2, press S. The SC year report with days in process lists products recorded during a specific service center (fiscal) year. Several options allow you to structure the report to include specific products. Service center hours, revenue, labor costs, and days in process are listed, totaled and averaged.

SC Year Report

At Print Menu 2, press B. The SC year report lists products recorded during a specific service center (fiscal) year. Several options allow you to structure the report to include specific products. Service center hours, revenue, and labor costs are listed, totaled and averaged.

Customer Job Order

At Print Menu 2, press J. The customer job order report can list information on one job order or on all job orders recorded within specified limits. You can include all products, products recorded within two dates, or products with service center unit recorded during a fiscal year. The report for all job order numbers lists numbers, date of last revenue, and associated revenue, labor cost, and organizational codes for each product. The report for one job order number lists the same information for one job order number.

Distribution Statement

At Print Menu 2, press D. This report lists distribution statement information for products recorded or distributed during a fiscal or calendar year or between any two dates. You can include products with one or several distribution statement designations.

Distribution/Classification Statements

At Print Menu 2, press 8. This report lists product number, date, service center number, classification, distribution statement, number of copies printed and number of pages printed for classified products only. You can limit the list to products distributed between any two dates.

One Service Center Category Report

At Print Menu 2, press 2. This report lists products and associated revenue, costs, and hours for one service center category. Current service center categories will be displayed for your selection. They may also be viewed using Housekeeping and Management Menu selection V. You can limit the list to products recorded during only one fiscal year, products recorded between two dates, or products distributed between two dates. You can include distributed products or all products.

List of Classified Products

At Print Menu 2, press 7. You can print a list of classified products completed between any two dates. This list will include product number, date, service center number, classification designation, distribution statement, number of copies printed and number of pages printed.

Log In Date Report

At Print Menu 2, press Z. This report is a tabular list of product recorded in the MIS during a specified period. It lists product number and entry date. If the product was distributed, the distribution date is listed. Distribution date for products distributed within one year of initial entry is shown in the first date column. Distribution dates for products with later distribution dates are shown in the second date column.

Print Menu 3 Choices

List of Newsletter Products

At Print Menu 3, press N. You can print a list of newsletter products distributed between two dates or worked on between two dates. The report will include all products with the words news" or "highlights" occurring in the title. The tabulated list will show service center and product number, distribution date, editor information and customer cost information. Number of days in process will also be shown.

Products with Last Labor Recorded on a Specific Date

At Print Menu 3, press L. This report lists those products that had the last labor recorded on a specific date. The tabular list shows service center number, date of last hour recorded, and all editors and production personnel who have charged labor against the product on any date.

Other Print Menu Choices

CRC Page Count Menu

Press G at Print Menu 1 to access the CRC Page Count Menu. This menu allows you to print a list of products with page count information. You can include products processed or distributed during a fiscal year. You can also print a list of products with labor hours recorded during a fiscal year. The lists are printed by organizational code.

Fiscal Year Reports Menu

Press Y at Print Menu 1 to access the Fiscal Year Reports Menu. This menu allows you to print information related to products produced and revenue received during a fiscal year. You can list revenue generated for one or all products and limit the list to revenue generated during one or several fiscal years. You can list only that revenue that falls into specific categories based on the job order number used (G&A, production, direct, or service center). You can list revenue generated during a specific fiscal year by organizational code and include specific types of products. You can print lists of products with page count information for processed or completed products. You can print a revenue and labor hour report for products with labor recorded during any fiscal year.

Mail Menu

Press M at Print Menu 1 to access the Mail Menu. Follow the instructions displayed on the screen. The Mail Menu allows you to view or print the BILL.TXT and EMAIL.BIL files created for service center fund transfer.

Status Reports Menu

Press W at Print Menu 1 to access the Status Reports Menu. The Status Reports Menu allows you to print checklists of work in process and special service center status reports. Choices available include service center status reports using various formats and options; checklists of work in process by service center number, product identification number, organizational code, or editor; checklists of work without editor hours; and editor labor hour reports.

Bibliography Menu

Press P at the Print Menu to access the Bibliography Menu. The Bibliography Menu allows you to print bibliography information on various types of products. The information will be written to an ASCII file. Follow the instructions displayed on the screen.

Duplicate Forms Menu

Press L at Print Menu 1 to access the Duplicate Forms Menu. You can print duplicates of any of the Publication Worksheet forms printed when you recorded product information as described in chapter 2. You can also print a duplicate of the *last Service Center Weekly Summary Report* that was printed for any product as described in chapters 3 and 4. Note the instructions displayed on the screen. When you print a duplicate weekly summary report, you may not want the information written to the BILL.TXT fund transfer file. Menu selections allow you to configure your electronic mail capability for duplicates as required.

Production Reports Menu

Press J at the Main Menu to access the Production Reports Menu. You can print a production report for a single product. It will list all production information recorded for that product. You can also print a tabular list of production information for selected products.

Page Cost Reports Menu

Press K at the Main Menu to access the Page Cost Reports Menu. The page cost reports list statistical information on selected products. Because statistical information is not valid unless all work has been completed on a product, only completed products will be included in the report. The list will include products distributed or completed between any two dates. These reports are usually printed at the end of the fiscal year.

Housekeeping and Management Menu Print Choices

Employee Listing Menu

The Employee Listing Menu allows you to print employee information. Access the Employee Listing Menu by pressing E at the Housekeeping and Management Menu and then P at the Employee Information Menu. You can print lists of employee information in various formats.

Service Center Information

Press P at the Housekeeping and Management Menu to print all current service center effort descriptions, units, unit costs, and job order numbers. The report will also list cumulative fiscal year revenue and cumulative fiscal year estimated labor costs. Current administrative information (activity, acronym, and organization information) will also be printed.

Expiring Job Order Number Report

Press F at the Housekeeping and Management Menu to print a list of products currently in process with job orders expiring on or before a selected date. This selection is also available at Print Menu 1.

Mail Menu

Press M at the Housekeeping & Management Menu to access the Mail Menu. This menu allows you to print the BILL.TXT file created when service center units are recorded. Example of the BILL.TXT file lines are shown in figure 5.

Chapter 7. Sending Mail

The MIS uses an electronic mail program to send billing files to accounting. This chapter contains information required for that function.

Mail Program

The electronic mail program on the MIS PC has been configured with the primary operator's user identification information. Therefore only the MIS primary operator can send EMAIL.BIL files. The primary operator can also send product information files and status report using an electronic mail program. Other operators and casual users can send other files by electronic mail. They can copy the applicable file to floppy disk and send it from another personal computer configured with their electronic mail program, or they can use a terminal program to transfer files. All files created by the MIS are located in the C:\MAIL directory.

The Mail Program Choices/Create Accounting Files Menu is shown in figure 10. Press E at the Main Menu to access this menu.

MAIL PROGRAM CHOICES/CREATE ACCOUNTING FILES	
U	- Create EMAIL.BIL file from BILL.TXT file
T	- USE TERMINAL PROGRAM (Send other files)
X	- EXIT
CHOICE ?	

Figure 10. Mail Program Choices/Send Accounting Files Menu.

Files

Three types of files can be created and sent by electronic mail from the MIS:

accounting EMAIL.BIL files

product information INFO.TXT files

status reports STATUS.TXT and EDSTATUS.TXT files

Accounting Files

The current EMAIL.BIL accounting file should be sent at the end of each week.

When you use Main Menu selection E, the BILL.TXT file lines that were created as service center units were recorded are written to a file in the C:\MAIL directory called *EMAIL.BIL* the BILL.TXT file is then deleted. The EMAIL.BIL file will be sent to accounting. The EMAIL BIL files are numbered consecutively as they are created. The first EMAIL.BIL file created during a fiscal year will be EMAIL1.BIL. A sample EMAIL24.BIL file is shown in figure 11. The Housekeeping and Management Menu (figure 5) displays the number of the next EMAIL.BIL file that will be created and the current value of the fund transfers that will be listed in the file.

Each week, after service center units have been recorded, use Main Menu selection E to create the EMAIL.BIL file. Press U at the Mail Program Choices/Create Accounting Files menu.

Follow the instructions displayed on the screens. The EMAIL.BIL file will be created in the C:\MAIL directory. Exit the MIS and use an electronic mail program to send the EMAIL.BIL file to the current accounting clerk or technician assigned to the service center. Send copies to yourself and your supervisor. When you create the EMAIL.BIL file, an information sheet showing file number, date of creation, and total transfer amount contained in the file will be printed. An EDSTATUS.TXT file will be created automatically. Send this file to the supervisor.

Exit the electronic mail program. Return to the MIS or exit as required.

ELECTRONIC MAIL FILE # 24 OF 10/08/93 TOTALS: \$XXXXX.XX							
PREPARED AT 10:21:35							
WK01	94004	1 40 4	CUSTJONOB04	564000	1541	PUBLICATIONS SC	46.83
WK01	94004	1 40 4	SCJONXA01	564000	1541	PUBLICATIONS SC	-46.83
WK01	94004	1 40 4	CUSTJONOD03	564000	1541	PUBLICATIONS SC	62.40
WK01	94004	1 40 4	SCJONXA019	564000	1541	PUBLICATIONS SC	-62.40
WK01	94004	1 40 4	CUSTJONOG01	564000	1541	PUBLICATIONS SC	124.80
WK01	94004	1 40 4	SCJONXA014	564000	1541	PUBLICATIONS SC	-124.80
WK01	94004	1 40 4	CUSTJONOR03	564000	1541	PUBLICATIONS SC	46.83
WK01	94004	1 40 4	SCJONXA01	564000	1541	PUBLICATIONS SC	-46.83
WK01	94004	1 40 4	CUSTJONOB04	564000	1541	PUBLICATIONS SC	46.83

Figure 11. Sample EMAIL.BIL File Lines.

Product Information Files

Main Menu selection Q allows you to create a file named INFO.TXT in your C:\MAIL directory. The file will contain information on one product. An example of an INFO.TXT file created for a completed product is shown in figure 12. Files can also be created for products that are still in process. Send a product information file to the customer when the product is completed or distributed and when requested to do so by the supervisor or customer.

The INFO.TXT file can be viewed, printed, or sent via electronic mail.

If you choose to send the file via electronic mail, the INFO.TXT file will be created in the C:\MAIL directory and an information screen will be displayed. Follow the instructions displayed on the screen. Exit the MIS and send the file via electronic mail. Send the file to the customer or supervisor as directed. Note that each INFO.TXT file that you create will overwrite the last one created, so the file must be sent or queued before another is created.

Status Report Files

Use Status Reports Menu selection S to create a file listing the status of products that are either in process or completed within the last month. Give this file to the supervisor on floppy disk or send it via electronic mail. If you choose to create the file for electronic mail transfer, the file will be located in your C:\MAIL directory and will be named STATUS.TXT. The file creation procedure will overwrite any exiting STATUS.TXT file in your C:\MAIL directory. Follow the instructions displayed on the screen. After the file has been created, exit the MIS and send the file via electronic mail.

The EDSTATUS.TXT file is created automatically when a BILL.TXT file is converted to an EMAIL.BIL file. Send this file to the supervisor. The file lists the current status of documents and projects worked on within this last month.

07/04/94

INFORMATION ON NOSC TD9999 (DOCUMENT)
PUBLICATIONS SERVICE CENTER NUMBER: 91XXX

NOTE: THIS DOCUMENT DISTRIBUTED ON 11/15/90. (12 copies requested.)

Item was entered in Publishing MIS on 10/04/90.
(42 days between receipt and distribution)

Title: Test Title for NOSC Publication
Customer: Smith, R.
Classification: U Cover date: 10/01/90

Contractor: Lightspeed Electronics Corp.
Contract: N66001-XX-X-XXXX
COR: J. Jones

Cognizant code: XXXX, Phone: XXXX, Current JO: XXXXXXXXXXXX
Editor: John Doe - also EEE YYY ZZZ
QA complete on 10/24/90 by JM

SERVICE CENTER TRANSFER INFORMATION
NOTE: Customer payment for publications work is through accounting transfers. Transfer amounts are 'rounded' in the accounting process. Publishing service center transfers cover work performed by personnel organizationally located in the PUBLICATIONS BRANCH ONLY.

Last transfer initiated 11/01/90. Last labor recorded 11/01/90

SERVICE CENTER EFFORT	TRANSFERS (\$) (CUSTOMER COST)
Editing	XX.XX
In-house composition	XX.XX
In-house illustration	XX.XX
Admin/support	XX.XX
TOTALS	XX.XX

TRANSFERS LISTED BY FISCAL YEAR
FY1991: \$XXX.XX. FY1992: \$0.00 FY1993: \$0.00 FY1994: \$0.00 FY1995 \$0.00

Editor has recorded 6 calendar days for production and QA
First production (composition, illustration) labor recorded on 10/18/90
Production work has been by: /BBB/CCC/DDD(DDD-BO-1.0)

57 camera-ready-copy pages were produced.

PRINT REQUEST AND COST INFORMATION
Print request no. 91008 of 10/04/90. Sent to print on 10/24/90. Received from print on 11/15/90.
Print approval on 11/15/90. 22 days at print. Print cost: \$XX.XX
12 copies were requested

TOTAL COSTS TO CUSTOMER
For labor, print, and stubs as of 07/20/94: \$XXX.XX
(\$XX.XX per MS pg.)(\$ XX.XX per CRC pg.)(\$ XX.XX per printed pg.)

MANAGEMENT NOTES: Back out info: Hours backed out at editor direction by YYY

For further information or interpretation, contact your editor or
MIS primary operator Joan Doe x 99999

Figure 12. Example of an Information File.

Chapter 8. Housekeeping and Management

This chapter describes functions available at the Housekeeping and Management Menu shown in figure 5. Use this menu to record and access employee and service center information, to back up or delete information, and to configure the MIS. All functions provide detailed on-screen instructions and information. Access the Housekeeping and Management Menu by pressing H at the Main Menu.

Menu Messages

Several messages are displayed at the bottom of the Housekeeping and Management Menu. The date of the beginning of the fiscal year, current cumulative revenue and costs processed during the current fiscal year, and balance (revenue - labor costs) are displayed. The number that will be assigned to the next EMAIL.BIL file is displayed, along with the current total revenue that will be included in the file.

Employee Functions

Employee information is maintained in the RATES.DBF database file. The functions described below allow you to view, print, and change the information in this file. The MIS uses the employee information when calculating product costs. Operator information is maintained in the USERS.DBF database file. The MIS maintains a list of operators, number of uses, and use dates.

Add Employee

To add employee information, press A. Follow the instructions displayed on the screen. At the first data entry screen enter employees first name, middle name or initial, last name, birthday, and overhead hourly rate. Enter the employee's unique identification initials. Do not use the same initials for more than one employee.

At the labor category data entry screen, place an X in the box next to the most appropriate type of labor to be performed by the employee. Choices are editorial, composition, illustration, and support or administrative. For each product, the MIS maintains the number of hours used in each of these categories.

At the confirmation prompt, the information you entered will be displayed. Confirm the information, re-enter it, or exit without recording. If you confirm, a new record containing the information you entered will be added to the RATES.DBF database file.

Delete Employee

To delete employee information, press B. Follow the instructions displayed on the screen. Identify the employee by employee identification initials. A confirmation prompt will be displayed. Note the information displayed on the screen. The employee information will not be deleted from the RATES.DBF database file. A question mark

will be substituted for the employee's first initial and the employee will be marked as not currently employed. You can use the Change Employee Identification Information selection described below to access deleted employee information and re-instate the employment status if required.

Change Employee Identification Information

To change employee identification information, press D. Follow the instructions displayed on the screen. Identify the employee by employee identification initials. A data entry screen will be displayed. Current employee information will be displayed on the left side of the screen. Type changed information in the blanks on the right side of the screen. The Labor Category Menu, will be displayed. Select the labor type performed by the employee. Press X to exit without changing the category. At the confirmation prompt, the changed information will be displayed. Press Y to make the changes, R to repeat the data entry screens, or X to exit without making changes.

Change Employee Rate

Change the employee rate as directed by the supervisor. Because product costs are calculated using this figure, it is important that the rate be kept current. This function allows you to change rates for all employees without returning to the Housekeeping and Management Menu between the change procedures. Press C to change the employee rate. Follow the instructions displayed on the screen. Identify the employee by employee identification initials. At the data entry screen, enter current hourly, project, and overhead rate as instructed. Enter the effective date of the rate change. A confirmation screen will be displayed. Press Y to confirm the rates. Identify the next employee by employee identification initials. Continue recording new labor rates as required. To exit, press Enter when prompted for employee identification initials.

Add/Delete Operator

This function allows you to add, delete, or change MIS operator information. Follow the instructions displayed on the data entry screen. You can record or change operator names and the passwords to be used for MIS access. Assign primary operator status only if the electronic mail program has been configured with this operator's user identification information.

View/Print Information

You can view and print employee and operator information in several formats. Press E to access the Employee Information Menu. You can view or print name and rate information on one or all employees. You can view a list of current MIS operators and view or print the operator log. The operator log lists the date the operator was added, the number of separate MIS uses, and the latest use dates.

Service Center Functions

Service center information is stored in the PCCRATES.DBF database file. The functions listed below allow you to change, print, and view the information.

Add/Change Service Center Information

The MIS uses the service center information in the PCCRATES.DBF file to calculate product revenue and costs. The information is required for all service center functions associated with the MIS and with the production of statistical information used in printed reports. Press H to add new service center categories or change existing category job order number, unit, or unit cost. An instruction screen will be displayed.

Unless you have detailed instructions from the supervisor regarding additions or changes to be made, do not continue with this function. You will need service center category, job order number, unit, and unit cost information for each service center effort to be added or changed. Note that unused categories are identified by the terms, *NOT USED*, in the description blank, and *NA* in the unit blank. Overwrite these unused categories when adding new categories. When deleting categories, overwrite existing description with NOT USED and unit information with NA.

At the data entry screens, read the instructions displayed at the bottom of the screen. Use the arrow keys to position the cursor and make changes as directed by the supervisor.

After service center category information has been changed as required, you can change operator, organization, and supervisor information. This information is required for the production of fund transfer files. Change this information only as directed by the supervisor.

Change Service Center Effort Descriptions

To maintain information on products over a period of years requires that some constants apply to effort descriptions. Service center rates change each year, and categories are added and deleted. To allow revenue and costs to be tracked for more than one year, some effort in continuity of effort description must be made. This function allows you to change category effort descriptions and maintain that continuity.

When you change the service center effort descriptions, you must reassign all the previously recorded labor hours and service center units recorded for all products so that subsequently printed and viewed information will reflect actual efforts performed. For example, if category C01 currently covers editing work and category J01 currently covers production work and you plan to change editing work to A01 and production work to C01, you must move the current C01 editing hours, costs, and revenue for all existing products to A01 and then move the current J01 hours, costs, and revenue for all existing products to C01. This function will perform that task for all categories.

First, a form listing current categories, efforts and units will be printed. Fill in the blanks for projected new category efforts and units. The supervisor must sign the list. During

the next part of the function, you will be prompted to move each category. You will be able to consolidate categories, if required.

A data entry screen will be displayed for each current category. You must assign a new category number for the category from a list displayed at the bottom of the screen. Type the new number in the blank and press Enter.

A confirmation prompt will be displayed. You can continue with the function or exit without changing any service center category descriptions.

Several category description data entry screens will be displayed. Current category descriptions for each category number will be shown on the left side of the screens. Enter new descriptions in the corresponding blanks on the right side of the screens. Use the arrow keys to position the cursor in the required blanks. Press PgDn to exit the current screen. If a service center category is not to be used, type **NOT USED** in the description blank.

A confirmation prompt will be displayed. You can continue with the function or exit without changing any service center category descriptions.

The MIS will begin rewriting the service center information for each recorded product. This function can take several hours to complete. After 300 products have been processed, you will be given the option of allowing the program to continue running or shutting it down for the day.

View Service Center Information

Press V to view current service center information. Category account numbers, descriptions, unit designations, job order numbers and unit costs will be displayed. The current information for the signature blank, phone number, organization code, and accounting organization code will also be displayed. The last screen will display the agency address and current information required for the creation of fund transfer files.

Print Service Center Information

Press P to print service center information. Current service center category numbers, effort descriptions, unit costs, and job order numbers will be printed. The cumulative total for revenue and labor costs will also be printed.

Access Mail/Archived Mail

Press M to access the Mail Menu. You can view BILL.TXT or EMAIL.BIL files, print EMAIL.BIL files. You can view, print, copy, or delete the MAIL.ARK (archived mail) file. You can view the latest INFO.TXT (customer information) file. You can also run the terminal.exe program from this prompt.

Return Service Center Fiscal Year Totals to Zero

The current cumulative fiscal year service center revenue and costs are shown at the bottom of the Housekeeping and Management Menu. At the end of each fiscal year,

return these figures to zero in preparation for new fiscal year revenue and costs. Press Z to replace these figures with zeros. Before these numbers are returned to zero, a printout showing cumulative revenue and costs will be printed.

Backup/Recall Functions

Since the database files are usually large, the MIS uses the MSDOS backup and restore programs for copying files between the hard disk and floppy disks. You can back up and recall database information if required. Several selections are available. Follow the instructions displayed on the screen.

Back up Product Information

All product information is maintained in four database files named MIS.DBF, MIS1.DBF, MIS2.DBF, and MIS3.DBF. Using the Backup Options Menu, you can back up all products marked distributed between two dates to floppy disk. This function will remove those products from the current database file. You can back up all product information to floppy disks without removing any product information. You can backup all product information to ASCII files. You can also perform a quick copy of the database files to the C:\DBHBU directory. Note that all databases are also automatically backed up daily.

Recall Product Information

Press J to restore items removed during the backup procedure described above. Follow the instructions displayed on the screen. The backed up information will be deleted from the floppy disk when it has been re-integrated into the current databases.

Special Functions

The functions described are useful in special situations.

Re-index Information

Press R to re-index all databases. Indexing allows faster retrieval of information as well as ordering information by number or phrase. During normal operation, all indexes are used, so re-indexing is not necessary.

Delete/Cancel One Product

You can delete *incomplete* product information if no service center units have been recorded against the product. If units have been recorded against the product, it can be marked complete and the product form can be marked *preliminary* or *canceled* to identify the effort as one that did not result in a product.

If a product has already been marked complete or distributed, you can not delete it. If you need to use the service center number for a different product, change the number using the Change and Back Out Information Menu. The MIS uses information on

completed products when printing statistical information about products. Do not change the first two digits of the service center number. That would remove it from the sample used in producing some statistical information.

To delete or cancel a product, press N. Follow the instructions displayed on the screen. If the product can not be deleted, an information screen will be displayed. If service center units have been recorded against the product, enter a brief reason for the cancellation and confirm marking the product as preliminary or canceled. If there have been no service center units recorded against the product, you can delete it. All previously recorded information on the product will be removed from the database files.

Set Print, Mail, Week Number

Press G to configure the printer and printer ports, set electronic mail capability on or off, or set the week number. The Configuring Printer and E-Mail Capability Menu will be displayed. At the beginning of the fiscal year (October 1), the week number will be set to 1. At the bottom of the screen, electronic mail status and the current week number will be displayed.

Select option required and following instructions displayed on the screens. You can use an Epson dot matrix or HP laser printer emulation. Your printer can be connected to LPT1, LPT2, COM1, or COM2. The electronic mail capability can be set to *on* or *off*. If the electronic mail capability is set to on, BILL.TXT fund transfer file lines will be created when you record service center units. The message, *E-MAIL INITIALIZED*, will be displayed at the menu. If it is set to off, these files will not be created and the message, *E-MAIL IS NOT INITIALIZED*, will be displayed at the menu. Set the week number to the current week.

Chapter 9. Error and Information Messages

This chapter lists error messages that may be displayed during MIS operation.

DOS Messages

Normal DOS messages will be displayed if you attempt to write to a drive that has no disk inserted. On power-up, watch for *low battery* or other system messages.

Foxpro Messages

A programming error will return you to the Foxpro prompt (blank screen with message). An error message will be displayed on the screen. Call the system administrator if such an error occurs. If the system administrator is not available, press C to cancel the program, then type the following commands:

clear all

close all

quit

This will exit the program.

MIS Messages

The following TID Publishing MIS messages will be displayed if certain operations are attempted.

One of the numbers you recorded was less than .10

When recording units against a product, the smallest unit increment that can be billed is .10. This message will be displayed if you enter units in smaller increments or if you enter a negative number.

Operator Note: Information can not be recorded as is

This message may be displayed when you are recording new information. It will be displayed if you have not entered information that is marked REQUIRED. You can exit without recording the information or return to the first data entry screen to insert the missing required information.

Operator Notice! Author entry is important for bibliographical purposes

If, while recording new product information, you did not enter the author's name, this message will be displayed.

Printer Not Responding

One of several printer error messages may be displayed if the computer can not access the printer or if the printer is displaying an error condition. If this message is displayed, check the printer. The printer status display indicates printer errors or a paper-out condition. Also check the printer cable connection. Follow instructions displayed on the screen. Do not continue with the current MIS function until printer error has been corrected.

Total calculated costs of hours exceeds total recorded costs

This message will be displayed if you attempt to back out too many hours against one product. The cost of the backed out hours exceeds the amount of revenue recorded for a product. Check the actual hours and revenue recorded before backing out hours.

Total costs calculated exceeds total recorded revenue

This message will be displayed if you attempt to back out too many service center units against one product. It indicates that the amount to be returned to the customer exceeds the revenue received from the customer. Check the actual revenue in each category before attempting to return funds to the customer.

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Appendix A: Database Structure

Structure for database: C:\DBDATA\MIS.DBF

The MIS.DBF database file contains general descriptive and administrative information about publication products.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
PUBNUM	Character	40	Product identification number.
DOCUMENT	Logical	1	True if product is a document
GRAPHIC	Logical	1	True if product is a graphic work order
INTFIN	Character	1	Designation of product as Interim or Final (I/F)
WRI	Character	3	Primary Editor
AUTNAME	Character	100	Product author name
TITLE	Character	254	Product title
CURJO	Character	10	Job order (JO) currently used for service center (SC) unit charges
JOTYPE	Character	1	Designation of current JO type as project of overhead (P/O)
JOEXPIRE	Date	8	Date current JO expires
JOCH	Character	10	Previous JO number
JOCHDTE	Date	8	Date JO number was changed
JOCH1	Character	10	Previous JO number
JOCH2	Character	10	Date JO number was changed
WKJO	Character	10	JO number used by customer to generate the product
MCT	Character	1	Designation of Military Critical Technology (Y/N)
PRGELEMEN	Character	10	Program element product produced under
NOOF282	Character	6	Print request number
AUTCODE	Character	5	Author organizational code
AUTPHONE	Character	5	Author telephone number
CONTDOC	Character	40	Contractor organization if product authored by contractor
COTR	Character	20	Contracting Officer's Technical Representative if contractor document
CONTNUM	Character	16	Contract number if contractor document
CCNUM	Character	6	SC number of product
CLASS	Character	3	Classification of product
DISSTAT	Character	1	Designation of distribution statement
MSRECDTE	Date	8	Date manuscript (MS) received
NEEDPRIBY	Date	8	Date customer requires distribution
MSMEDIA	Character	4	MS media
COVDTE	Date	8	Document cover date
MGMTNOTES	Character	200	Management comments
MSTOWRI	Date	8	Date MS given to editor
MSTOAUT1	Date	8	First date MS returned to customer
AUTRETMS1	Date	8	First date MS returned to editor
MSTOAUT2	Date	8	Second date MS returned to customer
AUTRETMS2	Date	8	Second date MS returned to editor
MSTOAUT3	Date	8	Third date manuscript returned to customer

AUTRETMS3	Date	8	Third date MS returned to editor
AUTAPPMS	Date	8	Date customer approves MS
MSTOPRO	Date	8	Date MS goes to production
CRCDUFRPRO	Date	8	Date MS due from production
WRIRECCRC	Date	8	Date editor receives camera-ready-copy (CRC) from production
MSTXTPGS	Numeric	7	Number of MS text pages
MSMTHPGS	Numeric	7	Number of MS math pages
MSHTPGS	Numeric	7	Number of MS photo pages
MSNEWARTPG	Numeric	7	Number of MS pages provided requiring new art work
MSFINARTPG	Numeric	7	Number of MS pages provided with final art
MSCHGARTPG	Numeric	7	Number of MS pages provided with art that must be changed.
MSTBLPGS	Numeric	7	Number of MS table pages
MSTOTPGS	Numeric	7	Total number of MS pages
WRIAPPCRC	Date	8	Date editor approves CRC
CRCTOAUT1	Date	8	First date CRC given to customer
CRCFRAUT1	Date	8	First date CRC returned to editor
CRCTOAUT2	Date	8	Second date CRC given to customer
CRCFRAUT2	Date	8	Second date CRC returned to editor
CRCTOAUT3	Date	8	Third date CRC given to customer
CRCFRAUT3	Date	8	Third date CRC returned to editor
AUTAPPCRC	Date	8	Date customer approves CRC
CRCTO282	Date	8	Date CRC sent to print
CRCTXTPGS	Numeric	7	Number of CRC text pages
CRCMTHPGS	Numeric	7	Number of CRC math pages
CRCLINAPGS	Numeric	7	Number of CRC line art pages
CRCHTOPGS	Numeric	7	Number of CRC photo pages
CRCBLPGS	Numeric	7	Number of CRC table pages
CRCTBLPGS	Numeric	7	Number of CRC blank pages
TOTCRCPGS	Numeric	7	Total number of CRC pages
DTEOF282	Date	8	Date of print request
PRIDUEDTE	Date	8	Date print is due
ESTPRICST	Numeric	10	Estimated print cost
CRCTOQC	Date	8	Date CRC sent to quality assurance (QA) check
QCBY	Character	2	Editor performing QA
QCCOMplete	Date	8	Date QA complete
NOCPSREQ	Numeric	5	Number of printed copies requested
CRCTONPPS	Date	8	Date CRC sent to print
RECFRNPPS	Date	8	Date approval copy returned from printer
ACTPRICST	Numeric	8	Final printing charges
TIDAPPDTE	Date	8	Date approval copy approved for print
DISTDATE	Date	8	Distribution date
DISTLIST	Numeric	3	Distribution list identification
ORDATE	Date	8	Date initial product information recorded
LASTCHDATE	Date	8	Last date information was changed
EDUPDTE	Date	8	Last date editor designation was changed
WRI2	Character	3	First secondary editor
WRI3	Character	3	Second secondary editor

WRI4	Character	3	Third secondary editor
EDNOTE	Character	200	Editor comments
NODISKS	Numeric	8	Number of disks produced
NOVIEWS	Numeric	8	Number of viewgraphs produced
NOJOURNP	Numeric	8	Number of journal article pages produced
NOOTHERS	Numeric	8	Number of other media pages produced
WORKFORM	Character	35	Type of product produced
TOTEDCOS	Numeric	10	Total cost of editing services
TOTPROCOS	Numeric	10	Total cost of production services
ACCRO	Character	15	Organization Accronym when product produced

Structure for database: C:\DBDATA\MIS1.DBF

The MIS1.DBF database file contains production, FY costs, and job order information. It is related to the MIS.DBF file

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
CCNUM	Character	6	Product SC number
PUBNUM	Character	40	Product identification number
COVDONE	Date	8	Date cover finished
COVREVISED	Date	8	Date cover revised
TIDEQUIP	Character	4	Equipment used to process product
WRIAPPCRC	Date	8	Date editor approves CRC
RECFORCONT	Date	8	Date product received for off-site contracted production
PROVENDOR	Character	20	Name of production vendor
VESEQUIP	Character	5	Equipment vendor used to produce product
TOVENDTE1	Date	8	First date product sent to vendor
DUEFRVEN1	Date	8	First date product due from vendor
VENTXTCOS1	Numeric	10	First vendor charge for text
VENILLCOS1	Numeric	10	First vendor charge for illustrations
RECFRVEN1	Date	8	First date product received from vendor
CRCTOWRI1	Date	8	First date vendor product given to editor
TOVENDTE2	Date	8	Second date product sent to vendor
DUEFRVEN2	Date	8	Second date product due from vendor
VENTXTCOS2	Numeric	10	Second vendor charge for text
VENILLCOS2	Numeric	10	Second vendor charge for illustrations
RECFRVEN2	Date	8	Second date product received from vendor
CRCTOWRI2	Date	8	Second date product given to editor
TOVENDTE3	Date	8	Third date product sent to vendor
DUEFRVEN3	Date	8	Third date product due from vendor
VENTXTCOS3	Numeric	10	Third vendor charge for text
VENILLCOS3	Numeric	10	Third vendor charge for illustrations
RECFRVEN3	Date	8	Third date product received from vendor
CRCTOWRI3	Date	8	Third date product given to editor
FINOUT	Date	8	Date final product received from vendor
TIDILLNOTE	Character	200	Illustration comments
TIDPRONOTE	Character	200	Production comments
CONPRONOTE	Character	200	Contracted production comments

DISTDATE	Date	8	Product distribution date
TOTCONCST	Numeric	10	Total cost of contracted production
DIRSCST	Numeric	10	Total cost of direct labor
ARTREVI	Numeric	10	Revenue received for in-house illustration work
ARTHOUSI	Numeric	10	Number of in-house production illustration hours used
ARTCOSTI	Numeric	10	Total cost of in-house production illustration
ARTCOSTC	Numeric	10	Total cost of contracted illustration production
COMPCOSTC	Numeric	10	Total cost of contracted text production
COMPREV	Numeric	10	Total revenue for in-house text production
COMPHRS	Numeric	10	Total hours spent on in-house text production
COMPCOST	Numeric	10	Total cost of in-house text production
EDREV	Numeric	10	Total revenue for editing
EDCOST	Numeric	10	Total cost of editing
EDHRS	Numeric	10	Total number of editing hours
ADMREV	Numeric	10	Total revenue for administration and support
ADM COST	Numeric	10	Total cost of administration and support
ADMHOURS	Numeric	10	Total number of administration and support hours
FYENTRY	Numeric	4	Fiscal year of first SC unit charge to customer
FY1REV	Numeric	10	First fiscal year revenue
FY1HOURS	Numeric	10	First fiscal year hours
FY2REV	Numeric	10	Second fiscal year revenue
FY2HOURS	Numeric	10	Second fiscal year hours
FY3REV	Numeric	10	Third fiscal year revenue
FY3HOURS	Numeric	10	Third fiscal year hours
FY4REV	Numeric	10	Fourth fiscal year revenue
FY4HOURS	Numeric	10	Fourth fiscal year hours
FY5REV	Numeric	10	Fifth fiscal year revenue
FY5HOURS	Numeric	10	Fifth fiscal year hours
FY6REV	Numeric	10	Sixth fiscal year revenue
FY6HOURS	Numeric	10	Sixth fiscal year hours
FY7REV	Numeric	10	Seventh fiscal year revenue
FY7HOURS	Numeric	10	Seventh fiscal year hours
FY8REV	Numeric	10	Eighth fiscal year revenue
FY8HOURS	Numeric	10	Eighth fiscal year hours
FY9REV	Numeric	10	Ninth fiscal year revenue
FY9HOURS	Numeric	10	Ninth fiscal year hourss
FY10REV	Numeric	10	Tenth fiscal year revenue
FY10HOURS	Numeric	10	Tenth fiscal year hours
PREVFYREV	Numeric	10	Previously recorded revenue (before revenue was tracked by fiscal year
COSTNTE	Numeric	10	Cost limitation imposed by customer
JO1	Character	10	First JO number used
JO1SDATE	Date	8	Date first JO first used
JO1AMOUNT	Numeric	10	Total charged to first JO
JO1EDATE	Date	8	Date discontinued use of first JO
JO1LLABOR	Date	8	Date latest labor charged to first JO
JO2	Character	10	Second JO number
JO2SDATE	Date	8	Date second JO first used
JO2EDATE	Date	8	Date discontinued use of second JO

JO2AMOUNT	Numeric	10	Total charged to second JO
JO2LLABOR	Date	8	Date latest labor charged to second JO
JO3	Character	10	Third JO number used
JO3SDATE	Date	8	Date third JO first used
JO3EDATE	Date	8	Date discontinued use of third JO
JO3AMOUNT	Numeric	10	Total charged to third JO
JO3LLABOR	Date	8	Date latest labor charged to third JO
JO4	Character	10	Fourth JO number used
JO4SDATE	Date	8	Date fourth JO number first used
JO4EDATE	Date	8	Date discontinued use of fourth JO
JO4AMOUNT	Numeric	10	Total charged to fourth JO
JO4LLABOR	Date	8	Date latest labor charged to fourth JO
JO5	Character	10	Fifth JO number used
JO5SDATE	Date	8	Date fifth JO number first used
JO5EDATE	Date	8	Date discontinued use of fifth JO
JO5AMOUNT	Numeric	10	Total charged to fifth JO
JO5LLABOR	Date	8	Date latest labor charged to fifth JO

Structure for database: C:\DBDATA\MIS2.DBF

The MIS2.DBF file contains product service center information. It is related to the MIS.DBF file.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
PUBNUM	Character	40	Product identification number
CCNUM	Character	6	Product SC number
DISTDATE	Date	8	Distribution date
CCBILLDTE	Date	8	Date of latest SC unit charge
CCFINBLDTE	Date	8	Date of final SC unit charge
CCFINTOT	Numeric	10	Total of all SC unit charges
CCFINH	Numeric	10	Total of all SC H01 unit charges
CCFINE	Numeric	10	Total of all SC E01 unit charges
CCFIND	Numeric	10	Total of all SC D01 unit charges
CCFINC	Numeric	10	Total of all SC C01 unit charges
CCFINB	Numeric	10	Total of all SC B01 unit charges
CCFINA	Numeric	10	Total of all SC A01 unit charges
CCFINF	Numeric	10	Total of all SC F01 unit charges
CCFING	Numeric	10	Total of all SC G01 unit charges
CCFINI	Numeric	10	Total of all SC I01 unit charges
CCFINI2	Numeric	10	Total of all SC I02 unit charges
CCFINJ	Numeric	10	Total of all SC J01 unit charges
CCFINJ2	Numeric	10	Total of all SC J02 unit charges
CCFINK	Numeric	10	Total of all SC K01 unit charges
CCFINL	Numeric	10	Total of all SC L01 unit charges
CCFINM	Numeric	10	Total of all SC M01 unit charges
CCFINN	Numeric	10	Total of all SC N01 unit charges
CCFINP	Numeric	10	Total of all SC P01 unit charges
CCFINP2	Numeric	10	Total of all SC P02 unit charges

CCFINQ	Numeric	10	Total of all SC Q01 unit charges
CCFINR	Numeric	10	Total of all SC R01 unit charges
CCFINS	Numeric	10	Total of all SC S01 unit charges
CCFINT	Numeric	10	Total of all SC T01 unit charges
CCFINU	Numeric	10	Total of all SC U01 unit charges
CCFINV	Numeric	10	Total of all SC V01 unit charges
CCFINW	Numeric	10	Total of all SC W01 unit charges
CCFINX	Numeric	10	Total of all SC X01 unit charges
CCFINY	Numeric	10	Total of all SC Y01 unit charges
CCFINZ	Numeric	10	Total of all SC Z01 unit charges
CCESTA	Numeric	10	Total of latest A01 unit charge
CCESTB	Numeric	10	Total of latest B01 unit charge
CCESTC	Numeric	10	Total of latest C01 unit charge
CCESTD	Numeric	10	Total of latest D01 unit charge
CCESTE	Numeric	10	Total of latest E01 unit charge
CCESTF	Numeric	10	Total of latest F01 unit charge
CCESTG	Numeric	10	Total of latest G01 unit charge
CCESTH	Numeric	10	Total of latest H01 unit charge
CCESTI	Numeric	10	Total of latest I01 unit charge
CCESTI2	Numeric	10	Total of latest I02 unit charge
CCESTJ	Numeric	10	Total of latest J01 unit charge
CCESTJ2	Numeric	10	Total of latest J02 unit charge
CCESTK	Numeric	10	Total of latest K01 unit charge
CCESTL	Numeric	10	Total of latest L01 unit charge
CCESTM	Numeric	10	Total of latest M01 unit charge
CCESTN	Numeric	10	Total of latest N01 unit charge
CCESTP	Numeric	10	Total of latest P01 unit charge
CCESTP2	Numeric	10	Total of latest P02 unit charge
CCESTQ	Numeric	10	Total of latest Q01 unit charge
CCESTR	Numeric	10	Total of latest R01 unit charge
CCESTS	Numeric	10	Total of latest S01 unit charge
CCESTT	Numeric	10	Total of latest T01 unit charge
CCESTU	Numeric	10	Total of latest U01 unit charge
CCESTV	Numeric	10	Total of latest V01 unit charge
CCESTW	Numeric	10	Total of latest W01 unit charge
CCESTX	Numeric	10	Total of latest X01 unit charge
CCESTY	Numeric	10	Total of latest Y01 unit charge
CCESTZ	Numeric	10	Total of latest Z01 unit charge
CCESTTOT	Numeric	10	Total of latest unit charges
ACOS	Numeric	10	Cumulative cost of SC labor against category A01
BCOS	Numeric	10	Cumulative cost of SC labor against category B01
CCOS	Numeric	10	Cumulative cost of SC labor against category C01
DCOS	Numeric	10	Cumulative cost of SC labor against category D01
ECOS	Numeric	10	Cumulative cost of SC labor against category E01
FCOS	Numeric	10	Cumulative cost of SC labor against category F01
GCOS	Numeric	10	Cumulative cost of SC labor against category G01
HCOS	Numeric	10	Cumulative cost of SC labor against category H01
ICOS	Numeric	10	Cumulative cost of SC labor against category I01
I2COS	Numeric	10	Cumulative cost of SC labor against category I02

JCOS	Numeric	10	Cumulative cost of SC labor against category J01
J2COS	Numeric	10	Cumulative cost of SC labor against category J02
KCOS	Numeric	10	Cumulative cost of SC labor against category K01
LCOS	Numeric	10	Cumulative cost of SC labor against category L01
MCOS	Numeric	10	Cumulative cost of SC labor against category M01
NCOS	Numeric	10	Cumulative cost of SC labor against category N01
PCOS	Numeric	10	Cumulative cost of SC labor against category P01
P2COS	Numeric	10	Cumulative cost of SC labor against category P02
QCOS	Numeric	10	Cumulative cost of SC labor against category Q01
RCOS	Numeric	10	Cumulative cost of SC labor against category R01
SCOS	Numeric	10	Cumulative cost of SC labor against category S01
TCOS	Numeric	10	Cumulative cost of SC labor against category T01
UCOS	Numeric	10	Cumulative cost of SC labor against category U01
VCOS	Numeric	10	Cumulative cost of SC labor against category V01
WCOS	Numeric	10	Cumulative cost of SC labor against category W01
XCOS	Numeric	10	Cumulative cost of SC labor against category X01
YCOS	Numeric	10	Cumulative cost of SC labor against category Y01
ZCOS	Numeric	10	Cumulative cost of SC labor against category Z01
TOTCOS	Numeric	10	Total cost of SC labor against all categories
TOTEDHRS	Numeric	10	Total editing hours recorded
TOTPROHRS	Numeric	10	Total production hours recorded
A01HRS	Numeric	10	Total hours recorded against category A01
B01HRS	Numeric	10	Total hours recorded against category B01
C01HRS	Numeric	10	Total hours recorded against category C01
D01HRS	Numeric	10	Total hours recorded against category D01
E01HRS	Numeric	10	Total hours recorded against category E01
F01HRS	Numeric	10	Total hours recorded against category F01
G01HRS	Numeric	10	Total hours recorded against category G01
H01HRS	Numeric	10	Total hours recorded against category H01
I01HRS	Numeric	10	Total hours recorded against category I01
I02HRS	Numeric	10	Total hours recorded against category I02
J01HRS	Numeric	10	Total hours recorded against category J01
J02HRS	Numeric	10	Total hours recorded against category J02
K01HRS	Numeric	10	Total hours recorded against category K01
L01HRS	Numeric	10	Total hours recorded against category L01
M01HRS	Numeric	10	Total hours recorded against category M01
N01HRS	Numeric	10	Total hours recorded against category N01
P01HRS	Numeric	10	Total hours recorded against category P01
P02HRS	Numeric	10	Total hours recorded against category P02
Q01HRS	Numeric	10	Total hours recorded against category Q01
R01HRS	Numeric	10	Total hours recorded against category R01
S01HRS	Numeric	10	Total hours recorded against category S01
T01HRS	Numeric	10	Total hours recorded against category T01
U01HRS	Numeric	10	Total hours recorded against category U01
V01HRS	Numeric	10	Total hours recorded against category V01
W01HRS	Numeric	10	Total hours recorded against category W01
X01HRS	Numeric	10	Total hours recorded against category X01
Y01HRS	Numeric	10	Total hours recorded against category Y01
Z01HRS	Numeric	10	Total hours recorded against category Z01

LSTHOUENT	Date	8	Date latest labor hour was recorded
PHRSREC1	Date	8	Date first production hour was recorded
WORKERS	Character	100	Initials of text and illustration production employees with labor recorded against product
DIRHRS	Numeric	10	Number of direct labor hours charged to product
DIRCST	Numeric	10	Cost of direct labor hours charged to product

Structure for database: D:\DBDATA\MIS3.DBF

The MIS3.DBF contains employee labor information. Information is recorded in detail for 10 employees.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
CCNUM	Character	6	Service center number
PUBNUM	Character	40	Publications number
DISTDATE	Date	8	Distribution date
EMP1	Character	3	EMP1 through EMP 10 contain initials of employees with labor recorded against product
EMP2	Character	3	
EMP3	Character	3	
EMP4	Character	3	
EMP5	Character	3	
EMP6	Character	3	
EMP7	Character	3	
EMP8	Character	3	
EMP9	Character	3	
EMP10	Character	3	
OTEMPS	Character	100	Other employees with labor recorded
EMP1FLDTE	Date	8	First date employee 1 labor was recorded.
EMP2FLDTE	Date	8	
EMP3FLDTE	Date	8	
EMP4FLDTE	Date	8	
EMP5FLDTE	Date	8	
EMP6FLDTE	Date	8	
EMP7FLDTE	Date	8	
EMP8FLDTE	Date	8	
EMP9FLDTE	Date	8	
EMP10FLDTE	Date	8	
OTEMPFLDTE	Date	8	First date other employee labor was recorded
EMP1LLDTE	Date	8	Last date employee 1 labor was recorded
EMP2LLDTE	Date	8	
EMP3LLDTE	Date	8	
EMP4LLDTE	Date	8	
EMP5LLDTE	Date	8	
EMP6LLDTE	Date	8	
EMP7LLDTE	Date	8	
EMP8LLDTE	Date	8	
EMP9LLDTE	Date	8	
EMP10LLDTE	Date	8	
OTEMPLLDTE	Date	8	Last date other employee labor was recorded

EMP1HRS	Numeric	6	Number of hours recorded by employee 1
EMP2HRS	Numeric	6	
EMP3HRS	Numeric	6	
EMP4HRS	Numeric	6	
EMP5HRS	Numeric	6	
EMP6HRS	Numeric	6	
EMP7HRS	Numeric	6	
EMP8HRS	Numeric	6	
EMP9HRS	Numeric	6	
EMP10HRS	Numeric	6	
OTEMPHRS	Numeric	6	Number of hours recorded by other employees
EMP1CAT	Character	1	Category (Editing, Illustration, Composition, Support) of employee 1
EMP2CAT	Character	1	
EMP3CAT	Character	1	
EMP4CAT	Character	1	
EMP5CAT	Character	1	
EMP6CAT	Character	1	
EMP7CAT	Character	1	
EMP8CAT	Character	1	
EMP9CAT	Character	1	
EMP10CAT	Character	1	
OTEMPCAT	Character	10	Category of other employees
EMP1REV	Numeric	8	Revenue generated by when labor and billing units were recorded for employee 1
EMP2REV	Numeric	8	
EMP3REV	Numeric	8	
EMP4REV	Numeric	8	
EMP5REV	Numeric	8	
EMP6REV	Numeric	8	
EMP7REV	Numeric	8	
EMP8REV	Numeric	8	
EMP9REV	Numeric	8	
EMP10REV	Numeric	8	
OTEMPREV	Numeric	8	Revenue generated when labor and billing units were recorded for other employees
EMP1COST	Numeric	8	Cost of employee 1 labor to the service center
EMP2COST	Numeric	8	
EMP3COST	Numeric	8	
EMP4COST	Numeric	8	
EMP5COST	Numeric	8	
EMP6COST	Numeric	8	
EMP7COST	Numeric	8	
EMP8COST	Numeric	8	
EMP9COST	Numeric	8	
EMP10COST	Numeric	8	
OTEMPCOST	Numeric	8	Cost of other employee labor to the service center

Structure for database: C:\DBDATA\RATES.DBF

The RATES.DBF contains employee information.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
LASTNAME	Character	20	Employee last name
FIRSTNAME	Character	20	Employee first name
MIDNAME	Character	20	Employee middle name
INITIALS	Character	3	Employee initials
CUROHRRATE	Numeric	5	Employee current overhead rate
CURPRRATE	Numeric	5	Employee current project rate
CURHRRATE	Numeric	5	Not used
CURYRRATE	Numeric	8	Not used
CURLEVEL	Character	10	Not used
DTRATECHGD	Date	8	Date last rate was changed
OLDOHRRATE	Numeric	5	Employee previous overhead rate
OLDPRRATE	Numeric	5	Employee previous project rate
OLDHRRATE	Numeric	5	Not used
OLDYRRATE	Numeric	8	Not used
OLDLEVEL	Character	10	Not used
EMPLOYED	Character	1	Whether employee is currently employed or not (Y/N)
DTADDED	Date	8	Date employee information was added
DTRMVD	Date	8	Date employee was marked as not employed
LABORCAT	Character	1	Employee labor category (P,E,S,I)
BIRTHDAY	Date	8	Employee birthdate

Structure for database: C:\DBDATA\PCCRATES.DBF

The PCCRATES.DBF file contains current service center information.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
A01	Numeric	10	A01 unit cost to customer
B01	Numeric	10	B01 unit cost to customer
C01	Numeric	10	C01 unit cost to customer
D01	Numeric	10	D01 unit cost to customer
E01	Numeric	10	E01 unit cost to customer
F01	Numeric	10	F01 unit cost to customer
G01	Numeric	10	G01 unit cost to customer
H01	Numeric	10	H01 unit cost to customer
I01	Numeric	10	I01 unit cost to customer
I02	Numeric	10	I02 unit cost to customer
J01	Numeric	10	J01 unit cost to customer
J02	Numeric	10	J02 unit cost to customer
K01	Numeric	10	K01 unit cost to customer
L01	Numeric	10	L01 unit cost to customer
M01	Numeric	10	M01 unit cost to customer
N01	Numeric	10	N01 unit cost to customer
P01	Numeric	10	P01 unit cost to customer
P02	Numeric	10	P02 unit cost to customer
Q01	Numeric	10	Q01 unit cost to customer

R01	Numeric	10	R01 unit cost to customer
S01	Numeric	10	S01 unit cost to customer
T01	Numeric	10	T01 unit cost to customer
U01	Numeric	10	U01 unit cost to customer
V01	Numeric	10	V01 unit cost to customer
W01	Numeric	10	W01 unit cost to customer
X01	Numeric	10	X01 unit cost to customer
Y01	Numeric	10	Y01 unit cost to customer
Z01	Numeric	10	Z01 unit cost to customer
SIGNATURE	Character	40	Name for signature blank on weekly summary report
CURFYREV	Numeric	12	Cumulative revenue for current fiscal year
PHNO	Character	5	Phone extension of primary operator
OURCODE	Character	10	Responsible organizational code
ACCODE	Character	10	Accounting organizational code
A01JO	Character	10	SC job order number for receipt of A01 revenue
B01JO	Character	10	SC job order number for receipt of B01 revenue
C01JO	Character	10	SC job order number for receipt of C01 revenue
D01JO	Character	10	SC job order number for receipt of D01 revenue
E01JO	Character	10	SC job order number for receipt of E01 revenue
F01JO	Character	10	SC job order number for receipt of F01 revenue
G01JO	Character	10	SC job order number for receipt of G01 revenue
H01JO	Character	10	SC job order number for receipt of H01 revenue
I01JO	Character	10	SC job order number for receipt of I01 revenue
I02JO	Character	10	SC job order number for receipt of I02 revenue
J01JO	Character	10	SC job order number for receipt of J01 revenue
J02JO	Character	10	SC job order number for receipt of J02 revenue
K01JO	Character	10	SC job order number for receipt of K01 revenue
L01JO	Character	10	SC job order number for receipt of L01 revenue
M01JO	Character	10	SC job order number for receipt of M01 revenue
N01JO	Character	10	SC job order number for receipt of N01 revenue
P01JO	Character	10	SC job order number for receipt of P01 revenue
P02JO	Character	10	SC job order number for receipt of P02 revenue
Q01JO	Character	10	SC job order number for receipt of Q01 revenue
R01JO	Character	10	SC job order number for receipt of R01 revenue
S01JO	Character	10	SC job order number for receipt of S01 revenue
T01JO	Character	10	SC job order number for receipt of T01 revenue
U01JO	Character	10	SC job order number for receipt of SU1 revenue
V01JO	Character	10	SC job order number for receipt of V01 revenue
W01JO	Character	10	SC job order number for receipt of W01 revenue
X01JO	Character	10	SC job order number for receipt of X01 revenue
Y01JO	Character	10	SC job order number for receipt of Y01 revenue
Z01JO	Character	10	SC job order number for receipt of Z01 revenue
A01EFFORT	Character	15	Identification of category A01 effort
B01EFFORT	Character	15	Identification of category B01 effort
C01EFFORT	Character	15	Identification of category C01 effort
D01EFFORT	Character	15	Identification of category D01 effort
E01EFFORT	Character	15	Identification of category E01 effort
F01EFFORT	Character	15	Identification of category F01 effort
G01EFFORT	Character	15	Identification of category G01 effort

H01EFFORT	Character	15	Identification of category H01 effort
I01EFFORT	Character	15	Identification of category I01 effort
I02EFFORT	Character	15	Identification of category I02 effort
J01EFFORT	Character	15	Identification of category J01 effort
J02EFFORT	Character	15	Identification of category J02 effort
K01EFFORT	Character	15	Identification of category K01 effort
L01EFFORT	Character	15	Identification of category L01 effort
M01EFFORT	Character	15	Identification of category M01 effort
N01EFFORT	Character	15	Identification of category N01 effort
P01EFFORT	Character	15	Identification of category P01 effort
P02EFFORT	Character	15	Identification of category P02 effort
Q01EFFORT	Character	15	Identification of category Q01 effort
R01EFFORT	Character	15	Identification of category R01 effort
S01EFFORT	Character	15	Identification of category S01 effort
T01EFFORT	Character	15	Identification of category T01 effort
U01EFFORT	Character	15	Identification of category U01 effort
V01EFFORT	Character	15	Identification of category V01 effort
W01EFFORT	Character	15	Identification of category W01 effort
X01EFFORT	Character	15	Identification of category X01 effort
Y01EFFORT	Character	15	Identification of category Y01 effort
Z01EFFORT	Character	15	Identification of category Z01 effort
A01UNITS	Character	5	Category A01 unit identification
B01UNITS	Character	5	Category B01 unit identification
C01UNITS	Character	5	Category C01 unit identification
D01UNITS	Character	5	Category D01 unit identification
E01UNITS	Character	5	Category E01 unit identification
F01UNITS	Character	5	Category F01 unit identification
G01UNITS	Character	5	Category G01 unit identification
H01UNITS	Character	5	Category H01 unit identification
I01UNITS	Character	5	Category I01 unit identification
I02UNITS	Character	5	Category I02 unit identification
J01UNITS	Character	5	Category J01 unit identification
J02UNITS	Character	5	Category J02 unit identification
K01UNITS	Character	5	Category K01 unit identification
L01UNITS	Character	5	Category L01 unit identification
M01UNITS	Character	5	Category M01 unit identification
N01UNITS	Character	5	Category N01 unit identification
P01UNITS	Character	5	Category P01 unit identification
P02UNITS	Character	5	Category P02 unit identification
Q01UNITS	Character	5	Category Q01 unit identification
R01UNITS	Character	5	Category R01 unit identification
S01UNITS	Character	5	Category S01 unit identification
T01UNITS	Character	5	Category T01 unit identification
U01UNITS	Character	5	Category U01 unit identification
V01UNITS	Character	5	Category V01 unit identification
W01UNITS	Character	5	Category W01 unit identification
X01UNITS	Character	5	Category X01 unit identification
Y01UNITS	Character	5	Category Y01 unit identification
Z01UNITS	Character	5	Category Z01 unit identification

CURFYCOS	Numeric	10	Cumulative SC cost for current fiscal year
LASTBUDATE	Date	8	Date of last automatic backup
LASTLOGIN	Date	8	Date of last operator/user use
LASTUSER	Character	20	Name of last operator/user
ACTIVITY	Character	100	Current name of activity
ACCRONYM	Character	15	Current acronym of activity
CONTRA	Character	4	Contra account number
FYRESTART	Date	8	Date current fiscal year activities started
TYPE	Character	2	Accounting type identification
DESC	Character	16	Abbreviated service center name
ADDRESS	Character	200	Address of publications for print delivery

Structure for database: C:\DBDATA\USERS.DBF

The USERS.DBF file contains information on operators and other MIS users.

<u>FIELD NAME</u>	<u>FIELD TYPE</u>	<u>LENGTH</u>	<u>DESCRIPTION</u>
PASSWORD	Character	20	Password used
FIRSTNAME	Character	20	First name
LASTNAME	Character	20	Last name
DATEENT	Date	8	Date information added
DATEREM	Date	8	Date information marked not current
NOOFLOGINS	Numeric	10	Total number of MIS uses
LASTLOGIN1	Date	8	Date of last MIS use
LASTLOGIN2	Date	8	Date of previous MIS use
LASTLOGIN3	Date	8	Date of previous MIS use
LASTLOGIN4	Date	8	Date of previous MIS use
LASTLOGIN5	Date	8	Date of previous MIS use
LASTLOGIN6	Date	8	Date of previous MIS use
LASTLOGIN7	Date	8	Date of previous MIS use
LASTLOGIN8	Date	8	Date of previous MIS use
LASTLOGIN9	Date	8	Date of previous MIS use
LASTHKEEP1	Date	8	Not used
LASTHKEEP2	Date	8	Not used
LASTHKEEP3	Date	8	Not used
LASTBACKUP	Date	8	Date last backup procedure performed
LASTRECALL	Date	8	Date last recall procedure performed
RCDTE1	Date	8	Date previous recall procedure performed
RCDTE2	Date	8	Date previous recall procedure performed
BUDTE1	Date	8	Date previous backup procedure performed
BUDTE2	Date	8	Date previous backup procedure performed
REPORTDTE	Date	8	Date last status report created
EXITWOPRI	Date	8	Not used
PRWSR1	Date	8	Not used
PRWSR2	Date	8	Not used
PRWSR3	Date	8	Not used
PRWSR4	Date	8	Not used
PRIMOP	Logical	1	Designation as primary operator (T/F)

Appendix B: Program Flow

All program files in the first column are called from the MENU.PRG file. Files in other columns are called from files in previous columns

				Main Menu
setup				sets up week and keyboard functions
helpmen				Help Menu
	helpem			email help
newuser				adds new user
	holiday			checks dates of holidays
userlog				writes login date
holiday				checks dates of holidays
restfy				reset fiscal year and zero revenue and cost totals
t				loads database files and indexes for normal operation
bual				checks disk space, copies database , index files
	t			loads database files and indexes for normal operation
	ediths5			checks printer status
ediths5				checks printer status
allform				records information from worksheets
	cfind			locates product
	allform0			stores variables, calls modules
		lastchk		displays checklist of missing information
		finget		data entry screens to get information
		recfinrl		releases variables
		fpr		prints page cost info on one product
			pco	prints page counts, costs
			pmsro1	prints unit costs, fy costs
			fpr1	prints information memo for editor
		recfinrl		releases variables
	allform1			data entry screens to get information
	chprod			data entry screen to get production information
	allform2			data entry screen to get administrative and content informtion
labentry				record labor hours, costs, and SC units
	buchek			checks to see if using backed up databases
		bumen		returns to current databases
	labsto			stores variables
	labrelea			releases variables if exiting
	getrate			gets employee rates
	labsto1			stores blanks to variables
	cfind			locates product
	prcalcs			calculates costs for backed out labor
		pc		data entry screen for entering hours
	prcalca			calculates costs for new labor
		pc		data entry screen for entering hours
	backchk			checks backed out cost of hours against existing revenue for product
		backchk1		performs check for each category
	labwri1			calculates and writes labor hours and costs
		assigl		calculates costs in labor categories
			t	loads database files and indexes for normal operation
	chneed			displays any deficit in revenue
	plabill1			stores variables for calculating SC revenue

	plabilx			data entry screen for getting SC units
	plabills			writes negative numbers for backed out units
	plabill			calculates SC unit revenue
	zercosp			writes zeros to current stored unit costs fields
	ccwri1			calculates and writes SC information
		assigl		calculates costs in labor categories
	ccwri2			writes FY revenue
	xstdate			stores date information for forms
	lbill1			prints weekly summary report
	em0			prepares positive e-mail BILL.TXT file lines
		getfy		gets current fiscal year
		em1		sets up alternate text file
		emf1		prints first line of BILL.TXT file lines
		emf2		prints second line of BILL.TXT file lines
	emback			prepares negative e-mail BILL.TXT file lines
		getfy		gets current fiscal year
		em1		sets up alternate text file
		emf1		prints first line of BILL.TXT file lines
		emf2		prints second line of BILL.TXT file lines
	labreleas			releases variables
menu2				Record New Information Menu
	helpmen			helpmenu
	chcrc			change CRC information
	newpub			gets information for new product
		newstore		stores variables
		nccfind		checks for existing SC number
		newreleas		releases variables
		npub1		gets SC units
		strates		calculates SC unit revenue
		display1		confirmation prompt for SC units
		displayl		calculates costs
			assigl	calculates costs in labor categories
		newreleas		releases variables
		edass		assigns editor
		newpub1		gets customer cost limit, product form; writes product information
		xstdate		stores date information for forms
		form1		prints general and latest SC unit charge information
		form2		prints editor worksheet
		form31		prints production worksheet
		form6		prints final information worksheet
		formp		prints print specification form
		lbill1		prints weekly summary report
		em0		prints positive BILL.TXT file lines
			getfy	gets current fiscal year
			em1	sets up alternate text file
			emf1	prints first line of BILL.TXT file lines
			emf2	prints second line of BILL.TXT file lines
		newreleas		releases variables
	assigned			assign editor
	cfind			locates product
	chprod			data entry screen to get production information
	bilonly			generate SC accounting file
		bilsto		stores variables
		cfind		locate product
		bilrel		release variables

		chneed			displays any deficit in revenue
		bilonly1			create weekly summary report and BILL.TXT file lines
			lasto		stores variables
			plabillx		data entry screen for getting SC units
			plabills		writes negative numbers for backed out units
			bilvarchk		checks for unit entry
				bilvarc1	checks for unit entry under .10
			bilonly4		calculates and stores revenue from units
			cbackchk		checks for backed out costs exceeding revenue
			zercosp		writes zeros to current stored unit costs fields
			ccwri1		calculates and writes SC information
				assigl	calculates costs in labor categories
			ccwri2		writes FY revenue
			xstdate		stores date information for forms
			lbill1		prints weekly summary report
		em0			prepares positive BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		emback			prepares negative BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		bilrel			releases variables
	recfin				record final product information
		cfind			locates product
		lastchk			displays checklist of missing information
		finget			data entry screens to get information
		fpr			prints information memo for editor
		recfinrl			releases variables
	edwk				data entry screen for editor worksheet
		cfind			locates product
	recnots				gets comment information
		cfind			locates product
		chnotes			data entry screen for comments
	labentry				record labor hours, costs, and SC units
		buchek			checks to see if using backed up databases
			bumen		returns to current databases
		labsto			stores variables
		labrelea			releases variables if exiting
		getrate			gets employee rates
		labsto1			stores blanks to variables
		cfind			locates product
		prcalcs			calculates costs for backed out labor
			pc		data entry screen for entering hours
		prcalca			calculates costs for new labor
			pc		data entry screen for entering hours
		backchk			checks backed out cost of hours against existing revenue for product
			backchk1		performs check for each category
		labwri1			calculates and writes labor hours and costs
			assigl		calculates costs in labor categories
		chneed			displays any deficit in revenue
		plabill1			stores variables for calculating SC revenue

		plabillx			data entry screen for getting SC units
		plabills			writes negative numbers for backed out units
		plabill			calculates SC unit revenue
		zercosp			writes zeros to current stored unit costs fields
		ccwri1			calculates and writes SC information
			assigl		calculates costs in labor categories
		ccwri2			writes FY revenue
		xstdate			stores date information for forms
		lbill1			prints weekly summary report
		em0			prepares positive e-mail BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		emback			prepares negative e-mail BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		labreleas			releases variables
	nondoc				get project information
		newstore			stores variables
		nonccfin			checks for existing numbers
		newreleas			releases variables
		npub1			gets SC units
		strates			calculates SC unit revenue
		display1			confirmation prompt for SC units
		displayl			calculates costs
		newreleas			releases variables
		newpub1			gets customer cost limit, product form; writes product information
		xstdate			stores date information for forms
		form1			prints general and latest SC unit charge information
		form2			prints editor worksheet
		form31			prints production worksheet
		form6			prints final information worksheet
		formp			prints print specification form
		lbill1			prints weekly summary report
		em0			prints positive BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		newreleas			releases variables
	gradoc				records graphic product information
		newstore			stores variables
		graccfin			checks existing service center numbers
		grarelea			releases variables
		gradoc1			gets information for graphic product
			worktype		displays infor to get type of work
		xstdate			stores week information
		ediths5			sets error checking
		gform1			prints graphic form
		em0			prepares positive BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file

			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		grarelea			releases variables
	griab				record initial graphic labor if required
		buchek			checks to see if using backed up databases
			bumen		returns to current databases
		getrate			gets employee rates
		prcalcg			gets hours and calculates costs
			pc		gets hours
		labwri1			write labor information
		chneed			checks for billing requirements
		plabill1			stores hours
		plabillx			gets billing information
		plabill			stores cost information
		zercosp			writes zeros to last estimate
		ccwri1			writes service center information
		ccwri2			writes service center information
		xstdate			sets date
		lbill1			gets billing information
		em0			writes service center information to billing file
		labrelea			releases variables
	allform				records information from forms
		cfind			locate product
		allform0			stores variables, calls modules
			lastchk		displays checklist of missing information
			finget		data entry screens to get information
			recfinrl		releases variables
			fpr		prints page cost info on one product
				pco	prints page counts, costs
				pmsro1	prints unit costs, fy costs
				fpr	prints information memo for editor
			recfinrl		releases variables
		allform1			data entry screen to get information
		chprod			data entry screen to get production information
		allform2			data entry screen to get administrative and content information
menu1					Change and Back Out Information Menu
	helpmen				Help menu
	assiged				assign editor
		cfind			locates product
	menu4				change product information
		cfind			locates product
		helpmen			Help menu
		chprod			data entry screen to get production information
		menu5			change product information
			helpmen		Help Menu
			chnotes		data entry screen for comments
			chdocpr		changes product between document and project
			chawktyp		change product form
	bilonly				service center charges module
		bilsto			stores variables
		cfind			locate product
		bilrel			release variables
		chneed			displays any deficit in revenue
		bilonly1			create weekly summary report and BILL.TXT file lines
			lasto		stores variables

		plabillx		data entry screen for getting SC units
		plabills		writes negative numbers for backed out units
		bilvarchk		checks for unit entry
			bilvarc1	checks for unit entry under .10
		bilonly4		calculates and stores revenue from units
		cbackchk		checks for backed out costs exceeding revenue
		zercosp		writes zeros to current stored unit costs fields
		ccwri1		calculates and writes SC information
			assigl	calculates costs in labor categories
		ccwri2		writes FY revenue
		xstdate		stores date information for forms
		lbill1		prints weekly summary report
	em0			prepares positive BILL.TXT file lines
		getfy		gets current fiscal year
		em1		sets up alternate text file
		emf1		prints first line of BILL.TXT file lines
		emf2		prints second line of BILL.TXT file lines
	emback			prepares negative BILL.TXT file lines
		getfy		gets current fiscal year
		em1		sets up alternate text file
		emf1		prints first line of BILL.TXT file lines
		emf2		prints second line of BILL.TXT file lines
		bilrel		releases variables
	cfind			locates product for production worksheet information
	chprod			data entry screen to get production information
	edwk			data entry screen for editor worksheet
	recfin			record final product information
	labentry			records labor hours and costs
		buchek		checks to see if using backed up databases
			bumen	returns to current databases
		labsto		stores variables
		labrelea		releases variables if exiting
		getrate		gets employee rates
		labsto1		stores blanks to variables
		cfind		locates product
		prcalcs		calculates costs for backed out labor
			pc	data entry screen for entering hours
		prcalca		calculates costs for new labor
			pc	data entry screen for entering hours
		backchk		checks backed out cost of hours against existing revenue for product
			backchk1	performs check for each category
		labwri1		calculates and writes labor hours and costs
			assigl	calculates costs in labor categories
		chneed		displays any deficit in revenue
		plabill1		stores variables for calculating SC revenue
		plabillx		data entry screen for getting SC units
		plabills		writes negative numbers for backed out units
		plabill		calculates SC unit revenue
		zercosp		writes zeros to current stored unit costs fields
		ccwri1		calculates and writes SC information
			assigl	calculates costs in labor categories
		ccwri2		writes FY revenue
		xstdate		stores date information for forms
		lbill1		prints weekly summary report
		em0		prepares positive e-mail BILL.TXT file lines

			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		emback			prepares negative e-mail BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		labreleas			releases variables
	recnots				gets comment information
		cfind			locates product
		chnotes			data entry screen for comments
onebill					generate SC accounting file
	bilsto				stores variables
	cfind				locates product
	bilrel				release variables
	chneed				displays any deficit in revenue
	bilonly1				service center charges module
		lasto			stores variables
		plabilx			data entry screen for getting SC units
		plabills			writes negative numbers for backed out units
		bilvarchk			checks for unit entry
			bilvarc1		checks for unit entry under .10
		bilonly4			calculates and stores revenue from units
		cbackchk			checks for backed out costs exceeding revenue
		zercosp			writes zeros to current stored unit costs fields
		ccwri1			calculates and writes SC information
			assigl		calculates costs in labor categories
		ccwri2			writes FY revenue
		xstdate			stores date information for forms
		lbill1			prints weekly summary report
	em0				prepares BILL.TXT file lines
		getfy			gets current fiscal year
		em1			sets up alternate text file
		emf1			prints first line of BILL.TXT file lines
		emf2			prints second line of BILL.TXT file lines
	emback				prepares negative BILL.TXT file lines
		getfy			gets current fiscal year
		em1			sets up alternate text file
		emf1			prints first line of BILL.TXT file lines
		emf2			prints second line of BILL.TXT file lines
	bilrel				releases variables
bills					Billing Menu
	buchek				checks for use of backed up files
	helpmen				Help Menu
	direct2				records direct non-production costs
		cfind			locates product
	direct				records direct production costs
	bilsto				stores variables
	cfind				locates product
	bilrel				releases variables
	chneed				displays any deficit in revenue
	bilonly1				service center charges module
		lasto	l		stores variables
		plabilx			data entry screen for getting SC units

		plabills			writes negative numbers for backed out units
		bilvarchk			checks for unit entry
			bilvarc1		checks for unit entry under .10
		bilonly4			calculates and stores revenue from units
		cbackchk			checks for backed out costs exceeding revenue
		zercosp			writes zeros to current stored unit costs fields
		ccwri1			calculates and writes SC information
			assigl		calculates costs in labor categories
		ccwri2			writes FY revenue
		xstdate			stores date information for forms
		lbill1			prints weekly summary report
	em0				prepares BILL.TXT file lines
		getfy			gets current fiscal year
		em1			sets up alternate text file
		emf1			prints first line of BILL.TXT file lines
		emf2			prints second line of BILL.TXT file lines
	bilrel				releases variables
	prde				record production work information
		cfind			locates product
	bilonly				services center charges module
		bilsto			stores variables
		cfind			locate product
		bilrel			release variables
		chneed			displays any deficit in revenue
		bilonly1			create weekly summary report and BILL.TXT file lines
			lasto		stores variables
			plabillx		data entry screen for getting SC units
			plabills		writes negative numbers for backed out units
			bilvarchk		checks for unit entry
				bilvarc1	checks for unit entry under .10
			bilonly4		calculates and stores revenue from units
			cbackchk		checks for backed out costs exceeding revenue
			zercosp		writes zeros to current stored unit costs fields
			ccwri1		calculates and writes SC information
				assigl	calculates costs in labor categories
			ccwri2		writes FY revenue
			xstdate		stores date information for forms
			lbill1		prints weekly summary report
		em0			prepares BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		emback			prepares negative BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		bilrel			releases variables
	labentry				records labor hours and costs
		buchek			checks to see if using backed up databases
			bumen		returns to current databases
		labsto			stores variables
		labrelea			releases variables if exiting
		getrate			gets employee rates
		labsto1			stores blanks to variables

		cfind			locates product
		prcalcs			calculates costs for backed out labor
			pc		data entry screen for entering hours
		prcalca			calculates costs for new labor
			pc		data entry screen for entering hours
		backchk			checks backed out cost of hours against existing revenue for product
			backchk1		performs check for each category
		labwri1			calculates and writes labor hours and costs
			assigl		calculates costs in labor categories
				t	loads database files and indexes for normal operation
		chneed			displays any deficit in revenue
		plabill1			stores variables for calculating SC revenue
		plabillx			data entry screen for getting SC units
		plabills			writes negative numbers for backed out units
		plabill			calculates SC unit revenue
		zercosp			writes zeros to current stored unit costs fields
		ccwri1			calculates and writes SC information
			assigl		calculates costs in labor categories
		ccwri2			writes FY revenue
		xstdate			stores date information for forms
		lbill1			prints weekly summary report
		em0			prepares positive e-mail BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		emback			prepares negative e-mail BILL.TXT file lines
			getfy		gets current fiscal year
			em1		sets up alternate text file
			emf1		prints first line of BILL.TXT file lines
			emf2		prints second line of BILL.TXT file lines
		labreleas			releases variables
	bilrel				releases variables
menup					Print Menus 1 and 2
	fypr				Fiscal Year Reports Menu
		newcrc			prints product and page count information, processed products
		crc			prints product and page count by fiscal year, completed products
		newcrc1			prints revenue and hour report
		prifyc1			prints list of products worked on
		prify1			prints current FY revenue to date
		prcbbc			prints customer base for FY by code
		prify			prints revenue by fiscal year
		prifyx			prints FY revenue by type
		prifyc			prints current fiscal information for products
	housem				Mail Menu
		em2			displays BILL.TXT file lines
	helpmen				electronic mail help
	shortpm				prints brief information on product
		cfind			locates product
	expjo				prints expiring JO report
	prbc1				prints information by code
		prbccov			prints information by code
	plog				prints log of work

		plogchk		counts work types
		plogrec		prints breakdown of work types
	proch1			Production Report Menu
		pprod1		prints composition labor for period
		pprod2		prints illustration labor for period
		artc		prints illustration costs
		cfind		locates product
		pr1		prints production information on single product
		pr2		prints tabular list of products with production charges
	prba			prints report on one customer's products
	prbc			prints information by code
		prbccov		prints information by code
	pedr1			prints workload history report for one or more editors
	pdistdoc			prints list of distributed documents
	xformx			prints duplicate worksheets & summary report
		weekno		stores week number
		xstdate		stores date information for forms
		form1		prints general and latest SC unit charge information
		form2		prints editor worksheet
		form31		prints production worksheet
		form6		prints final information worksheet
		formp		prints print specification form
		gervrx		stores variables
		lbill1		prints weekly summary report
		em0		prepares positive e-mail BILL.TXT file lines
			getfy	gets current fiscal year
			em1	sets up alternate text file
			emf1	prints first line of BILL.TXT file lines
			emf2	prints second line of BILL.TXT file lines
		emback		prepares negative e-mail BILL.TXT file lines
			getfy	gets current fiscal year
			em1	sets up alternate text file
			emf1	prints first line of BILL.TXT file lines
			emf2	prints second line of BILL.TXT file lines
		ccwri2		writes FY revenue
		gervrx		stores variables
		lbill1		prints weekly summary report
		em0		prepares positive email BILL.TXT file lines
			getfy	gets current fiscal year
			em1	sets up alternate text file
			emf1	prints first line of BILL.TXT file lines
			emf2	prints second line of BILL.TXT file lines
		emback		prepares negative e-mail BILL.TXT file lines
			getfy	gets current fiscal year
			em1	sets up alternate text file
			emf1	prints first line of BILL.TXT file lines
			emf2	prints second line of BILL.TXT file lines
		ccwri2		writes FY revenue
		bilrel		releases variables
	obib			Bibliography Menu
		bibtr		prints technical report (TR) bibliography only
		bibtd		prints technical document (TD) bibliography only
		bibtn		prints technical note (TN) bibliography only
		bib		prints TR, TD bibliography
		bibtm		prints technical manual (TM) bibliography
		diskw		prints TR, TD bibliography to disk

		diskw1		prints TR, TD, TN bibliography to disk
		bibln		prints TR, TD, TN bibliography by author's last name
	pmscl			prints report on one product
	noed1			prints list of products with no labor charges for latest year
	crcmenu			CRC Page Count Menu
		newcrc		prints product and page count information, processed products
		crc		prints product and page count by fiscal year, completed products
		newcrc1		prints revenue and hour report
	pagc			Page Cost Reports Menu
		prdt1		prints list of distributed products by type
		ppgct		prints list of products by code
		pcurpcos		prints list of distributed documents
		prdtail		prints detailed list of distributed products by type
		pedcos1		prints list of distributed products for one editor
		aedcost		prints list of distributed products
		pone		prints information on one product
		palpc		prints detailed list of distributed products
		xartc		prints list of items with illustration work
		tmpc		prints list of technical manuals only
	menup1			Print Menu 3
		helpmen		Help Menu
		chklab		prints list of products with last labor charged on a specific date
		cntnews		prints list of newsletter products
	pdistfc			prints list of classified products
	pdistdt			prints list of products by with distribution, classification statements
	pr6			prints list of products with SC charges in one category
	p2			prints list of products by distribution date
	p1			prints login date report
	crcpgct			prints production page count report
	pdistfy			prints list by distribution statement
	hrpers			prints hours/revenue percentage report
	josort			prints list by customer JO number
	pr3			prints editing SC report
	pr2			prints production SC report
	pr4			prints SC report with days in process
	pr5			prints SC year report
	ptime1			prints time in TID report
	acclist			prints labor costs by editor
	pwkfrm			prints final product form report
				(Print programs below at Status Reports Menu)
	fyhr			prints SC FY hour report
	pr6			prints SC totals in one category
	itwo			prints products in process between dates
	sstatus			prints status report to disk
	pmsryx			prints SC status with averages
	tipc			prints SC status list (time period)
	tipcc			prints SC status list by code
	yearpc			prints SC status list for a year
	scyr			prints SC totals for a year
	noeditor			prints list of products without editor charges
	pmsry			prints detailed list of work in process

	pmsryx			prints SC status list with averages for current or distributed products
	supclall			prints checklist of products in process by SC number, product ID number or code
	cured			prints checklist of products in process by editor
	edrp			prints editor labor hour report (one editor)
	hole			prints list of products with revenue at -\$100.00 or more
	cfind			locates product
	pmsro			prints status report on one product
	prx			prints SC labor page cost summary
	pmsro1			prints unit costs, fy costs
viewmen				View Menu
	viewjo1			view by job order
	lioldpn			view workform for all products
	viewfy			view revenue by fiscal year for one product
		cfind		locates product
	housem			Mail Menu
		em2		displays BILL.TXT file liness
	helpmen			Help Menu
	cfind			locates product
	view1			displays product information
		viewjo		display job order information
	view2			displays product information
	display9			displays product information
	display2			displays product information
	display3			displays product information
	display4			displays product information
	display5			displays product information
	display6			displays product information
	viewsto			stores variables for view selection
	viewrec			displays selected product information
		view1		displays product information
		view2		displays product information
		display9		displays product information
		display2		displays product information
		display3		displays product information
		display4		displays product information
		display5		displays product information
		display6		displays product information
hmenu				Housekeeping and Management Menu
	buchek			checks to see if using backed up databases
		bumen		returns to current databases
	ediths5			checks printer status
	helpmen			Help Menu
	redondx			reindexes database files
	restfy			reset fiscal year and zero revenue and cost totals
	house1			add employee information
	house2			mark employee not employed
	house3			changes RATES.DBF rates
	house4			changes employee information
	house5			Employee Information Menu
	prcon			configure printer and mail capability
	msx			Backup Options Menu
		omigod		copies database files to ascii files
	mrecall			recalls distributed information from floppy disk
	house8			changes service center rates

	addelu				adds or removes MIS operator
	housem				Mail Menu
		em2			displays BILL.TXT file liness
	delone				delete one product
		cfind			locates product
		ediths5			checks printer status
		t			loads database files and indexes for normal operation
	peginfo				prints service center information
	rat				change service center effort descriptions
		ratrel			releases variables
		ratsto			stores variables
		resc			escape from changing effort desciprions
		rat41			data entry screen to get effort descriptions
		rat5			checks and replaces effort descriptions
			rat51		stores effort description variables
	redondx				reindexes database files
	ho8dis				displays service center information
aquery					generates customer information report
	cfind				locates product
	emaq				sends customer information by e-mail
	pmsroa				prints customer information
	pr1a				prints production information
		prodstor			stores variables
		prxa			prints service center information
	view1				displays product information
		viewjo			displays product information
	display6				displays product information
	display9				displays product information
pforem					creates EMAIL.BIL file from BILL.TXT file lines
	helpem				electronic mail help
	pforem1				writes text file
	emlstchk				deletes text file
bumen					deletes backed up files

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