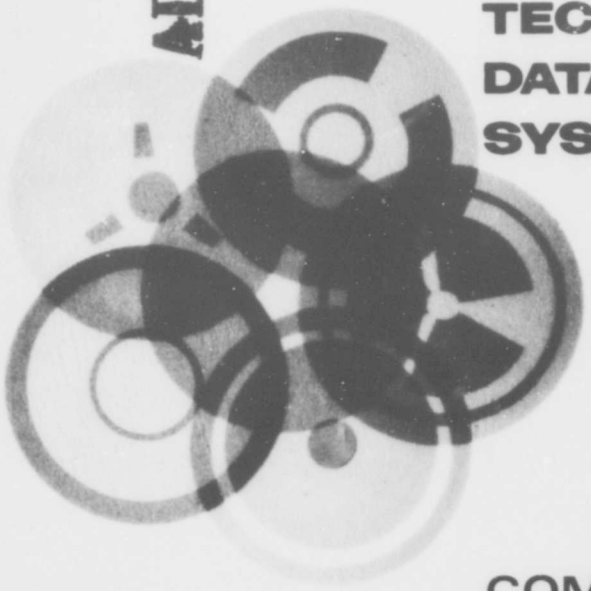
06349-W518-R0-00

INTEGRATED TECHNICAL DATA SYSTEM



COMPUTER SUBSYSTEM:

COMPUTER PROGRAMS MAINTENANCE MANUAL

JUNE 1969

PREPARED FOR
U.S. ARMY MATERIEL COMMAND
CONTRACT NO. DA-49-186-AMC-324 (X)

TRW SYSTEMS GROUP
WASHINGTON OPERATIONS
1735 I STREET N.W. • WASHINGTON, D.C. 20006

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FOREWORD

TRW Systems was awarded a contract (Contract Number DA-49-186-AMC-324(X)) by the U.S. Army Materiel Command to develop an Integrated Technical Data System (ITDS). The ITDS is intended to provide assistance to the Army Systems Manager in performing his management and technical tasks by operating on relevant data to produce, summarize, and condense information. This allows the manager and technical support personnel to (a) determine status and monitor technical progress, (b) identify and predict system technical/management problems and their impact, (c) comprehend and evaluate proposed system changes, and (d) assign and maintain awareness of responsibility for action.

The ITDS is composed of personnel, procedures, equipment and computer programs. The organization of these elements provides a capability for the processing of systems program data, including the following functions:

- Data receipt and indexing
- Validation and verification for authenticity
- Storage
- Manipulation
- Retrieval
- Display and dissemination

The organization is divided into three major subsystems: the Functional Disciplines Subsystem, the Data Operations Subsystem, and the Computer Subsystem. ITDS user documentation, of which this manual is a part, is oriented to the above subsystems, with the exception of an overall System User's Guide and a Configuration Management Plan.

Following is a tabulation of ITDS user documentation (title of this document is heavily underscored).

ITDS - overall:

- System User's Guide
- Configuration Management Plan

Functional Disciplines Subsystem:

- Administrative Manual
- Operations Manual
- Personnel Position Descriptions

Data Operations Subsystem:

- Administrative Manual
- Operations Manual
- Equipment Descriptions
- Personnel Position Descriptions

Computer Subsystem:

These 12 manuals, in general, cover administration of the subsystem, operating and maintenance instructions for the programs, computing equipment descriptions, and personnel position descriptions.

- Administrative Manual
- Generalized Processing Program, General Description
- Applications Programs, General Descriptions
- Peripheral Programs, General Descriptions
- Computer Programs Maintenance Manual
- Computer Programs Operations Manual
- Data Processing Center Operator's Manual
- Equipment Descriptions
- Personnel Position Descriptions
- Generalized Processing Program, Programming Documentation
- Applications Programs, Programming Documentation
- Peripheral Programs, Programming Documentation

This manual covers installation and maintenance instructions for the programs of the Computer Subsystem. The emphasis is on initial installation of the ITDS, and on procedures to handle modifications, new releases, and software system documentation changes, and procedures to handle problem areas. You will be referred to other manuals in the ITDS documentation structure for specific details about some of the subjects covered herein.

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ILLUSTRATIONS

COMPUTER SUBSYSTEM:
COMPUTER PROGRAMS MAINTENANCE MANUAL

1 INTRODUCTION

1.1 PURPOSE

The purpose of this manual is to assist in the initial installation and effective maintenance of the ITDS computer programs at an operating, suitably equipped data processing center. Initial ITDS software installation procedures and maintenance procedures are described on the following pages. Maintenance and installation procedures for a data processing center are used in this manual in the same context as maintaining and installing programming packages such as COBOL, FORTRAN, and OS. This manual will not contain maintenance information such as detailed system flows necessary to obtain corrective fixes. Detailed maintenance information can be found in the ITDS Programming Documentation Manuals (Refer to ITDS Computer Subsystem: Generalized Processing Program, Programming Documentation, ITDS Computer Subsystem: Applications Programs, Programming Documentation, and ITDS Computer Subsystem: Peripheral Programs, Programming Documentation.).

1.2 SCOPE

This manual contains:

- Information concerning ITDS initial delivery, installation, and sample maintenance problems.
- Information concerning the delivery, distribution, and installation of modifications, new releases, and software systems documentation changes.
- Information concerning the distribution, forms, and procedures for problem areas which might arise during the ITDS operation.

NOTE

While most of the sections in this manual are machine-independent, this version assumes that the IBM System/360 Operating System is being utilized to include support for all devices used by the ITDS software. Those sections which must be revised to accommodate the procedures of operating systems other than the IBM System/360 Operating System will be preceded by an asterisk (*).

2. INSTALLATION PROCEDURES

Included in this section are procedures and materials, including charts, tables, and forms necessary to:

- initially install the ITDS software,
- install new releases,
- install modifications,
- handle software system documentation changes.

For the purpose of this manual, the terminology "new release" refers to the replacement of the entire ITDS software. This will include any modifications made since the last new release. "Modification" refers to any change made to a portion of the software system; "software systems documentation change" refers to any changes made to ITDS user documentation.

2.1 DISTRIBUTION RESPONSIBILITIES

This manual assumes that there will be an ITDS Program Maintenance and Support Group at a centralized location and ITDS Field Coordinators at the separate field installations.

The ITDS Program Maintenance and Support Group is responsible for the issuance of the initial ITDS implementation, new releases, modifications, and software systems documentation changes. The responsibility of the ITDS Field Coordinator is to act upon the received material and to report any deficiencies found in this material to the ITDS Program Maintenance and Support Group.

2.2 GENERAL PROCEDURES FOR DISTRIBUTION OF MATERIALS

All packages sent from the ITDS Maintenance and Support Group to the field installation will be prefaced with a cover letter listing the included materials.

Items which should be included in the distribution package are:

- List of related documents.
- Card decks with accompanying identification (e.g., object programs with sample catalog cards, sample job control cards, and sample problems).

- Tape reel with accompanying identification (e.g., source cards, assembly listings, and flow charts).

- Memos containing instructions or procedures relating to the specific issuance.

In identifying deck and/or tapes, keys for all programs will be listed in the following order:

Card Decks

- Deck number

- Descriptive title

- Location of sequence numbers

- Exact number of cards in deck

EXAMPLE: Deck #1 - Source Deck
Identification "PROG" in columns 73-76
Sequence # in columns 77-80
250 cards.

(Note: Examples in this section are designed to illustrate specific points and are not drawn from actual ITDS usage.)

Magnetic Tapes

- Full name and description of each file

- The data record length, blocking factor, and block length on magnetic tape

EXAMPLE: Header Label - A single unblocked 80-character record.

IBM System/360 Object Program Cards - multiple unblocked 80-character records.

Sample Problem Input Data - 300 transactions, unblocked 80-character records.

COBOL Compile Assembly Listing - 125 characters to a record, 5 records to a block, 625 characters to a block.

COBOL Source Program Cards - multiple unblocked 80-character records.

Trailer Label - a single unblocked 80-character record.

2.3 ITDS INITIAL DISTRIBUTION AND NEW RELEASE INSTALLATION PROCEDURES

The procedures needed to initially install the ITDS and to install new releases are essentially the same. Those minor differences are noted in the detailed installation procedures of Section 2.3.3.

The following sections provide:

- Responsibilities of the ITDS Program Maintenance and Support Group in the issuance of an initial installation package and a new release package.
- General actions required of the ITDS Field Installations.
- Step-by-step procedures for initially installing the ITDS and installing new releases.

2.3.1 ITDS Program Maintenance and Support Group Responsibilities

The ITDS Program Maintenance and Support Group will issue machine-readable material and appropriate documentation for the initial ITDS installation. The following materials should be sent to the ITDS Field Installation to support an initial release:

a) Cover letter containing a list of materials included in the ITDS initial installation package. Refer to Section 2.2.

b) Machine Readable Material

- Source Modules - Includes sample problem and catalog procedures.
- Object Modules
- Load Modules

c) Documentation

- List of published documentation
- Data set descriptions
- Minimum system configuration
- Control card information
- Instructions for retrieval of machine readable materials
- Data preparation

- System preparatory procedures
- Program listings
- Dependency programs
- Sample programs
- Problem areas outstanding
- Considerations for future maintenance

The ITDS Program Maintenance and Support Group will issue machine-readable material and appropriate documentation for a new release. The following materials should be sent to the ITDS Field Installation to support a new release:

a) Cover letter listing the materials included and sent to the ITDS Field Coordinator. Refer to Section 2.2.

b) Program material which consists of:

- Complete information describing to the ITDS Field Coordinator all material items which make up the package.
- Machine-readable material (MRM). Includes each distribution volume, paper tape, or card deck which must be replaced if it changes as a result of the new release.
- New manuals.

c) Announcement letter to the ITDS Field Coordinator which lists major changes.

d) A step-by-step narrative of functions the Field Installation must perform to update the system when a new release has been issued.

*2.3.2 ITDS Field Installation Responsibilities

The following sections provide the ITDS Field Installation with the procedures necessary to initially install the ITDS and to install new releases. Many of the procedures for both applications are similar. Those which are used just at initial installation can be utilized as a check list when installing a new release. Those procedures unique to new releases are so noted in the text. Specific instructions sent with new release packages may supplement and/or override the existing procedures. If a conflict

should arise between the existing procedures and the procedures sent with the new release package, the latter should be followed.

This section provides a general overview of the procedures necessary for installing the ITDS and the new releases. Step(s) listed under each action are described in detail in the following section.

a) Review the distributed material

This will include checking all the items received to ensure they correspond to those listed in the cover letter. (Step 1)

b) Perform system preparation procedures

This will include initializing direct access volumes, IBM System/360 Operating System data sets, and ITDS system data sets. (Step 2)

c) Perform system specification procedures

This will include preparing the input deck for system generation, adapting sample job control procedures to conform to the installation's configuration, and using selected IBM System/360 Operating System macro instructions. (Step 3 - Step 5)

d) Integrate the ITDS into the IBM System/360 Operating System

This will include the procedures and utilities necessary to generate the ITDS integrated data base and software. (Step 6 - Step 10)

e) Perform certain operation procedures

This will include the procedures/considerations which pertain to the back-up of the ITDS, maintenance data set materials, and removal of libraries. (Step 11)

*2.3.3 Detailed Instructions for Installing the ITDS

This section provides a step-by-step account of the procedures necessary to initially install the ITDS. It is an expansion of the actions required of the ITDS Field Installation listed in the previous section.

2.3.3.1 Step 1 - Review the Distributed Material

Verify that all materials listed in the cover letter to the installation package have been received. Report any deficiencies to the ITDS Program Maintenance and Support Group.

2.3.3.2 Step 2 - Prepare for System Generation

Before an operating system can be generated, a new system residence volume and any other direct access volumes required must be initialized. The highest level of the system catalog must be built on the new system residence volume. Space must be allocated for the appropriate system data sets in the new operating system, and the appropriate data sets must be catalogued in the new system catalog. Special IBM System/360 operating considerations which relate to the System/360 operating system, such as Task Supervisor, Access Methods, Sort/Merge Functions, and Languages must also be included.

Task Supervisor. Task Supervisor options must be selected to include the following optional support:

- The number of events that can be specified in the WAIT macro instruction should be multiple.
- The capability to request date plus time of day in various units of measurement, and the capability to request, check, and cancel intervals of time should exist.

Access Methods. Data management access methods must include:

- Basic Direct Access Method (BDAM)
- Basic Telecommunications Access Method

Note: BTAM requires the inclusion of the telecommunications subroutine library.

Sort/Merge. All sort/merge functions should be specified for inclusion in the operating system.

Languages. Any installation modifying the ITDS software will require an operating system which includes the appropriate language processors and subroutine libraries. These are:

ASSEMBLER F

COBOL

FORTRAN

PL/1

2.3.3.3 Step 3 - Adapt JCL Procedures to Conform to the Installation's Configuration

The ITDS procedures must be added, as members, to the SYSL.PROCLIB. These procedures include the operations required for ITDS maintenance and execution. A description and listing of each procedure is included in ITDS Computer Subsystem: Generalized Processing Program, Programming Documentation, as well as the sample job step needed to add these procedures to the system procedure library. Sample procedures will be supplied at initial installation, and revisions and additions will be supplied with new releases and modifications, when applicable. Refer to IBM System/360 Operating System: Utilities, Form C28-6586 for Additional information. Appendix A contains the JCL required to execute the Generalized Processing Program.

2.3.3.4 Step 4 - Initialize the ITDS System Direct Access Volumes

Each disk pack used by the ITDS is considered a private volume. These volumes must be initialized using the IBCDASDR utility program. Refer to IBM System/360 Operating System: Utilities, Form C28-6586, for additional information. A description of the volume labeling conventions and a sample deck setup are included in Appendix C.

Data sets must be allocated in the VTOC for each volume. A description of the volume labeling conventions, disk pack allocation, and initialization is included in Appendix C.

2.3.3.5 Step 5 - Checkpoint the Applications Data Base

This step is used in installing a new release and should be bypassed at initial installation since the applications data base does not exist. The applications data base should be dumped onto magnetic tape using the system verb DDUMP. Refer to Appendix D.

2.3.3.6 Step 6 - Load the ITDS Software

The ITDS software resides on the first pack allocated to the ITDS. A transportable copy of all libraries necessary for ITDS installation will be provided. This must be loaded onto the disk pack using the IBM System/360 Operating System Utilities. Refer to IBM System/360 Operating System: Utilities, Form C28-6586 for additional information. A sample restore deck is shown in Appendix D. All ITDS libraries will be allocated and initialized in the process of executing this step.

2.3.3.7 Step 7 - Allocate the ITDS Data Base Extents

The Generalized Processing Program (GPP) must be informed of the disk space allocated for its use. The area allocated need only be formatted once (i.e., at initial installation or when a new disk area is to be added). The program FORMATDB performs this task. Appendix C contains a description of the program and a sample deck set up.

2.3.3.8 Step 8 - Load the BOOTSTRAP Data Base

A data base must be present for the GPP to execute. The system files reside in the ITDS object library member name SYSFILE in DLOAD format. The execution of the procedure "GPPBOOT" will load these files and create the BOOTSTRAP data base.

2.3.3.9 Step 9 - Restore the Applications Data Base

If Step 5 was not executed, this step should also be bypassed. The applications data base must be restored using the system verb RESTORE-TO-CHECKPOINT. Refer to Appendix E. This is an excellent opportunity to take advantage of the reallocation option. Note: Do not neglect to specify the LSTREC parameter in the RESTORE-TO-CHECKPOINT.

2.3.3.10 Step 10 - Integrate System File Changes

System file changes will be included as DLOAD data cards. These changes must be integrated in the applications data base. If the installation has modified the file location of any of the System Data Lists, the DLOAD cards must be modified to reflect the reallocation. Reference DLOAD in Appendix E.

2.3.3.11 Step 11 - Checkpoint the GPP System Pack

This step is not required to execute the GPP system. It is recommended that this step be executed as an insurance measure after the ITDS has been generated. The ITDS system disk pack may be copied to magnetic tape using the utility IEHDASAR. See the example in Appendix D.

2.4 MODIFICATIONS

The ITDS Program Maintenance and Support Group will issue modification packages. Items which should be included in the modification package are:

a) Cover letter listing the materials included and sent to the ITDS Field Coordinator. Refer to Section 2.2.

b) Basic Program Material - Updated master of all machine-readable material to be sent to the installation.

c) Maintenance Package - Must contain all of the items required by the ITDS Field Installation to update Basic Program Material to the new program level. The Maintenance Package consists of the following items:

- Replacement of existing informal documentation for those pages that are being updated. Reference to these pages should be made on the cover letter.
- Any new documentation revisions which the ITDS Field Coordinator needs to update his system documentation.
- The Machine Readable Material required to update the ITDS Field Installation's Basic Program Material.
- A step-by-step narrative of functions the ITDS Field Coordinator must perform to update his system when he receives a maintenance package.
- General description of changes to the original system. Will reference a list of outstanding errors and a list of known errors fixed by the maintenance procedures.

The following actions are required of the ITDS Field Coordinator after a modification has been issued:

a) Verify that all materials listed in the cover letter to the modification package have been received.

b) Machine Readable Material:

- Card decks should be checked to ensure that the card count agrees with the count supplied on the cover letter.
- If the deck has identification punched in certain columns, the identification should be checked to ensure it is punched in the correct card columns and agrees with the cover letter.
- Magnetic tapes used should be checked to ensure that the record counts, tape mark counts, etc., agree with the information supplied in the cover letter.

c) Ensure that any actions and procedures which were outlined in the maintenance package have been performed.

d) Report any deficiencies to the ITDS Program Maintenance and Support Group.

2.5 SOFTWARE SYSTEMS DOCUMENTATION CHANGES

The ITDS Program Maintenance and Support Group will issue any software systems documentation changes. Items which should be included in the software system documentation change package are:

a) Cover letter listing the updated documentation material with its effective date. Refer to Section 2.2.

b) Mention of any previous related Revision Package or Interim Distribution and their effective dates.

c) Filing procedures.

d) Any other pertinent instructions or information, e.g., the sequence of pages in named manual has been changed, etc.

e) Revised page or pages of named document.

The following actions are required by the ITDS Field Coordinator after a software system documentation change has been received:

a) Verify that all materials listed in the cover letter to the software system documentation change package have been received.

b) Ensure that proper filing procedures have been performed.

c) Ensure that any other instructions have been carried out.

d) Report any deficiencies to the ITDS Program Maintenance and Support Group.

3. SYSTEM MAINTENANCE

System maintenance is the joint responsibility of the ITDS Field Coordinator and the ITDS Program Maintenance and Support Group. In general terms, the ITDS Field Coordinator is responsible for screening problems which arise at the field installation and properly reporting these problems to the ITDS Program Maintenance and Support Group. The ITDS Program Maintenance and Support Group is responsible for investigating any problems which might arise; proposing a solution to the problem; making software corrections under the direction of the Configuration Control Manager (refer to ITDS Configuration Management Plan); and communicating results to the Field Coordinator.

Section 3.1 contains error identification aids available to the ITDS Field Coordinator for problem validation. Section 3.2 contains procedures for submitting an ITDS Problem Report (IPR). Section 3.3 contains ITDS Program Maintenance and Support Group procedures for responding to an IPR.

3.1 ERROR IDENTIFICATION AND TRACING

The ITDS Field Coordinator should be familiar with features of the ITDS. The following sections are offered as a guide to the aids available to him in problem validation. More detailed information is available in the following documents:

- ITDS Computer Subsystem: Computer Programs Operations Manual,
- ITDS Computer Subsystem: Generalized Processing Program, Programming Documentation,
- ITDS Computer Subsystem: Applications Programs, Programming Documentation, and
- ITDS Computer Subsystem: Peripheral Programs, Programming Documentation.

*3.1.1 Error Identification - Messages

A list of error messages which could occur during the operation of the Generalized Processing Program, Applications Programs, and Peripheral Programs is found in Appendix F.

Refer to IBM System/360 Operating System: Messages and Codes, Form C28-6631, for a list and explanation of the messages, completion codes, and wait state codes produced by the IBM System/360 Operating System.

*3.1.2 Error Tracing

The following routines will be helpful in tracing errors in the Generalized Processing Program:

- DDUMP - This program provides the system with the ability to checkpoint dump the data base. It displays, in report form, data distribution statistics for the checkpointed data base. Refer to Appendix G.

- DPRINT - This ITDS verb invokes the printing of an image of the data base records. As much of the data base as is requested will be printed out. Note: Print within bounds. Refer to Appendix F.

- PRINT-BOOT - This program prints a summary of the current data in the base structure. The output is a set of parameters which describes current status of the data base. Refer to Appendix G.

- SYSDUMP - SYSDUMP provides the user with the ability to retrieve small portions of the data base. It prints out all or part of an item, a physical record, or a group (a set of linked records). It obtains the parameters identifying the data area to be printed from the input statement. Refer to Appendix G.

- SYSSELECT-HISTORY - This program enables the system to select items from the history tape. Selection options are available. The data may be loaded into a specified data list after selection. The normal retrieval/update options for the system are then available for use with this data list. Refer to Appendix G.

- TDUMP - A tape dump is available which will dump a standard unlabeled ITDS formatted tape. The dump may be evoked by control statement or mode entry. Refer to Appendix G.

Standard IBM System/360 Operating System utilities can be used for error tracing in the Applications Programs and Peripheral Programs. Refer to IBM System/360 Operating System: Utilities, Form C28-6586 for detailed information.

3.2 IPR PREPARATION PROCEDURES

The proper method of reporting problems encountered in the ITDS system software is by the use of an ITDS Problem Report (IPR). Submitted information should provide a complete description of the problem, all available

supporting documentation, methods used for circumvention (successful or unsuccessful), and particularly useful information to help resolve and/or create a permanent modification. IPR's are not to be used for comments, suggestions, or improvements.

3.2.1 IPR Usage

IPRs are acceptable for three types of error conditions: 1) program logic errors, 2) documentation errors, and 3) program distribution errors.

The program logic type error IPR should be submitted as soon as the problem can be defined. Therefore, it is necessary and expected that an IPR will be submitted without temporary relief being provided to the user. It is important that this be done in order to reduce program repair time.

An IPR may be submitted for documentation errors that fall into the category of format, punctuation, spelling, or style. Errors of this type must be assigned the lowest severity code.

IPR's may be submitted for two types of program distribution errors. An IPR may be submitted for incomplete, illegible, or physically damaged documentation or machine readable material. It may also be submitted for problems of a programming nature which make it difficult or impossible to install the program in an environment which meets minimum software/hardware requirements.

3.2.2 Areas of IPR Responsibility

The ITDS Field Coordinator is responsible for:

a) Preliminary validation of the problem area.

b) Serving as the focal point for obtaining all related information and fixes.

c) Signing the IPR as the issuing authority.

d) Coordinating further activities as a result of the IPR submittal.

- Contracting the ITDS Program Maintenance and Support Group prior to the submission of any Severity Code 1 IPR.

- Packaging and identifying by Field Installation assigned serial number all material submitted with the IPR.

- Assisting in the establishment of a shipping mode for the IPR.

e) Sending the IPR to the ITDS Program Maintenance and Support Group.

3.2.3 Description of the IPR Layout

The following descriptions accompany the IPR Form, Figure 3-1.

Item	Description	Explanation
A	INSTALLATION NAME, INSTALLATION ADDRESS	Self-explanatory.
B	OPERATING JOB ENVIRONMENT	IPR submitter's description of the system operation (e.g., single job processing, teleprocessing, multi-tasking, etc.).
C	PROGRAM IDENTITY AND CHANGE LEVEL	Description of the level of the programming system component and application being used at the time of failure detection.
D	IPR SERIAL NO.	Unique serial number assigned to each IPR by the ITDS Field Coordinator.
E	IPR SUBMITTED	Date (month, day, year) submitted.
F	SEVERITY CODE	ITDS Field Coordinator's appraisal of the local situation:
	Code 1	Indicates the inability of the installation to use the program, resulting in a critical impact on its operations. This condition requires an immediate solution that is not already available from the installation. Immediate action must be coordinated through the appropriate ITDS Program Maintenance and Support Group.
	Code 2	The installation is able to use the program, but is severely restricted.
	Code 3	The installation is able to use the program with limited functions which are not critical to the overall operations.
	Code 4	The installation has found a way to circumvent the problem. However, the IPR will be evaluated and action taken as dictated by the problem.

Item	Description	Explanation
G	SYMPTOMS WAIT/HALT ABEND LOOP SYS-MESSAGE SYS-TERMINATE ITDS-TERMINATE ITDS-DDUMP ITDS-PROCEDURES OTHER	Check the failure symptoms that best describe the failure, and provide external codes and messages. OTHER: Explain the failure symptoms which cannot be classified by the available categories.
H	CPU, CORE SIZE, SYS. RES., SYS. IN, SYS. OUT	Description of the system configurations and unit types of the system detecting the fault.
I	ERROR DESCRIPTION	The problem description should include four major items: 1. Failure Symptom: one sentence describing the external manifestation. 2. Conditions required to produce the failure: Set-up, etc. 3. Logic leading to the failure: functions, action problem description, etc. 4. Temporary relief: method used to get around the problem. If additional space is required for the description of the problem, use additional sheets, attached securely to the original. The installation name, installation-assigned sequence number, and page number must be indicated on additional pages.
J	PREPARED BY	Signature of person preparing the IPR.
K	AUTHORIZED SIGNATURE	IPRs must be reviewed and signed by the installation's ITDS Field Coordinator.
L	PAGE OF	When one or more pages is used to describe a problem, indicate the total number of pages used (e.g., two of six).
M	MAINTENANCE GROUP AND INDIVIDUAL CONTACTED	Self-explanatory.

Item	Description	Explanation
N	TEST RUN TIME	Time required to process test data included with the support material in 1/10-hour increments.
O	MATERIAL SUBMITTED STORAGE PRINT STORAGE MAP TAPE PRINT DASD PRINT SOURCE DECK/TAPE OBJECT DECK/TAPE PROGRAM LISTING OTHER CONTROL CARDS/JCL CONSOLE LOG CONSOLE CONDITIONS SYSTEM LOG SYSTEM OUTPUT TEST DATA DIAGNOSTIC OUTPUT PTF LIST	The installation should submit any items which have been used to arrive at the diagnosis and which might aid the ITDS Program Maintenance and Support Group in the evaluation of the problem. The material should be self-contained in that all of the information supplied should explain the problem area. Circle applicable areas of the material when appropriate.
P	RETRY, NO-RETRIES	The number of retries recorded by the programmer before the IPR is prepared, plus the retry after the program problem was circumvented.
Q	TEMPORARY RELIEF GIVEN	☐ BYPASS ☐ CORRECTION

3.3 PROBLEM RESOLUTION

When an IPR has been sent to the ITDS Program Maintenance and Support Group and a method of resolution by circumvention cannot be created, a temporary modification may be necessary to physically change executable code. The temporary modification is only to be employed in an emergency situation (i.e., when the system is inoperable or severely crippled due to the failing component) and is not meant to replace or conflict with the established configuration control procedures.

When a problem of this severity occurs, the ITDS Program Maintenance and Support Group should:

- Contact the Configuration Control Manager.
- Gather information needed for creating a temporary modification and request approval for the modification from the Configuration Control Manager.

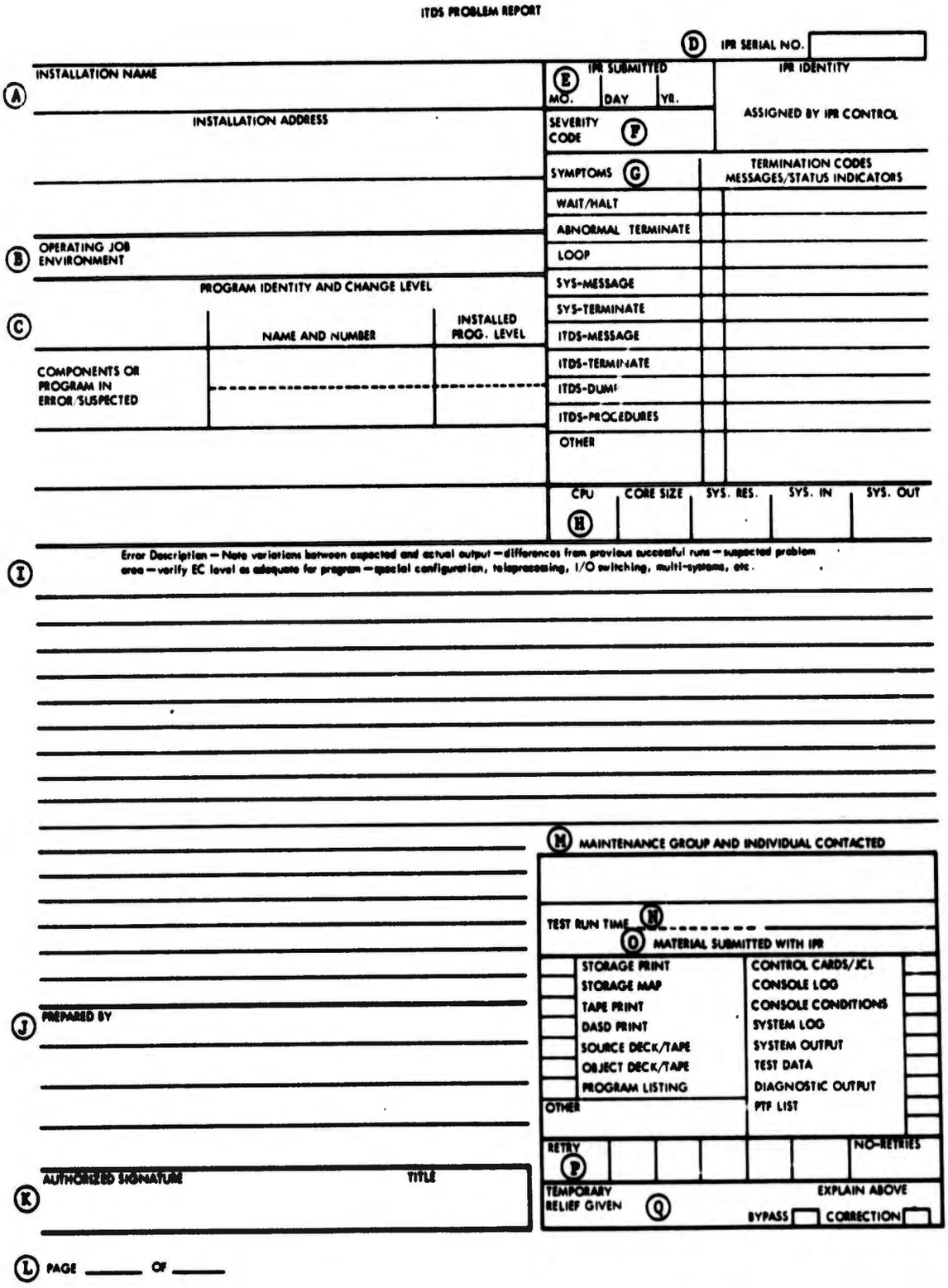

Figure 3-1. Sample ITDS Problem Report Form

- Send the temporary modification and procedural information needed to incorporate the temporary fix to the requesting ITDS Field Coordinator. It should be sent to all Field Installations when the problem is of a nature that will affect many ITDS users.

- Investigate permanent modification to the component and schedule its implementation.

- Send schedule for implementation to the Configuration Control Manager.

- Prepare normal update distribution to replace temporary modification.

The temporary fix supplied by the ITDS Program Maintenance and Support Group as a response to the IPR should include:

a) Description of the following:

   - reported error and required changes,

   - libraries affected by the change,

   - detailed implementation procedures for application,

   - additional external storage necessary for application,

   - method to determine a need for "temporary data sets" used during the installation of a fix.

b) The job control statements necessary to insert the temporary fix into the user's system.

c) ITDS Program Maintenance and Support Group processing number assigned to each IPR received from the ITDS Field Coordinator and used on all correspondence referencing that IPR.

4. TEST CASES AND SAMPLE PROBLEMS

Supplement A, a separately-bound supplement to this manual, contains descriptions of appropriate test cases and sample problems for each of the ITDS programs.

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5. RELATED DOCUMENTATION

This section contains references to ITDS and operating system documents which may prove useful to system maintenance personnel.

5.1 THE ITDS DOCUMENTATION REFERENCES

The following ITDS Documentation is required to understand the maintenance functions of the system, validate error reports, etc.:

- ITDS System User's Guide
- ITDS Computer Subsystem: Generalized Processing Program, General Description
- ITDS Computer Subsystem: Applications Programs, General Description
- ITDS Computer Subsystem: Peripheral Programs, General Description
- ITDS Computer Subsystem: Computer Programs Operations Manual
- ITDS Computer Subsystem: Data Processing Center Operator's Manual

The following ITDS Documentation could prove useful in providing additional insight into the detailed functioning of the software:

- ITDS Computer Subsystem: Generalized Processing Program, Programming Documentation
- ITDS Computer Subsystem: Applications Programs, Programming Documentation
- ITDS Computer Subsystem: Peripheral Programs, Programming Documentation

*5.2 IBM SYSTEM/360 OPERATING SYSTEM DOCUMENTATION

The following IBM System/360 Operating System publications are required to understand the operating system and to identify errors associated with it:

- IBM System/360 Operating System: Introduction Form C28-6534;
- IBM System/360 Operating System: Concepts and Facilities, Form C28-6535;

- IBM System/360 Operating System: Storage Estimates, Form C28-6551;
- IBM System/360 Operating System: System Programmers Guide, Form C28-6550;
- IBM System/360 Operating System: Messages and Codes, Form C28-6631.

For a better understanding of the system generation process, see IBM System/360 Operating System: System Generation, Form C28-6554.

Reference is made throughout these publications to several utility programs. The utility programs are described in IBM System/360 Operating System: Utilities, Form C28-6586.

APPENDIX A
JCL REQUIREMENTS OF ITDS

GPPEXEC

EXECUTE CARD

The GPP System Execute Card may contain the following parameters:

PGM=GPPEXEC

REGIØN=54K

PARM=(PBN, DBN, TSVC)

PBN is the Program base number and must be 1 or null.

DBN is the Data base number and must be 2 or null.

TSVC is the number of an SVC which modifies the Unit Control Block for terminals. This is used only when the terminal in use does not correspond to the OS System generation specifications. This may be null.

JOBLIB CARD

The GPPEXEC is a member of the GPP.LØAD library and (unless it is moved) will require a JOBLIB card to execute. A recommended format is:

//JØBLIB DD DSNAME=GPP.LØAD,DISP=SHR,VOL=SER=GPPLB1,UNIT=2314

DD CARDS

1. GPPIN - This is the initial GPP INPUT file. It is read using BSAM. The DD parameters specified are:

   DEVD=DA, DSØRG=PS, LRECL=80, MACRF=R, RECFM=F

   (See format of Initial Input File.)

2. GPPØUT - This is the initial printed output file. It is written using BSAM. The DD parameters specified are:

   DEVD=DA, DSORG=PS, BLKSIZE=120, MACRF=W, RECFM=VB

3. GPPPCH - This is the punched output file. It is written using BSAM. The DD parameters specified are:

   DEVD=DA, DSØRG=PS, BLKSIZE=120, MACRF=W, RECFM=VB

4. GPPU11 - This is the GPP Tape Unit 1. It is a read/write file created and written using BSAM. The DD parameters are:

   BLKSIZE=3600, DEVD=DA, DSØRG=PS, MACRF=(R,W), RECFM=VB.

   The BLKSIZE specified is for output only. The maximum number of characters that will be read is 650, one logical record per block.

5. GPPU12 - This is GPP Tape Unit 2. It has the same characteristics as GPPU11.

6. GPPU13 - This is GPP Tape Unit 3. This is assigned as the History Tape. It is written using BSAM. The DD parameters are:

   BLKSIZE=650, DEVD=DA, DSØRG=PS, MACRF=(R,W), RECFM=VB

7. GPPU21 - This is the 2701(1050) terminal/adapter/Line. It is accessed using BTAM. The DCB parameters are:

   DSØRG=CX, MACRF=(R,W), LERB=TM1LRB, ERRØPT=ERWC

8. GPPU22 - This is the same as GPPU21.

9. GPPU23 - This is the same as GPPU21.

10. GPPU24 - This is the same as GPPU21.

11. DISK01 - This is the first volume of 2314 disk pack allocated to the GPP System (GPPLB1). The DCB parameters are:

    MACRF=(E), DSØRG=DA

12. DISK02 through DISK05

    These DD cards are required and must only be present if volumes 2 through 5, respectively, are to be accessed by the GPP System. The FORMATDB program parameters specify the number of packs and the areas on each pack. The EXEC reads the FORMATDB created disk space description to access the data base. Thus, care should be exercised in coordinating these DD cards with the FORMATDB program.

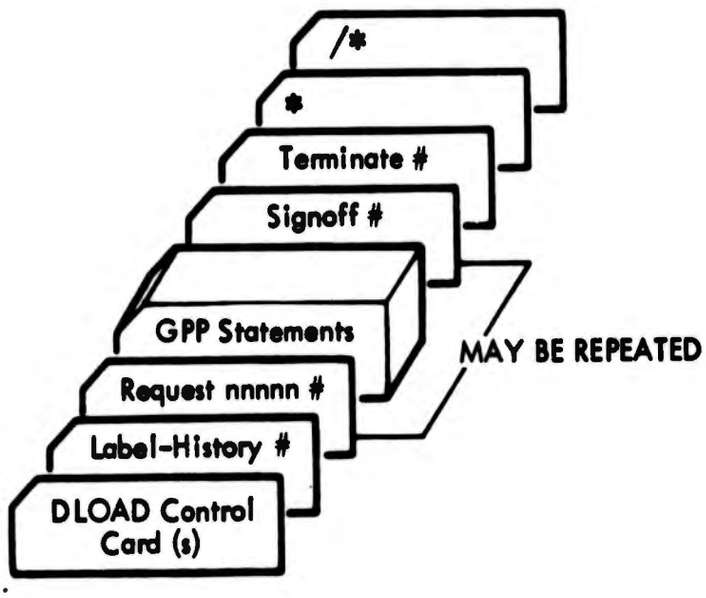
SAMPLE JCL CARDS

```
//JOBLIB DD     UNIT=2314,VOL=SER=GPPLB1,DSNAME=GPP.LOAD,DISP=SHR
       EXEC     PGM=GPPEXEC,PARM=(1,2,236)
//SYSUDUMP DD   SYSOUT=A
//GPPOUT DD     SYSOUT=A
//GPPPCH DD     SYSOUT=B
//DISK01 DD     UNIT=2314,VOL=SER=GPPLB1,DSNAME=GPP.CLDB,DISP=(OLD,PASS)
//DISK02 DD     UNIT=2314,VOL=SER=GPPLB2,DSNAME=GPP.CLDB,DISP=(OLD,PASS)
//DISK03 DD     UNIT=2314,VOL=SER=GPPLB3,DSNAME=GPP.CLDB,DISP=(OLD,PASS)
//DISK04 DD     UNIT=2314,VOL=SER=GPPLB4,DSNAME=GPP.CLDB,DISP=(OLD,PASS)
//DISK05 DD     UNIT=2314,VOL=SER=GPPLB5,DSNAME=GPP.CLDB,DISP=(OLD,PASS)
//GPPU11 DD     UNIT=2314,SPACE=(TRK,(200,25)),DSNAME=&UT1
//GPPU12 DD     UNIT=2314,SPACE=(TRK,(200,25)),DSNAME=&UT2
//GPPU13 DD     UNIT=2400,LABEL=(,NL),DSNAME=HISTORY,DISP=(,KEEP),
                DEB=(TRTCH=C)
//GPPU21 DD     UNIT=02A          1050 - 1
//GPPU22 DD     UNIT=02B          1050 - 2
//GPPU23 DD     UNIT=02C          1050 - 3
//GPPU24 DD     UNIT=02D          1050 - 4
//GPPIN  DD     *
```

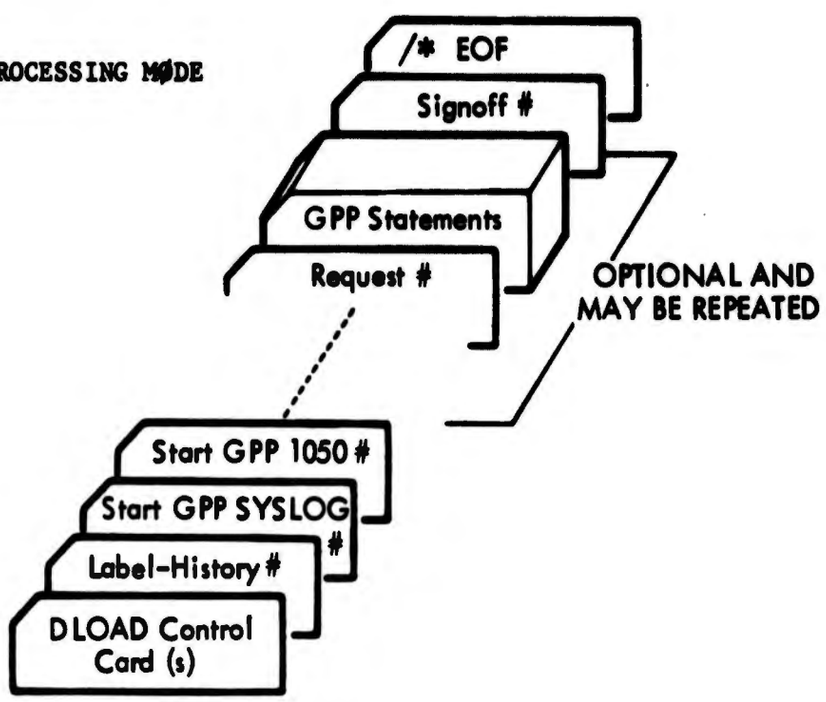
INITIAL INPUT FILE FORMAT

A. BATCH MØDE

The initial input file (GPPIN) must be formulated as follows:



B. TLEPROCESSING MØDE



APPENDIX B
ITDS PROCEDURES

1. GENERAL

All Data Sets (with the exception of execution time temporary data sets) reside on one of the private packs allocated for GPP System usage. The GPP System expects contiguous areas of full cylinders for its use on each of the disk packs allocated to it. There is currently a maximum of five disk packs which the GPP System will support. (See Figure B-1 for volume labeling conventions.)

VOLUME	LABEL
1	GPPLB1
2	GPPLB2
3	GPPLB3
4	GPPLB4
5	GPPLB5

Figure B-1. Volume Labeling Conventions for GPP Disk Pack

2. INITIALIZATION OF 2314 DISK PACKS

Disk packs which are to be used with operating system 360 must be initialized, and bad tracks must be assigned alternates. IBM supplies programs to perform this task (reference: IEHDASDR or IBCDASDI Program IBM System/360 Operating System Utilities Form C28-6586). Figure B-2 shows a sample IBCDASDR deck setup.

3. ALLOCATION OF GPPLB1

The first pack, GPPLB1, contains a number of data sets which are used for maintenance and execution of the program. The VTOC will be created for GIMLB1 during initial system generation, and the data sets will be loaded. The allocation of GPPLB1 is shown in Figures B-3 and B-3A.

A description of each data set follows.

```
//STEP     EXEC   PGM=IEHDASDR
//SYSPRINT  DD    SYSOUT=A
//SYSIN      DD   *
         ANALYZE     TODD=232,VTOC=00002,EXTENT=00008,NEWVOLID=GPPLB1,      X
               FLAGTEST=NO, PASSES=1,OWNERID=TRWGIM1
/*
//STEP    EXEC    PGM=IEHDASDR
//SYSPRINT    DD    SYSOUT=A
//VOL1    DD    UNIT=(SYSDA,,DEFER),DISP=OLD,                               X
//                VOLUME=(PRIVATE,,SER=(GIMLB1))
//SYSIN    DD     *
         GETALT    TODD=VOL1,TRACK=009D0002
         GETALT    TODD=VOL1,TRACK=00A10002
         GETALT    TODD=VOL1,TRACK=00A20002
         GETALT    TODD=VOL1,TRACK=00A50002
         GETALT    TODD=VOL1,TRACK=00C6000A
/*
```


Figure B-2. Sample Deck to Initialize and Assign Alternate Tracks Using the TEHDASDR Program

LIBRARY NAME	ORGANIZATION	STARTING TRACK	NUMBER TRACKS	COMMENTS
VOL LABEL	-	0	1	
VTØC	-	2	8	
GPP.CLDB				
PROG STORAGE	BLOCKED			
ID = 1	2 REC/TRACK	20	180	3520 CHAR PER RECORD
DATA BASE	BLOCKED			
ID = 2	9 REC/TRACK	200	3360	642 CHAR PER RECORD
GPP.PREDEF	SEQUENTIAL	3560	30	BLKSIZE = 3520
GPP.POSTDEF	SEQUENTIAL	3590	10	BLKSIZE = 3520
GPP.OBJECT	PARTITIONED	3600	280	
GPP.SOURCE	PARTITIONED	3880	40	
GPP.LOAD	PARTITIONED	3920	40	
GPP.MISC	SEQUENTIAL	3960	40	

Figure B-3. Allocation of Data Sets on GPPLB1 - 2314

3.1 GPP.SOURCE LIBRARY

This library contains linkage editor control statements which control the linking and loading of the GPP System program pages. This is a partitioned data set, and each member (MEMBER NAME = PAGEnnn) contains the control statements to link edit one page.

3.2 GPP.OBJECT LIBRARY

This library is formatted as a partitioned data set. It contains an image of all the object decks in the GPP System. Each deck is a member. The following conventions are used for member names.

Modes are named MDnnn (nnn is the mode number)

Subroutines are named by their subroutine name (i.e., RETI,NXREC)

```
$       IDENT    LIBDEF
//STEP    EXEC   PGM=IEHPROGM    ALLOCATE   DISK PACK   VOLUME SER GPPLB1
//DD   DD   DISP=OLD,UNIT=SYSDA,VOLUME=(PRIVATE,,SER=GIMLB1)
//SYSPRINT    DD   SYSOUT=A
//SYSIN  DD   DUMMY
//LOAD        DD DSNAME=GPP,LOAD,                                          X
//               DISP=(,KEEP),                                             X
//               UNIT=SYSDA,                                               X
//               VOLUME=SER=GPPLB1,                                        X
//               SPACE=(ABSTR,(40,3920,75)
//CLDB   DD      DSNAME=GPP,CLDB,DISP=(,KEEP),UNIT=SYSDA,                  X
//               VOL=SER=GPPLB1,SPACE=(ABSTR,(3550,10))
//PRE     DD     DSNAME=GPP,PREDEF,DISP=(,KEEP),UNIT=SYSDA,                X
//               VOL=SER=GPPLB1,SPACE=(ABSTR,(30,3560))
//POST    DD     DSNAME=GPP,POSTDEF,DISP=(,KEEP),UNIT=SYSDA,               X
//               VOL=SER=GPPLB1,SPACE=(ABSTR,(10,3590))
//OBJ         DD DSNAME=GPP,OBJECT,                                        X
//               DISP=(,KEEP),                                             X
//               UNIT=SYSDA,                                               X
//               VOLUME=SER=GPPLB1,                                        X
//               SPACE=(ABSTR,(280,3600,75))
//SRC         DD DSNAME=GPP,SOURCE,                                        X
//               DISP=(,KEEP),                                             X
//               UNIT=SYSDA,                                               X
//               VOLUME=SER=GPPLB1,                                        X
//               SPACE=(ABSTR,(40,3880,75))
//MISC        DD DSNAME=GPP.MISC,                                          X
//               DISP=(,KEEP),                                             X
//               UNIT=SYSDA,                                               X
//               VOLUME=SER=GPPLB1,                                        X
//               SPACE=(ABSTR,(40,3960))                                   X
```

Figure B-3A. Allocation of Data Sets on GPPLB1 - 2314

Pages are named PAGEnnn (nnn is the page number)

The System Files are also kept here under the member name SYSFILES.

3.3 GPP.LOAD LIBRARY

This library is formatted as a partitioned data set. It contains only the executable load modules for the GPP System. These include the bootstrap for the GPP System (GIMEXEC), and the GPP System utilities.

3.4 GPP.PREDEF

This sequential data set contains the MACRO and data definitions required to assemble the GPP modes (BLKSIZE = 3520).

3.5 GPP.POSTDEF

This sequential data set contains the paging definitions for the system. This is required at assembly time. (BLKSIZE,3520).

3.6 GPP.MISC

This sequential data set is used for utility operations and during assembly of the GPP System.

3.7 GPP.CLDB

This is the GPP classical data base and is organized into data bases and records. Data Base 1 contains the executable program pages. Data Base 2 contains the first part of the Integrated Data Base.

4. ALLOCATION OF GPPLB2 THROUGH GPPLB5

The area allocated for data base usage must be contiguous full cylinders on each pack. The Data Set name on each pack is GPP.CLDB. Normally, this would include cylinders 1 through 199. (Cylinder 0 contains the VOL Label and VTØC.) This area must be allocated using the ABSTR parameter in the DD card (see Figure B-4).

```
//STEP    EXEC   PGM=IEFBR14       ALLOCATE CLDB GPPLB2,3,4,5
//CLDB2   DD     DSNAME=GPP.CLDB,DISP=(,KEEP),UNIT=2314,VOL=SER=GPPLB2,          X
//               SPACE=(ABSTR,(3980,20)
//CLDB3   DD     DSNAME=GPP.CLDB,DISP=(,KEEP),UNIT=2314,VOL=SER=GPPLB3,          X
//               SPACE=(ABSTR,(3980,20)
//CLDB4   DD     DSNAME=GPP.CLDB,DISP=(,KEEP),UNIT=2314,VOL=SER=GPPLB4,          X
//               SPACE=(ABSTR,(3980,20)
//CLDB5   DD     DSNAME=GIM.CLDB,DISP=(,KEEP),UNIT=2314,VOL=SER=GPPLB5,          X
//               SPACE=(ABSTR,(3980,20)
/*
```


Figure B-4. Sample Job to Allocate GPP. CLDB on Volumes GPPLB2, GPPLB3, GPPLB4 and GPPLB5

5. FORMATTING THE DATA BASE

The disk space allocated to the GPP.CLDB must be formatted into fixed length records, with record addresses written on each track. The FORMATDB program formats this area and creates a master record of data base extents which is used by all GPP programs when accessing the data base. The data base area(s) need be formatted only once. The master record must be rebuilt when each new revision is installed. (Formatting is a program option.) A description of the FORMATDB program is included in Appendix C. Figure B-5 shows a typical deck setup for execution of the FORMATDB program at initial installation. Figure B-5A shows the same setup at revision installation.

```
//*              FORMAT THE DATA BASE INITIAL INSTALLATION
//*
//*
//JOBLIB DD      VOL=SER=GPPLB1,DSN=GPP.LOAD,UNIT=2314,DISP=SHR
//BLOCK  EXEC    PGM=GPPFRMT
//DSK1   DD      VOL=SER=GPPLB1,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//DSK2   DD      VOL=SER=GPPLB2,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//DSK3   DD      VOL=SER=GPPLB3,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//OUT    DD      SYSOUT=A
//IN     DD
1030575001177001199001199                    2  MASTER CARD
2 01000000093504                                PGM DATA BASE-BYPASS FORMAT
2X02000905660642                                DATA LIST DATA BASE-FORMAT
3                END OF DATA
```

Figure B-5. Sample Deck Setup at Initial Installation

```
//*
//*
//*              FORMAT THE DATA BASE AT REVISION INSTALLATION
//JOBLIB DD      VOL=SER=GPPLB1,DSN=GIM.LOAD,UNIT=2314,DISP=SHR
//BLOCK  EXEC    PGM=GPPFRMT
//DSK1   DD      VOL=SER=BPPLB1,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//DSK2   DD      VOL=SER=GPPLB2,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//DSK3   DD      VOL=SER=GPPLB3,DSN=GPP.CLDB,UNIT=2314,DISP=(OLD,KEEP)
//OUT    DD      SYSOUT=A
//IN     DD      *
1030575001177001199001199                    2  MASTER CARD
2 01000000093504                                PGM DATA BASE-BYPASS FORMAT
2 02000905660642                                DATA LIST DATA BASE-BYPASS FORMAT
3                END OF DATA
```

Figure B-5A. Sample Deck Setup at Revision Installation

APPENDIX C
FORMATDB

1. FUNCTION

FORMATDB is an ITDS system utility which formats the Integrated Data Bases (IDB) by writing dummy records and/or building a Master Record which reflects the IDB's disk extents. The IDB is made up of several individual data bases; the number of distinct data bases is presently limited to less than ten. Each of the data bases has its own record size (bytes per physical record) and its own allotment of IDB's cylinders.

2. UTILITY CONTROL STATEMENTS

A separate option card must be provided for each data base. This must be done even if a particular data base is not to be formatted. The fields in the option cards used by FORMATDB are described below:

- A card code of "2" should appear in card column 1.
- A flag in column 2 controls whether or not dummy records are written in a particular data base's extent. If column 2 is blank, the extent is formatted and any information that existed previously in this area is lost. If any non-blank character appears in column 2, the extent is not written over but the extent information is reflected in the Master Record.

  NOTE

  A data base disk area must be formatted before it can be used by any other ITDS software.

- The data base ID appears in columns 3-4. This ID should be numeric, greater than zero, and unique.

  NOTE

  The generalized software's "pages" currently reside on Data Base 01. The "page" data base should always be defined to the FORMATDB system utility. Nine cylinders should be allocated to the data base containing the "pages" and its record size should be 3504.

- The relative location of the cylinder within the total IDB disk areas where the data base is to start must be supplied in columns 5-8. This starting cylinder value ranges from 0 (first cylinder of first IDB disk area) to N-1 (where N is the total number of cylinders allocated to IDB).

NOTE

The data base descriptor cards should be provided to FORMATDB in ascending starting cylinder order. The step is terminated if overlapping disk areas are detected.

- The number of cylinders to be allocated to the data base must be provided in columns 9-12.

- The number of bytes per physical record must be specified in columns 13-16. This value is 3504 for the data base containing the generalized software's "pages" and should usually be 642 for all other data bases.

3. ERROR MESSAGES

The FORMATDB program creates a sequential data set on the device described by a SYSPRINT DD statement. If an error is detected in an option card, a message is printed and the job step may be terminated. Examples of various error messages are included with this write-up.

4. DISK ALLOCATIONS

At present the program has been designed to format a maximum of five contiguous disk areas. The IDB's may reside on either an IBM 2311 or an IBM 2314 DASD but not both; the type of DASD is determined from the IBM System/360 Operating System control blocks.

The Master Record is written in a data set described by a MR DD statement. The parameters DISP=(NEW,KEEP) and SPACE=(TRK,(1)) should be included when the data set is allocated.

The IDB disk areas are described by DISK01, DISK02, DISK03, DISK04, and DISK05 DD statements. Only the DISK01 DD statement is required; if additional DD statements are required they should be used in ascending order. The parameters DISP=(NEW,KEEP) and SPACE=(CYL,(x)) should be included to allocate the data set. The value "x" in the SPACE parameter is the number

of cylinders to be allocated on a particular disk volume. Secondary allocations should not be used.

CAUTION

The DUMMY parameter should not be specified for DISKXX DD statements.

NOTE

If the absolute allocation of any of the IBM System/360 Operating System Data Sets which make up the IDB are ever changed, it will be necessary to execute FORMATDB to build a new Master Record reflecting the new absolute allocations.

EXAMPLE OF JCL

```
                    [Installation Standard JOB Card]
//JØBLIB    DD   UNIT=2314,DSN=GIM.LØAD,VØL=SER=GPPLB1,DISP=SHR
//FØRMAT    EXEC PGM=FØRMATDB
//DISK01    DD   UNIT=2314,DSN=GPP.CLDB,VØL=SER=GPPLB1,
//                DISP=(NEW,KEEP),SPACE=(CYL,(168))
//DISK02    DD   UNIT=2314,DSN=GPP.CLDB2,VØL=SER=GPPLB2,
//                DISP=(NEW,KEEP),SPACE=(CYL,(199))
//MR        DD   UNIT=2314,DSN=GPP.MR,VOL=SER=GPPLB1,
//                DISP=(NEW,KEEP),SPACE=(TRK,(1))
//SYSPRINT  DD   SYSØUT=A
//SYSIN     DD   *
2 01000000093504
2 02000903580642
/*
```

The Master Record which describes the disk extents for each Data Base is constructed by the FORMATDB program. All fields in the record are hexidecimal.

The format is as follows:

BYTE	1	PAKCOUNT	Number of DD cards needed to describe Integrated Data Bases DASD volumes (1-5).
		DCON	Number of heads on an access mechanism for device (OA_x or 14_x).
	3	TBLCOUNT	Byte count for all information in this record for this Data Base. (Length of A)
	4-5	(DBID)	Data Base ID number.

		6-7	(RECSZ)	Physical record size for Data Base's disk records.
		8	(RTRK)	Records per track for this Data Base.
A		9	VCON	Volume on which this extent begins.
	B	10	STARTCC	Physical cylinder of volume on which this extent begins.
		11-13	(LASTRC)	Highest record number available this extent for this data base; this value could range from 1 through N where N is the total number of records in the Data Base.
		14		Begins either another set of B values, starts a new Data Base description (i.e., new A), or is 0 at end of Master Record.

APPENDIX D
DUMP/RESTORE OF GPPLB1 USING IEHDASAR PROGRAM

The delivery of the GPP System will include, for initial installation and revisions, a copy of GPPLB1 on magnetic tape. This machine readable copy is created using the IEHDASDR program. The same OS/360 utility will restore the magnetic tape onto the installations GPPLB1. Upon completion of this restore, GPPLB1 will contain a VTOC as described in Appendix C, and all libraries will be loaded. The data list data base will be formatted but its contents are not predictable. Reference: IBM System/360 Operating System Utilities (C28-6586-8). (See Figures D-1 and D-2.)

```
//DUMP     EXEC  PGM=IEHDASDR,PARM='LINECNT=35,N=1'                          0006
//SYSPRINT DD    SYSOUT=A                                                    0007
//DUMPFROM DD    UNIT=2314,DISP=(OLD,PASS),VOLUME=(PRIVATE,,SER=GPPLB1)      0008
//DUMPTO1  DD    UNIT=2400-2,DISP=(,KEEP),DSNAME=DSKDUMP,VOLUME=(,,,3),  X   0009
//              DCB=(DEN=2,TRTCH=C)                                         0010
//DUMPTO2  DD    UNIT=2400,DISP=(,KEEP),DSNAME=DSKDUMP,VOLUME=(,,,3)         0011
//SYSIN    DD    *                                                           0012
       DUMP      FROMDD=DUMPFROM,TODD=(DUMPTO1,DUMPTO2)                      0013
```

Figure D-1. Sample Job Step To Dump GPPLB1 To Both A 7- And 9-Track Tape Drive


```
//RESTORE EXEC  PGM=IEHDASDR        RESTORE 9 TK TO GPPLB1
//SYSPRINT  DD SYSOUT=A
//DUMPFROM DD UNIT=(2400,,DEFER),DISP=(OLD,PASS),DSNAME=DSKDUMP,          X
//              VOLUME=SER=(MTVOL1,MTVOL2)
//DUMPTO1    DD UNIT=2314,DISP=OLD,VOL=(PRIVATE,,SER=GIMLB1)
//SYSIN      DD *
        RESTORE TODD=DUMPTO1,FROMDD=DUMPFROM,PURGE=YES
      LABEL     TODD=DUMPTO1,NEWVOLID=GIMLB1
```

Figure D-2. Sample Job Step To Restore GPPLB1 From A 9-Track Tape Drive

APPENDIX E
DLOAD; RESTORE-TO-CHECKPOINT AND REALLOCATION

1. DLOAD

1.1 GENERAL

DLOAD is a series of modes which is capable of initialising or augmenting a data base with card input. Dload is entered each time the system is loaded and it will be the first program executed. Options are available which allow full loading, partial loading, or a complete bypass of loading. All data loaded by Dload is at the item level. Updating facilities are available only as replacement-type updates.

1.2 FULL LOAD

The first set of parameters describes the physical limits of the data base.

a) RECSZ = XXX (No. of characters per disk record)

b) LSTREC = XXX (Number of records in the data base minus 1)

c) SEQNMR = XXX (Starting transaction number for the data base) Each one of these parameters is loaded on a card and the parameter must appear as shown starting in column 1.

The second set of parameters describes and identifies the data list and dictionary areas which are to be loaded or added to.

Data List Name = Base, Modulo, Separ
where Data List Name is a name which is assigned temporarily as the Identifier of an area starting at Base Record = Base. Modulo and separ are the modules and separation of the data list. Each data list requires one card and must start in column 1. If a / follows the =, then the data list will not be initialized.

The third set of parameters contains the data to be entered into a list and an identifier of the list.

= Data List Name (= must be in column 1)
This is the first card of a set and identifies the data list. (Data List Name must have appeared in the parameters mentioned under 2)

Each item to be added is started on a new card. The card is formatted:

= Item ID remainder of item

Data on the card is terminated by the first blank following a record mark or column 80. Data for an item which is continued on subsequent cards must begin in column 2 with column 1 blank. The data for an item is terminated by the first card without a blank in column 1.

All items to be loaded must be grouped into sets as just described. The last item of the last data set must be followed by a card containing = ⊥ (columns 1 and 2). Column 3 determines subsequent action, * -the program is terminated, X no print is wanted.

1.3 PARTIAL LOAD

A partial load operates much like a full load except that the first parameter set is replaced with one card

* / (columns 1 and 2)

Data lists must be defined as described under A2 but initialization may want to be inhibited. Data is entered as described under A3.

1.4 BYPASS LOADING

Two options are available with the no load option

* D (columns 1 and 2), Bypass all loading but print the data base

* ① , Bypass all loading.

1.5 CHECKOUT OPTION

A checkout option is available which loads the data base area with an image from another area of the disk (record 500). This option is evoked with an *L card.

2. RESTORE-TO-CHECKPOINT AND REALLOCATION

2.1 STATEMENT OF PURPOSE

The program provides the system with the ability to restore the data base to the processing level of a checkpoint dump. Processing efficiency is increased by the reorganization of the overflow areas. Optionally,

reallocation of data base and data list limits is provided to further increase efficiency in processing the restored data base.

2.2 FUNCTIONAL DESCRIPTION

The program is evoked by the verb "RESTORE-TO-CHECKPOINT XXXXXX". The input parameters are edited and the checkpoint requested is used to request and check the required dump tape. Data is extracted from the dump tape and written to the data base by data list; if reallocation of the data list was specified it will be reallocated at this time. The master dictionary and data list dictionaries are updated with reallocation parameters, and a new history tape is started with the renumbered checkpoint specified.

2.3 INPUT

2.3.1 Requester Parameters (See Figure E-1.)

Parameter	Meaning	Required
RESTORE-TO-CHECK-POINT XXXXXX,	The verb which evokes the processor. XXXXXX is the checkpoint number associated with the dump tape.	Yes
RENUMBER = NN,	The number of the checkpoint assigned to the restored data base. It will also become the reel number of the next History Tape.	Yes
LSTREC = NNN,	The highest numbered record in the data base. It is necessary to input this only if the data base limits are to be changed.	No
REALLOCATION	If present, specifies that reallocation of data list limits is to be performed and that the reallocation parameters follow.	No
#	Input statement terminator (END)	Yes

Figure E-1. Requester Parameters

2.3.2 Reallocation Parameters

Reallocation parameters must be supplied for each data list which is to have its storage limits changed. Data list dictionaries and M/DICT are considered as data lists. (These parameters must be supplied at the time the Reallocation option is specified. They will not be processed if reallocation is not requested.)

ØBASE = NBASE, MODULUS, SEPARATION #

ØBASE, The Base record number of the data list at the time of checkpoint.

NBASE, The Base record number where the data list is now to be stored.

MODULUS, The number of groups allocated to the data list.

SEPARATION, The number of physical disk records allocated to a group.

The set of reallocation parameters must be terminated by an *.

2.3.3 Checkpoint Dump Tape

The format of this tape is specified in the DDump program. It is input on GPP Unit 1.

2.4 OUTPUT

2.4.1 Data Base

The data base will be restored to the processing level of the specified checkpoint. The Dictionaries and Bootstrap will be updated with the current physical locations of data.

2.4.2 History Tape

The History Tape currently in use will be terminated, and a new checkpoint series of History initiated. The checkpoint number given will become the checkpoint number and the reel number of the new tape. (The History Tape resides on GPP unit 3.)

2.4.3 Errors

Errors detected by the Restore-To-Checkpoint program may be specification errors or System type errors.

A. Specification errors cause the restore to terminate with one of the following messages.

381. PARAMETER X CANNOT BE IDENTIFIED

The parameter shown is not a legal input parameter, check misspelling.

382. PARAMETER MISSING

The renumber parameter for the new checkpoint has not been given.

B. System Type Errors cause the program to abort with one of the following messages. In all cases Systems Personnel should be informed of the problem.

384. SYSTEM TAPE LABELS MISSING IN SYSI DATA LIST. CALL SYSTEMS STAFF.

The tape labels for the dump or history tape cannot be located.

UNRECOVERABLE ERROR X1 HAS OCCURRED IN MODE X2. CALL SYSTEMS.

The error encountered was of such a nature that the program aborted processing. The message will be followed with a dump.

TRANSACTION 336
STATEMENT DDUMP#

Sample DDUMP with Simple Restore Checkpoint

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

DATA LIST	B.M.S.	NO. ITEMS	MAX. SIZE	MIN. SIZE
CEI-SM	DICT 58,1,1	10	54	28
	D.I. 59,1,1	8	27	22
CHARGES	DICT 63,1,1	13	182	27
	D.I. 64,1,1	9	72	40
CLASSES	DICT 75,1,1	5	38	31
	D.I. 76,1,1	5	43	23
DL/ID	DICT 1,11,1	162	48	10
	D.I. 1,11,1	162	48	10
EMPLOYEE	DICT 80,5,1	24	150	28
	D.I. 107,13,1	1	75	75
EMPLOYEES	DICT 60,2,1	22	45	26
	D.I. 62,1,1	6	102	66
ERRMSG	DICT 15,17,2	228	319	24
	D.I. 15,17,2	228	319	24
ERRMSG-LIST	DICT 14,1,1	21	32	28
	D.I. 15,17,2	228	319	24
EXPIRATION	DICT 73,1,1	7	65	31
	D.I. 74,1,1	8	43	25
GFM	DICT 53,3,1	37	53	26
	D.I. 56,1,2	16	155	106
M/DICT	DICT 1,11,1	162	48	10
	D.I. 1,11,1	162	48	10
MJO-SOS	DICT 65,2,1	18	148	26
	D.I. 67,1,1	10	84	58

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

DATA LIST		B.M.S.	NO. ITEMS	MAX. SIZE	MIN. SIZE
HJOS	DICT	68,2,1	22	130	29
	D.I.	70,1,1	6	102	67
ORGANIZATIONS	DICT	85,5,1	30	66	28
	D.I.	120,13,1	13	186	96
PART	DICT	133,1,1	14	50	37
	D.I.	134,1,2	16	21	18
SKILLS	DICT	77,3,1	3	38	30
	D.I.	90,17,1	47	31	18
SKILLSSYN	DICT	77,3,1	3	38	30
	D.I.	90,17,1	47	31	18
SYSI	DICT	13,1,1	22	35	10
	D.I.	13,1,1	22	35	10
SYSI-LIST	DICT	12,1,1	9	29	28
	D.I.	13,1,1	22	35	10
SYSMAN	DICT	49,1,1	5	32	29
	D.I.	50,3,1	12	57	25
TYPES	DICT	71,1,1	5	67	36
	D.I.	72,1,1	10	56	22

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

B.M.S.	MAX REC NO. REC /GROUP	TOTAL	********** NUMBER OF GROUPS IN PERCENT FULL RANGES ********** 00-20	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	OFLO
1,11,1	1	11		4	4	2	1					
12,1,1	1	1			1							
13,1,1	1	1				1						
14,1,1	1	1					1					
15,17,2	3	35		1	4	5	6	1				
49,1,1	1	1		1								
50,3,1	1	3	2	1								
53,3,1	1	3				2	1					
56,1,2	4	4						1				
58,1,1	1	1				1						
59,1,1	1	1		1								
60,2,1	1	2			1	1						
62,1,1	1	1				1						
63,1,1	2	2						1				
64,1,1	1	1				1						
65,2,1	1	2			1	1						
67,1,1	2	2						1				

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

B.M.S.	MAC REC NO. REC /GROUP	TOTAL	NUMBER OF GROUPS IN PERCENT FULL RANGES 00-20	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	OFLO
68,2,1	1	2				1	1					
70,1,1	1	1					1					
71,1,1	1	1		1								
72,1,1	1	1			1							
73,1,1	1	1			1							
74,1,1	1	1		1								
75,1,1	1	1		1								
76,1,1	1	1		1								
77,3,1	1	3	3									
80,5,1	1	5		3	1	1						
85,5,1	1	5		3	2							
90,17,1	1	17	16	1								
107,13,1	1	13	13									
120,13,1	1	13	7	3	3							
133,1,1	1	1					1					
134,1,2	1	2		1								

```
END OF JOB
```

```
CHECKPOINT 000002  DISK DUMP TAKEN.

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,11,1    RECSIZ = 639    LSTREC = 199    LOWREC = 185
BOTTOM AVAILABLE SPACE = 136    SEQ. NO. = 337    NEXT OVERFLOW = 190

TRANSACTION 337
STATEMENT RESTORE-TO-CHECKPOINT 2, RENUMBER=1#
*
HISTORY TAPE TERMINATED  REEL NO. 2
HISTORY TAPE LABELED ITDS HISTORY   CHECKPOINT 000001    REEL 1

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,11,1    RECSIZ = 639    LSTREC = 199    LOWREC - 192
BOTTOM AVAILABLE SPACE = 136    SEQ. NO. = 338    NEXT OVERFLOW = 192
```

```
                                                Restore the Data Base from Checkpoint on DDUMP Tape
                                                Reallocate the Data Base Storage

TRANSACTION 228
STATEMENT RESTORE-TO-CHECKPOINT 2 RENUMBER=1, LSTREC-299, REALLOCATION#
1=1,13,1#
12=80,1,1#
13=81,1,1#
15=15,19,2#
49=82,1,1#
50=83,1,1#
*
HISTORY TAPE TERMINATED REEL NO. 5
HISTORY TAPE LABELED ITDS HISTORY   CHECKPOINT 000001    REEL 1

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,13,1    RECSIZ = 639    LSTREC = 299    LOWREC = 291
BOTTOM AVAILABLE SPACE = 84    SEQ. NO. = 229    NEXT OVERFLOW = 297
```

```
                                                NEW JOB - Next Reel of History Tape Started for
                                                          the Renumbered Checkpoint 1
```

TRANSACTION 230

```
STATEMENT LABEL-HISTORY #
HISTORY TAPE LABELED ITDS HISTORY    CHECKPOINT 000001     REEL 2
```

CURRENT BOOTSTRAP PARAMETERS

```
MDICT BMS = 1,13,1     RECSIZ = 639     LSTREC = 299     LOWREC = 291
BOTTOM AVAILABLE SPACE = 84     SEQ. NO. = 231     NEXT OVERFLOW = 296
```



```
TRANSACTION 231
STATEMENT VLABEL 1#
```

```
TRANSACTION 232
STATEMENT DDUMP#                                    Dump the Reallocated Data Base
```

```

```

Checkpoint No. is the Next Reel of History Tape

DATE 06/01/68 — DATA DISTRIBUTION STATISTICS — CHECKPOINT 3

DATA LIST		B.M.S.	NO. ITEMS	MAX. SIZE	MIN. SIZE
CEI-SN	DICT	58,1,1	10	54	28
	D.L.	59,1,1	8	27	22
CHARGES	DICT	63,1,1	13	182	27
	D.L.	64,1,1	9	72	40
CLASSES	DICT	75,1,1	5	38	31
	D.L.	76,1,1	5	43	23
DL/ID	DICT	1,13,1	165	48	10
	D.L.	1,13,1	165	48	10
EMPLOYEES	DICT	60,2,1	22	45	26
	D.L.	62,1,1	6	102	66
ERRMSG	DICT	15,19,2	228	319	24
	D.L.	15,19,2	228	319	24
ERRMSG-LIST	DICT	14,1,1	21	32	28
	D.L.	15,19,2	228	319	24
EXPIRATION	DICT	73,1,1	7	65	31
	D.L.	74,1,1	8	43	25
GFM	DICT	53,3,1	37	53	26
	D.L.	56,1,2	16	155	106
M/DICT	DICT	1,13,1	165	48	10
	D.L.	1,13,1	165	48	10
MJO-SOS	DICT	65,2,1	18	148	26
	D.L.	67,1,1	10	84	58
MJOS	DICT	68,2,1	22	130	29
	D.L.	70,1,1	6	102	67

DATE 06/01/68	DATA DISTRIBUTION STATISTICS				CHECKPOINT 3
DATA LIST		B.M.S.	NO. ITEMS	MAX. SIZE	MIN. SIZE
PART	DICT	77,1,1	14	50	37
	D.L.	78,1,2	16	21	18
SYSI	DICT	81,1,1	22	35	10
	D.L.	81,1,1	22	35	10
SYSI-LIST	DICT	80,1,1	9	29	28
	D.L.	81,1,1	22	35	10
SYSMAN	DICT	82,1,1	5	32	29
	D.L.	83,1,1	12	57	25
TYPES	DICT	71,1,1	5	67	36
	D.L.	72,1,1	10	56	22

DATE 06/01/68 DATA DISTRIBUTION STATISTICS CHECKPOINT 3

B.M.S.	MAX REC NO. REC /GROUP	TOTAL	NUMBER OF GROUPS IN PERCENT FULL RANGES 00-20	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	OFLO
1,13,1	1	13		5	5	2	1					
14,1,1	1	1					1					
15,19,2	2	38		1	8	7	3					
53,3,1	1	3				2	1					
56,1,2	4	4						1				
58,1,1	1	1				1						
59,1,1	1	1		1								
60,2,1	1	2			1	1						
62,1,1	1	1				1						
63,1,1	2	2						1				
64,1,1	1	1				1						
65,2,1	1	2			1	1						
67,1,1	2	2						1				
68,2,1	1	2				1	1					
70,1,1	1	1					1					
71,1,1	1	1		1								
72,1,1	1	1			1							

DATE 06/01/68 DATA DISTRIBUTION STATISTICS CHECKPOINT 3

B.M.S.	MAX REC /GROUP	NO. REC TOTAL	NUMBER OF GROUPS IN PERCENT FULL RANGES 00-20	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	OFLO
73,1,1	1	1			1							
74,1,1	1	1		1								
75,1,1	1	1		1								
76,1,1	1	1		1								
77,1,1	1	1					1					
78,1,2	1	2		1								
80,1,1	1	1			1							
81,1,1	1	1				1						
82,1,1	1	1		1								
83,1,1	1	1			1							

END OF JOB

Those Data Lists which were Reallocated are Underlined

```
CHECKPOINT 000003  DISK DUMP TAKEN.

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,13,1   RECSIZ = 639   LSTREC = 299   LOWREC = 288
BOTTOM AVAILABLE SPACE = 84   SEQ. NO. = 233   NEXT OVERFLOW = 297
```

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APPENDIX F - ITDS ERROR MESSAGES

PART I - GENERALIZED PROCESSING PROGRAM

The Generalized Processing Program error messages have been divided into four different categories: format errors, data errors, system errors, and non-reactive diagnostics. Some of the error messages will overlap and be repeated. Each category is explained on the following pages with its corresponding list of errors.

The following symbols may be printed with the error message:

- E Found at the beginning of the message. It will print the message number and the data to the record mark (¬).
- ¬ Record mark which is used to indicate the end of the data.
- H Found at the beginning of a message and usually marks messages containing information only. It will print the following data to the record mark.
- A An insert variable.
- L Line control.

Category I - Format Errors

Format errors are generally due to mistakes in the structure and/or content of input statements. They are usually attributed to a misunderstanding of the data base and/or non compliance with established procedures. These errors can generally be resolved by the Functional Departments without assistance from other agencies.

1. EIMPROPER USE OF VALUE IDENTIFIER MARK.
2. EUNEVEN NUMBER OF ITEM OR VALUE DELIMITERS.
3. EPROGRAM VERB NOT RECOGNIZABLE.
4. EIMPROPER FORMAT FOR FILE/DICT STATEMENT.
5. ESECOND VERB "¬A¬H" IS NOT ALLOWED.

6. ESECOND DATA LIST NAME "¬A¬H" IS NOT ALLOWED.

8. EA DATA LIST ATTRIBUTE MUST NOT HAVE THE SAME NAME AS A DICT ATTRIBUTE.

10. ENO DATA LIST NAME CAN BE FOUND IN THE STATEMENT.

12. EM/DICT ILLEGAL IN A FILE/DICT INPUT.

13. ETHERE IS NO DL/ID ENTRY IN THE USER DICTIONARY.

14. EA DATA LIST NAME MUST BE THE FIRST ELEMENT IN A FILE/DATA INPUT.

15. ETHE DATA LIST NAME IS PRECEDED BY AN ILLEGAL CONNECTIVE.

16. ETHE WORD "TO" MAY ONLY PRECEDE A DATA LIST NAME IN AN ADD STATEMENT.

17. ETHE WORD "INN" MAY ONLY BE USED IN A LIST OR COUNT STATEMENT.

18. EA CONNECTIVE MAY NOT OCCUR AS THE LAST ELEMENT(S) IN A STATEMENT.

19. EA VALUE WITHOUT AN ASSOCIATED ATTRIBUTE NAME IS MEANINGLESS.

20. ETHERE IS A MEANINGLESS ITEM ID CONTAINED IN THE STATEMENT.

21. ETHERE IS A CONFLICT BETWEEN A USER NAME AND A SYSTEM NAME.

22. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MAY ONLY BE USED IN A CHANGE STATEMENT.

23. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MUST ALSO BE PRECEDED BY AN ITEM ID.

24. ETHE WORD "¬A¬H" CANNOT BE IDENTIFIED.

25. ETHE WORD "WITH" MAY NOT PRECEDE A VALUE.

26. EATTRIBUTE VALUES MAY NOT BOTH PRECEDE AND FOLLOW AN ATTRIBUTE NAME.

29. ETHIS INN STATEMENT IS MISSING EITHER AN ITEM ID OR AN ATTRIBUTE NAME.

30. EA NON-IMPLEMENTED VERB HAS BEEN USED.

31. ETHERE ARE NO VALUES TO BE ADDED TO A CONDITIONAL ITEM ID.

32. EA REQUIRED ITEM ID IS MISSING IN THE ADD STATEMENT.

33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.

36. EAN ILLEGAL CONNECTIVE WAS USED PRECEDING AN ITEM ID.

37. EILLEGAL CONNECTIVES PRECEDE AN ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.

38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM ID TO ITEM ID".

40. EAN ILLEGAL CONNECTIVE PRECEDES THE FIRST ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.

41. ETHE WORD "TO" MUST PRECEDE THE SECOND ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.

42. EILLEGAL MULTIPLE CONNECTIVES PRECEDE EITHER THE SECOND ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.

53. ETHIS INN STATEMENT HAS AN ILLEGAL CONNECTIVE PRECEDING THE ITEM ID.

54. ETHIS INN STATEMENT HAS ILLEGAL WORDS BETWEEN THE ITEM ID AND THE FIRST ATTRIBUTE NAME.

55. EA CHANGE STATEMENT REQUIRES AN ITEM ID AND/OR A CONDITIONAL ATTRIBUTE.

57. ESIMULTANEOUS CHANGES TO ITEM IDS AND ATTRIBUTE VALUES ARE ILLEGAL.

58. ETHE WORD "TO" IS THE ONLY ALLOWABLE CONNECTIVE PRECEDING A VALUE IN A CHANGE STATEMENT.

59. EEVERY ATTRIBUTE NAME IN A CHANGE STATEMENT REQUIRES A CORRESPONDING "TO V", WHERE V IS A VALUE.

60. EAN ADD STATEMENT REQUIRES AN ITEM ID OR A CONDITIONAL ATTRIBUTE.

62. EAN ILLEGAL CONNECTIVE PRECEDES THE VALUE "¬A¬H" IN THIS ADD STATEMENT.

63. EEVERY ATTRIBUTE IN AN ADD STATEMENT REQUIRES A CORRESPONDING VALUE.

64. EIF AN ADD STATEMENT, THE WORD "TO" PRECEDES ANY ATTRIBUTES, IT MUST PRECEDE ALL ATTRIBUTES.

65. ETHE WORD "TO" MAY NOT PRECEDE BOTH THE DATA LIST NAME AND ATTRIBUTE NAMES IN THE SAME ADD STATEMENT.

66. EAN ATTRIBUTE HAS AN ILLEGAL CONNECTIVE IN AN ADD STATEMENT.

71. ETHE VALUE "¬A¬H" HAS AN IMPROPER CONNECTIVE.

72. ETHE VALUE "¬A¬H" IS MEANINGLESS.

74. ETHE NUMBER OF CONCATENATED PARTS OF "¬A¬H" IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.

75. E "¬A¬H" FAILS TO PASS ITS MAXIMUM SIZE RESTRICTIONS.

76. E "¬A¬H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.

77. E "¬A¬H" FAILS TO PASS ITS TYPE RESTRICTIONS.

78. E "¬A¬H" FAILS TO PASS ITS PATTERN AUDIT.

79. ETHE NUMBER OF SEPARATE "ANDD" CLAUSES MAY NOT EXCEED 9.

81. ESECURITY CODE VIOLATION.

82. ECONDITIONAL ADDS ARE ONLY PERMITTED IN STATEMENTS OF THE "ADD TO" FORMAT.

83. E "¬A¬H" HAS AN ILLEGAL CONCATENATED FORMAT.

108. ETHIS REQUEST CONTAINS MORE D1-D2 ATTRIBUTES THAN THE SYSTEM CAN HANDLE. PLEASE SPLIT THE REQUEST AND CONTINUE.

109. ETHERE ARE NON-PARALLEL D1-D2S IN THE ASSOCIATED DATA LISTS.

112. ESIMULTANEOUS CHANGES TO D1 AND CORRESPONDING D2 ATTRIBUTES ARE NOT PERMITTED.

113. ETHE FORMAT "CHANGE VALUE TO VALUE" MUST BE USED FOR A D1 ATTRIBUTE IN A CHANGE STATEMENT.

117. EA DELETE STATEMENT MUST CONTAIN EITHER ITEM IDS OR CONDITIONAL ATTRIBUTES.

118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.

123. E ¬A¬H CONTAINS TWO CORRELATIVES.

128. ETHE ATTRIBUTE "¬¬A¬¬H" CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.

133. ETHIS "INN" STATEMENT DOES NOT CONTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.

137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.

139. EA D2 HAS BEEN REQUESTED WITHOUT ITS CORRESPONDING D1 IN A REFERENCED DATA LIST.

143. E "¬A¬H" IS A MULTIPLE RETRIEVAL SYNONYM AND CANNOT BE USED AS AN UPDATE OR CONDITIONAL ATTRIBUTE.

158. EAN ILLEGAL CONNECTIVE OF THE FORM ¬¬A¬¬H MODIFIES "¬A¬H".

160. EIF THE D1 ATTRIBUTE '¬A¬H' IS USED IN ANY "ANDD" CLAUSE, IT MAY BE USED AGAIN ONLY IN ANOTHER "ANDD" CLAUSE.

334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.

336. EINVALID USER NO.

339. E IMPROPER OR UNDEFINED FORMAT FOR DATE CONVERSION.

351. EILLEGAL COMBINATION OF PARAMETERS USED.

352. EILLEGAL COMBINATIONS OF D, I, AND R CLAUSES.

353. EEQUAL SIGN MISSING WHEN EXPECTED.

354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.

355. E "¬A¬H" IS A NONEXISTENT PARAMETER.

386. EINVALID DELIMITER ENCOUNTERED.

402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTIVALUED SEGMENT.

406. ECOUNT VERB NOT APPLICABLE.

414. EILLEGAL MODIFIER USED IN DEFINING THE DATA LIST OR DICTIONARY AREAS.

424. EDICTIONARY NOT VALIDATED FOR PROCESSING.

721. E TOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.

722. E MORE THAN THE MAXIMUM OF 6 SIMULTANEOUS TOTALS IS CALLED FOR.

1005. EALL PRIMARY D1 ATTRIBUTES MUST HAVE A VALUE INPUT UNLESS IN A DELETE STATEMENT.

1006. EIN PRIMARY ITEM '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" HAS CONFLICTING FILE DELETE VALUES AND INPUT "CHANGE TO" VALUES. STATEMENT MAY BE BROKEN IN TO A DELETE AND ADD.

2052. EBULK ADD TAPE NOT PROPERLY IDENTIFIED.

2053. ESKELETON ATTRIBUTE IDENTIFIER NOT NUMERIC.

2060. EAN UNCONDITIONAL UPDATE WITHOUT AN ITEM ID IS NOT PERMITTED.

Category II - Data Errors

Data errors are generally due to major procedural problems involving the user dictionaries and their associated data base maps and to minor problems involving the system dictionary. With few exceptions, data errors can be resolved by the Data Operations Department without assistance from Computer Operations.

33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.

38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM ID TO ITEM ID."

72. ETHE VALUE "¬A¬H" IS MEANINGLESS.

74. ETHE NUMBER OF CONCATENATED PARTS OF "¬A¬H" IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.

75. E "¬A¬H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.

76. E "¬A¬H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.

77. E "¬A¬H" FAILS TO PASS ITS TYPE RESTRICTIONS.

181. ETHE PRIMARY ATTRIBUTE "¬A¬H" IS A D2 AND MAY ONLY BE USED IN A SECONDARY AS A PARALLEL D2.

183. EA UNIT POST CORRELATIVE IS INCORRECTLY USED WITH ATTRIBUTE "¬A¬H".

184. ETHE ATTRIBUTE "¬A¬H" IS A POST AND MAY NOT BE CONCATENATED.

185. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A D2 AND MAY NOT STORE FROM A PRIMARY D1.

186. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A NON-REDUNDANT STORE AND MAY NOT STORE FROM A NON-STORE.

301. EIS OR OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.

302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM ID OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.

333. ELENGTH OF USER SECURITY CODES EXCEEDS 100 CHARACTER MAXIMUM.

338. EINVALID VALUE FOR OUTPUT DATA CONVERSION. CALL SYSTEMS.

339. EIMPROPER OR UNDEFINED FORMAT FOR DATA CONVERSION.

354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.

355. E "¬A¬H" IS A NONEXISTENT PARAMETER.

356. EFOR DATA LIST "¬A¬H" NAME OR DICTIONARY NOT FOUND.

357. EFOR DATA LIST "¬A¬H" NAME FOUND BUT IS NOT A D TYPE ITEM.

358. EFOR DATA LIST "¬A¬H" DICTIONARY B, M, OR S IS NON-NUMERIC.

359. EITEM ID "¬A¬H" NOT LOCATED.

360. ES CLAUSE INCOMPATIBLE WITH E CLAUSE OR WITH END OF ITEM OR RECORD.

361. EITEM ID IS TOO LARGE.

362. EDATA LIST NAME TOO LARGE.

363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.

364. EL AND V CLAUSES BOTH PRESENT OR BOTH ABSENT.

365. ES CLAUSE MISSING WHEN EXPECTED.

366. EN CLAUSE MISSING WHEN EXPECTED.

367. EITEM "¬A¬H" TO BE ADDED ALREADY EXISTS.

368. EIN V CLAUSE, CHARACTER FOLLOWING $ IS INCORRECT.

369. ES FIELD MUST BE BEYOND ID FIELD.

370. ES CLAUSE EXCEEDS ITEM SIZE OF¬A¬H.

371. EN CLAUSE INCOMPATIBLE WITH ITEM SIZE OF¬A¬H.

372. ES AND N CLAUSES INCOMPATIBLE WITH SIZE OF RECORD.

373. EITEM SIZE IS ZERO.

374. ENUMBER OF REPLACEMENT CHARACTERS MUST EQUAL N CLAUSE IN RECORD FIX.

375. EDATA LIST DICT ¬A¬H HAS NO DL/ID ENTRY.

381. EPARAMETER ¬A¬H CANNOT BE IDENTIFIED.

382. EPARAMETER MISSING.

387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.

402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTI-VALUED SEGMENT.

403. ESECONDARY ITEM ID NOT FOUND.

404. EAN INPUT ITEM ID HAS EXCEEDED THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.

408. EONE OF THE ATTRIBUTE VALUES HAS EXCEEDED ITS MAXIMUM SIZE.

410. ETHE MAXIMUM NUMBER OF LEVELS HAS BEEN EXCEEDED.

412. ETHE DATA BASE IS TOO SMALL TO ACCOMMODATE THE DATA LIST.

413. ETHE DATA LIST NAME IS ALREADY IN MDICT.

78. E "¬A¬H" FAILS TO PASS ITS PATTERN AUDIT.

104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "¬A¬H" WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.

110. ETAPE LABEL IS NOT CORRECT ¬L¬HLABEL REQUESTED IS ¬ ¬A¬H REEL NO.¬A¬L¬HTAPE LABEL IS ¬A¬H REEL NO.¬A¬

121. ETHERE IS A D-CORRELATIVE ON AN ATTRIBUTE REFERENCED FOR AUTOMATIC DATING.

122. EA PRIMARY D1 IS BEING MADE A D2 IN A SECONDARY DATA LIST.

123. E¬A¬H CONTAINS TWO CORRELATIVES.

128. ETHE ATTRIBUTE "¬A¬H" CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.

129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "¬A¬H" SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY THE DICTIONARY.

132. FTHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.

133. ETHIS "INN" STATEMENT DOES NOT CONTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.

136. EAN ATTRIBUTE VALUE OF ITEM "¬A¬H" DOES NOT MEET THE REQUIREMENTS OF ITS G CORRELATIVE.

137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.

148. EONE OR MORE OF THE ITEM IDS IS NONEXISTENT.

161. EAN ATTRIBUTE MAY NOT BE UPDATED USING DIFFERENT CORRELATIVES UNLESS THEY ARE POSTS.

162. ETHE SECONDARY ATTRIBUTE '¬A¬H' MAY NOT BE UPDATED FROM MORE THAN ONE PRIMARY ATTRIBUTE UNLESS THEY ARE BOTH POSTS.

163. ETHE "FROM" AND "TO" VALUES OF THE ATTRIBUTE '¬A¬H' CONTAIN EQUALITIES.

164. ETHE ATTRIBUTE '¬A¬H' IS A SINGLE VALUE REJECT AND MAY NOT ACCEPT MORE THAN ONE INPUT VALUE.

165. ETHE D1 ATTRIBUTE '¬A¬H' MUST HAVE UNIQUE CHANGE "FROM" AND "TO" VALUES.

166. ETHE PRIMARY ATTRIBUTE '¬A¬H' IS USED IN "ANDD" CLAUSES, EACH OF ITS VALUES MUST BE UNIQUE.

167. ETHE PRIMARY ATTRIBUTE '¬A¬H' MAY NOT HAVE A DELETE IGNORE CORRELATIVE.

168. ETHE PRIMARY ATTRIBUTE "¬A¬H" DOES NOT HAVE A Y CORRELATIVE.

170. ETHE ATTRIBUTE "¬A¬H" IS A D2 AND MAY NOT BE USED AS AN ACT DATE.

171. ETHE ATTRIBUTE "¬A¬H" MAY BE A D2 TO ONLY ONE D1.

172. ETHE ATTRIBUTE "¬A¬H" IS A D1 AND MUST BE A NON-REDUNDANT STORE OR SINGLE VALUE REJECT.

173. ETHE SECONDARY ATTRIBUTE (DATA LIST) "¬A¬H" MUST STORE (BRIDGE) FROM PRIMARY ATTRIBUTES WITH CORRELATIVES OF A NON-REDUNDANT STORE OR A SINGLE VALUE REJECT.

174. ETHE PRIMARY ATTRIBUTE "¬A¬H" IS A CONCATENATED NON-REDUNDANT STORE, AND IF USED AS A SECONDARY BRIDGE OR STORE MUST BE TAKEN IN WHOLE.

175. ETHE ATTRIBUTE "¬A¬H" IS A POST AND THEREFORE MUST HAVE A TYPE OF NUMERIC.

176. ETHE SECONDARY ATTRIBUTE "¬A¬H" MAY NOT BE A NON-STORE.

177. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A NON-REDUNDANT STORE, AND ILLEGALLY STORES FROM A PRIMARY THAT IS A REDUNDANT STORE.

178. ETHE SECONDARY ATTRIBUTE "¬A¬H" STORES FROM A SINGLE VALUE REPLACE AND THEREFORE MUST BE A SINGLE VALUE REPLACE, IGNORE, OR REJECT OR A POST.

179. ETHE SECONDARY ATTRIBUTE "¬A¬H" STORES FROM A POST AND THEREFORE MAY NOT BE CONCATENATED.

180. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A D1 AND MAY NOT BE A DELETE IGNORE.

416. ETHE DATA LIST CANNOT BE FOUND IN MDICT.

417. ETHE DL/ID ENTRY IN THE DATA LIST DICTIONARY IS MISSING.

418. EDATA LIST DELETED. DICTIONARY B, M, S = ¬A¬H DATA LIST B, M, S = ¬A¬

419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.

420. E¬A¬H IS AN ILLEGAL ATTRIBUTE NAME.

421. E¬A¬H AMC ¬A¬H SYNONYM CREATED.

422. EATTRIBUTE FOR AMC ¬A¬H MISSING.

423. E¬A¬H HAS AMC OF ZERO.

424. EDICTIONARY NOT VALIDATED FOR PROCESSING.

425. E¬A¬H HAS DUPLICATE AMC.

427. E¬A¬H MISSING DL/MAX.

428. E¬A¬H MISSING DL/TYPE.

429. E¬A¬H MISSING DL/CORRELATIVES.

700. ETHE FORMAT OF THE F-CORRELATIVE IS INCORRECT.

701. EINVALID OPERATOR FOR THE F-CORRELATIVE.

702. EFOR F-CORRELATIVE OPERATORS "+-X/" ONLY ONE ATTRIBUTE MAY HAVE MULTIPLE VALUES.

705. ENON-IMPLEMENTED CONVERSION CODE.

706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.

707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.

708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.

709. ECONFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.

710. EVALUE HAS INVALID CHARACTER FOR MASK CONVERSION.

711. EVALUE "¬A¬H" WAS NOT TRANSLATED BY T-CONVERSION.

721. ETOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.

724. ENON-NUMERIC FIELD ENCOUNTERED IN PERFORMING TOTAL VERB.

726. EDIVIDE CHECK ERROR OCCURRED IN F CORRELATIVE.

780. E'¬A¬H' NOT FOUND.

801. ETHE M/DICT ITEM IN THE M/DICT IS MISSING.

802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.

1002. EIN PRIMARY ITEM '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM " A H" MAY NOT EXCEED 999 VALUES.

1003. ETHE ITEM ID '¬A¬H' EXCEEDS THE MAXIMUM OF 99 CHARACTERS.

1004. ETHE ITEM ID '¬A¬H' IS NOT ON THE FILE.

1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE.

1011. ETHE PRIMARY D1 "FROM" VALUE "¬A¬H" IS NOT ON THE FILE.

1012. ETHE PRIMARY D1 "TO" VALUE "¬A¬H" ALREADY EXISTS.

1013. ETHE PRIMARY ATTRIBUTE '¬A¬H' HAS A NON-EXISTENT DELETE OR CHANGE "FROM" VALUE.

1014. EAN IDENTIFYING D1 VALUE OF PRIMARY ATTRIBUTE '¬A¬H' IS NON-EXISTENT.

1020. ETHE "TO" ITEM ID '¬A¬H' OF THIS CHANGE OR RECREATE STATEMENT ALREADY EXISTS.

1021. EIN ITEM ID '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" IS A SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.

1022. EIN ITEM ID '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" IS A D2 SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.

1023. EIN ITEM ID '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" MAY NOT EXCEED THE MAXIMUM OF 999 VALUES.

1025. EIN ITEM ID '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" HAS AN ILLEGAL NEGATIVE BALANCE.

1030. ETHE SECONDARY ITEM ID ' A H' IS NOT ON THE FILE.

1031. EIN SECONDARY ITEM ID '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" HAS A DELETE OR CHANGE "FROM" VALUE THAT IS NOT ON THE FILE.

1032. EIN A SECONDARY DATA LIST OF WHICH '¬A¬H' HAS BEEN GENERATED AS AN ITEM ID, THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" IS DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.

1033. EA SECONDARY VALUE EXCEEDS THE SYSTEM MAXIMUM SIZE, WHICH IS THE SIZE OF A DISK RECORD. THE VALUE THROUGH THE ALLOWED SIZE IS "¬A¬H"

1034. EIN THE SECONDARY DATA LIST '¬A¬H', THERE IS MORE THAN ONE MULTI-VALUED SEGMENT FORMING THE ITEM ID.

1035. EIN THE SECONDARY ITEM WHOSE ID IS '¬A¬H' THE ATTRIBUTE WHOSE SYNONYM IS "¬A¬H" HAS MORE THAN ONE MULTI-VALUED SEGMENT.

1036. EA SECONDARY ITEM ID EXCEEDS THE MAXIMUM OF 99 CHARACTERS. THE ID THROUGH THE ALLOWED SIZE IS '¬¬A¬¬H'.

1037. ETHE NUMBER OF REFERENCED VALUES IN SECONDARY ITEM ID '¬A¬H' EXCEEDS THE AMOUNT OF CORE NECESSARY TO KEEP TRACK OF THEM.

1040. ETHE SECONDARY ID '¬A¬H' IS A BRIDGE AND VERIFY, BUT IS NOT ON THE FILE.

1041. EIN THE SECONDARY DATA LIST '¬A¬H' THE ITEM ID HAS BEEN DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.

1042. ETHE NUMBER OF SECONDARY D1-D2 RELATIONSHIPS REFERENCED BY ITEM ID '¬A¬H' IS TOO LARGE TO BE KEPT TRACK OF IN CORE.

2001. ENON-EXISTENT DATA LIST REQUESTED.

2050. EATTRIBUTE NAME EXCEEDS BUFFER.

2051. ESKELETON STATEMENT EXCEEDS BUFFER.

2054. EA NULL DATA LIST EXISTS.

2100. EEXTRACT RECORD EXCEEDS MAXIMUM ALLOWABLE LENGTH - 3500.

Category III - System Errors

System errors are generally due to operational difficulties or to inconsistencies between the computer programs and the established dictionaries and data base maps. With few exceptions, the system errors can only be resolved by Computer Operations with assistance from the Data Operations Department and the Functional Disciplines.

80. EA SYSTEM ERROR HAS OCCURRED IN MODE ¬A¬H. YOU MAY PROCEED WITH THE NEXT STATEMENT. CALL SYSTEMS.

102. EA D1-D2 RELATIONSHIP IS INCORRECTLY STATED IN THE DICTIONARY. CALL SYSTEMS.

103. ETHIS UPDATE STATEMENT CONTAINS A D2 ATTRIBUTE, BUT NO CORRESPONDING D1.

104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "¬A¬H" WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.

105. EDEVICE TABLE IS MISSING¬A¬.

106. EA DICTIONARY WITH BASE¬A¬H DOES NOT CONTAIN THE SYSTEM SYNONYM "¬A¬H".

107. EIN THE DICTIONARY WHOSE BASE IS ¬A¬H, THE SYSTEM SYNONYM " A H" IS NOT COMPLETE.

111. EDEVICE REQUESTED IS INOPERATIVE ¬A¬.

118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.

129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "¬A¬H" WHICH IS INCORRECTLY DEFINED. CALL SYSTEMS.

130. ETHIS STATEMENT REQUESTS A MEANINGLESS REFERENCE TO DATA LIST "¬A¬H", SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY DICTIONARY.

132. ETHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.

144. E"¬A¬H" CONTAINS A CORRELATIVE IN ITS DICTIONARY WHICH IS NOT OPERATIVE IN THIS CONFIGURATION.

300. ESELECTION LIMITS ERROR. ENDING LIMIT SMALLER THAN STARTING LIMIT.

301. E IS OR OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.

302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM ID OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.

338. EINVALID VALUE FOR OUTPUT DATA CONVERSION. CALL SYSTEMS.

363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.

377. EHISTORY TRANSACTION MISSING TRANSACTION ITEM.

380. H FORMAT MISSING. CALL SYSTEMS STAFF.

384. ESYSTEM TAPE LABELS MISSING IN SYSI DATA LIST. CALL SYSTEMS STAFF.

385. EDELETED ITEM MISSING¬H KEY = ¬A¬L¬ HRECORD = ¬A¬L¬H. CALL SYSTEMS.

387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.

389. EFOLLOWING DECKS NOT FOUND ¬L¬A¬.

396. EHISTORY TAPE FORMAT ERROR. CALL SYSTEMS.

397. ETRANSACTION ITEM MISSING.

412. ETHE DATA BASE IS TOO SMALL TO ACCOMMODATE THE DATA LIST.

419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.

430. EDEVICE NAME CANNOT BE IDENTIFIED.

431. EDEVICE NOT PRESENT GPPU--A--.

705. ENON-IMPLEMENTED CONVERSION CODE.

706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.

707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.

708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.

709. ECONFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.

802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.

900. ESTATEMENT NOT PROCESSED.

901. EAN INACCURATE ITEM COUNT HAS BEEN FOUND. CALL SYSTEMS.

902. EAN ILLEGAL DISK STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.

903. EAN ILLEGAL BOOTSTRAP STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.

1001. ETHIS UPDATE STATEMENT CONTAINS TOO MANY VALUES TO BE PROCESSED IN CORE.

1009. EDATA LIST OR ITEM ID UNABLE TO BE FOUND IN PROGRAMMED INPUT STRING BY UPDATE PROGRAM. CALL SYSTEMS.

1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE.

1011. ETHE PRIMARY D1 "FROM" VALUE "¬A¬H" IS NOT ON THE FILE.

1017. EMODE 53 HAS FOUND AN UNANTICIPATED ERROR. CALL SYSTEMS.

2050. EATTRIBUTE NAME EXCEEDS BUFFER.

2051. ESKELETON STATEMENT EXCEEDS BUFFER.

2054. EA NULL DATA LIST EXISTS.

Category IV - Non Reactive Diagnostics

The messages in this group are informative in nature, and with few exceptions, require no reaction, resolution, or response to Computer Operations. They are intended primarily to provide valuable and useful information to the user and to the operator of the system.

334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.

335. HSIGNOFF ACKNOWLEDGED TIME ¬A¬X3¬ HNO. STATEMENTS ¬A¬X3¬ HPROCESSOR TIME ¬A¬X3¬ HELAPSED TIME ¬A¬.

337. HREQUEST ACKNOWLEDGED ¬L¬ HDATE¬A¬X3¬
HTIME ¬A¬X3¬ HUSER ¬A¬X2¬A¬.

340. HID = "¬A¬H" DL = "¬A¬H".

341. HRECORD = "¬A¬H".

342. H"¬A¬H" ADDED.

343. H"¬A¬H" REPLACES OLD VALUE OF "¬A¬H".

344. H"¬A¬H" DELETED.

345. HNEW LINK OF"¬A¬H" REPLACES OLD LINK OF "¬A¬H".

350. EDUMP TYPE MUST EQUAL ITEM, RECORD, OR GROUP.

373. EITEM SIZE IS ZERO.

378. HHISTORY TAPE TERMINATED ¬X2¬ HREEL NO. ¬A¬.

379. HHISTORY TAPE LABELED ¬A¬X3¬ HCHECKPOINT¬A¬X3¬
HREEL ¬A¬.

395. A¬X2 HINPUT STATEMENTS SELECTED TO REPROCESS.

398. L¬HSTATEMENT NOT REPROCESSED¬X2¬ HTRANSACTION
¬A¬X2¬ HDATE ¬A¬X2¬ HTIME ¬A¬L¬L1¬.

399. HSELECT PROGRAM COMPLETE. NO ITEMS EXTRACTED
= ¬A¬.

401. HNO ITEMS TO BE LISTED.

407. HNUMBER OF ACCEPTABLE ITEMS = ¬A¬.

409. HONE OR MORE VALUES WAS CUTOFF AT 300 CHARACTERS.

415. EDATA LIST STRUCTURED. DICTIONARY B, M, S = ¬A¬H
DATA LIST B, M, S = ¬A¬.

418. EDATA LIST DELETED. DICTIONARY B, M, S = ¬A¬H
DATA-LIST B, M, S = ¬A¬.

426. EDICTIONARY ENABLE IS COMPLETE AND CORRECT.

720. H NO ITEMS TO BE TOTALED.

730. E NO ITEMS TO BE UPDATED.

780. E'¬A¬H' NOT FOUND.

781. H'¬A¬H' ADDED.

782. H'¬A¬H' UPDATED.

783. H'¬A¬H' DELETED.

784. H'¬A¬H' RECREATED AS '¬A¬H'.

785. H'¬A¬H' CHANGED TO '¬A¬H'.

900. ESTATEMENT NOT PROCESSED.

1015. HNO ACTION WAS NECESSARY IN THIS UPDATE STATEMENT.

1024. H** NOTE ** - IN ITEM ID '¬A¬H' ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOUND IS "¬A¬H".

2101. ENO ITEMS TO BE EXTRACTED.

PART II - APPLICATIONS PROGRAMS

The following error messages could occur during execution of the Applications Programs:

Identification No.	Message * * * * * * * * * * * * * * *	Explanation
WØØ1 - EØØ1 TITLE: CEI Configuration Index	ERROR IN CEI-FILE - - THIS RECORD OUT OF SEQUENCE NO. 9 9 9 9 CEI NO. 9 9 9 9 9 9 9, JOB ENDED.* * * * * * * * * *	Self-Explanatory
W001 - EØØ2 TITLE: CEI Configuration Index	* * * * * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT.*	Self-Explanatory
W002 - E001 TITLE: Description and Specification Index/Status	PROGRAM NUMBER - ERROR NUMBER 'PROPAGATION CODE IN FIRST KEYFIELD'. KEYWORD.	The first record read did not have its key-field prefixed with an 'N'. The program is aborted.

Identification No.	Message	Explanation
E002 TITLE: Description and Specification Index/Status	PROGRAM NUMBER - ERROR NUMBER 'MASTER FILE IS OUT OF SEQUENCE KEY=',KEYWORD.	The file is not in sequence. The program is abortal.
E003 Drawing Index/ Status	PROGRAM NUMBER - ERROR NUMBER 'THERE IS A DUPLICATE MSTR RCD: KEY='. KEYWORD.	There is a duplicate master record i.e. keyfields the same and preceded by an 'N'. A new record is read.
W003 - E001 Drawing Index/ Status	* * * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID INVALID FORMAT * * * * * * * * * * * * * * * *	Self-explanatory
W003 - E002 Drawing Index/ Status	* * * * * * ERROR IN DRAWING FILE - - THIS RECORD OUT OF SEQUENCE - - - SEQ. NO. - 9 9 9 9 DRAWING NO. 9 9 9 9 9 9 9 9 9 9 9 9 9. * * * * * * * * *	Self-explanatory
W004 - E001 ICD Index/Status	* * * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT * * * * * * * * * * * * * * *	Self-explanatory
W004 - E002 ICD Index/Status	* * * * * * ERROR IN IDC FILE - - - - - THIS RECORD IS OUT OF SEQUENCE - - - SEQ. NO. 9 9 9 9 ICD NO. 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 * * * * *	Self-explanatory
W005 - E001 ECP Index/Status	CODE OTHER THAN N FOUND AT START OF A NEW GROUP IN RECORDS: XXXXXXXXXXXXXXXX	Self-explanatory
W006 - E001 ICWG Action Status	INVALID OR MISSING DATE CARD	Self-explanatory. Refer to the ITDS Data Card Layout in Appendix B-2 of "Computer Subsystem: Applications Programs, Programming Documentation.

Identification No.	Message **********	Explanation
W006-E001 ICWG Action Status	GROUP EXCEEDS PROGRAM STORAGE GROUP CONTAINS nnnn	This size of the tables for storing multi-value items within a group must be increased to allow the size group indicated. Program must be recompiled.
W007 - E001 ECP/Waiver Processing Audit	ALL FIELDS CONTAIN PROPAGATION CODE IN THIS RECORD: XXXXXXXXXXXXXXX	Self-explanatory
W008 - E001 Technical Publication Index/Status	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.).	Self-explanatory. Resort input file.
W008 - E002 Technical Publication Index/Status	FIRST N INVALID FOR KEY=(KEY AND SEQUENCE NO.)	Two successive records with the same key are designated as new. Check with analyst and software programmer.
W008 - E003 Technical Publication Index/Status	DUPLICATE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Check with analyst.
W008 - E004 Technical Publication Index/Status	DATE CARD MISSION OR IT HAS INVALID FORMAT.	Self-explanatory. Rerun job with appropriate date card.
W009 Test Requirements - DTP Status	No error messages	
W010 Requirements for Contractor Test-Status Report	No error messages	
W011 - E001 Specifications Equipment Test-Status Report	NO DATE CARD	Self-explanatory.
W012 - E001 Development Test Status Report	OUT OF SEQUENCE RECORD KEY= (KEY-SEQUENCE NO.)	Self-explanatory. Tape must be resorted.

Identification No.	Message	Explanation
W012 - E002 Development Test Status Report	FIRST NO INVALID FOR KEY =(KEY-SEQUENCE NO.)	The second or later record of a group is designated as new instead of propagated. Analyst must examine ITDS data base.
W012 - E003 Development Test Status Report	DUPLICATE RECORD KEY = (KEY-SEQUENCE NO.)	Self-explanatory. Analyst must examine data base.
W012 - E004 Development Test Status Report	ATT (3,5,7,11,12,14)OF (KEY-SEQUENCE) HAS NO DECIMAL POINT.	Self-explanatory. Analyst must examine data base.
W013 - EØØ1 Maintainability Problem Reports-HI 25	PROGRAM NUMBER - ERROR - NUMBER 'ALL FIELDS CONTAIN PROPAGATION CODE IN THIS RECORD'. KEYWORD	For a given FGC number listed in the FGC-VAL-File there were no corresponding N values. A new record is then read.
W014 - E001 Reliability Problem Reports-HI/LO 25	DATE CARD MISSING OR BAD.	Date card either missing or in wrong format. Correct card and resubmit run.
W015 - E001 Maintenance Man-Hour Per Usage Unit-Mos	DATE CARD MISSING OR INCORRECT	Date card is missing.
W015 - E002 Maintenance Man-Hour Per Usage Unit-Mos	MOS OVERFLOW HAS OCCURRED, FGC=XXXXXX	If the array size limit is exceeded this message is printed.
W016 GFM/GSE Function and Status	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W017 - E001 Master Detail Milestones	DATE CARD MISSING OR INVALID	Self-explanatory

Identification No.	Message * * * * * * * * * * * * * * *	Explanation
W018 Time Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W019 Cost Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W020 Funding Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W021 Key Word-DAI Cross Reference Index	NONE	
W022 - E001 Document List	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Resort input file.
W022 - E002 Document List	FIRST N INVALID FOR KEY=(KEY AND SEQUENCE NO.)	Two successive records with same key are designated as new. Check with analyst and software programmer.
W022 - E003 Document List	DUPLICATE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Check with analyst.
W022 - E004 Document List	DATE CARD MISSING OR IT HAS INVALID FORMAT.	Self-explanatory, rerun job with appropriate date card.
W024 - E001 Contractor Data Requirements List	DATE CARD HAS INVALID FORMAT	Date card either missing or in wrong format. Correct card and resubmit run.
W024 - E002 Contractor Data Requirements List	OUT OF SEQUENCE RECORD. KEY = XXXX SEQ. NO. = XXXX	Extract tape records not in correct sequence. Re-sort extract tape and resubmit run.

Identification No.	Message	Explanation
W024 - E004 Contractor Data Requirements List	INVALID N FOR KEY XXXX SEQ. NO: XXXX	Two records found on extract tape with the same ADL item number and title and both flagged as N. Resubmit run with corrected extract tape.
W025 - E001 Government Data Requirements List-Contractor Required Data	DATE CARD MISSING OR BAD	Date card either missing or in wrong format. Correct card and resubmit run.
W026 - 1 Generalized Input	INPUT RECORD HAS IMPROPER CODE	A code of 1, 2, or 3 did not appear in the position indicated on the C-control card. The next record is read and processing continues.
W026 - 2 Generalized Input	BLANK KEY	A blank key has been found. This record is ignored and processing continues.
W026 - 3 Generalized Input	CONCATENATION HAS BLANK AND NON BLANK FIELDS. RMC=NN, KEY=XXXXXXXX	ITDS will not accept a concatenated value with a blank segment; therefore, if a segment of a concatenated value is blank, this attribute value is not output. Processing continues with the next record mark count.

THERE ARE SEVERAL CONDITIONS WHICH CAUSE AN ABEND TERMINATION. THE USER CONDITION CODE INDICATES THE PROBLEM WHICH CAUSED THE TERMINATION. A DUMP WILL BE GIVEN WHEN THE SYSUDUMP CONTROL IS PRESENT.

W026 Generalized Input	100	C - Control card is missing
W026 Generalized Input	101	Record type code in table card is not equal to 1, 2 or 3.

Identification No.	Message * * * * * * * * * * * * * * * *	Explanation
W026 Generalized Input	102	The first table card does not have record mark count of '00'
W026 Generalized Input	103	Incorrect concatenation code found in table card.
W026 Generalized Input	104	Internal table is incorrect - see Programmer.
W026 Generalized Input	200	Input file is not specified as fixed or undefined record form-check DD card for TIN.
W027C - E001 PERT/Time Extract/ Load	SELECT KEY OUT OF SEQUENCE =(SELECT EVENT NO.)	Self-explanatory. Select file must be sorted.
W027C - E002 PERT/Time Extract/ Load	EXTRACT KEY OUT OF SEQUENCE =(EXTRACT EVENT NO.)	Self-explanatory. Extract file must be sorted.
W027C - E003 PERT/Time Extract/ Load	MATCH KEY (SELECT EVENT NO.) NOT ON PMS TIME TAPE.	A selection card was prepared for an event that does not exist in the PERT network.
W028B - E001 PERT/Cost Extract/ Load	SELECT KEY OUT OF SEQUENCE=(SELECT CHARGE NO.)	Self-explanatory
W028B - E002 PERT/Cost Extract/ Load	EXTRACT KEY OUT OF SEQUENCE=(EXTRACT CHARGE NO.)	Self-explanatory
W028B - E003 PERT/Cost Extract/ Load	MATCH KEY (SELECT CHARGE NO.) NOT ON PMS COST TAPE	A selection card was prepared for a charge no. that does not exist in the PERT COST network.
W029 - E001 Sciolist Extract/ Load	GEXT KEY (SELECTED CCS NO.) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No. not in SCIOLIST Reports.

Identification No.	Message	Explanation
W029 - E002 Sciolist Extract/ Load	GEXT KEY (SELECTED CCS NO. COMMAND) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No., Command combination not in SCIOLIST Report 6.
W029 - E003 Sciolist Extract/ Load	CONTROL CARD MISSING OR IT HAS WRONG CARDS.	Self-explanatory.
W030 Mast Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
W031 Action Item System Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
W032 Meads Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
Reader/Cover	1. INCORRECT CODE	Job terminated
Reader/Cover	2. INCORRECT SPACE CODE	Job Terminated
Reader/Cover	3. CARD OUT OF SEQUENCE	Job Terminated

PART III - PERIPHERAL PROGRAMS

The following error messages could occur during execution of the Peripheral Programs:

Identification No.	Message	Explanation
X001 MEADS	REFER TO TEXT IN "COMPUTER SUBSYSTEM: PERIPHERAL PROGRAMS PROGRAMMING DOCUMENTATION.	
X002 Engineering Fact Sheets	REFER TO IBM FORM C35-002.	
X003 Engineering Problem Narratives	REFER TO IBM FORM C35-002.	
X004 PERT/Time	REFER TO REFERENCED IBM DOCUMENTATION.	

Identification No.	Message	Explanation
X005 PERT/Cost	REFER TO REFERENCED IBM DOCUMENTATION.	
X005 PERT/Cost		Records in error are listed by the Printer.
X007 - 001 Sciolist	DUPLICATE TRANSACTIONS	Self-explanation
X007 - 002 Sciolist	INVALID FISCAL YEAR	
Sciolist - 003	INVALID CCS	
Sciolist - 004	INVALID COMMAND	
Sciolist - 005	INVALID TRANSACTION	
Sciolist - 006	DUPLICATE MASTERS	
Sciolist - 007	UNMATCHED CHANGE	
Sciolist - 008	UNMATCHED DELETE	
Sciolist - 009	"CONTROL CARD MISSING, JOB HALTED"	
Sciolist - 010	"TABLE CARDS INVALID OR MISSING".	
Sciolist - 011	TRANSACTIONS OUT OF SEQUENCE	
Sciolist - 012	MASTER FILE OUT OF SEQUENCE	
Sciolist - 013	MATCHING ADD	

APPENDIX G
ERROR TRACING ROUTINES

This appendix contains ITDS programs which might prove useful in error tracing.

DDUMP

STATEMENT OF PURPOSE

This program provides the system with the ability to checkpoint dump the data base. It displays, in report form, data distribution statistics for the checkpointed data base.

FUNCTIONAL DESCRIPTION

The program is evoked by the verb "DDUMP#".

The system checkpoint number is updated. The updated value is set to the reel number of the next history tape. The current history tape checkpoint series is terminated and a new checkpoint series begun. The data base is read by data list, statistics are computed, and the data list image is written on magnetic tape. Two reports are printed. The first report (order: data list name) contains item total and size statistics. The second report (base record no. order) contains the statistics on records occupied and the distribution of data within those records.

INPUT

A. HISTORY TAPE

The reel number of the current history tape is used to compute the new checkpoint number.

B. DATA BASE

1. M/DICT

   All D Entries in M/DICT are used to find the data list dictionaries.

2. Data list dictionaries

   DL/ID entries are used to find the data list locations.

OUTPUT

A. CURRENT HISTORY TAPE CHECKPOINT SERIES (GIM Unit 3)

The reel of history tape currently being processed is terminated with a trailer identifying it as the last reel of the current checkpoint series.

B. CHECKPOINT NUMBER

The checkpoint number is set to the history tape reel number plus one.

C. HISTORY TAPE LABEL

The history tape label, which resides in Item format in the SYSI data list, is updated with the new checkpoint number. A new history tape is initialized with a label on GIM Unit 3. The first reel of the series has a reel number equal to the checkpoint number.

D. DUMP TAPE (GPP Unit 1)

The Data Base image is written on the Dump tape. (Reference sample).

E. REPORTS

Two reports are printed at the conclusion of the Dump (Reference samples).

ERRORS

An error detected by the Dump program is of an unrecoverable nature. The error usually means that some structure abnormality in the data base has been detected. The program will abort and one of the following error messages will appear.

375. EDATA LIST DICT A H HAS NO DL/ID ENTRY.

M/DICT entry pointed to a data list dictionary which had a DL/ID entry missing.

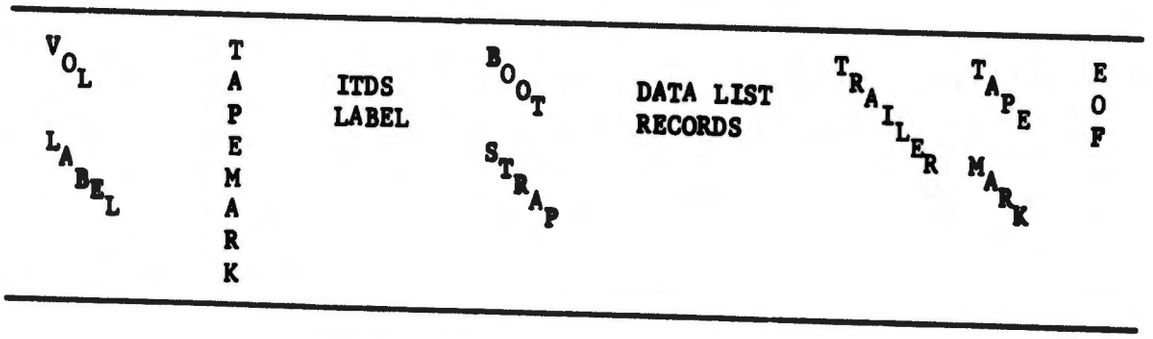
394. ESYSTEM TAPE LABELS MISSING IN SYSI DATA LIST. CALL SYSTEMS STAFF.

The tape labels for the DUMP and/or History tape cannot be located.

902. EAN ILLEGAL DISK STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.

An item's count field has implied that a record links to another record, but the link field is zero.

A. DUMP TAPE FORMAT



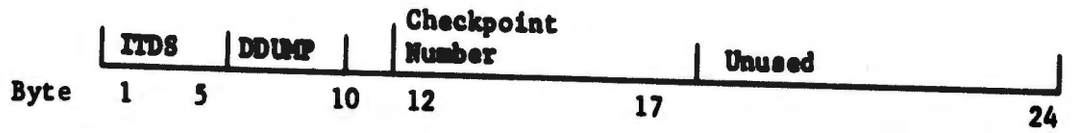
E E
O O
R R

The tape is a Standard ITDS formatted tape.

B. LABEL

The tape label is a standard ITDS Label.

The reel number starts with 1 and the variable descriptor is formatted:



(Checkpoint number is right justified with leading zeros)

C. BOOTSTRAP

The BOOTSTRAP is an exact image of the Disk Record Zero.

D. DATA LIST RECORDS

Data lists are formatted into record sets.

A. IDENTIFIER RECORD

Link = 0, The body of the record contains the Data List Base, Modulus, and Separation, formatted: Base Record NO ≠ MODULUS ≠ SEPARATION ≠ #

B. LOGICAL RECORDS

Logical records contain the data for one disk group (set of linked records). The record is formatted: GROUP NO. # DATA FOR GROUP #.

C. PHYSICAL RECORDS

Link = Physical record number within the data list (1, 2, 3, etc.). Logical records are packed into system length physical records. The last logical record of the data list will be terminated by a #Z.

TRANSACTION 225

```
STATEMENT LABEL-HISTORY#
HISTORY TAPE LABELED ITDS HISTORY     CHECKPOINT 000004     REEL 5
```

CURRENT BOOTSTRAP PARAMETERS

```
MDICT BMS = 1,11,1     RECSIZ = 639     LSTREC = 199     LOWREC = 170
BOTTOM AVAILABLE SPACE = 132     SEQ. NO. = 226     NEXT OVERFLOW = 171
```

```
TRANSACTION 226
STATEMENT VLABEL 2#
```

```
TRANSACTION 227
STATEMENT TDUMP 1 0-999#
```

Print the DDUMP Tape

TAPE 1

***** REC-1 LINK=1
ITDS DDUMP 000202 06/01/0108240CD

***** REC-2 LINK=120
000000010000000110000000100000063900000019900000019300000005000009900000000050000000050000001930000001
000000000063&EXPIRE DATE&3&&&&Y211 JB&EXPIRATION&R&8&000046TYPE&A&4&&&&&&Y111 RLTYPES RRTYPES 1&L&8&0005856&5&6&
LASS&5&&&&Y111 RL&CLASSES RR&CLASSES 2 D1 6&L&3&00036DESCRIPTION&&7&&&&&&Y111&L&100&000397&A&7&DESCRIPTION&7&&&.
Y111&L&100&000359&A&9&TOTAL HR5&9&&&&Y211&R&7&00035FORMAT-1&N&99&&&&&&M3 6 8&R&1&&

***** REC-3 LINK=
1&111&1&=

***** REC-4 LINK=1
&00012AND&C2&00013DICT&CY&00018DICT-BASE&CF&00013EACH&C3&00034SAVE-DATA-BASE&P.S1005&150106000025TTAPE&P.T1098.
150&0&00026VLABEL&P.U1096&150606000029DELETE-FILE&P.185&33071&00031ERRMSG&D&15&17&2&&&&&L&30&000034DL/MODULO&A&
&&&&&&Y211&L&30&000030IR/SEC&A&5&&&&&Y111&R&6&0003256&5&IR/SEC&5&&&&Y111&R&6&00040126&5&12&DL/PATTERN&12&&&&Y
11&L&15&00011PC&P&C&00011CD&C&D&00011C2&C2&00011C4&C4&00028MJOS&D&6&8&2&1&&&&&L&30&000034VERB&P.U99&44000&&&&&LA
23&5=1&00013AND&C1&00012ARE&C2&00011E0&C&00011GT&CA&00013WITH&C4&00022BULK&P.X50&220306000037SYSSELECT-HIST
RY&P.U1069&160606000035ERRMSG-LIST&D&14&1&1&&&&&L&50&00031SYSMAN&D&49&1&1&&&&&N&6&1&00031A

&***** REC-5 LINK=2
/AMC/1&N&4&&&&&Y211&R&6&00031V/TYPE&N&9&&&&&Y211&L&15&00034CONVERSION&A&7&&&&&Y111&L&2&0003610&5&10&DL/MAX
10&&&&Y211&R&12&00011PA&PA&00011CB&CB&=2&00014AFTER&CA&00023DATA-LIST-BASE&C1&00029DATA-LIST-SEPARATION&CK&0
024DICT-SEPARATION&CH&00013FROM&C2&00015HAVING&C2&00011IF&C4&00012INN&C2&00012NOT&CD&00019LIST&PA&44010&00018
DD&PC&2201060003OM/DICT&D&1&1&1&&&&&L&50&00D25TDUMP&P.T1097&450306000024MODE&P.U1099&150506000035RESTART-HISTO
Y&P.R1006&1102060002?REQUEST&P.N1066&1105060003SSYSDECK-TO-TAPE&P.I1067&1607060003SYSI-LIST&D&12&1&1&&&&&L&5
&00031DL/BASE&N&2&&&&&Y211&R&6&00031UPD/SEC&A&6&&&&&&Y111&R&6&00030UPD/SC&N&6&&&&&&Y111&

***** REC-6 LINK=3
B&6&00030V/CONV&N&7&&&&&Y111&L&2&00032DL/MING&A&11&&&&&Y211&R&12&00033&6&5&6&UPD/SEC&6&&&&Y111&R&6&0004286&5&8
DL/CORRELATIVES&8&&&Y111&L&80&00011PE&PE00031MJO-SOS&D&65&2&1&&&&&L&30&&=3&00010A&CZ&00012ALL&CZ&00012ANY&C
&00025DATA-LIST-MODULO&CJ&00020DICT-MODULO&CG&00014EQUAL&CC&00011ON&CC&00010)&CB&00024SYSFIX&P.F92&2205060002
FILE/DELETE&P9&33080&00041DL/ID&D&1&1&1&345CDE&CDE345&&&&L&50&00030SYSI&D&13&1&1&&&&&L&50&1&00031V/MIN&N&11&&
&&&Y211&R&12&00030RMC/1&N&4&&&&&Y211&RN&3&00029SIZE/DICT&A&13&&&&&&&LN&00033Z&5&2&DL/BASE&2&&&&Y211&R&6&00003
4&5&4&DL/SEPARATION&4&&&&Y211&R&6&00011CY&CY&00039GFM&D&53&3&1&123ABC&ABC123&&&&L&30&00042

NOTE: Attribute marke re shown as & and # is shown as =

```
TRANSACTION 2
STATEMENT LABEL-HISTORY#
HISTORY TAPE LABELED ITDS HISTORY    CHECKPOINT 000001    REEL 1

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,11,1     RECSIZ = 639     LSTREC = 199     LOWREC = 189
BOTTOM AVAILABLE SPACE = 100     SEQ. NO. = 3     NEXT OVERFLOW = 189

TRANSACTION 3
STATEMENT VLABEL 1#

TRANSACTION 4
STATEMENT DDUMP #
```

REPORT 1

This report contains the name of each data list, the disk space allocated to the data list and its dictionary and the statistics pertaining to total number of items and the range of item sizes.

1.	CHECKPOINT	New system checkpoint number.
2.	DATA LIST NAME	The name of each data list printed in alphabetical order.
3.	DICT BMS	The base record number, modulus, and separation of the data list dictionary.
4.	D.L. BMS	The base record number, modulus, and separation of the data list dictionary.
5.	NO. ITEMS	The total number of items found in the area defined by BMS.
6.	MAX SIZE	The size in characters of the largest item in the area defined by BMS.
7.	MIN SIZE	The size in characters of the smallest item in the area defined by BMS.

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2 ①

DATA LIST ②	B.M.S.	NO. ITEMS ⑤	MAX. SIZE ⑥	MIN. SIZE ⑦
CEI-SN	DICT 58,1,1 ③	10	54	28
	D.L. 59,1,1 ④	8	27	22
CHARGES	DICT 63,1,1	13	182	27
	D.L. 64,1,1	9	72	40
CLASSES	DICT 75,1,1	5	38	31
	D.L. 76,1,1	5	43	23
DL/ID	DICT 1,11,1	165	48	10
	D.L. 1,11,1	165	48	10
EMPLOYEES	DICT 60,2,1	22	45	26
	D.L. 62,1,1	6	102	66
ERRMSG	DICT 15,17,2	228	319	24
	D.L. 15,17,2	228	319	24
ERRMSG-LIST	DICT 14,1,1	21	32	28
	D.L. 15,17,2	228	319	24
EXPIRATION	DICT 73,1,1	7	65	31
	D.L. 74,1,1	8	43	25
GFH	DICT 53,3,1	37	53	26
	D.L. 56,1,2	16	155	106
M/DICT	DICT 1,11,1	165	48	10
	D.L. 1,11,1	165	48	10
MJO-SOS	DICT 65,2,1	18	148	26
	D.L. 67,1,1	10	84	58
MJOS	DICT 68,2,1	22	130	29
	D.L. 70,1,1	6	102	67

REPORT 1

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

DATA LIST	B.M.S.	NO. ITEMS	MAX. SIZE	MIN. SIZE
PART	DICT 77,1,1	14	50	37
	D.L. 78,1,2	16	21	18
SYS1	DICT 13,1,1	22	35	10
	D.L. 13,1,1	22	35	10
SYS1-LIST	DICT 12,1,1	9	29	28
	D.L. 13,1,1	22	35	10
SYSMAN	DICT 49,1,1	5	32	29
	D.L. 50,3,1	12	57	25
TYPES	DICT 71,1,1	5	67	36
	D.L. 72,1,1	10	56	22

REPORT 2

This report contains a list of all defined data list areas for each data list area. The data distribution is displayed.

1.	Checkpoint	New System Checkpoint Number.
2.	B, M, S	The base record number, modulus, and separation of the area.
3.	Maximum Records Per Group	The size in records of the largest group in the area.
4.	Number Records Total	The total number of records required by the data list residing in the defined area. This includes the number of records in the defined area plus all overflow records.
5.	Number of Groups in Percent Full Ranges	The percent full = (NO. DATA CHAR IN A GROUP*100)/(SEPARATION*RECORD SIZE). The number of groups which are found to be within a percentage range are shown under the column heading for that range (i.e., 00-20 is zero to [but not including] 20% full). The total number of groups is equal to the modulus of the data list.
6.	OVERFLOW	This is the number of groups which are 500% or more full (i.e., greater than or equal to 5 times the defined separation).

REPORT 2

DATE 06/01/01 — DATA DISTRIBUTION STATISTICS — CHECKPOINT 2 (1)

B.M.S. (2)	MAX REC /GROUP (3)	NO. REC TOTAL (4)	********** NUMBER OF GROUPS IN PERCENT FULL RANGES **********									OFLO (6)
			00-20 (5)	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	
1,11,1	2	12		2	6	1	1	1				
12,1,1	1	1			1							
13,1,1	1	1				1						
14,1,1	1	1					1					
15,17,2	3	35		1	4	5	6	1				
49,1,1	1	1		1								
50,3,1	1	3	2	1								
53,3,1	1	3				2	1					
56,1,2	4	4						1				
58,1,1	1	1				1						
59,1,1	1	1		1								
60,2,1	1	2			1	1						
62,1,1	1	1				1						
63,1,1	2	2						1				
64,1,1	1	1				1						
65,2,1	1	2			1	1						
67,1,1	2	2						1				

DATE 06/01/01 DATA DISTRIBUTION STATISTICS CHECKPOINT 2

B.M.S.	MAX REC /GROUP	NO. REC TOTAL	NUMBER OF GROUPS IN PERCENT FULL RANGES									
			00-20	20-40	40-60	60-80	80-100	100-200	200-300	300-400	400-500	OFLO
68,2,1	1	2				1	1					
70,1,1	1	1					1					
71,1,1	1	1		1								
72,1,1	1	1			1							
73,1,1	1	1			1							
74,1,1	1	1		1								
75,1,1	1	1		1								
76,1,1	1	1		1								
77,1,1	1	1					1					
78,1,2	1	2		1								

END OF JOB

```
CHECKPOINT 000002  DISK DUMP TAKEN.

CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,11,1     RECSIZ  =  639     LSTREC  =  199     LOWREC  =  184
BOTTOM AVAILABLE SPACE  =  100     SEQ.NO.  =  5     NEXT OVERFLOW  =  188
```

STATEMENT OF PURPOSE

This ITDS verb invokes the printing of an image of the data base records.

FUNCTIONAL DESCRIPTION

As much of the data base as is requested will be printed out.

INPUT STATEMENT FORMAT

DPRINT (NNN-MMM) #

NNN the starting record number to be printed.

MMM the ending record number to be printed.

OUTPUT

All records from NNN through MMM will be printed. The nominal is 0 through LSTREC.

Record marks will be printed as &.

If MMM is less than NNN, only NNN will be printed.

PRINT-BOOT

STATEMENT OF PURPOSE

This program prints a summary of the current data base structure.

FUNCTIONAL DESCRIPTION

The program is evoked by the VERB PRINT-BOOT. The program is also evoked by other processors when an operation is executed which could have changed the data base structure. The output is a set of parameters which describe the current status of the data base.

INPUT

PRINT-BOOT #

OUTPUT PARAMETERS

MDICT = B,M,S

The location within the data base of the systems DICTIONARY (MDICT).

B is the base record number;

M is the modulo (No. of groups in the Data List); and

S is the Separation (No. of records in a group).

RECSIZ = NNN

The number of data characters in a physical data base record.

LSTREC = NNN

The highest numbered record in the data base.

LOWREC = NNN

The overflow area on the data base is located between LSTREC + 1 (being the highest numbered record) and the highest numbered data list record. This area is termed "AVAILABLE SPACE". This area is allocated for overflow from highest to lowest numbered records. LOWREC is the lowest numbered record of available space ever allocated.

BOTTOM AVAILABLE SPACE = NNN

The highest numbered Data List record plus 1.

SEQ. NO. = NNN

The transaction number which will be assigned to the next statement to be processed.

NEXT OVERFLOW = NNN

The available space record which will be allocated the next time a data list overflow occurs.

PURPOSE

SYSDUMP provides the user with the ability to retrieve small portions of the data base.

FUNCTIONAL DESCRIPTION

SYSDUMP prints out all or part of an item, a physical record, or a group (a set of linked records). It obtains the parameters identifying the data area to be printed from the input statement. The statement is processed and the output formated and printed immediately. The output is also logged on the history tape.

INPUT

The input statement is of the form:

$$\text{SYSDUMP } x, P_1, \ldots\ldots, P_n$$

where

x is ITEM, RECØRD, or GRØUP,

$P_1, \ldots\ldots, P_n$ are the other parameters.

All parameters must be separated by commas. Blanks following commas will be ignored. Carriage returns from a terminal will be ignored. After x, the remaining parameters may be in any order. The last parameter must be followed by an EØB from a terminal or an input statement terminator (END) in the input card.

OUTPUT

The output consists of the following:

1. A line giving the record number and link of the record on which the first of the printed data is located. In the case of a group printout, this line will be repeated for each record of the group.

2. A line giving the Item I.D. (if applicable).

3. A line with the characters ..... * repeated six times. This is for locating character positions.

4. Printout of the data. Each 60 characters of data will occupy two lines. The second line begins with the position number of the first of the 60 characters. The remainder of the line contains the true characters, with the exception of attribute marks, value marks, and secondary value separators. These will appear as A, V, and S, respectively. Their corresponding positions on the first line will each contain a $. The remainder of the first line will contain blanks.

5. A line containing ***** to denote the end of the printout.

ERROR PROCEDURES

If the input is in error, or the processing cannot be done for any reason, "STATEMENT NØT PRØCESSED" and another statement explaining the error will be printed.

STATEMENT OF PURPOSE

This program enables the system to select Items from the History Tape. Selection options are available. The data may be loaded into a specified data list after selection. The normal retrieval/update options for the system are then available for use with this data list.

FUNCTIONAL DESCRIPTION

The program is evoked by the verb "SYSSELECT-HISTORY". Input parameters are edited and used to select the checkpoint series tape requested. All items which satisfy the selection criteria are formatted for sorting and written on an extract tape. If requested, the data from this tape will be loaded into the data list specified.

INPUT

REQUESTOR PARAMETERS

The verb must appear first but the other parameters may be written in any order. Options are separated by commas and the last option is terminated with the standard input statement terminator (END).

Parameter	Meaning	Required
SYSSELECT-HISTORY	This verb evokes the processor	Yes
CHECKPOINT=NNN,	The checkpoint number on the label of the History tape.	Yes
REEL=NNN,	The reel number within the checkpoint series where selection is to start. Nominal is the first reel of the checkpoint series whose reel number always equals the checkpoint number.	No
LIMITS=XXXXX-YYYYY,	A pair of retrieval key limits which encompass the retrieval keys which are to be selected. Up to 100 pairs of these keys may be entered. Nominal selection is 0-99999.	No
FROM=MMDDYY-TT.TTTT,	The data and time when selection is to start. MMDDYY is the calendar date TT.TTTT is the time on a 24 hours decimal clock to four decimal places. The decimal point is assumed.	No. Only one pair may be entered. Nominal is all transactions in the checkpoint series.
TO=MMDDYY-TT.TTTT,	The inclusive ending date and time when selection is to stop.	No
DATA-LIST='DL NAME',	The data list name into which the extracted items are to be loaded.	No
ID=X,	The Item ID type which is to be selected if the transaction is accepted. (i.e., ID=I, ID=D, ID=O...) Up to 90 Item I.D.'s may be entered. Nominal is all Item I.D.'s.	No
INITIALIZE,	This option, if present, allows the data list specified to be initialized before loading the extracted data.	No
#	Input statement terminator (END)	Yes

OUTPUT

The extracted Item from the History Tape will be formatted as follows:

YYMMDD * TTTTTT * No. ($^{R}_{M}$) ITEM TYPE ($^{R}_{M}$) ITEM ($^{R}_{M}$) #

(If the item is loaded onto disk the # will be removed)

YYMMDD*TTTTTT is the date and time of the transaction.

No. is a sequential number assigned during extraction to insure the Item I.D. is unique.

ITEM TYPE is the item identifier from the history tape (i.e., I,), D,T,..)

If items are to be processed from the extracted tape, refer to the extract tape description for a detailed format of the physical/logical records.

TDUMP (TAPE DUMP)

A tape dump is available which will dump a standard unlabeled ITDS formatted tape. The dump may be evoked by control statement or mode entry.

CONTROL STATEMENT

A standard ITDS entry statement of the following format will effect the dump:

TDUMP U, R1, RN #

where

U is the unit number

R is the starting record number

RN is the ending record number

Example

"TDUMP 1, 1, 999" would cause the contents of the tape mounted on unit 1 to be printed starting with record 1 (label record if a labeled tape) and ending with record 999 or EØF whichever is encountered first.

APPENDIX H

MINI MICRO THREE FILE TEST CASE

```
//S3319   JOB  (41,                                                    *     3319
//               567477),'542359714HAM,P.',MSGLEVEL=1
//MINI EXEC GPPBATCH,VOL02=000063,DSN02=MINIMIC
XX       PROC  DSN01='GPP.PDB',LOAD='GPP.LOAD',PDB=1,UDB=2,TSVC=0,     *00000010
XX             VOL=IPLRES,VOL01=IPLRES                                 00000020
XXEXEC   EXEC  PGM=EXEC,PARM='&PDB,&UDB,&TSVC'                         00000030
XXDISK01   DD  DISP=SHR,DSN=&DSN01,UNIT=2314,VOL=SER=&VOL01            00000040
XXDISK02   DD  DISP=SHR,DSN=&DSN02,UNIT=2314,VOL=SER=&VOL02            00000050
XXMR       DD  DISP=SHR,DSN=MR.&DSN02,UNIT=2314,VOL=SER=&VOL02         00000060
XXUNIT11   DD  DUMMY                                                   00000070
XXUNIT12   DD  DUMMY                                                   0000008C
XXUNIT13   DD  DUMMY                    HISTORY FILE.                  0000009C
XXSTEPLIB  DD  DISP=SHR,DSN=&LOAD,UNIT=2314,VOL=SER=&VOL               00000100
XXSYSPRINT DD  SYSOUT=A                                                00000110
//EXEC.SYSIN DD *
IEF236I ALLOC. FOR S3319    EXEC     MINI
IEF237I DISK01   ON 130
IEF237I DISK02   ON 134
IEF237I MR       ON 134
IEF237I STEPLIB  ON 130
IEF237I SYSIN    ON 00C
```

```
    MODEL GPP-3  VERSION 9167

    LOAD MAP
COMREG BEGINS AT 005320      SYSTEM LINK TABLE IS AT 00695C

SOFTWARE COMPUTERS BEGIN AT
    006D60

BPOOL1 IS 000DD8   IN SIZE.  BUFFERS BEGIN AT

    008C30    009A08    00A7E0    00B5B8    00C390    00D168    00DF40

BPOOL2 IS 0002BC   IN SIZE.  BUFFERS BEGIN AT

    00E278    00EFC8    00F528    00F7D8    00FA88    00FD38    00FFE8    010298    010548
    0107F8

USER CONTROL BLOCKS BEGIN AT
    006B38    006BF0    006CA8

DEVICE CONTROL TABLES LOC     CODE DDNAME
                      005F18  01   SYSIN
                      005FB0  02   SYSPRINT
                      006048  09   SYSPUNCH
                      0060A0  11   UNIT11
                      006270  12   UNIT12
                      006340  13   UNIT13
                      0063E0  90   SYSLOG
                      006410  21   UNIT21
                      006508  22   UNIT22
                      0066C0  23   UNIT23
                      0066F8  24   UNIT24
                      0067F0  25   UNIT25
```

SOFTWARE COMPUTER VARIABLES WITH LOCATIONS

ABIT	006E37	FP1	007000	NREC	006F40	SB0	006E18
ASEND	007000	IBEND	006FD0	OBEND	006FDC	SB15	006E27
BASE	006F44	IIEND	006FE4	OSEND	006FB8	SCP	007020
BKBIT	006E51	IREND	006F94	OVRFLW	006E6C	SCEND	006DAC
BMSEND	006FC4	ISEND	006FAC	OSEND	007018	SIZE	006F2C
CCXXX	006E57	KEY	006F69	PBIT	006E48	SR1	007028
CSEND	007000	LBIT	006E42	REC	006F30	SR15	00706C
CTR1	006E74	LINQUE	006F38	RECORD	006F34	S1	00709C
CTR15	006EAC	LSTREC	006F69	RECSZ	006E64	TAPE	006F64
C1	006EEC	LTBL	007CF4	REJCTR	006F28	TSEND	006FE8
DBASE	006F50	MBASE	006E58	RMBIT	006E54	UPDEND	006FA0
DNREC	006F5C	NEXT	006F3C	RMCDE	006F74	WRAPUP	006F7C

```
TRANSACTION 1
STATEMENT LABEL-HISTORY#
HISTORY TAPE LABELED ITOS HISTORY   CHECKPOINT 000001   REEL 1


CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,17,1    RECSIZ = 639    LSTREC = 499    LOWREC = 486
BOTTOM AVAILABLE SPACE = 59    SEQ.NC. = 2    NEXT OVERFLOW = 486


TRANSACTION 2
STATEMENT REQUEST 1#
REQUEST ACKNOWLEDGED
DATE 06-25-69   TIME 19.0271   USER 1  SYSTEMS PROGRAMMER

TRANSACTION 3
STATEMENT DELETE DICT M/DICT 'V/BASE' #
1004    THE ITEM ID @V/BASE@ IS NOT ON THE FILE.

TRANSACTION 4
STATEMENT DELETE DICT M/DICT'V/MODULO'  'V/NAME' #
1004    THE ITEM ID @V/MODULO@ IS NOT ON THE FILE.
@V/NAME@ DELETED.

TRANSACTION 5
STATEMENT DELETE DICT M/DICT 'V/RMC' 'A/AMC' 'V/SEPARATOR' #
@V/RMC@ DELETED.
@A/AMC@ DELETED.
1004    THE ITEM ID @V/SEPARATOR@ IS NOT ON THE FILE.
```

```
TRANSACTION 6
STATEMENT DELETE DICT M/DICT 'A/AMC/1' 'V/RMC/1' #
@A/AMC/1@ DELETED.
@V/RMC/1@ DELETED.


TRANSACTION 7
STATEMENT ADD DICT M/DICT 'V/RMC' 'A/AMC' DICT/CODE "N" DL/BASE "2" V/TYPE "R" V/MAX "6"  CORRELATIVES "Y211"
          #
@V/RMC@ ADDED.
@A/AMC@ ADDED.


TRANSACTION 8
STATEMENT ADD DICT M/DICT 'V/SEPARATOR' V/RMC "4" DICT/CODE "N" V/TYPE  "R"  V/MAX "6"    CORRELATIVES "Y211"
          #
@V/SEPARATOR@ ADDED.


TRANSACTION 9
STATEMENT ADD DICT M/DICT 'V/BASE' DICT/CODE "N" A/AMC "2" CORRELATIVES "Y211" V/TYPE "R"                    V/
          MAX "6"#
@V/BASE@ ADDED.


TRANSACTION 10
STATEMENT ADD DICT M/DICT 'V/MODULO' 'V/NAME'                    DICT/CODE "N" V/TYPE "L"      V/MAX "30"A/AMC "3"
          CORRELATIVES "Y211" #
@V/MODULO@ ADDED.
@V/NAME@ ADDED.


TRANSACTION 11
STATEMENT DELETE-FILE 'ACOT/ICOT-RPT*DT-FILE' #
416     THE DATA LIST CANNOT BE FOUND IN MDICT


TRANSACTION 12
STATEMENT DELETE-FILE 'PROD-COST-TEST' #
```

```
416     THE DATA LIST CANNOT BE FOUND IN MDICT

TRANSACTION 13
STATEMENT DELETE-FILE 'CONTRACT-TEST' #
416     THE DATA LIST CANNOT BE FOUND IN MDICT

TRANSACTION 14
STATEMENT ADD DICT M/DICT 'V/RMC/1''A/AMC/1'DICT/CODE "N" A/AMC "4" CORRELATIVES "Y211" V/TYPE "R" V/MAX "6" #
@V/RMC/1@ ADDED.
@A/AMC/1@ ADDED.

TRANSACTION 15
STATEMENT ADD DICT M/DICT 'V/CORRELATIVES' DICT/CODE "N" CORRELATIVES "Y111" V/TYPE "L" V/MAX "250" A/AMC "8"#
@V/CORRELATIVES@ ADDED.

TRANSACTION 16
STATEMENT
```

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```
                                                                                    STRUCTURE-FILE 'CONT
RACT-TEST' DICT-BASE "100" DICT-MODULO "3" DICT-SEPARATION  "1"  DATA-LIST-BASE "120"  DATA-LIST-MOD
ULO "3"     DATA-LIST-SEPARATION "2" #
```

```
415     DATA LIST STRUCTURED. DICTIONARY B,M,S=100,3,1  DATA LIST B,M,S=120,3,2


CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,17,1    RECSIZ = 639    LSTREC = 499    LOWREC = 477
BOTTOM AVAILABLE SPACE = 126    SEQ.NC. = 17    NEXT OVERFLOW = 477


TRANSACTION 17
STATEMENT STRUCTURE-FILE 'PROD-COST-TEST' DICT-BASE "103" DICT-MODULO "7" DICT-SEPARATION "2" DATA-LIST-BASE
          "126"  DATA-LIST-MODULO "5" DATA-LIST-SEPARATION "4" #
415     DATA LIST STRUCTURED. DICTIONARY B,M,S=103,7,2  DATA LIST B,M,S=126,5,4


CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,17,1    RECSIZ = 639    LSTREC = 499    LOWREC = 475
BOTTOM AVAILABLE SPACE = 146    SEQ.NC. = 18    NEXT OVERFLOW = 483


TRANSACTION 18
STATEMENT STRUCTURE-FILE 'ACDT/ICDT-RPT*DT-FILE' DICT-BASE "146" DICT-MODULO "7"          DICT-SEPARATION "2"
          DATA-LIST-BASE "160" DATA-LIST-MODULO "7"                    DATA-LIST-SEPARATION "2" #
415     DATA LIST STRUCTURED. DICTIONARY B,M,S=146,7,2  DATA LIST B,M,S=160,7,2


CURRENT BOOTSTRAP PARAMETERS

MDICT BMS = 1,17,1    RECSIZ = 639    LSTREC = 499    LOWREC = 475
BOTTOM AVAILABLE SPACE = 174    SEQ.NC. = 19    NEXT OVERFLOW = 479
```

```
TRANSACTION 19
STATEMENT
          T/ICDT' DICT/CODE "D" DL/BASE "146" DL/MODULO "7"                    ADD DICT M/DICT 'ACD
          #                                                  DL/SEPARATION "2" V/TYPE "L" V/MAX "30"
@ACDT/ICDT@ ADDED.


TRANSACTION 20
STATEMENT ADD DICT M/DICT 'ACDT/ICDT*DT-FILE' DICT/CODE "D" DL/BASE "146" DL/MODULO "7"   DL/SEPARATION "2" V/
          TYPE "L" V/MAX "30" #
@ACDT/ICDT*DT-FILE@ ADDED.


TRANSACTION 21
STATEMENT ADD DICT  M/DICT  'AI'   DICT/CODE "D"
          LO "7"  V/SEPARATOR "2"  V/TYPE "L"  V/MAX "30" #                    V/BASE "146"  V/MODU
@AI@ ADDED.


TRANSACTION 22
STATEMENT ADD DICT  ACDT/ICDT 'DL/ID' DICT/CODE "D"  V/CORRELATIVES  "Y41"
            V/TYPE "L*R"   V/MAX "15*6" #
@DL/ID@ UPDATED.

6-H
TRANSACTION 23
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'ACT-DT'
          "1"                                                          DICT/CODE "A"  V/RMC
          V/MAX "6"  V/MIN "6" #                 V/CORRELATIVES "Y113"   V/TYPE "RN"
@ACT-DT@ ADDED.


TRANSACTION 24
STATEMENT ADD DICT  ACDT/ICDT*DT-FILE '1'  DICT/CODE "S"  V/RMC "1" V/NAME "ACT-DT"      V/RMC/1 "1"   V/CORR
          ELATIVES  "Y113"     V/TYPE "RA"   V/MAX "6" V/MIN "6" #
@1@ ADDED.


TRANSACTION 25
```

```
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'CONTR-NAME'   DICT/CODE "A" V/RMC "2" V/CORRELATIVES"Y211"  V/TYPE "L"
          V/MAX "25"  #
@CONTR-NAME@ ADDED.


TRANSACTION 26
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '2'   DICT/CODE "S"  V/RMC "2"  V/NAME "CONTR-NAME"  V/RMC/1  "2" V/CORRE
          LATIVES "Y211"   V/TYPE "L"   V/MAX "25" #
@2@ ADDED.


TRANSACTION 27
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'TIME'  DICT/CODE "A"  V/RMC "3" V/CORRELATIVES "Y211"  V/TYPE "R" V/MAX
          "4"  #
@TIME@ ADDED.


TRANSACTION 28
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '3'   DICT/CODE "S"  V/RMC "3"  V/NAME "TIME" V/RMC/1"3" V/CORRELATIVES "
          Y211"  V/TYPE "R"   V/MAX "4"  #
@3@ ADDED.


TRANSACTION 29
STATEMENT ADD DICT  ACDT/ICDT*DT-FILE  'LOC'  DICT/CODE "A"  V/RMC "4" V/CORRELATIVES "Y211" V/TYPE "L"  V/MAX
          "25"  #
@LOC@ ADDED.


TRANSACTION 30
STATEMENT ADD DICT  ACDT/ICDT*DT-FILE '4'      DICT/CODE "S" V/RMC/1 "4" V/RMC "4" V/NAME  "LOC" V/CORRELATIVES
          "Y211"  V/TYPE "L"   V/MAX "25" #
@4@ ADDED.


TRANSACTION 31
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'SUMMARY'   DICT/CODE "A" V/RMC "5" V/CORRELATIVES   "Y211"  V/TYPE "L"
          V/MAX "300" #
@SUMMARY@ ADDED.
```

```
TRANSACTION 32
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '5'  DICT/CODE "S" V/RMC "5" V/NAME "SUMMARY" V/RMC/1"5"  V/CORRELATIVES
          "V211"  V/TYPE "L"  V/MAX "3CO" #
@5@ ADDED.


TRANSACTION 33
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'CAUSE' DICT/CODE "A" V/RMC "6" V/CORRELATIVES "V211"V/TYPE "L" V/MAX "30
          C" #
@CAUSE@ ADDED.


TRANSACTION 34
STATEMENT ADD DICT  ACDT/ICDT*DT-FILE '6' DICT/CODE "S" V/RMC "6" V/NAME "CAUSE" V/RMC/1  "6" V/CORRELATIVES
          "V211" V/TYPE "L"  V/MAX "3CC"  #
@6@ ADDED.


TRANSACTION 35
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'PERS-STAT'  DICT/CODE "A" V/RMC "7" V/CORRELATIVES  "V111" "D1:8"
                                                  V/TYPE "L" V/MAX "25" #
@PERS-STAT@ ADDED.


TRANSACTION 36
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '7'  DICT/CODE "S" V/RMC "7" V/NAME "PERS-STAT"      V/RMC/1  "7"
                                                 V/TYPE "L" V/MAX   "25"   V/CORRELATIVES "V111" "D1:8"
                                                #
@7@ ADDED.


TRANSACTION 37
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'NO-PERS-INVOL'  DICT/CODE "A" V/RMC "8" V/TYPE "L"  V/MAX "1" V/CORRELAT
          IVES  "D2;7""V211"                          #
@NO-PERS-INVOL@ ADDED.
```

```
TRANSACTION 38
STATEMENT ADD DICT ACDT/ICDT*DT-FILE  '8'  DICT/CODE "S"  V/RMC "8" V/NAME "NO-PERS-INVOL"V/RMC/1 "8"  V/CORRE
          LATIVES "D2;7" "Y211"                    V/TYPE "L" V/MAX "1"#
∂8∂ ACDED.


TRANSACTION 39
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'EST-PROP-CAMAGE'  DICT/CODE "A"  V/RMC "9" V/MAX "15" V/TYPE "R" V/CONV
          "MS"  V/CORRELATIVES "Y211" #
∂EST-PROP-CAMAGE∂ ADDED.


TRANSACTION 40
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '9' DICT/CODE "S" V/RMC "9" V/NAME "EST-PROP-DAMAGE" V/RMC/1  "9"  V/CORR
          ELATIVES "Y211" V/CONV "MS" V/TYPE "R" V/MAX "15" #
∂9∂ ADDED.


TRANSACTION 41
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'NATURE-DAMAGE'  DICT/CODE "A" V/RMC "10" V/TYPE "L" V/MAX "300" V/CORREL
          ATIVES  "Y211" #
∂NATURE-DAMAGE∂ ADDED.


TRANSACTION 42
STATEMENT ADD DICT ACDT/ICDT*DT-FILE  '10' DICT/CODE "S" V/RMC "10" V/NAME "NATURE-DAMAGE"V/RMC/1 "10" V/CORRE
          LATIVES  "Y211"  V/TYPE "L"  V/MAX "300" #
∂10∂ ADDED.


TRANSACTION 43
STATEMENT ADD DICT ACDT/ICDT*DT-FILE  'EFFECT-CAMAGE'  DICT/CODE "A" V/RMC "11" V/TYPE "L"V/MAX "12" V/CORRELA
          TIVES "Y111" #
∂EFFECT-DAMAGE∂ ADDED.


TRANSACTION 44
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '11' DICT/CODE "S" V/RMC "11" V/NAME  "EFFECT-DAMAGE"V/RMC/1  "11" V/CORR
          ELATIVES "Y111"  V/TYPE "L"  V/MAX "12"  #
```

```
@11@ ADDED.


TRANSACTION 45
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'CONTR-ACTION'  DICT/CODE "A" V/RMC "12" V/CORRELATIVES "V211" V/TYPE "L"
          V/MAX "30C"  #
@CONTR-ACTION@ ADDED.


TRANSACTION 46
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '12' DICT/CODE "S" V/RMC "12" V/NAME "CONTR-ACTION"  V/RMC/1 "12"  V/CORR
          ELATIVES "V211" V/TYPE "L"  V/MAX "3CO" #
@12@ ADDED.


TRANSACTION 47
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'CTHER-PROP-DAM-INJ'                                    DICT/CODE "A" V/RMC
          "13" V/CORRELATIVES "V211" V/TYPE "L" V/MAX "300" #
@OTHER-PROP-DAM-INJ@ ADDED.


TRANSACTION 48
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '13' DICT/CODE "S" V/RMC "13" V/NAME "OTHER-PROP-DAM-INJ" V/RMC/1 "13" V/
          CORRELATIVES "V211" V/TYPE "L" V/MAX "300"    #
@13@ ADDED.


TRANSACTION 4C
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'DAI-NO'  DICT/CODE "A" V/RMC "14" V/CORRELATIVES    "V111" V/TYPE "L" V/
          MAX "10"  #
@DAI-NO@ ADDED.


TRANSACTION 5C
STATEMENT ADD DICT ACDT/ICDT*DT-FILE '14' DICT/CODE "S" V/RMC "14" V/NAME "DAI-NO"        V/RMC/1 "14" V/CORRE
          LATIVES "V111" V/TYPE "L" V/MAX "10" #
@14@ ADDED.
```

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```
TRANSACTION 51
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'ACDT/ICDT-RPT' DICT/CODE "N" V/RMC "0" V/CORRELATIVES "G*1" V/TYPE "L"
          V/MAX "15" #
@ACDT/ICDT-RPT@ ADDED.


TRANSACTION 52
STATEMENT ADD DICT ACDT/ICDT*DT-FILE 'NC-PERS-INVOL-SYN' DICT/CODE "N" V/RMC "8" V/CORRELATIVES "Y113" V/TYPE
          "L" V/MAX "1" #
@NO-PERS-INVOL-SYN@ ADDED.


TRANSACTION 53
STATEMENT                                                                                    ADD DICT M/DICT 'XX'
           DICT/CODE "D"                                                    V/BASE "1CO"       V/MODULO "3"       V/SE
          PARATOR "1"     V/TYPE "L" V/MAX "3C"  #
@XX@ ADDED.


TRANSACTION 54
STATEMENT ADD DICT CONTRACT-TEST 'DL/IC' DICT/CODE "D"                                       V/CORRELATIVES "Y41"
           V/TYPE "L" V/MAX "20" #
@DL/ID@ UPDATED.


TRANSACTION 55
STATEMENT ADD DICT CONTRACT-TEST 'ACT-DT'                                                    DICT/CODE "A" V/RMC
          "1"                                                             V/CORRELATIVES "Y113"
                                                                             V/TYPE "RN"          V/MAX "6"  V/

          MIN "6"       #
@ACT-DT@ ADDED.


TRANSACTION 56
STATEMENT ADD DICT CONTRACT-TEST '1'                                                         DICT/CODE "S" V/RMC
          "1"    V/NAME "ACT-DT"                                          V/RMC/1 "1"    V/CORRELATIVES "Y113"
                                                                             V/TYPE "RN"          V/MAX "6"  V/

          MIN "6"       #
@1@ ADDED.
```

```
TRANSACTION 57
STATEMENT ADD DICT CONTRACT-TEST 'FMC*CONTR-NAME'                    DICT/CODE "A" V/RMC
          "2"                                                  V/CORRELATIVES "Y211"
                                                                  V/TYPE "L*L"          V/MAX "5*100"
                          #
@FMC*CONTR-NAME@ ADDED.


TRANSACTION 58
STATEMENT ADD DICT CONTRACT-TEST '2'                                 DICT/CODE "S" V/RMC
          "2"    V/NAME "FMC*CONTR-NAME"                       V/RMC/1 "2"    V/CORRELATIVES "Y211"
                                                                  V/TYPE "L*L"          V/MAX "5*100"
                          #
@2@ ADDED.


TRANSACTION 59
STATEMENT ADD DICT CONTRACT-TEST 'WBS'                               DICT/CODE "A" V/RMC
          "3"                                                  V/CORRELATIVES "Y113"
                                                                  V/TYPE "R"            V/MAX "13"
                          #
@WBS@ ADDED.


TRANSACTION 60
STATEMENT ADD DICT CONTRACT-TEST '3'                                 DICT/CODE "S" V/RMC
          "3"    V/NAME "WBS"                                  V/RMC/1 "3"    V/CORRELATIVES "Y113"
                                                                  V/TYPE "R"            V/MAX "13"
                          #
@3@ ADDED.


TRANSACTION 61
STATEMENT ADD DICT CONTRACT-TEST 'CONTRACTING-AGCY'                  DICT/CODE "A" V/RMC
          "4"                                                  V/CORRELATIVES "Y211"
                                                                  V/TYPE "L"            V/MAX "6"
                          #
```

```
@CONTRACTING-AGCY@ ADDED.

TRANSACTION 62
STATEMENT ADD DICT CONTRACT-TEST '4'
          "4"    V/NAME "CONTRACTING-AGCY"                    DICT/CODE "S" V/RMC
                                                   V/RMC/1 "4"    V/CORRELATIVES "V211"
                                                      V/TYPE "L"              V/MAX "6"
                         #
@4@ ADDED.

TRANSACTION 63
STATEMENT ADD DICT CONTRACT-TEST 'PBS'
          "5"                                                  DICT/CODE "A" V/RMC
                                                   V/CORRELATIVES "Y113"
                                                      V/TYPE "R"              V/MAX "13"
                         #
@PBS@ ADDED.

TRANSACTION 64
STATEMENT ADD DICT CONTRACT-TEST '5'
          "5"    V/NAME "PBS"                                 DICT/CODE "S" V/RMC
                                                   V/RMC/1 "5"    V/CORRELATIVES "Y113"
                                                      V/TYPE "R"              V/MAX "13"
                         #
@5@ ADDED.

TRANSACTION 65
STATEMENT ADD DICT CONTRACT-TEST 'CONTRACT-DATA'
          "6"                                                  DICT/CODE "N" V/RMC
                                                   V/CORRELATIVES "M2;4;5"    #
@CONTRACT-DATA@ ADDED.

TRANSACTION 66
STATEMENT
          DICT/CODE "D"                                        ADD DICT M/DICT 'XY'
                                                      V/TYPE "L" V/MAX "30"
                                          V/BASE "103" V/MODULO "7"  V/SEPARATOR "2"  #
@XY@ ADDED.
```

```
TRANSACTION 67
STATEMENT ADD DICT PROD-COST-TEST  'CL/IC'  DICT/CODE "D"                                   V/CORRELATIVES "Y41"
          "V3;4" "BCONTRACT-TEST;V:2;3,Y1C1:0;5,Y1C1:21"                                         "JSCONTRACT-
          TEST;3" "SCONTRACT-TEST;2;2"              V/TYPE "R" V/MAX "13" #
@DL/ID@ UPDATED.

TRANSACTION 68
STATEMENT ADD DICT PROD-COST-TEST 'ACT-DT'
          "1"                                                                     DICT/CODE "A" V/RMC
                                                              V/CORRELATIVES "Y113"
          IN "6"          #                                      V/TYPE "RN"               V/MAX "6" V/M
@ACT-DT@ ADDED.

TRANSACTION 69
STATEMENT ADD DICT PROD-COST-TEST '1'
          "1"   V/NAME "ACT-DT"                                                   DICT/CODE "S" V/RMC
                                                              V/RMC/1 "1"   V/CORRELATIVES "Y113"
          MIN "6"         #                                      V/TYPE "RN"               V/MAX "6"  V/
@1@ ADDED.

TRANSACTION 70
STATEMENT ADD DICT PROD-COST-TEST 'CONT'
          "2"                                                                     DICT/CODE "A" V/RMC
          "RLCONTRACT-TEST" "RICONTRACT-TEST;2"               V/CORRELATIVES "Y213" "JBCONTRACT-TEST"
                          #                                      V/TYPE "L"                V/MAX "20"
@CONT@ ADDED.

TRANSACTION 71
STATEMENT ADD DICT PROD-COST-TEST '2'
          "2"   V/NAME "CONT"                                                     DICT/CODE "S" V/RMC
          CONTRACT-TEST" "RLCONTRACT-TEST"                    V/RMC/1 "2"   V/CORRELATIVES "Y213" "JB
                                                                         "RICONTRACT-TEST;2"
@2@ ADDED.                                   V/TYPE "L"              V/MAX "20"             #
```

```
TRANSACTION 72
STATEMENT ADD DICT PROD-COST-TEST 'PARENT-WBS'                                  DICT/CODE "A" V/RMC
          "3"                                                  V/CORRELATIVES "Y211"
                                                                  V/TYPE "R"                V/MAX "13"
                          #
@PARENT-WBS@ ADDED.


TRANSACTION 73
STATEMENT ADD DICT PROD-COST-TEST '3'                                           DICT/CODE "S" V/RMC
          "3"    V/NAME "PARENT-WBS"                         V/RMC/1 "3"    V/CORRELATIVES "Y211"
                                                                  V/TYPE "R"                V/MAX "13"
                          #
@3@ ADDED.


TRANSACTION 74
STATEMENT ADD DICT PROD-COST-TEST 'COMPOSED-OF-WBS'                             DICT/CODE "A" V/RMC
          "4"                                                  V/CORRELATIVES "Y111"
                                                                  V/TYPE "R"                V/MAX "13"
                          #
@COMPOSED-OF-WBS@ ADDED.


TRANSACTION 75
STATEMENT ADD DICT PROD-COST-TEST '4'                                           DICT/CODE "S" V/RMC
          "4"    V/NAME "COMPOSED-OF-WBS"                    V/RMC/1 "4"    V/CORRELATIVES "Y111"
                                                                  V/TYPE "R"                V/MAX "13"
                          #
@4@ ADDED.


TRANSACTION 76
STATEMENT ADD DICT PROD-COST-TEST 'WBS-NOMEN'                                   DICT/CODE "A" V/RMC
          "5"                                                  V/CORRELATIVES "Y211"
                                                                  V/TYPE "R"                V/MAX "50"
                          #
@WBS-NOMEN@ ADDED.
```

```
TRANSACTION 77
STATEMENT ADD DICT PROD-COST-TEST '5'
          "5"    V/NAME "ABS-NOMEN"                                    DICT/CODE "S" V/RMC
                                                          V/RMC/1 "5"    V/CORRELATIVES "Y211"
                                                             V/TYPE "R"                V/MAX "50"
                          #
@5@ ADDED.


TRANSACTION 78
STATEMENT ADD DICT PROD-COST-TEST 'COST-CAT-TYPE'                       DICT/CODE "A" V/RMC
          "6"                                           V/CORRELATIVES "Y111" "D1:7:8:9:25"
                                                             V/TYPE "L"                V/MAX "25"
                          #
@COST-CAT-TYPE@ ADDED.


TRANSACTION 79
STATEMENT ADD DICT PROD-COST-TEST '6'                                   DICT/CODE "S" V/RMC
          "6"    V/NAME "COST-CAT-TYPE"                        V/RMC/1 "6"    V/CORRELATIVES "Y111" "D1
          :7:8:9:25"                                                    V/TYPE "L"                V/MAX "25"
                          #
@6@ ADDED.


TRANSACTION 80
STATEMENT ADD DICT PROD-COST-TEST 'CONT-TGT'                            DICT/CODE "A" V/RMC
          "7"                                           V/CORRELATIVES "Y311" "D2:6" "I10:Y311"
                                                V/CONV "MS"    V/TYPE "R"                V/MAX "14"
                          #
@CONT-TGT@ ADDED.


TRANSACTION 81
STATEMENT ADD DICT PROD-COST-TEST '7'                                   DICT/CODE "S" V/RMC
          "7"    V/NAME "CONT-TGT"                             V/RMC/1 "7"    V/CORRELATIVES "Y311" "D2
          :6" "I10:Y311"                        V/CONV "MS"       V/TYPE "R"                V/MAX "14"
                          #
```

```
@7@ ADDED.

TRANSACTION 82
STATEMENT ADD DICT PROD-COST-TEST 'ACTL-TO-DT'                                                 DICT/CODE "A" V/RMC
          "8"                                                              V/CORRELATIVES "Y311" "D2;6" "I11;Y311"
          "I24;Y311" "I25;Y311"                        V/CONV "MS"           V/TYPE "R"                 V/MAX "14"
                     #
@ACTL-TO-DT@ ADDED.

TRANSACTION 83
STATEMENT ADD DICT PROD-COST-TEST '8'                                                          DICT/CODE "S" V/RMC
          "8"   V/NAME "ACTL-TO-DT"                                        V/RMC/1 "8"   V/CORRELATIVES "Y311" "D2
          ;6" "I11;Y311" "I24;Y311" "I25;Y311"         V/CONV "MS"           V/TYPE "R"                 V/MAX "14"
                     #
@8@ ADDED.

TRANSACTION 84
STATEMENT ADD DICT PROD-COST-TEST 'PROJ-AT-COMPL'                                              DICT/CODE "A" V/RMC
          "9"                                                              V/CORRELATIVES "Y311" "D2;6" "I24;Y312"
          "I25;Y312"                                   V/CONV "MS"           V/TYPE "R"                 V/MAX "14"
                     #
@PROJ-AT-COMPL@ ADDED.

TRANSACTION 85
STATEMENT ADD DICT PROD-COST-TEST '9'                                                          DICT/CODE "S" V/RMC
          "9"   V/NAME "PROJ-AT-COMPL"                                     V/RMC/1 "9"   V/CORRELATIVES "Y311" "D2
          ;6" "I24;Y312" "I25;Y312"                    V/CONV "MS"           V/TYPE "R"                 V/MAX "14"
                     #
@9@ ADDED.

TRANSACTION 86
STATEMENT ADD DICT PROD-COST-TEST 'TEST-VARIANCE-3'                                            DICT/CODE "A" V/RMC
          "25"                                                             V/CORRELATIVES "Y113" "D2;6"
                                                       V/CONV "MS"           V/TYPE "R"                 V/MAX "14"
```

```
                                #
@TEST-VARIANCE-30 ADDED.


TRANSACTION 87
STATEMENT ADD DICT PROD-COST-TEST '25'                                    DICT/CODE "S" V/RMC
          "25"  V/NAME "TEST-VARIANCE"                    V/RMC/1 "25"   V/CORRELATIVES "Y113" "D2
          :6"                                V/CONV "MS"     V/TYPE "R"                V/MAX "14"
                                #
@25@ ADDED.


TRANSACTION 88
STATEMENT ADD DICT PROD-COST-TEST 'SUB-TOT-TGT'                           DICT/CODE "A" V/RMC
          "10"                                            V/CORRELATIVES "Y113"
                                V/CONV "MS"     V/TYPE "R"                V/MAX "16"
                                #
@SUB-TOT-TGT@ ADDED.


TRANSACTION 89
STATEMENT ADD DICT PROD-COST-TEST '1C'                                    DICT/CODE "S" V/RMC
          "10"  V/NAME "SUB-TOT-TGT"                      V/RMC/1 "10"   V/CORRELATIVES "Y113"
                                V/CONV "MS"     V/TYPE "R"                V/MAX "16"
                                #
@10@ ADDED.


TRANSACTION 90
STATEMENT ADD DICT PROD-COST-TEST 'SUB-TOT-ACTL'                          DICT/CODE "A" V/RMC
          "11"                                            V/CORRELATIVES "Y113"
                                V/CONV "MS"     V/TYPE "R"                V/MAX "16"
                                #
@SUB-TOT-ACTL@ ADDED.


TRANSACTION 91
STATEMENT ADD DICT PROD-COST-TEST '11'                                    DICT/CODE "S" V/RMC
          "11"  V/NAME "SUB-TOT-ACTL"                     V/RMC/1 "11"   V/CORRELATIVES "Y113"
```

```
                              *                    V/CONV "MS"          V/TYPE "R"            V/MAX "16"
@11@ ADDED.

TRANSACTION 92
STATEMENT ADD DICT PROD-COST-TEST 'SUB-TOT-PROJ-AT-COMPL'                                  DICT/CODE "A" V/RMC
          "12"                                                    V/CORRELATIVES "Y113"
                                                   V/CONV "MS"         V/TYPE "R"            V/MAX "16"
                              *
@SUB-TOT-PROJ-AT-COMPL@ ADDED.

TRANSACTION 93
STATEMENT ADD DICT PROD-COST-TEST '12'                                                     DICT/CODE "S" V/RMC
          "12"  V/NAME "SUB-TOT-PROJ-AT-COMPL"                    V/RMC/1 "12"  V/CORRELATIVES "Y113"
                                                   V/CONV "MS"         V/TYPE "R"            V/MAX "16"
                              *
@12@ ADDED.

TRANSACTION 94
STATEMENT ADD DICT PROD-COST-TEST 'TGT-G/A'                                                DICT/CODE "A" V/RMC
          "13"                                                    V/CORRELATIVES "Y211"
                                                   V/CONV "MS"         V/TYPE "R"            V/MAX "14"
                              *
@TGT-G/A@ ADDED.

TRANSACTION 95
STATEMENT ADD DICT PROD-COST-TEST '13'                                                     DICT/CODE "S" V/RMC
          "13"  V/NAME "TGT-G/A"                                  V/RMC/1 "13"  V/CORRELATIVES "Y211"
                                                   V/CONV "MS"         V/TYPE "R"            V/MAX "14"
                              *
@13@ ADDED.

TRANSACTION 96
STATEMENT ADD DICT PROD-COST-TEST 'ACTL-G/A'                                               DICT/CODE "A" V/RMC
```

```
        "14"                                              V/CORRELATIVES "Y211"
                                          V/CONV "MS"       V/TYPE "R"             V/MAX "14"
                             #
@ACTL-G/A@ ADDED.

TRANSACTION 97
STATEMENT ADD DICT PROD-COST-TEST '14'                                 DICT/CODE "S" V/RMC
        "14"  V/NAME "ACTL-G/A"                   V/RMC/1 "14"  V/CORRELATIVES "Y211"
                                          V/CONV "MS"       V/TYPE "R"             V/MAX "14"
                             #
@14@ ADDED.

TRANSACTION 98
STATEMENT ADD DICT PROD-COST-TEST 'PROJ-G/A'                            DICT/CODE "A" V/RMC
        "15"                                      V/CORRELATIVES "Y211"
                                          V/CONV "MS"       V/TYPE "R"             V/MAX "14"
                             #
@PROJ-G/A@ ADDED.

TRANSACTION 99
STATEMENT ADD DICT PROD-COST-TEST '15'                                 DICT/CODE "S" V/RMC
        "15"  V/NAME "PROJ-G/A"                   V/RMC/1 "15"  V/CORRELATIVES "Y211"
                                          V/CONV "MS"       V/TYPE "R"             V/MAX "14"
                             #
@15@ ADDED.

TRANSACTION 100
STATEMENT ADD DICT PROD-COST-TEST 'TOT-TGT'                             DICT/CODE "A" V/RMC
        "16"                                      V/CORRELATIVES "F+;10;13"
                                          V/CONV "MS"       V/TYPE "R"             V/MAX "16"
                             #
@TOT-TGT@ ADDED.

TRANSACTION 101
```

```
STATEMENT ADD DICT PROD-COST-TEST 'TCT-ACTL'                                              DICT/CODE "A" V/RMC
          "17"                                                   V/CORRELATIVES "F+;11;14"
                                               V/CONV "MS"          V/TYPE "R"                     V/MAX "16"
                           #
@TOT-ACTL# ADDED.

TRANSACTION 1C2
STATEMENT ADD DICT PROD-COST-TEST '17'                                                    DICT/CODE "S" V/RMC
          "17"  V/NAME "TOT-ACTL"                                V/RMC/1 "17"  V/CORRELATIVES "F+;11;14"
                                               V/CONV "MS"          V/TYPE "R"                     V/MAX "16"
                           #
@17@ ADDED.

TRANSACTION 103
STATEMENT ADD DICT PROD-COST-TEST 'TCT-PROJ'                                              DICT/CODE "A" V/RMC
          "19"                                                   V/CORRELATIVES "F+;12;15"
                                               V/CONV "MS"          V/TYPE "R"                     V/MAX "16"
                           #
@TOT-PROJ@ ADDED.

TRANSACTION 1C4
STATEMENT ADD DICT PROD-COST-TEST '19'                                                    DICT/CODE "S" V/RMC
          "19"  V/NAME "TOT-PROJ"                                V/RMC/1 "18"  V/CORRELATIVES "F+;12;15"
                                               V/CONV "MS"          V/TYPE "R"                     V/MAX "16"
                           #
@18@ ADDED.

TRANSACTION 1C5
STATEMENT ADD DICT PROD-COST-TEST 'WRK-IN-PROCESS-M/F-INDX'                               DICT/CODE "A" V/RMC
          "19"                                                   V/CORRELATIVES "Y211"
                                                                    V/TYPE "R"                     V/MAX "6"
                           #
@WRK-IN-PROCESS-M/F-INDX@ ADDED.
```

```
TRANSACTION 106
STATEMENT ADD DICT PROD-COST-TEST '19'                                              DICT/CODE "S" V/RMC
          "19"  V/NAME "WRK-IN-PROCESS-M/F-INCX"          V/RMC/1 "19"   V/CORRELATIVES "Y211"
                                                            V/TYPE "R"                  V/MAX "6"
                    *
@19@ ADDED.

TRANSACTION 107
STATEMENT ADD DICT PROD-COST-TEST 'REPT-DT'                                         DICT/CODE "A" V/RMC
          "20"                                            V/CORRELATIVES "Y211"
                                          V/CONV "D"        V/TYPE "R"                  V/MAX "11"
                    *
@REPT-DT@ ADDED.

TRANSACTION 108
STATEMENT ADD DICT PROD-COST-TEST '20'                                              DICT/CODE "S" V/RMC
          "20"  V/NAME "REPT-DT"                          V/RMC/1 "20"   V/CORRELATIVES "Y211"
                                          V/CONV "D"        V/TYPE "R"                  V/MAX "11"
                    *
@20@ ADDED.

TRANSACTION 109
STATEMENT ADD DICT PROD-COST-TEST 'PBS'                                             DICT/CODE "A" V/RMC
          "21"                                            V/CORRELATIVES "Y111" "JSCONTRACT-TEST;5
          "                                                 V/TYPE "R"                  V/MAX "13"
                    *
@PBS@ ADDED.

TRANSACTION 110
STATEMENT ADD DICT PROD-COST-TEST '21'                                              DICT/CODE "S" V/RMC
          "21"  V/NAME "PBS"                              V/RMC/1 "21"   V/CORRELATIVES "Y111" "JS
          CONTRACT-TEST;5"                                  V/TYPE "R"                  V/MAX "13"
                    *
@21@ ADDED.
```

```
TRANSACTION 111
STATEMENT ADD DICT PROD-COST-TEST 'REMARKS'                                   DICT/CODE "A" V/RMC
          "22"                                             V/CORRELATIVES "Y211"
                                                             V/TYPE "L"                V/MAX "100"
                         #
@REMARKS@ ADDED.

TRANSACTION 112
STATEMENT ADD DICT PROD-COST-TEST '22'                                        DICT/CODE "S" V/RMC
          "22"  V/NAME "REMARKS"                           V/RMC/1 "22"   V/CORRELATIVES "Y211"
                                                             V/TYPE "L"                V/MAX "100"
                         #
@22@ ADDED.

TRANSACTION 113
STATEMENT ADD DICT PROD-COST-TEST 'TEST-VARIANCE-2'                           DICT/CODE "A" V/RMC
          "24"                                             V/CORRELATIVES "Y113"
                                          V/CONV "MS"        V/TYPE "R"                V/MAX "14"
                         #
@TEST-VARIANCE-2@ ADDED.

TRANSACTION 114
STATEMENT ADD DICT PROD-COST-TEST '24'                                        DICT/CODE "S" V/RMC
          "24"  V/NAME "TEST-VARIANCE-2"                   V/RMC/1 "24"   V/CORRELATIVES "Y113"
                                          V/CONV "MS"        V/TYPE "R"                V/MAX "14"
                         #
@24@ ADDED.

TRANSACTION 115
STATEMENT ADD DICT PROD-COST-TEST 'TEST-VARIANCE-4'                           DICT/CODE "A" V/RMC
          "26"                                             V/CORRELATIVES "F-;11;12"
                                          V/CONV "MS"        V/TYPE "R"                V/MAX "16"
                         #
@TEST-VARIANCE-4@ ADDED.
```

```
TRANSACTION 116
STATEMENT ADD DICT PROD-COST-TEST '26'                                    DICT/CODE "S" V/RMC
          "26" V/NAME "TEST-VARIANCE-4"                          V/RMC/1 "26"   V/CORRELATIVES "F-:11:12"
                                                  V/CONV "MS"       V/TYPE "R"                V/MAX "16"
                          #
@26@ ADDED.


TRANSACTION 117
STATEMENT ADD DICT PROD-COST-TEST 'CAT-COUNT'                             DICT/CODE "A" V/RMC
          "27"                                                 V/CORRELATIVES "FC:6"
                                                                  V/TYPE "R"                V/MAX "2"
                          #
@CAT-COUNT@ ADDED.


TRANSACTION 118
STATEMENT ADD DICT PROD-COST-TEST '27'                                    DICT/CODE "S" V/RMC
          "27"  V/NAME "CAT-COUNT"                               V/RMC/1 "27"   V/CORRELATIVES "FC:6"
                                                                  V/TYPE "R"                V/MAX "2"
                          #
@27@ ADDED.


TRANSACTION 119
STATEMENT ADD DICT PROD-COST-TEST 'CONT-TGT-COUNT'                        DICT/CODE "A" V/RMC
          "28"                                                 V/CORRELATIVES "FC:7"
                                                                  V/TYPE "R"                V/MAX "2"
                          #
@CONT-TGT-COUNT@ ADDED.


TRANSACTION 120
STATEMENT ADD DICT PROD-COST-TEST '28'                                    DICT/CODE "S" V/RMC
          "29"   V/NAME "CONT-TGT-COUNT"                         V/RMC/1 "28"   V/CORRELATIVES "FC:7"
                                                                  V/TYPE "R"                V/MAX "2"
                          #
```

```
@28@ ADDED.

TRANSACTION 121
STATEMENT ADD DICT PROD-COST-TEST 'COMPOSED-WBS-COUNT'                        DICT/CODE "A" V/RMC
          "29"                                                  V/CORRELATIVES "FC;4"
                                                                   V/TYPE "R"              V/MAX "2"
                   #
@COMPOSED-WBS-COUNT@ ADDED.

TRANSACTION 122
STATEMENT ADD DICT PROD-COST-TEST '29'                                        DICT/CODE "S" V/RMC
          "29"  V/NAME "COMPOSED-WBS-COUNT"                    V/RMC/1 "29"  V/CORRELATIVES "FC;4"
                                                                   V/TYPE "R"              V/MAX "2"
                   #
@29@ ADDED.

TRANSACTION 123
STATEMENT ADD DICT PROD-COST-TEST 'COST-CAT-TYPESYN'                          DICT/CODE "N" V/RMC
          "6"                                                   V/CORRELATIVES "Y111"
                                                                   V/TYPE "L"              V/MAX "20"
                   #
@COST-CAT-TYPESYN@ ADDED.

TRANSACTION 124
STATEMENT ADD DICT PROD-COST-TEST 'CONT-TGTSYN'                               DICT/CODE "N" V/RMC
          "7"                                                   V/CORRELATIVES "Y311"
                                          V/CONV "MS"              V/TYPE "R"              V/MAX "14"
                   #
@CONT-TGTSYN@ ADDED.

TRANSACTION 125
STATEMENT ADD DICT PROD-COST-TEST 'ACTL-TC-DTSYN'                             DICT/CODE "N" V/RMC
          "8"                                                   V/CORRELATIVES "Y311"
                                          V/CONV "MS"              V/TYPE "R"              V/MAX "14"
```

```
                                                        #
@ACTL-TO-DTSYN@ ADDED.

TRANSACTION 126
STATEMENT ADD DICT PROD-COST-TEST 'PROJ-AT-COMPLSYN'                                                   DICT/CODE "N" V/RMC
          "9"                                                                     V/CORRELATIVES "Y311"
                                                          V/CONV "MS"               V/TYPE "R"                V/MAX "14"
                                                        #
@PROJ-AT-COMPLSYN@ ADDED.

TRANSACTION 127
STATEMENT ADD DICT PROD-COST-TEST 'TEST-VARIANCE-3SYN'                                                 DICT/CODE "N" V/RMC
          "25"                                                                    V/CORRELATIVES "Y113"
                                                          V/CONV "MS"               V/TYPE "R"                V/MAX "14"
                                                        #
@TEST-VARIANCE-3SYN@ ADDED.

TRANSACTION 128
STATEMENT ADD DICT PROD-COST-TEST 'COST-SUMMARY'                                                       DICT/CODE "N" V/RMC
          "90"                                                                    V/CORRELATIVES "M7;8;9"   #
@COST-SUMMARY@ ADDED.

TRANSACTION 129
STATEMENT ADD DICT PROD-COST-TEST 'SUB-TOT-COST-SUMMARY'                                               DICT/CODE "N" V/RMC
          "91"                                                                    V/CORRELATIVES "M10;11;12"   #
@SUB-TOT-COST-SUMMARY@ ADDED.

TRANSACTION 130
STATEMENT ADD DICT PROD-COST-TEST 'G/A-SUMMARY'                                                        DICT/CODE "N" V/RMC
          "92"                                                                    V/CORRELATIVES "M13;14;15"   #
@G/A-SUMMARY@ ADDED.

TRANSACTION 131
```

```
STATEMENT ADD DICT PROD-COST-TEST 'TCT-CCST-SUMMARY'                          DICT/CODE "N" V/RMC
          "93"                                                      V/CORRELATIVES "M16;17;18"   #
@TOT-COST-SUMMARY@ ADDED.

TRANSACTION 132
STATEMENT ADD DICT PROD-COST-TEST 'TEST-VARIANCE-SUMMARY'                     DICT/CODE "N" V/RMC
          "94"                                                      V/CORRELATIVES "M24;25;26"  #
@TEST-VARIANCE-SUMMARY@ ADDED.

TRANSACTION 133
STATEMENT ADD DICT PROD-COST-TEST 'CCUNT-SUMMARY'                             DICT/CODE "N" V/RMC
          "95"                                                      V/CORRELATIVES "M27;28;29"   #
@COUNT-SUMMARY@ ADDED.

TRANSACTION 134
STATEMENT ADD DICT PROD-COST-TEST 'GRAND-SUMMARY'                             DICT/CODE "N" V/RMC
          "96"                                                      V/CORRELATIVES "M7;8;9;10;11;12;13;14;15
          ;16;17;18;24;25;26;27;28;29"   #
@GRAND-SUMMARY@ ADDED.

TRANSACTION 135
STATEMENT ADD DICT PROD-COST-TEST '16'                                        DICT/CODE "S" V/RMC
          "15"  V/NAME "TOT-TGT"                            V/RMC/1 "16"  V/CORRELATIVES "F+;10;13"
                                          V/CONV "MS"          V/TYPE "R"                 V/MAX "16"
                   #
@16@ ADDED.

TRANSACTION 136
STATEMENT ADD TO DICT XY 'PROJ-AT-COMPL' '9' V/CORRELATIVES "I12;V3!1" #
@PROJ-AT-COMPL@ UPDATED.
@9@ UPDATED.

TRANSACTION 137
```

```
STATEMENT                                                                                      ADD ACDT/ICDT-RPT*DT
          -FILE 'LAC/49C077*6806C4'                                            CONTR-NAME "LOCKHEED"
                                                          TIME "1193"
                                     LOC "VAN NUYS CALIF"
          SUMMARY "GYPO ARM FAILURE DURING TIE DOWN TESTS"                                  CAUSE "UNKNOWN"
                                                                               NATURE-DAMAGE "DAMAGE TO CONTROL GYRO AR
          M AND ONF MAIN ROTOR BLADE"                      EFFECT-DAMAGE "TESTING"
                                     CONTR-ACTICN "INVESTIGATING INCIDENT"
          OTHER-PROP-DAM-INJ  "NONF"
            #                                                                                DAI-NO  "16037"
@LAC/490077*680604@ ADDED.

TRANSACTION 138
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/49C077*680604'                                     PERS-STAT "SERIOUSLY
           INJURED"                                                            NO-PERS-INVOL "1"  #
@LAC/490077*680604@ UPDATED.

TRANSACTION 139
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/490077*680604'
          "                                                                                  PERS-STAT "UNINJURED
@LAC/490077*68C604@ UPDATED.                                                  NO-PERS-INVOL "1"   #

TRANSACTION 14C
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/49C077*680604'
           INJURED"                                                                           PERS-STAT "SLIGHTLY
@LAC/490077*680604@ UPDATED.                                                  NO-PERS-INVOL "1"   #

TRANSACTION 141
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488367*680513'
          "                                                                                  CONTR-NAME "LOCKHEED
                                                                         TIME "1200"
                                                      LOC "3/4 MI NNW PT MUGU"
                                      SUMMARY "PILOT EXPERIENCED ROUGHNESS AND NOTICEABLE VIBRATION AT APPROX 2500FT A
          LT AND AT 100 KNOTS; PILOT MADE PRECAUTIONARY LANDING"                              CAUSE "UNKNOWN"
                                                                               NATURE-DAMAGE "VEHICLE FUSELAG AND MAIN
          ROTOR BLADES"                                  EFFECT-CAMAGE "PRODUCTION"
```

```
                    OTHER-PROP-DAM-INJ   CONTR-ACTION "INVESTIGATIVE TEAM DISPATCHED TO SITE"
                                         "NONE"
                    #                                                                              DAI-NO  "15252"
@LAC/488367*680513@ ADDED.

TRANSACTION 142
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488367*680513'
          Y INJURED"                                                                               PERS-STAT  "SERIOUSL
@LAC/488367*680513@ UPDATED.                                                   NO-PERS-INVOL "1" #

TRANSACTION 143
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488367*680513'
          INJURED"                                                                                 PERS-STAT "SLIGHTLY
@LAC/488367*680513@ UPDATED.                                                   NO-PERS-INVOL "1"  #

TRANSACTION 144
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488367*680513'
          D"                                                                                       PERS-STAT  "UNINJURE
@LAC/488367*680513@ UPDATED.                                                   NO-PERS-INVOL "1" #

TRANSACTION 145
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488489*680715'
          "                                                                                        CONTR-NAME "LOCKHEED
                                                                        TIME "0015"
                                                      LOC "PITFALL NEBRASKA"
                                 SUMMARY "PILOT ATTEMPTED INVERTED BUZZING"
          CAUSE "ANTS IN PANTS"
          000"                                                                                     EST-PROP-DAMAGE "150
                                                                    NATURE-DAMAGE "RUINED CIRCUS TENT"
                                                     EFFECT-DAMAGE "DEPLOYMENT"
          OTHER-PROP-DAM-INJ   CONTR-ACTICN "BOUGHT OUT CIRCUS"
                               "CLOWN HAD HEART FAILURE"
          #                                                                                        DAI-NO  "99999"
@LAC/488489*680715@ ADDED.

TRANSACTION 146
```

```
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488489*680715'                              PERS-STAT  "KILLED"
                                                                    NO-PERS-INVOL "2" #
@LAC/488489*680715@ UPDATED.

TRANSACTION 147
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488489*680715'                              PERS-STAT "SLIGHTLY
          INJURED"                                                  NO-PERS-INVOL "9" #
@LAC/488489*680715@ UPDATED.

TRANSACTION 148
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488489*680715'                              PERS-STAT  "BADLY FR
          IGHTENED"                                                 NO-PERS-INVOL "6" #
@LAC/488489*680715@ UPDATED.

TRANSACTION 149
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/493718*680906'                              CONTR-NAME "LOCKHEED
          "                                                         TIME "1123"
                                             LOC "OXNARD,CALIF"
                        SUMMARY "DURING GROUND RUN A ROTOR BLADE STRUCK THE TAIL BOOM AND KNOCKED OFF TH
          E COCKPIT CANCPY,ACFT 66-8828"                                                     CAUSE "LONG PERIOD O
          SCILLATION"                                               NATURE-DAMAGE "ALL FOUR MAIN ROTOR BLADE
          S, THE FORWARD FUSELAGE SKIN AND CANCPY, THE AFT FUSELAGE SKIN, AND THE LEADING EDGE OF THE VERTICAL
           FIN"                  EFFECT-DAMAGE "TESTING"
          CONTR-ACTION "INVESTIGATIVE TESTING INITIATED"                                     OTHER-PROP-DAM-INJ
          "NONE"                                                    DAI-NO  "26603"            #
@LAC/493718*680906@ ADDED.

TRANSACTION 150
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/493718*680906'                              PERS-STAT  "SLIGHTLY
          INJURED"                                                  NO-PERS-INVOL "1" #
@LAC/493718*680906@ UPDATED.

TRANSACTION 151
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/493718*680906'                              PERS-STAT "SERIOUSLY
```

```
          INJURED"                                                    NO-PERS-INVOL "1" #
@LAC/493718*680906@ UPDATED.


TRANSACTION 152
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/493718*680906'                                  PERS-STAT  "UNINJURE
          D"                                                          NO-PERS-INVOL "1" #
@LAC/493718*680906@ UPDATED.


TRANSACTION 153
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488378*680614'                                  CONTR-NAME "GENERAL
          ELECTRIC"                                                   TIME "0415"
                                                LOC "ZANADU"
                              SUMMARY "ENGINE CVER SPEED"
          CAUSE "HOT PILOT"                                                              EST-PROP-DAMAGE "500
          00"                                                         NATURE-DAMAGE "RUINED WHEAT CROP"
                                                EFFECT-DAMAGE "TRAINING"
                             CONTR-ACTICN "CHASTIZED PILOT"
          OTHER-PROP-DAM-INJ  "LOSS CF US PRESTIGE"                                      DAI-NO  "99998"
            #
@LAC/488378*680614@ ADDED.


TRANSACTION 154
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488378*680614'                                  PERS-STAT  "UNINJURE
          D"                                                          NO-PERS-INVOL "1" #
@LAC/488378*680614@ UPDATED.


TRANSACTION 155
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488378*680614'                                  PERS-STAT "SLIGHTLY
          INJURED"                                                    NO-PERS-INVOL "1" #
@LAC/488378*680614@ UPDATED.


TRANSACTION 156
STATEMENT ADD ACDT/ICDT-RPT*DT-FILE 'LAC/488378*680614'                                  PERS-STAT  "KILLED"
                                                                      NO-PERS-INVOL "1" #
```

```
@LAC/488378*680614@ UPDATED.


TRANSACTION 157
STATEMENT                                                                                    ADD CONTRACT-TEST 'D
          AAJ01-68-C-1749(H)'FMC*CONTR-NAME "36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA" CONTRACTI
          NG-AGCY "AVSCOM"#
@DAAJ01-68-C-1749(H)@ ADDED.


TRANSACTION 158
STATEMENT ADD CONTRACT-TEST 'DAAJ01-68-C-1530(53)' FMC*CONTR-NAME "99207*GENERAL ELECTRIC COMPANY, ENGINE GROU
          P, MILITARY ENGINE DIVISION, WEST LYNN, MASS" CONTRACTING-AGCY "AVSCOM" #
@DAAJ01-68-C-1530(53)@ ADDED.


TRANSACTION 159
STATEMENT ADD CONTRACT-TEST 'DAA11-66-C-3667(H)' FMC*CONTR-NAME "36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, C
          ALIFORNIA" CONTRACTING-AGCY "AVSCOM"#
@DAA11-66-C-3667(H)@ ADDED.


TRANSACTION 160
STATEMENT                                                                                    ADD PROD-COST-TEST '
          11100' CONT "DAAJ01-68-C-1749(H)"PARENT-WBS "11000" COMPOSED-OF-WBS "11110" "11120" "11130" WBS-NOME
          N "AIRFRAME" TGT-G/A "13125445." ACTL-G/A   "1087578."PROJ-G/A "14318167." WRK-IN-PROCESS-M/F-INDX "
          20992" REPT-DT "28  FEB 69" PBS "111C00000" REMARKS "TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC" #
@11100@ ADDED.


TRANSACTION 161
STATEMENT ADD PROD-COST-TEST '10000' CONT "DAAJ01-68-C-1749(H)"                              COMPOSED-OF-WBS
                                                                                "11000" "12000" "13000" "14000" "150
          00" "16000" "17000" "18000" WBS-NOMEN   "CHEYENNE WEAPON SYSTEM" TGT-G/A "40885108." ACTL-G/A "68374
          93." PROJ-G/A       "74220100." WRK-IN-PROCESS-M/F-INDX "20992" REPT-DT "28 FEB 69" PBS "11100000C"
          REMARKS "TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC" #
@10000@ ADDED.
```

```
TRANSACTION 162
STATEMENT ADD PROD-COST-TEST '11000' CONT "DAAJC1-68-C-1749(H)" PARENT-WBS "10000"          COMPOSED-OF-WBS "111
          00" "11600" "11500" "11400" "11300" "11200" WBS-NOMEN "AIR  VEHICLE" TGT-G/A "25930079." ACTL-G/A "2
          035587." PROJ-G/A "2567250C." WRK-IA-PROCESS-M/F-INDX     "20992" REPT-DT "28 FEB 69" PBS "111000000"
           REMARKS "TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC" #
@11000@ ADDED.


TRANSACTION 163
STATEMENT ADD PROD-COST-TEST '11100' COST-CAT-TYPE "DEVELOPMENT" CONT-TGT "2530000"ACTL-TO-DT "38540" PROJ-AT-
          COMPL "2785000" #
@11100@ UPDATED.
** NOTE ** - IN ITEM ID @11100@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 164
STATEMENT ADD PROD-COST-TEST '11100' COST-CAT-TYPE "TOOLING" CONT-TGT "12630450" ACTL-TO-DT "1500240" PROJ-AT-
          COMPL "11680000" #
@11100@ UPDATED.
** NOTE ** - IN ITEM ID @11100@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 165
STATEMENT ADD PROD-COST-TEST '11100' COST-CAT-TYPE "PRODUCTION" CONT-TGT "74093000" ACTL-TO-DT "7360000" PROJ-
          AT-COMPL "93450000" #
@11100@ UPDATED.
** NOTE ** - IN ITEM ID @11100@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 166
STATEMENT ADD PROD-COST-TEST '11100' COST-CAT-TYPE "MISCELLANEOUS" CONT-TGT "6034000" ACTL-TO-DT "653000" PROJ
          -AT-COMPL "7521670" #
@11100@ UPDATED.
** NOTE ** - IN ITEM ID @11100@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."
```

```
TRANSACTION 167
STATEMENT ADD PROD-COST-TEST '11100' COST-CAT-TYPE "OTHER SP AND SUPPORT" CONT-TGT "35967000" ACTL-TO-DT "1324
          000" PROJ-AT-COMPL "37685000" #
@111000 UPDATED.
** NOTE ** - IN ITEM ID @111000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 168
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "DEVELOPMENT" CONT-TGT "5000000" ACTL-TO-DT "342000"PROJ-AT
          -COMPL "5759000" #
@100000 UPDATED.
** NOTE ** - IN ITEM ID @100000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 169
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "TOOLING" CONT-TGT "7897000" ACTL-TO-DT "3569781" PROJ-AT-C
          OMPL "21300000" #
@100000 UPDATED.
** NOTE ** - IN ITEM ID @100000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 170
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "PRODUCTION" CONT-TGT "126073000" ACTL-TO-DT "23542110" PRO
          J-AT-COMPL "132540000" #
@100000 UPDATED.
** NOTE ** - IN ITEM ID @100000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 171
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "PUBLICATIONS" CONT-TGT "67007000" ACTL-TO-DT "567100" PRO
          J-AT-COMPL "65430000" #
@100000 UPDATED.
** NOTE ** - IN ITEM ID @100000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."
```

```
TRANSACTION 172
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "MISCELLANEOUS" CONT-TGT "27000000" ACTL-TO-DT "2450675" PR
          OJ-AT-COMPL "35870000" #
@10000@ UPDATED.
** NOTE ** - IN ITEM ID @10000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 173
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "SPARES" CONT-TGT "31870000" ACTL-TO-DT "4782563" PROJ-AT-C
          OMPL "31870000" #
@10000@ UPDATED.
** NOTE ** - IN ITEM ID @10000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 174
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "GSE" CONT-TGT "87000540" ACTL-TO-DT "21467530" PROJ-AT-COM
          PL "93432000" #
@10000@ UPDATED.
** NOTE ** - IN ITEM ID @10000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 175
STATEMENT ADD PROD-COST-TEST '10000' COST-CAT-TYPE "OTHER SP AND SUPPORT" CONT-TGT "47003540" ACTL-TO-DT "6549
          200" PROJ-AT-COMPL "56000000" #
@10000@ UPDATED.
** NOTE ** - IN ITEM ID @10000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 176
STATEMENT ADD PROD-COST-TEST '11000' COST-CAT-TYPE "DEVELOPMENT" CONT-TGT "3750000" ACTL-TO-DT "232000" PROJ-A
          T-COMPL "30250000" #
@11000@ UPDATED.
** NOTE ** - IN ITEM ID @11000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
```

```
ND IS "25."

TRANSACTION 177
STATEMENT ADD PROD-COST-TEST '11000' CCST-CAT-TYPE "TOOLING" CONT-TGT "153450C0" ACTL-TO-DT "2064000" PROJ-AT-
          COMPL "18936000" #
a11000a UPDATED.
** NOTE ** - IN ITEM ID a11000a ONE CR MCRE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."

TRANSACTION 178
STATEMENT ADD PROD-COST-TEST '11000' COST-CAT-TYPE "PRODUCTION" CONT-TGT "114332000" ACTL-TO-DT "12109000" PRO
          J-AT-COMPL "98674000" #
a11000a UPDATED.
** NOTE ** - IN ITEM ID a11000a ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."

TRANSACTION 179
STATEMENT ADD PROD-COST-TEST '11000' COST-CAT-TYPE "MISCELLANEOUS" CONT-TGT "14031789" ACTL-TO-DT "1321462" PR
          OJ-AT-COMPL "16325000" #
a11000a UPDATED.
** NOTE ** - IN ITEM ID a11000a ONE OR MCRE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FCU
ND IS "25."

TRANSACTION 180
STATEMENT ADD PROD-COST-TEST '11000' COST-CAT-TYPE "PUBLICATIONS" CONT-TGT "52737000" ACTL-TO-DT "894000" PROJ
          -AT-COMPL "58350000" #
a11000a UPDATED.
** NOTE ** - IN ITEM ID a11000a ONE CR MCRE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."

TRANSACTION 181
STATEMENT ADD PROD-COST-TEST '11000' CCST-CAT-TYPE "SPARES" CONT-TGT "17855000" ACTL-TO-DT "1368000" PROJ-AT-C
          OMPL "18240000" #
a11000a UPDATED.
```

```
** NOTE ** - IN ITEM ID @110000 ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 182
STATEMENT ADD PROD-COST-TEST '11000' COST-CAT-TYPE "OTHER SP AND SUPPORT" CONT-TGT "41250000"ACTL-TO-DT "23674
          12" PROJ-AT-COMPL "4317500C" #
@11000@ UPDATED.
** NOTE ** - IN ITEM ID @11000@ ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOU
ND IS "25."


TRANSACTION 183
STATEMENT                                                                          LIST DICT  ACDT/ICDT
          -RPT*DT-FILE #


ACDT/ICDT-RPT*DT-FILE : 3
DICT/CODE : S
DL/BASE : 3
DL/MODULO : TIME
DL/SEPARATION : 3
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 4


ACDT/ICDT-RPT*DT-FILE : OTHER-PROP-DAM-INJ
DICT/CODE : A
DL/BASE : 13
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300


ACDT/ICDT-RPT*DT-FILE : 14
DICT/CODE : S
DL/BASE : 14
DL/MODULO : DAI-NO
```

```
DL/SEPARATION : 14
DL/CORRELATIVES : Y111
DL/TYPE : L
DL/MAX : 10


ACDT/ICDT-RPT*DT-FILE : LOC
DICT/CODE : A
DL/BASE : 4
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : 4
DICT/CODE : S
DL/BASE : 4
DL/MODULO : LOC
DL/SEPARATION : 4
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : 7
DICT/CODE : S
DL/BASE : 7
DL/MODULO : PERS-STAT
DL/SEPARATION : 7
DL/CORRELATIVES : Y111 : 01:8
DL/TYPE : L
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : 9
DICT/CODE : S
DL/BASE : 9
DL/MODULO : EST-PROP-DAMAGE
DL/SEPARATION : 9
```

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```
DL/CONVERSION : 4S
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 15


ACDT/ICDT-RPT*DT-FILE : 12
DICT/CODE : S
DL/BASE : 12
DL/MODULO : CONTR-ACTION
DL/SEPARATION : 12
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300


ACDT/ICDT-RPT*DT-FILE : CONTR-NAME
DICT/CODE : A
DL/BASE : 2
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : 2
DICT/CODE : S
DL/BASE : 2
DL/MODULO : CONTR-NAME
DL/SEPARATION : 2
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : PERS-STAT
DICT/CODE : A
DL/BASE : 7
DL/CORRELATIVES : Y111 : 01:8
DL/TYPE : L
```

```
DL/MAX : 25


ACDT/ICDT-RPT*DT-FILE : NO-PERS-INVOL
DICT/CODE : A
DL/BASE : 8
DL/CORRELATIVES : 02;7 : V211
DL/TYPE : L
DL/MAX : 1


ACDT/ICDT-RPT*DT-FILE : DAI-NO
DICT/CODE : A
DL/BASE : 14
DL/CORRELATIVES : V111
DL/TYPE : L
DL/MAX : 10


ACDT/ICDT-RPT*DT-FILE : TIME
DICT/CODE : A
DL/BASE : 3
DL/CORRELATIVES : V211
DL/TYPE : R
DL/MAX : 4


ACDT/ICDT-RPT*DT-FILE : 8
DICT/CODE : S
DL/BASE : 8
DL/MODULO : NO-PERS-INVOL
DL/SEPARATION : 8
DL/CORRELATIVES : 02;7 : V211
DL/TYPE : L
DL/MAX : 1


ACDT/ICDT-RPT*DT-FILE : 11
DICT/CODE : S
```

```
DL/BASE : 11
DL/MODULO : EFFECT-DAMAGE
DL/SEPARATION : 11
DL/CORRELATIVES : V111
DL/TYPE : L
DL/MAX : 12


ACDT/ICDT-RPT*DT-FILE : 1
DICT/CODE : S
DL/BASE : 1
DL/MODULO : ACT-DT
DL/SEPARATION : 1
DL/CORRELATIVES : V113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6


ACDT/ICDT-RPT*DT-FILE : 6
DICT/CODE : S
DL/BASE : 6
DL/MODULO : CAUSE
DL/SEPARATION : 6
DL/CORRELATIVES : V211
DL/TYPE : L
DL/MAX : 300


ACDT/ICDT-RPT*DT-FILE : EST-PROP-DAMAGE
DICT/CODE : A
DL/BASE : 9
DL/CONVERSION : 99
DL/CORRELATIVES : V211
DL/TYPE : R
DL/MAX : 15


ACDT/ICDT-RPT*DT-FILE : ACDT/ICDT-RPT
```

```
DICT/CODE : N
DL/BASE : 0
DL/CORRELATIVES : G*1
DL/TYPE : L
DL/MAX : 15


ACDT/ICDT-RPT*DT-FILE : DL/ID
DICT/CODE : D
DL/BASE : 160
DL/MODULO : 7
DL/SEPARATION : 2
DL/CORRELATIVES : Y41
DL/TYPE : L*R
DL/MAX : 15*6


ACDT/ICDT-RPT*DT-FILE : ACT-DT
DICT/CODE : A
DL/BASE : 1
DL/CORRELATIVES : Y113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6


ACDT/ICDT-RPT*DT-FILE : S
DICT/CODE : S
DL/BASE : 5
DL/MODULO : SUMMARY
DL/SEPARATION : 5
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300


ACDT/ICDT-RPT*DT-FILE : CAUSE
DICT/CODE : A
DL/BASE : 6
```

```
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300

ACDT/ICDT-RPT*DT-FILE : 10
DICT/CODE : S
DL/BASE : 10
DL/MODULO : NATURE-DAMAGE
DL/SEPARATION : 10
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300

ACDT/ICDT-RPT*DT-FILE : EFFECT-DAMAGE
DICT/CODE : A
DL/BASE : 11
DL/CORRELATIVES : Y111
DL/TYPE : L
DL/MAX : 12

ACDT/ICDT-RPT*DT-FILE : NO-PERS-INVOL-SYN
DICT/CODE : N
DL/BASE : 8
DL/CORRELATIVES : Y113
DL/TYPE : L
DL/MAX : 1

ACDT/ICDT-RPT*DT-FILE : SUMMARY
DICT/CODE : A
DL/BASE : 5
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300
```

ACDT/ICDT-RPT*DT-FILE : NATURE-DAMAGE
DICT/CODE : A
DL/BASE : 10
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300

ACDT/ICDT-RPT*DT-FILE : CONTR-ACTION
DICT/CODE : A
DL/BASE : 12
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300

ACDT/ICDT-RPT*DT-FILE : 13
DICT/CODE : S
DL/BASE : 13
DL/MODULO : OTHER-PROP-DAM-INJ
DL/SEPARATION : 13
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 300

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TRANSACTION 184
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE #

ACDT/ICDT-RPT*DT-FILE : LAC/488367*68C513
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 1200
LOC : 3/4 MI NNW PT MUGU
SUMMARY : PILOT EXPERIENCED ROUGHNESS AND NOTICEABLE VIBRATION AT APPROX 2500FT ALT AND AT 100 KNOTS; PILOT MA

DE PRECAUTIONARY LANDING
CAUSE : UNKNOWN
PERS-STAT : SERIOUSLY INJURED : SLIGHTLY INJURED : UNINJURED
NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : VEHICLE FUSELAG AND MAIN ROTOR BLADES
EFFECT-DAMAGE : PRODUCTION
CONTR-ACTION : INVESTIGATIVE TEAM DISPATCHED TO SITE
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 15252

ACDT/ICDT-RPT*DT-FILE : LAC/493718*68C506
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 1123
LOC : OXNARD,CALIF
SUMMARY : DURING GROUND RUN A ROTOR BLADE STRUCK THE TAIL BOOM AND KNOCKED OFF THE COCKPIT CANOPY,ACFT 66-8828
CAUSE : LONG PERIOD OSCILLATION
PERS-STAT : SLIGHTLY INJURED : SERIOLSLY INJURED : UNINJURED
NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : ALL FOUR MAIN ROTOR BLADES, THE FORWARD FUSELAGE SKIN AND CANOPY, THE AFT FUSELAGE SKIN, AND T
HE LEADING EDGE OF THE VERTICAL FIN
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATIVE TESTING INITIATED
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 26603

ACDT/ICDT-RPT*DT-FILE : LAC/488489*68C715
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 0015
LOC : PITFALL NEBRASKA
SUMMARY : PILOT ATTEMPTED INVERTED BUZZING
CAUSE : ANTS IN PANTS
PERS-STAT : KILLED : SLIGHTLY INJURED : BADLY FRIGHTENED
NO-PERS-INVOL : 2 : 9 : 6
EST-PROP-DAMAGE : 150,000.00
NATURE-DAMAGE : RUINED CIRCUS TENT

EFFECT-DAMAGE : DEPLOYMENT
CONTR-ACTION : BOUGHT OUT CIRCUS
OTHER-PROP-DAM-INJ : CLOWN HAD HEART FAILURE
DAI-NO : 99999

ACDT/ICDT-RPT*DT-FILE : LAC/488378*68C614
ACT-DT : 06-25-69
CONTR-NAME : GENERAL ELECTRIC
TIME : 0415
LOC : ZANADU
SUMMARY : ENGINE OVER SPEED
CAUSE : HOT PILOT
PERS-STAT : UNINJURED : SLIGHTLY INJURED : KILLED
  NO-PERS-INVOL : 1 : 1 : 1
EST-PROP-DAMAGE : 50,COC.00
NATURE-DAMAGE : RUINED WHEAT CROP
EFFECT-DAMAGE : TRAINING
CONTR-ACTION : CHASTIZED PILOT
OTHER-PROP-DAM-INJ : LOSS OF US PRESTIGE
DAI-NO : 99998

ACDT/ICDT-RPT*DT-FILE : LAC/490C77*680604
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 1103
LOC : VAN NUYS CALIF
SUMMARY : GYRO ARM FAILURE DURING TIE DOWN TESTS
CAUSE : UNKNOWN
PERS-STAT : SERIOUSLY INJURED : UNINJURED : SLIGHTLY INJURED
  NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : DAMAGE TO CONTROL GYRO ARM AND ONE MAIN ROTOR BLADE
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATING INCIDENT
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 16037

*****

TRANSACTION 185
STATEMENT LIST THE CONTR-NAME FOR ALL ACDT/ICDT-RPT*DT-FILE #

ACDT/ICDT-RPT*DT-FILE.. CONTR-NAME.....

LAC/488367 680513 LOCKHEED
LAC/493718 680906 LOCKHEED
LAC/488499 680715 LOCKHEED
LAC/488378 680614 GENERAL ELECTRIC
LAC/49CC77 680604 LOCKHEED

*****

TRANSACTION 186
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE WITH CONTR-NAME "LOCKHEED" #

ACDT/ICDT-RPT*DT-FILE : LAC/488367*680513
ACT-DT : 06-25-68
CONTR-NAME : LOCKHEED
TIME : 1200
LOC : 3/4 MI NNW PT MUGU
SUMMARY : PILOT EXPERIENCED ROUGHNESS AND NOTICEABLE VIBRATION AT APPROX 2500FT ALT AND AT 100 KNOTS; PILOT MA
DE PRECAUTIONARY LANDING
CAUSE : UNKNOWN
PERS-STAT : SERIOUSLY INJURED : SLIGHTLY INJURED : UNINJURED
NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : VEHICLE FUSELAG AND MAIN ROTOR BLADES
EFFECT-DAMAGE : PRODUCTION
CONTR-ACTION : INVESTIGATIVE TEAM DISPATCHED TO SITE
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 15252

ACDT/ICDT-RPT*DT-FILE : LAC/493718*6EC506
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 1123
LOC : OXNARD,CALIF
SUMMARY : DURING GROUND RUN A ROTOR BLADE STRUCK THE TAIL BOOM AND KNOCKED OFF THE COCKPIT CANOPY.ACFT 66-8828
CAUSE : LONG PERIOD OSCILLATION
PERS-STAT : SLIGHTLY INJURED : SERIOLSLY INJURED : UNINJURED
  NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : ALL FOUR MAIN ROTOR BLADES, THE FORWARD FUSELAGE SKIN AND CANOPY, THE AFT FUSELAGE SKIN, AND T
                HE LEADING EDGE OF THE VERTICAL FIN
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATIVE TESTING INITIATED
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 26603

ACDT/ICDT-RPT*DT-FILE : LAC/488489*6EC715
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 0015
LOC : PITFALL NEBRASKA
SUMMARY : PILOT ATTEMPTED INVERTED BUZZING
CAUSE : ANTS IN PANTS
PERS-STAT : KILLED : SLIGHTLY INJURED : BADLY FRIGHTENED
  NO-PERS-INVOL : 2 : 9 : 6
EST-PROP-DAMAGE : 150,000.00
NATURE-DAMAGE : RUINED CIRCUS TENT
EFFECT-DAMAGE : DEPLOYMENT
CONTR-ACTION : BOUGHT OUT CIRCUS
OTHER-PROP-DAM-INJ : CLOWN HAD HEART FAILURE
DAI-NO : 99999

ACDT/ICDT-RPT*DT-FILE : LAC/490C77*6EC6C4
ACT-DT : 06-25-69
CONTR-NAME : LOCKHEED
TIME : 1123

```
LOC : VAN NUYS CALIF
SUMMARY : GYRO ARM FAILURE DURING TIE DOWN TESTS
CAUSE : UNKNOWN
PERS-STAT : SERIOUSLY INJURED : UNINJURED : SLIGHTLY INJURED
  NO-PERS-INVOL : 1 : 1 : 1
NATURE-DAMAGE : DAMAGE TO CONTROL GYRO ARM AND ONE MAIN ROTOR BLADE
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATING INCIDENT
OTHER-PROP-DAM-INJ : NONE
DAI-NO : 16037


*****


TRANSACTION 187
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE WITH CONTR-NAME "GENERAL ELECTRIC"  ANDD WITH TIME > "0015" ANDD WITH LOC
           NOT = "PITFALL NEBRASKA" ANDD WITH  EST-PROP-DAMAGE < "200000" ANDD WITH EFFECT-DAMAGE NOT = "TESTI
          NG" ANDD WITH PERS-STAT "KILLED" ANDD WITH NO-PERS-INVOL < "2" ANDD WITH CAUSE "HOT PILOT" ANDD WITH
           OTHER-PROP-DAM-INJ "LOSS OF US PRESTIGE" #


ACDT/ICDT-RPT*DT-FILE : LAC/488378*68C614
ACT-DT : 06-25-69
CONTR-NAME : GENERAL ELECTRIC
TIME : 0415
LOC : ZANADU
SUMMARY : ENGINE OVER SPEED
CAUSE : HOT PILOT
PERS-STAT : UNINJURED : SLIGHTLY INJURED : KILLED
  NO-PERS-INVOL : 1 : 1 : 1
EST-PROP-DAMAGE : 50,000.00
NATURE-DAMAGE : RUINED WHEAT CROP
EFFECT-DAMAGE : TRAINING
CONTR-ACTION : CHASTIZED PILOT
OTHER-PROP-DAM-INJ : LOSS OF US PRESTIGE
DAI-NO : 99998
```

```
*****

TRANSACTION 188
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE WITH EFFECT-DA"AGE "DEPLOYMENT" ANDD WITH PERS-STAT "BADLY FRIGHTENED" NO
          -PERS-INVOL #

ACDT/ICDT-RPT*DT-FILE..  PERS-STAT.................  NO-PERS-INVOL
                                                     *
LAC/488499        680715 KILLED                      2
                         SLIGHTLY INJURED           9
                         BADLY FRIGHTENED           6

*****

TRANSACTION 189
STATEMENT TOTAL NO-PERS-INVOL-SYN WITH CONTR-NAME "LOCKHEED" ACDT/ICDT-RPT*DT-FILE #

NO-PERS-INVOL-S YN
                26.

TRANSACTION 190
STATEMENT TOTAL NO-PERS-INVOL-SYN IN ACDT/ICDT-RPT*DT-FILE #

NO-PERS-INVOL-S YN
                29.

TRANSACTION 191
STATEMENT LIST PERS-STAT "KILLED" NO-PERS-INVOL ACDT/ICDT-RPT*DT-FILE #

ACDT/ICDT-RPT*DT-FILE..  PERS-STAT.................  NO-PERS-INVOL
```

```
                                                                    *
LAC/488367        680513
LAC/493718        680906
LAC/488489        680715  KILLED                                    2
LAC/488378        680614  KILLED                                    1
LAC/490077        680604

*****


TRANSACTION 192
STATEMENT COUNT ACDT/ICDT-RPT*DT-FILE WITH PERS-STAT = "KILLED" #
NUMBER OF ACCEPTABLE ITEMS = 2


TRANSACTION 193
STATEMENT LIST NO-PERS-INVOL ACDT/ICDT-RPT*DT-FILE #


ACDT/ICDT-RPT*DT-FILE..  PERS-STAT.................  NO-PERS-INVOL
                                                                    *
LAC/488367        680513  SERIOUSLY INJURED                         1
                          SLIGHTLY INJURED                          1
                          UNINJURED                                 1
LAC/493718        680906  SLIGHTLY INJURED                          1
                          SERIOUSLY INJURED                         1
                          UNINJURED                                 1
LAC/488489        680715  KILLED                                    2
                          SLIGHTLY INJURED                          9
                          BADLY FRIGHTENED                          6
LAC/488378        680614  UNINJURED                                 1
                          SLIGHTLY INJURED                          1
                          KILLED                                    1
LAC/490077        680604  SERIOUSLY INJURED                         1
                          UNINJURED                                 1
                          SLIGHTLY INJURED                          1
```

*****

TRANSACTION 194
STATEMENT LIST TIME LOC SUMMARY CAUSE FOR ACDT/ICDT-RPT*DT-FILE 'LAC/493718*680906' #

ACDT/ICDT-RPT*DT-FILE : LAC/493718*68C906
TIME : 1123
LOC : OXNARD,CALIF
SUMMARY : DURING GROUND RUN A ROTOR BLADE STRUCK THE TAIL BOOM AND KNOCKED OFF THE COCKPIT CANOPY,ACFT 66-8828
CAUSE : LONG PERIOD OSCILLATION

*****

TRANSACTION 195
STATEMENT LIST NATURE-DAMAGE EFFECT-CAMAGE CONTR-ACTION OTHER-PROP-DAM-INJ FOR ACDT/ICDT-RPT*DT-FILE #

ACDT/ICDT-RPT*DT-FILE : LAC/488367*68C513
NATURE-DAMAGE : VEHICLE FUSELAG AND MAIN ROTOR BLADES
EFFECT-DAMAGE : PRODUCTION
CONTR-ACTION : INVESTIGATIVE TEAM DISPATCHED TO SITE
OTHER-PROP-DAM-INJ : NONE

ACDT/ICDT-RPT*DT-FILE : LAC/493718*68C906
NATURE-DAMAGE : ALL FOUR MAIN ROTOR BLADES, THE FORWARD FUSELAGE SKIN AND CANOPY, THE AFT FUSELAGE SKIN, AND T
HE LEADING EDGE OF THE VERTICAL FIN
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATIVE TESTING INITIATED
OTHER-PROP-DAM-INJ : NONE

ACDT/ICDT-RPT*DT-FILE : LAC/489489*68C715
NATURE-DAMAGE : RUINED CIRCUS TENT
EFFECT-DAMAGE : DEPLOYMENT

CONTR-ACTION : BOUGHT OUT CIRCUS
OTHER-PROP-DAM-INJ : CLOWN HAD HEART FAILURE

ACDT/ICDT-RPT*DT-FILE : LAC/488378*68C614
NATURE-DAMAGE : RUINED WHEAT CROP
EFFECT-DAMAGE : TRAINING
CONTR-ACTION : CHASTIZED PILOT
OTHER-PROP-DAM-INJ : LOSS OF US PRESTIGE

ACDT/ICDT-RPT*DT-FILE : LAC/490077*68C604
NATURE-DAMAGE : DAMAGE TO CONTROL GYRO ARM AND ONE MAIN ROTOR BLADE
EFFECT-DAMAGE : TESTING
CONTR-ACTION : INVESTIGATING INCIDENT
OTHER-PROP-DAM-INJ : NONE

*****

TRANSACTION 196
STATEMENT LIST EST-PROP-DAMAGE FOR ALL ACDT/ICDT-RPT*DT-FILE #

ACDT/ICDT-RPT*DT-FILE.. EST-PROP-DAMAGE

LAC/488367 68C513
LAC/493718 69C906
LAC/488489 68C715 150,000.00
LAC/488378 680614 50,000.00
LAC/490077 68C604

*****

TRANSACTION 197
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE WITH ACDT/ICDT-RPT "LAC/488378" ANDD WITH EST-PROP-DAMAGE > "49000" #

```
ACDT/ICDT-RPT*DT-FILE : LAC/488379#680614
ACT-DT : 06-25-69
CONTR-NAME : GENERAL ELECTRIC
TIME : 0415
LOC : ZANADU
SUMMARY : ENGINE OVER SPEED
CAUSE : HOT PILOT
PERS-STAT : UNINJURED : SLIGHTLY INJURED : KILLED
  NO-PERS-INVOL : 1 : 1 : 1
EST-PROP-DAMAGE : 50,000.00
NATURE-DAMAGE : RUINED WHEAT CROP
EFFECT-DAMAGE : TRAINING
CONTR-ACTION : CHASTIZED PILOT
OTHER-PROP-DAM-INJ : LOSS OF US PRESTIGE
OAI-NO : 99998

*****

TRANSACTION 198
STATEMENT COUNT AI WITH CONTR-NAME "LOCKHEED" #
NUMBER OF ACCEPTABLE ITEMS = 4

TRANSACTION 199
STATEMENT LIST NO-PERS-INVOL IN AI WITH PERS-STAT "KILLED" #

AI.....................  PERS-STAT................  NO-PERS-INVOL
                                                     *

LAC/488489      680715  KILLED                      2
                        SLIGHTLY INJURED            9
                        BADLY FRIGHTENED            6
LAC/488378      680614  UNINJURED                   1
                        SLIGHTLY INJURED            1
```

```
                        KILLED                      1

*****


TRANSACTION 200
STATEMENT COUNT ACDT/ICDT-RPT*DT-FILE WITH EST-PROP-DAMAGE > "49000" #
NUMBER OF ACCEPTABLE ITEMS = 2


TRANSACTION 201
STATEMENT COUNT ACDT/ICDT-RPT*DT-FILE WITH EST-PROP-DAMAGE < "151000" #
NUMBER OF ACCEPTABLE ITEMS = 2


TRANSACTION 202
STATEMENT TOTAL EST-PROP-DAMAGE ACDT/ICDT-RPT*DT-FILE #


EST-PROP-DAMAGE
              200,000.00


TRANSACTION 203
STATEMENT LIST ACDT/ICDT-RPT*DT-FILE WITH EFFECT-DAMAGE "DEPLOYMENT" ANDD WITH PERS-STAT "BADLY FRIGHTENED" NO
         -PERS-INVOL < "7" #

ACDT/ICDT-RPT*DT-FILE..  PERS-STAT.................  NO-PERS-INVOL
                                                     *

LAC/488489       6807L5  KILLED                      2
                         SLIGHTLY WOUNDED            9
                         BADLY FRIGHTENED            6


TRANSACTION 204
STATEMENT LIST DICT PROD-COST-TEST #


PROD-COST-TEST : 3
DICT/CODE : S
DL/BASE : 3
DL/MODULO : PARENT-WBS
DL/SEPARATION : 3
DL/CORRELATIVES : Y211
```

```
DL/TYPE : R
DL/MAX : 13


PROD-COST-TEST : WBS-NOMEN
DICT/CODE : A
DL/BASE : 5
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 50


PROD-COST-TEST : 14
DICT/CODE : S
DL/BASE : 14
DL/MODULO : ACTL-G/A
DL/SEPARATION : 14
DL/CONVERSION : MS
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : 17
DICT/CODE : S
DL/BASE : 17
DL/MODULO : TCT-ACTL
DL/SEPARATION : 17
DL/CONVERSION : MS
DL/CORRELATIVES : F+;11;14
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : 19
DICT/CODE : S
DL/BASE : 19
DL/MODULO : WRK-IN-PROCESS-M/F-INDX
DL/SEPARATION : 19
```

```
DL/CORRELATIVES : V211
DL/TYPE : R
DL/MAX : 6

PROD-COST-TEST : 28
DICT/CODE : S
DL/BASE : 28
DL/MODULO : CONT-TGT-COUNT
DL/SEPARATION : 28
DL/CORRELATIVES : FC;7
DL/TYPE : R
DL/MAX : 2

PROD-COST-TEST : COMPOSED-WBS-COUNT
DICT/CODE : A
DL/BASE : 29
DL/CORRELATIVES : FC;4
DL/TYPE : R
DL/MAX : 2

PROD-COST-TEST : TEST-VARIANCE-3SYN
DICT/CODE : N
DL/BASE : 25
DL/CONVERSION : MS
DL/CORRELATIVES : V113
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : SUB-TOT-COST-SUMMARY
DICT/CODE : N
DL/BASE : 91
DL/CORRELATIVES : M10;11;12

PROD-COST-TEST : TOT-COST-SUMMARY
```

```
DICT/CODE : N
DL/BASE : 93
DL/CORRELATIVES : M16;17;18

PROD-COST-TEST : 4
DICT/CODE : S
DL/BASE : 4
DL/MODULO : COMPOSED-OF-WBS
DL/SEPARATION : 4
DL/CORRELATIVES : Y111
DL/TYPE : R
DL/MAX : 13

PROD-COST-TEST : 7
DICT/CODE : S
DL/BASE : 7
DL/MODULO : CONT-TGT
DL/SEPARATION : 7
DL/CONVERSION : MS
DL/CORRELATIVES : Y311 : D2;6 : I10;Y311
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : 12
DICT/CODE : S
DL/BASE : 12
DL/MODULO : SUB-TOT-PROJ-AT-COMPL
DL/SEPARATION : 12
DL/CONVERSION : MS
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 16

PROD-COST-TEST : 21
DICT/CODE : S
```

T9-H

```
DL/BASE : 21
DL/MODULO : PRS
DL/SEPARATION : 21
DL/CORRELATIVES : Y111 : JSCONTRACT-TEST;5
DL/TYPE : R
DL/MAX : 13


PROD-COST-TEST : 26
DICT/CODE : S
DL/BASE : 26
DL/MODULO : TEST-VARIANCE-4
DL/SEPARATION : 26
DL/CONVERSION : Ms
DL/CORRELATIVES : F-;11;12
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : CAT-COUNT
DICT/CODE : A
DL/BASE : 27
DL/CORRELATIVES : FC;6
DL/TYPE : R
DL/MAX : 2


PROD-COST-TEST : COST-CAT-TYPESYN
DICT/CODE : N
DL/BASE : 6
DL/CORRELATIVES : Y111
DL/TYPE : L
DL/MAX : 20


PROD-COST-TEST : PROJ-AT-COMPLSYN
DICT/CODE : N
DL/BASE : 9
DL/CONVERSION : Ms
```

```
DL/CORRELATIVES : Y311
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : TEST-VARIANCE-SUMMARY
DICT/CODE : N
DL/BASE : 94
DL/CORRELATIVES : M24;25;26

PROD-COST-TEST : 9
DICT/CODE : S
DL/BASE : 9
DL/MODULO : PROJ-AT-COMPL
DL/SEPARATION : 9
DL/CONVERSION : 48
DL/CORRELATIVES : Y311 : D2;6 : I24;Y312 : I25;Y312 : I12;Y311
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : CONT
DICT/CODE : A
DL/BASE : 2
DL/CORRELATIVES : Y213 : JBCONTRACT-TEST : RLCCNTRACT-TEST : RICONTRACT-TEST;2
DL/TYPE : L
DL/MAX : 20

PROD-COST-TEST : 2
DICT/CODE : S
DL/BASE : 2
DL/MODULO : CONT
DL/SEPARATION : 2
DL/CORRELATIVES : Y213 : JBCONTRACT-TEST : RLCCNTRACT-TEST : RICONTRACT-TEST;2
DL/TYPE : L
DL/MAX : 20
```

```
PROD-COST-TEST : 25
DICT/CODE : S
DL/BASE : 25
DL/MODULO : TEST-VARIANCE
DL/SEPARATION : 25
DL/CONVERSION : MS
DL/CORRELATIVES : Y113 : D2;6
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : TGT-G/A
DICT/CODE : A
DL/BASE : 13
DL/CONVERSION : MS
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : 18
DICT/CODE : S
DL/BASE : 18
DL/MODULO : TCT-PROJ
DL/SEPARATION : 18
DL/CONVERSION : MS
DL/CORRELATIVES : F*;12;15
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : PBS
DICT/CODE : A
DL/BASE : 21
DL/CORRELATIVES : Y111 : JSCONTRACT-TEST;5
DL/TYPE : R
DL/MAX : 13
```

```
PROD-COST-TEST : CONT-TGT-COUNT
DICT/CODE : A
DL/BASE : 28
DL/CORRELATIVES : FC;7
DL/TYPE : P
DL/MAX : 2


PROD-COST-TEST : PROJ-AT-COMPL
DICT/CODE : A
DL/BASE : 9
DL/CONVERSION : MS
DL/CORRELATIVES : V311 : D2;6 : I24;V312 : I25;V312 : I12;V311
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : 9
DICT/CODE : S
DL/BASE : 8
DL/MODULO : ACTL-TO-DT
DL/SEPARATION : 9
DL/CONVERSION : MS
DL/CORRELATIVES : V311 : D2;6 : I11;V311 : I24;V311 : I25;V311
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : SUB-TOT-TGT
DICT/CODE : A
DL/BASE : 10
DL/CONVERSION : MS
DL/CORRELATIVES : V113
DL/TYPE : P
DL/MAX : 16


PROD-COST-TEST : 11
```

```
DICT/CODE : S
DL/BASE : 11
DL/MODULO : SUB-TOT-ACTL
DL/SEPARATION : 11
DL/CONVERSION : Ms
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : SUB-TOT-PROJ-AT-COMPL
DICT/CODE : A
DL/BASE : 12
DL/CONVERSION : Ms
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : ACTL-G/A
DICT/CODE : A
DL/BASE : 14
DL/CONVERSION : Ms
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : TOT-TGT
DICT/CODE : A
DL/BASE : 16
DL/CONVERSION : Ms
DL/CORRELATIVES : F+;10;13
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : TOT-PROJ
DICT/CODE : A
```

```
DL/BASE : 18
DL/CONVERSION : MS
DL/CORRELATIVES : F*;12;15
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : 20
DICT/CODE : S
DL/BASE : 2C
DL/MODULO : REPT-DT
DL/SEPARATION : 20
DL/CONVERSION : D
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 11


PROD-COST-TEST : COST-SUMMARY
DICT/CODE : N
DL/BASE : 9C
DL/CORRELATIVES : M7;8;9


PROD-COST-TEST : G/A-SUMMARY
DICT/CODE : N
DL/BASE : 92
DL/CORRELATIVES : M13;14;15


PROD-COST-TEST : GRAND-SUMMARY
DICT/CODE : N
DL/BASE : 96
DL/CORRELATIVES : M7;8;9;10;11;12;13;14;15;16;17;18;24;25;26;27;28;29


PROD-COST-TEST : 16
DICT/CODE : S
DL/BASE : 16
```

```
DL/MODULO : TOT-TGT
DL/SEPARATION : 16
DL/CONVERSION : MS
DL/CORRELATIVES : F*;10;13
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : 1
DICT/CODE : S
DL/BASE : 1
DL/MODULO : ACT-DT
DL/SEPARATION : 1
DL/CORRELATIVES : Y113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6


PROD-COST-TEST : PARENT-WBS
DICT/CODE : A
DL/BASE : 3
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 13


PROD-COST-TEST : COMPOSED-OF-WBS
DICT/CODE : A
DL/BASE : 4
DL/CORRELATIVES : Y111
DL/TYPE : R
DL/MAX : 13


PROD-COST-TEST : 6
DICT/CODE : S
DL/BASE : 6
DL/MODULO : COST-CAT-TYPE
```

```
DL/SEPARATION : 6
DL/CORRELATIVES : V111 : D1;7;8;9;25
DL/TYPE : L
DL/MAX : 25


PROD-COST-TEST : TEST-VARIANCE-3
DICT/CODE : A
DL/BASE : 25
DL/CONVERSION : MS
DL/CORRELATIVES : V113 : D2;6
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : PROJ-G/A
DICT/CODE : A
DL/BASE : 15
DL/CONVERSION : MS
DL/CORRELATIVES : V211
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : 15
DICT/CODE : S
DL/BASE : 15
DL/MODULO : PROJ-G/A
DL/SEPARATION : 15
DL/CONVERSION : MS
DL/CORRELATIVES : V211
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : DL/ID
DICT/CODE : D
DL/BASE : 126
DL/MODULO : 5
```

DL/SEPARATION : 4
DL/CORRELATIVES : Y41 : V3;4 : BCONTRACT-TEST;V:2;3,Y101:0;5,Y101:21 : JSCONTRACT-TEST;3 : SCONTRACT-TEST;2;2
DL/TYPE : R
DL/MAX : 13

PROD-COST-TEST : ACT-DT
DICT/CODE : A
DL/BASE : 1
DL/CORRELATIVES : Y113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6

PROD-COST-TEST : 5
DICT/CODE : S
DL/BASE : 5
DL/MODULO : WBS-NOMEN
DL/SEPARATION : 5
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 50

PROD-COST-TEST : COST-CAT-TYPE
DICT/CODE : A
DL/BASE : 6
DL/CORRELATIVES : Y111 : 01;7;8;9;25
DL/TYPE : L
DL/MAX : 25

PROD-COST-TEST : ACTL-TO-DT
DICT/CODE : A
DL/BASE : 8
DL/CONVERSION : 4s
DL/CORRELATIVES : Y311 : 02;6 : I11;Y311 : I24;Y311 : I25;Y311
DL/TYPE : R

```
DL/MAX : 14


PROD-COST-TEST : 10
DICT/CODE : S
DL/BASE : 10
DL/MODULO : SUB-TOT-TGT
DL/SEPARATION : 10
DL/CONVERSION : MS
DL/CORRELATIVES : Y113
DL/TYPE : P
DL/MAX : 16


PROD-COST-TEST : REPT-DT
DICT/CODE : A
DL/BASE : 20
DL/CONVERSION : D
DL/CORRELATIVES : Y211
DL/TYPE : R
DL/MAX : 11


PROD-COST-TEST : 24
DICT/CODE : S
DL/BASE : 24
DL/MODULO : TEST-VARIANCE-2
DL/SEPARATION : 24
DL/CONVERSION : MS
DL/CORRELATIVES : Y113
DL/TYPE : P
DL/MAX : 14


PROD-COST-TEST : TEST-VARIANCE-4
DICT/CODE : A
DL/BASE : 26
DL/CONVERSION : MS
DL/CORRELATIVES : F-;11;12
```

```
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : 27
DICT/CODE : S
DL/BASE : 27
DL/MODULO : CAT-COUNT
DL/SEPARATION : 27
DL/CORRELATIVES : FC;6
DL/TYPE : R
DL/MAX : 2


PROD-COST-TEST : 29
DICT/CODE : S
DL/BASE : 29
DL/MODULO : COMPOSED-WBS-COUNT
DL/SEPARATION : 29
DL/CORRELATIVES : FC;4
DL/TYPE : R
DL/MAX : 2


PROD-COST-TEST : CONT-TGTSYM
DICT/CODE : N
DL/BASE : 7
DL/CONVERSION : MS
DL/CORRELATIVES : Y311
DL/TYPE : R
DL/MAX : 14


PROD-COST-TEST : CONT-TGT
DICT/CODE : A
DL/BASE : 7
DL/CONVERSION : MS
DL/CORRELATIVES : Y311 : D2;6 : I10;Y311
DL/TYPE : R
```

```
DL/MAX : 14


PROD-COST-TEST : SUB-TOT-ACTL
DICT/CODE : A
DL/BASE : 11
DL/CONVERSION : Ms
DL/CORRELATIVES : Y113
DL/TYPE : P
DL/MAX : 16


PROD-COST-TEST : 13
DICT/CODE : S
DL/BASE : 13
DL/MODULO : TGT-G/A
DL/SEPARATION : 13
DL/CONVERSION : Ms
DL/CORRELATIVES : Y211
DL/TYPE : P
DL/MAX : 14


PROD-COST-TEST : TOT-ACTL
DICT/CODE : A
DL/BASE : 17
DL/CONVERSION : Ms
DL/CORRELATIVES : F+:11:14
DL/TYPE : R
DL/MAX : 16


PROD-COST-TEST : WRK-IN-PROCESS-M/F-INDX
DICT/CODE : A
DL/BASE : 19
DL/CORRELATIVES : Y211
DL/TYPE : P
DL/MAX : 6
```

PROD-COST-TEST : REMARKS
DICT/CODE : A
DL/BASE : 22
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 100

PROD-COST-TEST : 22
DICT/CODE : S
DL/BASE : 22
DL/MODULO : REMARKS
DL/SEPARATION : 22
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 100

PROD-COST-TEST : TEST-VARIANCE-2
DICT/CODE : A
DL/BASE : 24
DL/CONVERSION : MS
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : ACTL-TO-DTSYN
DICT/CODE : N
DL/BASE : 8
DL/CONVERSION : MS
DL/CORRELATIVES : Y311
DL/TYPE : R
DL/MAX : 14

PROD-COST-TEST : COUNT-SUMMARY
DICT/CODE : N

DL/BASE : 95
DL/CORRELATIVES : M27;28;29

*****

TRANSACTION 205
STATEMENT LIST PROD-COST-TEST #

PROD-COST-TEST : 10000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
COMPOSED-OF-WBS : 11000 : 12000 : 13000 : 14000 : 15000 : 16000 : 17000 : 18000
WBS-NOMEN : CHEYENNE WEAPON SYSTEM
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
D SUPPORT
CONT-TGT : 5,000,000.00 : 7,897,000.00 : 126,073,000.00 : 67,007,000.00 : 27,000,000.00 : 31,870,000.00 : 87
,000,540.00 : 47,003,540.00
ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,000.00 : 2,450,675.00 : 4,782,563.00 : 21,467
,530.00 : 6,549,200.00
PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
0 : 93,432,000.00 : 56,000,000.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00
SUB-TOT-PROJ-AT-COMPL : 442,201,000.00
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,100.00
TOT-TGT : 439,736,188.00
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.00
WRK-IN-PROCESS-M/F-INDX : 20992
KEPT-DT : 28 FEB 1969
PBS : 11100000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)

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FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11100
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
PARENT-WBS : 11000
COMPOSED-OF-WBS : 11110 : 11120 : 11130
WBS-NOMEN : AIRFRAME
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : OTHER SP AND SUPPORT
CONT-TGT : 2,530,000.00 : 12,630,450.00 : 74,093,000.00 : 6,034,000.00 : 35,967,000.00
ACTL-TO-DT : 38,540.00 : 1,500,240.00 : 7,360,000.00 : 653,000.00 : 1,324,000.00
PROJ-AT-COMPL : 2,785,000.00 : 11,680,000.00 : 83,450,000.00 : 7,521,670.00 : 37,685,000.00
SUB-TOT-TGT : 131,254,450.00
SUB-TOT-ACTL : 10,875,780.00
SUB-TOT-PROJ-AT-COMPL : 143,121,670.00
TGT-G/A : 13,125,445.00
ACTL-G/A : 1,087,578.00
PROJ-G/A : 14,318,167.00
TOT-TGT : 144,379,895.00
TOT-ACTL : 11,963,358.00
TOT-PROJ : 157,439,837.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 11100000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
PARENT-WBS : 10000
COMPOSED-OF-WBS : 11100 : 11600 : 11500 : 11400 : 11300 : 11200
WBS-NOMEN : AIR VEHICLE
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : PUBLICATIONS : SPARES : OTHER SP AND SUPP
ORT

CONT-TGT : 3,750,000.00 : 15,345,000.00 : 114,332,000.00 : 14,031,789.00 : 52,737,000.00 : 17,855,000.00 : 4
1,250,000.00
ACTL-TO-DT : 232,000.00 : 2,064,000.00 : 12,109,000.00 : 1,321,462.00 : 894,000.00 : 1,368,000.00 : 2,367,41
2.00
PROJ-AT-COMPL : 3,025,000.00 : 18,936,000.00 : 98,674,000.00 : 16,325,000.00 : 58,350,000.00 : 18,240,000.00
: 43,175,000.00
SUB-TOT-TGT : 259,300,789.00
SUB-TOT-ACTL : 20,355,874.00
SUB-TOT-PROJ-AT-COMPL : 256,725,000.00
TGT-G/A : 25,930,079.00
ACTL-G/A : 2,035,587.00
PROJ-G/A : 25,672,500.00
TOT-TGT : 285,230,868.00
TOT-ACTL : 22,391,461.00
TOT-PROJ : 282,397,500.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111C00000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

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TRANSACTION 206
STATEMENT LIST COST-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	COST-CAT-TYPE.....	CONT-TGT..... *	ACTL-TO-DT.... *	PROJ-AT-COMPL. *
10000	DEVELOPMENT	5,000,000.00	342,000.00	5,759,000.00
	TOOLING	7,897,000.00	3,569,781.00	21,300,000.00
	PRODUCTION	126,073,000.00	23,542,110.00	132,540,000.00
	PUBLICATIONS	67,007,000.00	5,671,000.00	65,430,000.00
	MISCELLANEOUS	27,000,000.00	2,450,675.00	35,870,000.00

	SPARES	31,870,000.00	4,782,563.00	31,870,000.00
	GSE	87,000,540.00	21,467,530.00	93,432,000.00
	OTHER SP AND SUPPORT	47,003,540.00	6,549,200.00	56,000,000.00
11100	DEVELOPMENT	2,530,000.00	38,540.00	2,785,000.00
	TOOLING	12,630,450.00	1,500,240.00	11,680,000.00
	PRODUCTION	74,093,000.00	7,360,000.00	83,450,000.00
	MISCELLANEOUS	6,034,000.00	653,000.00	7,521,670.00
	OTHER SP AND SUPPORT	35,967,000.00	1,324,000.00	37,685,000.00
11000	DEVELOPMENT	3,750,000.00	232,000.00	3,025,000.00
	TOOLING	15,345,000.00	2,064,000.00	18,936,000.00
	PRODUCTION	114,332,000.00	12,109,000.00	98,674,000.00
	MISCELLANEOUS	14,031,789.00	1,321,462.00	16,325,000.00
	PUBLICATIONS	52,737,000.00	894,000.00	58,350,000.00
	SPARES	17,855,000.00	1,368,000.00	18,240,000.00
	OTHER SP AND SUPPORT	41,250,000.00	2,367,412.00	43,175,000.00

*****

TRANSACTION 207
STATEMENT LIST SUB-TOT-COST-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	SUB-TOT-TGT.....	SUB-TOT-ACTL....	SUB-TOT-PROJ-AT-COMPL
10000	398,851,090.00	68,374,859.00	442,201,000.00
11100	131,254,450.00	10,875,780.00	143,121,670.00
11000	259,300,789.00	20,355,874.00	256,725,000.00

*****

TRANSACTION 208
STATEMENT LIST G/A-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	TGT-G/A.....	ACTL-G/A.....	PROJ-G/A.....

10000	40,885,108.00	6,837,483.00	74,220,100.00
11100	13,125,445.00	1,087,578.00	14,318,167.00
11000	25,930,079.00	2,035,587.00	25,672,500.00

*****

TRANSACTION 209
STATEMENT LIST TOT-COST-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	TOT-TGT.....	TOT-ACTL.....	TOT-PROJ.....
10000	439,736,188.00	75,212,342.00	516,421,100.00
11100	144,379,895.00	11,963,358.00	157,439,837.00
11000	285,230,868.00	22,391,461.00	282,397,500.00

*****

TRANSACTION 210
STATEMENT LIST TEST-VARIANCE-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	COST-CAT-TYPE.....	TEST-VARIANCE. *	TEST-VARIANCE-2	TEST-VARIANCE-4...
10000	DEVELOPMENT	-5,417,000.00	-373,826,141.00	-373,826,141.00
	TOOLING	-17,730,219.00		
	PRODUCTION	-108,997,890.00		
	PUBLICATIONS	-59,759,000.00		
	MISCELLANEOUS	-33,419,325.00		
	SPARES	-27,087,437.00		
	GSE	-71,964,470.00		
	OTHER SP AND SUPPORT	-49,450,800.00		
11100	DEVELOPMENT	-2,746,460.00	-132,245,890.00	-132,245,890.00
	TOOLING	-10,179,760.00		

		PRODUCTION	-76,090,000.00		
		MISCELLANEOUS	-6,868,670.00		
		OTHER SP AND SUPPORT	-36,361,000.00		
	11000	DEVELOPMENT	-2,793,000.00	-236,369,126.00	-236,369,126.00
		TOOLING	-16,872,000.00		
		PRODUCTION	-86,565,000.00		
		MISCELLANEOUS	-15,003,538.00		
		PUBLICATIONS	-57,456,000.00		
		SPARES	-16,872,000.00		
		OTHER SP AND SUPPORT	-40,807,588.00		

*****

TRANSACTION 211
STATEMENT LIST COUNT-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST	CAT-COUNT.....	CONT-TGT-COUNT....	COMPOSED-WBS-COUNT
10000	8.	8.	8.
11100	5.	5.	3.
11000	7.	7.	6.

*****

JOB-H

TRANSACTION 212
STATEMENT LIST GRAND-SUMMARY IN PROD-COST-TEST #

PROD-COST-TEST : 10000
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
D SUPPORT
CONT-TGT : 5,000,000.00 : 7,897,000.00 : 126,073,000.00 : 67,007,000.00 : 27,000,000.00 : 31,870,000.00 : 87
,000,540.00 : 47,003,540.00
ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,300.00 : 2,450,675.00 : 4,782,563.00 : 21,467
,530.00 : 6,549,200.00

PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
0 : 93,432,000.00 : 56,000,000.00
TEST-VARIANCE : -5,417,000.00 : -17,730,219.00 : -108,997,890.00 : -59,759,000.00 : -33,419,325.00 : -27,087
,437.00 : -71,564,470.00 : -45,450,800.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00
SUB-TOT-PROJ-AT-COMPL : 442,201,000.00
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,100.00
TOT-TGT : 439,736,188.00
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.00
TEST-VARIANCE-2 : -373,826,141.00
TEST-VARIANCE-4 : -373,826,141.00
CAT-COUNT : 8.
CONT-TGT-COUNT : 8.
COMPOSED-WBS-COUNT : 8.

PROD-COST-TEST : 11100
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : OTHER SP AND SUPPORT
CONT-TGT : 2,530,000.00 : 12,630,450.00 : 74,093,000.00 : 6,034,000.00 : 35,967,000.00
ACTL-TO-DT : 38,540.00 : 1,500,240.00 : 7,340,000.00 : 653,000.00 : 1,324,000.00
PROJ-AT-COMPL : 2,785,000.00 : 11,680,000.00 : 83,450,000.00 : 7,521,670.00 : 37,685,000.00
TEST-VARIANCE : -2,746,460.00 : -10,179,760.00 : -76,090,000.00 : -6,868,670.00 : -36,361,000.00
SUB-TOT-TGT : 131,254,450.00
SUB-TOT-ACTL : 10,875,780.00
SUB-TOT-PROJ-AT-COMPL : 143,121,670.00
TGT-G/A : 13,125,445.00
ACTL-G/A : 1,087,578.00
PROJ-G/A : 14,318,167.00
TOT-TGT : 144,379,895.00
TOT-ACTL : 11,963,358.00
TOT-PROJ : 157,439,837.00
TEST-VARIANCE-2 : -132,245,890.00
TEST-VARIANCE-4 : -132,245,890.00
CAT-COUNT : 5.
CONT-TGT-COUNT : 5.

```
COMPOSED-WBS-COUNT : 3.


PROD-COST-TEST : 11CCO
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : PUBLICATIONS : SPARES : OTHER SP AND SUPP
                ORT
  CONT-TGT : 3,750,CCC.CO : 15,345,OCC.CO : 114,332,000.00 : 14,031,789.0C : 52,737,00C.00 : 17,855,000.00 : 4
             1,250,000.CO
  ACTL-TO-DT : 232,000.CO : 2,064,000.00 : 12,109,000.00 : 1,321,462.0C : 894,000.00 : 1,368,000.00 : 2,367,41
               2.0C
  PROJ-AT-COMPL : 3,025,000.CO : 18,936,COC.CC : 98,674,000.00 : 16,325,000.00 : 58,35C,000.00 : 18,240,000.CO
                  : 43,175,000.00
  TEST-VARIANCE : -2,793,0C0.00 : -16,872,CCO.CO : -86,565,CCC.00 : -15,003,538.00 : -57,456,000.00 : -16,872,
                  CC0.0C : -40,807,588.CO
SUB-TOT-TGT : 259,300,789.CO
SUB-TOT-ACTL : 20,355,874.CO
SUB-TOT-PROJ-AT-COMPL : 256,725,COC.CO
TGT-G/A : 25,930,079.CO
ACTL-G/A : 2,035,587.00
PROJ-G/A : 25,672,500.CO
TOT-TGT : 285,230,868.00
TOT-ACTL : 22,391,461.0C
TOT-PROJ : 282,397,500.00
TEST-VARIANCE-2 : -236,369,126.CC
TEST-VARIANCE-4 : -236,369,126.CO
CAT-COUNT : 7.
CONT-TGT-COUNT : 7.
COMPOSED-WBS-COUNT : 6.

*****


TRANSACTION 213
STATEMENT LIST TEST-VARIANCE-2 IN PROD-COST-TEST #


PROD-COST-TEST  TEST-VARIANCE-2
```

```
        10000  -373,926,141.00
        11100  -132,245,890.00
        11000  -236,369,126.00

*****


TRANSACTION 214
STATEMENT LIST TEST-VARIANCE-3 IN PROD-COST-TEST '11100' #

PROD-COST-TEST  COST-CAT-TYPE.............  TEST-VARIANCE-3
                                            *

        11100   DEVELOPMENT                   -2,746,460.00
                TOOLING                      -10,179,760.00
                PRODUCTION                   -76,090,000.00
                MISCELLANEOUS                 -6,868,670.00
                OTHER SP AND SUPPORT         -36,361,000.00

*****


TRANSACTION 215
STATEMENT LIST TEST-VARIANCE-3 IN PROD-COST-TEST #

PROD-COST-TEST  COST-CAT-TYPE.............  TEST-VARIANCE-3
                                            *

        10000   DEVELOPMENT                   -5,417,000.00
                TOOLING                      -17,730,219.00
                PRODUCTION                  -108,997,890.00
                PUBLICATIONS                 -55,759,000.00
                MISCELLANEOUS                -33,419,325.00
                SPARES                       -27,087,437.00
                GSE                          -71,964,470.00
                OTHER SP AND SUPPORT         -49,450,800.00
```

```
        11100   DEVELOPMENT                  -2,746,460.00
                TOOLING                     -10,179,760.00
                PRODUCTION                  -76,090,000.00
                MISCELLANEOUS                -6,868,670.00
                OTHER SP AND SUPPORT        -36,361,000.00
        11000   DEVELOPMENT                  -2,793,000.00
                TOOLING                     -16,872,000.00
                PRODUCTION                  -86,565,000.00
                MISCELLANEOUS               -15,003,538.00
                PUBLICATIONS                -57,456,000.00
                SPARES                      -16,872,000.00
                OTHER SP AND SUPPORT        -40,807,588.00

*****


TRANSACTION 216
STATEMENT LIST TEST-VARIANCE-3 FOR COST-CAT-TYPE "DEVELOPMENT" IN PROD-COST-TEST #


PROD-COST-TEST  COST-CAT-TYPE.............  TEST-VARIANCE-3
                                            *

        10000   DEVELOPMENT                  -5,417,000.00
        11100   DEVELOPMENT                  -2,746,460.00
        11000   DEVELOPMENT                  -2,793,000.00

*****


TRANSACTION 217
STATEMENT LIST TEST-VARIANCE-3 FOR COST-CAT-TYPE "DEVELOPMENT" IN PROD-COST-TEST '11000' #


PROD-COST-TEST  COST-CAT-TYPE.............  TEST-VARIANCE-3
                                            *

        11000   DEVELOPMENT                  -2,793,000.00
```

*****

TRANSACTION 218
STATEMENT LIST TOT-TGT IN PROD-COST-TEST WITH TOT-TGT > "400000000" #

PROD-COST-TEST TOT-TGT.....

10000 439,736,188.00

*****

TRANSACTION 219
STATEMENT LIST THE SUB-TOT-TGT AND SUB-TOT-ACTL OF ANY PROD-COST-TEST WITH SUB-TOT-TGT > "200000000" ANDD WITH
SUB-TOT-ACTL < "50000000" #

PROD-COST-TEST SUB-TOT-TGT..... SUB-TOT-ACTL....

11000 259,300,789.00 20,355,874.00

*****

TRANSACTION 220
STATEMENT LIST ACTL-TO-DT FOR COST-CAT-TYPE "DEVELOPMENT" IN PROD-COST-TEST '10000' #

PROD-COST-TEST COST-CAT-TYPE..... ACTL-TO-DT....

10000 DEVELOPMENT 342,000.00

*****

```
TRANSACTION 221
STATEMENT LIST PARENT-WBS INN PROD-COST-TEST '11100' #

                    PROD-COST-TEST  PARENT-WBS...

X
 X                      11100
  X                     11000          11000
                        10000          10000
*****


TRANSACTION 222
STATEMENT LIST COMPOSED-OF-WBS INN PROD-COST-TEST '10000' #

                    PROD-COST-TEST  COMPOSED-OF-WBS

X
                       10000
                                       11000
                                       12000
                                       13000
                                       14000
                                       15000
                                       16000
                                       17000
X                                      18000
                       11000           11100
                                       11600
                                       11500
                                       11400
                                       11300
X                                      11200
                       11100           11110
                                       11120
                                       11130
```

*****

TRANSACTION 223
STATEMENT LIST ACTL-TO-DT IN PROD-COST-TEST '10000' #

PROD-COST-TEST	COST-CAT-TYPE.....	ACTL-TO-DT.... *
10000	DEVELOPMENT	342,000.00
	TOOLING	3,569,781.00
	PRODUCTION	23,542,110.00
	PUBLICATIONS	5,671,000.00
	MISCELLANEOUS	2,450,675.00
	SPARES	4,782,563.00
	GSE	21,467,530.00
	OTHER SP AND SUPPORT	6,549,200.00

*****

TRANSACTION 224
STATEMENT LIST ACTL-TO-DTSYN IN PROD-COST-TEST '10000' #

PROD-COST-TEST	ACTL-TO-DTSYN.
10000	342,000.00
	3,569,781.00
	23,542,110.00
	5,671,000.00
	2,450,675.00
	4,782,563.00
	21,467,530.00
	6,549,200.00

```
*****

TRANSACTION 225
STATEMENT LIST WBS-NOMEN AND CONT IN PROD-COST-TEST #

PROD-COST-TEST : 10000
CONT : DAAJ01-68-C-1749(H)
WBS-NOMEN : CHEYENNE WEAPON SYSTEM

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11100
CONT : DAAJ01-68-C-1749(H)
WBS-NOMEN : AIRFRAME

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11000
CONT : DAAJ01-68-C-1749(H)
WBS-NOMEN : AIR  VEHICLE

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

*****

TRANSACTION 226
STATEMENT LIST CONT-TGT IN PROD-COST-TEST '11000' #

PROD-COST-TEST  COST-CAT-TYPE.....  CONT-TGT.....
```

11C00	DEVELOPMENT	3,750,000.00
	TOOLING	15,345,000.00
	PRODUCTION	114,332,000.00
	MISCELLANEOUS	14,031,789.00
	PUBLICATIONS	52,737,000.00
	SPARES	17,855,000.00
	OTHER SP AND SUPPORT	41,250,000.00

*****

TRANSACTION 227
STATEMENT LIST ACTL-TO-DT FOR COST-CAT-TYPE "PRODUCTION" IN PROD-COST-TEST '11100' #

PROD-COST-TEST	COST-CAT-TYPE.....	ACTL-TO-DT....
11100	PRODUCTION	7,360,000.00

*****

TRANSACTION 228
STATEMENT LIST PROJ-AT-COMPL FOR COST-CAT-TYPE "DEVELOPMENT" "TOOLING" AND "PUBLICATIONS" IN PROD-COST-TEST '1
0000' #

PROD-COST-TEST	COST-CAT-TYPE.....	PROJ-AT-COMPL.
10000	DEVELOPMENT	5,759,000.00
	TOOLING	21,300,000.00
	PUBLICATIONS	65,430,000.00

*****

```
TRANSACTION 229
STATEMENT LIST COST-CAT-TYPE IN PROD-COST-TEST '11000' #


PROD-COST-TEST  COST-CAT-TYPE.............

        11000   DEVELOPMENT
                TOOLING
                PRODUCTION
                MISCELLANEOUS
                PUBLICATIONS
                SPARES
                OTHER SP AND SUPPORT

*****


TRANSACTION 230
STATEMENT LIST PROD-COST-TEST WITH SUB-TOT-TGT > "400000000"  #
NO ITEMS TO BE LISTED.


TRANSACTION 231
STATEMENT LIST PROD-COST-TEST WITH TOT-TGT < "150000000"  #


PROD-COST-TEST : 11100
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
PARENT-WBS : 11000
COMPOSED-OF-WBS : 11110 : 11120 : 11130
WBS-NOMEN : AIRFRAME
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : OTHER SP AND SUPPORT
  CONT-TGT : 2,530,000.00 : 12,630,450.00 : 74,093,000.00 : 6,034,000.00 : 35,967,000.00
  ACTL-TO-DT : 38,540.00 : 1,500,240.00 : 7,360,000.00 : 653,000.00 : 1,324,000.00
  PROJ-AT-COMPL : 2,785,000.00 : 11,680,000.00 : 83,450,000.00 : 7,521,670.00 : 37,685,000.00
SUB-TOT-TGT : 131,254,450.00
```

06-H

SUB-TOT-ACTL : 10,875,780.00
SUB-TOT-PROJ-AT-COMPL : 143,121,670.00
TGT-G/A : 13,125,445.00
ACTL-G/A : 1,087,578.00
PROJ-G/A : 14,318,167.00
TOT-TGT : 144,379,895.00
TOT-ACTL : 11,963,358.00
TOT-PROJ : 157,439,837.00
#RK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111000000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

*****

TRANSACTION 232
STATEMENT LIST PROD-COST-TEST WITH ACTL-G/A > "5000000" ANDD WITH PROJ-G/A > "5000000" #

PROD-COST-TEST : 10000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
COMPOSED-OF-#BS : 11000 : 12000 : 13000 : 14000 : 15000 : 16000 : 17000 : 18000
WBS-NOMEN : CHEYENNE WEAPON SYSTEM
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
D SUPPORT
CONT-TGT : 5,000,000.00 : 7,897,000.00 : 126,073,000.00 : 67,007,000.00 : 27,000,000.00 : 31,870,000.00 : 87
,000,540.00 : 47,003,540.00
ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,000.00 : 2,450,675.00 : 4,782,563.00 : 21,467
,530.00 : 6,549,200.00
PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
0 : 93,432,000.00 : 56,000,000.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00

SUB-TOT-PROJ-AT-COMPL : 442,201,000.CC
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,1CC.0C
TOT-TGT : 439,736,188.0C
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.CO
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111000000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT ALTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

*****

TRANSACTION 233
STATEMENT LIST CONT-TGT ACTL-TO-DT AND PROJ-AT-COMPL IN PROD-COST-TEST '11100' #

PROD-COST-TEST	COST-CAT-TYPE.....	CONT-TGT..... *	ACTL-TO-DT.... *	PROJ-AT-COMPL. *
11100	DEVELOPMENT	2,530,000.00	38,540.00	2,785,000.00
	TOOLING	12,630,450.00	1,500,240.00	11,680,000.00
	PRODUCTION	74,093,000.00	7,360,000.00	83,450,000.00
	MISCELLANEOUS	6,034,000.00	653,000.00	7,521,670.00
	OTHER SP AND SUPPORT	35,967,000.00	1,324,000.00	37,685,000.00

*****

TRANSACTION 234
STATEMENT LIST ACTL-TO-DT AND PROJ-AT-COMPL IN PROD-COST-TEST #

PROD-COST-TEST	COST-CAT-TYPE.....	ACTL-TO-DT.... *	PROJ-AT-COMPL. *
10000	DEVELOPMENT	342,000.00	5,759,000.00
	TOOLING	3,569,781.00	21,300,000.00
	PRODUCTION	23,542,110.00	132,540,000.00
	PUBLICATIONS	5,671,000.00	65,430,000.00
	MISCELLANEOUS	2,450,675.00	35,870,000.00
	SPARES	4,782,563.00	31,870,000.00
	GSE	21,467,530.00	93,432,000.00
	OTHER SP AND SUPPORT	6,549,200.00	56,000,000.00
11100	DEVELOPMENT	38,540.00	2,785,000.00
	TOOLING	1,500,240.00	11,680,000.00
	PRODUCTION	7,360,000.00	83,450,000.00
	MISCELLANEOUS	653,000.00	7,521,670.00
	OTHER SP AND SUPPORT	1,324,000.00	37,685,000.00
11000	DEVELOPMENT	232,000.00	3,025,000.00
	TOOLING	2,064,000.00	18,936,000.00
	PRODUCTION	12,109,000.00	98,674,000.00
	MISCELLANEOUS	1,321,462.00	16,325,000.00
	PUBLICATIONS	894,000.00	58,350,000.00
	SPARES	1,368,000.00	18,240,000.00
	OTHER SP AND SUPPORT	2,367,412.00	43,175,000.00

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TRANSACTION 235
STATEMENT LIST SUB-TOT-TGT SUB-TOT-ACTL AND SUB-TOT-PROJ-AT-COMPL IN PROD-COST-TEST '11100' #

PROD-COST-TEST	SUB-TOT-TGT.....	SUB-TOT-ACTL....	SUB-TOT-PROJ-AT-COMPL
11100	131,254,450.00	10,875,780.00	143,121,670.00

*****

```
TRANSACTION 236
STATEMENT LIST TOT-TGT TOT-ACTL AND TCT-PROJ IN PROD-COST-TEST '11100' #

PROD-COST-TEST  TOT-TGT.....  TCT-ACTL.....  TOT-PROJ.....

        11100      144,379,895.CO      11,963,358.00      157,439,837.00

*****

TRANSACTION 237
STATEMENT LIST TGT-G/A ACTL-G/A AND PROJ-G/A IN PROD-COST-TEST '11100' #

PROD-COST-TEST  TGT-G/A.......  ACTL-G/A......  PROJ-G/A......

        11100    13,125,445.00    1,CC7,578.CC   14,318,167.CC

*****

TRANSACTION 238
STATEMENT LIST ANY PROD-COST-TEST #

PROD-COST-TEST : 10000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
COMPOSED-OF-WBS : 11000 : 12000 : 13000 : 14000 : 15000 : 16000 : 17000 : 18000
WBS-NOMEN : CHEYENNE WEAPON SYSTEM
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
                D SUPPORT
  CONT-TGT : 5,000,000.00 : 7,897,000.CC : 126,C73,0C0.00 : 67,0C7,000.00 : 27,000,00C.00 : 31,870,000.00 : 87
             ,000,540.0C : 47,003,54C.CC
  ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,00C.00 : 2,450,675.00 : 4,792,563.00 : 21,467
               ,530.00 : 6,549,200.0C
```

H-94

PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
0 : 93,432,000.00 : 56,000,000.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00
SUB-TOT-PROJ-AT-COMPL : 442,201,000.00
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,100.00
TOT-TGT : 439,736,188.00
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 11100000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT ALTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11100
ACT-DT : 06-25-69
CONT : DAAJC1-68-C-1749(H)
PARENT-WBS : 11000
COMPOSED-OF-WBS : 11110 : 11120 : 11130
WBS-NOMEN : AIRFRAME
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : OTHER SP AND SUPPORT
CONT-TGT : 2,530,000.00 : 12,630,450.00 : 74,093,000.00 : 6,034,000.00 : 35,967,000.00
ACTL-TO-DT : 38,540.00 : 1,500,240.00 : 7,360,000.00 : 653,000.00 : 1,324,000.00
PROJ-AT-COMPL : 2,785,000.00 : 11,680,000.00 : 83,450,000.00 : 7,521,670.00 : 37,685,000.00
SUB-TOT-TGT : 131,254,450.00
SUB-TOT-ACTL : 10,875,780.00
SUB-TOT-PROJ-AT-COMPL : 143,121,670.00
TGT-G/A : 13,125,445.00
ACTL-G/A : 1,087,578.00
PROJ-G/A : 14,318,167.00
TOT-TGT : 144,379,895.00
TOT-ACTL : 11,963,358.00
TOT-PROJ : 157,439,837.00

WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 11100C000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT ALTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11000
ACT-DT : 06-25-69
CONT : DAAJC1-68-C-1749(H)
PARENT-WBS : 10000
COMPOSED-OF-WBS : 11100 : 11600 : 11500 : 11400 : 11300 : 11200
WBS-NOMEN : AIR VEHICLE
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : PUBLICATIONS : SPARES : OTHER SP AND SUPP
ORT
CONT-TGT : 3,750,000.00 : 15,345,0CC.00 : 114,332,C00.00 : 14,031,789.00 : 52,737,00C.00 : 17,855,000.00 : 4
1,250,000.00
ACTL-TO-DT : 232,000.00 : 2,064,COC.00 : 12,109,000.00 : 1,321,462.00 : 894,000.0C : 1,368,000.00 : 2,367,41
2.0C
PROJ-AT-COMPL : 3,025,000.00 : 18,936,COC.00 : 98,674,000.00 : 16,325,000.0C : 58,350,000.00 : 18,240,000.00
: 43,175,000.00
SUB-TOT-TGT : 259,300,789.C0
SUB-TOT-ACTL : 20,355,874.C0
SUB-TOT-PROJ-AT-COMPL : 256,725,COC.C0
TGT-G/A : 25,930,079.00
ACTL-G/A : 2,035,587.C0
PROJ-G/A : 25,672,5CC.C0
TOT-TGT : 285,230,868.CC
TOT-ACTL : 22,391,461.0C
TOT-PROJ : 282,397,5CC.C0
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111000CC0
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NCT AUTHENTIC

CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFCRNIA

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TRANSACTION 239
STATEMENT LIST ONLY PROD-COST-TEST #

PROD-COST-TEST : 10000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
COMPOSED-OF-WBS : 11000 : 12000 : 13000 : 14000 : 15000 : 16000 : 17000 : 18000
WBS-NOMEN : CHEYENNE WEAPON SYSTEM
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
D SUPPORT
CONT-TGT : 5,000,000.00 : 7,897,000.00 : 126,073,000.00 : 67,007,000.00 : 27,000,000.00 : 31,870,000.00 : 87
,000,540.00 : 47,003,540.00
ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,000.00 : 2,450,675.00 : 4,782,563.00 : 21,467
,530.00 : 6,549,200.00
PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
0 : 93,432,000.00 : 56,000,000.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00
SUB-TOT-PROJ-AT-COMPL : 442,201,000.00
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,100.00
TOT-TGT : 439,736,188.00
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 11100000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT ALTHENTIC

PROD-COST-TEST : 11100
ACT-DT : 06-25-69

CONT : DAAJ01-68-C-1749(H)
PARENT-WBS : 11000
COMPOSED-OF-WBS : 11110 : 11120 : 11130
WBS-NOMEN : AIRFRAME
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : OTHER SP AND SUPPORT
CONT-TGT : 2,530,000.00 : 12,630,450.00 : 74,093,000.00 : 6,034,000.00 : 35,967,000.00
ACTL-TO-DT : 38,540.00 : 1,500,240.00 : 7,360,000.00 : 653,000.00 : 1,324,000.00
PROJ-AT-COMPL : 2,785,000.00 : 11,680,000.00 : 83,450,000.00 : 7,521,670.00 : 37,685,000.00
SUB-TOT-TGT : 131,254,450.00
SUB-TOT-ACTL : 10,875,780.00
SUB-TOT-PROJ-AT-COMPL : 143,121,670.00
TGT-G/A : 13,125,445.00
ACTL-G/A : 1,087,578.00
PROJ-G/A : 14,318,167.00
TOT-TGT : 144,379,895.00
TOT-ACTL : 11,963,358.00
TOT-PROJ : 157,439,837.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 11100000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

PROD-COST-TEST : 11000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(H)
PARENT-WBS : 10000
COMPOSED-OF-WBS : 11100 : 11600 : 11500 : 11400 : 11300 : 11200
WBS-NOMEN : AIR VEHICLE
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : MISCELLANEOUS : PUBLICATIONS : SPARES : OTHER SP AND SUPPORT
CONT-TGT : 3,750,000.00 : 15,345,000.00 : 114,332,000.00 : 14,031,789.00 : 52,737,000.00 : 17,855,000.00 : 4,250,000.00
ACTL-TO-DT : 232,000.00 : 2,064,000.00 : 12,109,000.00 : 1,321,462.00 : 894,000.00 : 1,368,000.00 : 2,367,412.00
PROJ-AT-COMPL : 3,025,000.00 : 18,936,000.00 : 98,674,000.00 : 16,325,000.00 : 58,350,000.00 : 18,240,000.00 : 43,175,000.00
SUB-TOT-TGT : 259,300,789.00
SUB-TOT-ACTL : 20,355,874.00

SUB-TOT-PROJ-AT-COMPL : 256,725,CCC.CC
TGT-G/A : 25,93C,079.00
ACTL-G/A : 2,C35,587.00
PROJ-G/A : 25,672,500.0C
TOT-TGT : 285,23C,869.CC
TOT-ACTL : 22,391,461.CC
TOT-PROJ : 282,397,5CC.00
#RK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111000000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NCT AUTHENTIC

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TRANSACTION 240
STATEMENT LIST ONLY EACH PROD-COST-TEST #

PROD-COST-TEST

10000
11100
11000

*****

TRANSACTION 241
STATEMENT LIST PROD-COST-TEST '10000' #

PROD-COST-TEST : 10000
ACT-DT : 06-25-69
CONT : DAAJ01-68-C-1749(M)
COMPOSED-OF-WBS : 11000 : 12000 : 13000 : 14000 : 15000 : 16000 : 17000 : 18000
#BS-NOMEN : CHEYENNE WEAPON SYSTEM

```
COST-CAT-TYPE : DEVELOPMENT : TOOLING : PRODUCTION : PUBLICATIONS : MISCELLANEOUS : SPARES : GSE : OTHER SP AN
                D SUPPORT
  CONT-TGT : 5,000,000.00 : 7,897,000.00 : 126,073,000.00 : 67,007,000.00 : 27,000,000.00 : 31,870,000.00 : 87
             ,000,540.00 : 47,003,540.00
  ACTL-TO-DT : 342,000.00 : 3,569,781.00 : 23,542,110.00 : 5,671,000.00 : 2,450,675.00 : 4,782,563.00 : 21,467
               ,530.00 : 6,549,200.00
  PROJ-AT-COMPL : 5,759,000.00 : 21,300,000.00 : 132,540,000.00 : 65,430,000.00 : 35,870,000.00 : 31,870,000.0
                  0 : 93,432,000.00 : 56,000,000.00
SUB-TOT-TGT : 398,851,080.00
SUB-TOT-ACTL : 68,374,859.00
SUB-TOT-PROJ-AT-COMPL : 442,201,000.00
TGT-G/A : 40,885,108.00
ACTL-G/A : 6,837,483.00
PROJ-G/A : 74,220,100.00
TOT-TGT : 439,736,188.00
TOT-ACTL : 75,212,342.00
TOT-PROJ : 516,421,100.00
WRK-IN-PROCESS-M/F-INDX : 20992
REPT-DT : 28 FEB 1969
PBS : 111000000
REMARKS : TEST DATA-ALL ATTRIBUTE VALUES NOT AUTHENTIC

    CONTRACT-TEST : DAAJ01-68-C-1749(M)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA


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TRANSACTION 242
STATEMENT LIST DICT ONLY EACH PROD-COST-TEST #


PROD-COST-TEST.................


3
WBS-NOMEN
14
```

H-100

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17
19
28
COMPOSED-WBS-COUNT
TEST-VARIANCE-3SYN
SUB-TOT-COST-SUMMARY
TOT-COST-SUMMARY
4
7
12
21
26
CAT-COUNT
COST-CAT-TYPESYN
PROJ-AT-COMPLSYN
TEST-VARIANCE-SUMMARY
9
CONT
2
25
TGT-G/A
18
PBS
CONT-TGT-COUNT
PROJ-AT-COMPL
8
SUB-TOT-TGT
11
SUB-TOT-PROJ-AT-COMPL
ACTL-G/A
TOT-TGT
TOT-PROJ
20
COST-SUMMARY
G/A-SUMMARY
GRAND-SUMMARY
16
1
PARENT-WBS
```

```
CONPOSED-OF-WBS
6
TEST-VARIANCE-3
PROJ-G/A
15
DL/ID
ACT-DT
5
COST-CAT-TYPE
ACTL-TO-DT
10
REPT-DT
24
TEST-VARIANCE-4
27
29
CONT-TGTSYN
CONT-TGT
SUB-TOT-ACTL
13
TOT-ACTL
WRK-IN-PROCESS-M/F-INDX
REMARKS
22
TEST-VARIANCE-2
ACTL-TO-DTSYN
COUNT-SUMMARY

*****


TRANSACTION 243
STATEMENT LIST CONT IN PROD-COST-TEST #


PROD-COST-TEST : 10000
CONT : DAAJ01-68-C-1749(H)

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
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    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11100
CONT : DAAJ01-68-C-1749(H)

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

PROD-COST-TEST : 11000
CONT : DAAJ01-68-C-1749(H)

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

*****

TRANSACTION 244
STATEMENT LIST CONT IN PROD-COST-TEST '10000' #

PROD-COST-TEST : 10000
CONT : DAAJ01-68-C-1749(H)

    CONTRACT-TEST : DAAJ01-68-C-1749(H)
    FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA

*****

TRANSACTION 245
STATEMENT LIST DICT CONTRACT-TEST #

CONTRACT-TEST : WBS
```

```
DICT/CODE : A
DL/BASE : 3
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 13

CONTRACT-TEST : 3
DICT/CODE : S
DL/BASE : 3
DL/MODULO : WBS
DL/SEPARATION : 3
DL/CORRELATIVES : Y113
DL/TYPE : R
DL/MAX : 13

CONTRACT-TEST : CONTRACTING-AGCY
DICT/CODE : A
DL/BASE : 4
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 6

CONTRACT-TEST : 4
DICT/CODE : S
DL/BASE : 4
DL/MODULO : CONTRACTING-AGCY
DL/SEPARATION : 4
DL/CORRELATIVES : Y211
DL/TYPE : L
DL/MAX : 6

CONTRACT-TEST : PBS
DICT/CODE : A
DL/BASE : 5
DL/CORRELATIVES : Y113
```

```
DL/TYPE : R
DL/MAX : 13


CONTRACT-TEST : 5
DICT/CODE : S
DL/BASE : 5
DL/MODULO : PPS
DL/SEPARATION : 5
DL/CORRELATIVES : V113
DL/TYPE : R
DL/MAX : 13


CONTRACT-TEST : ACT-DT
DICT/CODE : A
DL/BASE : 1
DL/CORRELATIVES : V113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6


CONTRACT-TEST : 2
DICT/CODE : S
DL/BASE : 2
DL/MODULO : FMC*CONTR-NAME
DL/SEPARATION : 2
DL/CORRELATIVES : V211
DL/TYPE : L*L
DL/MAX : 5*100


CONTRACT-TEST : CONTRACT-DATA
DICT/CODE : N
DL/BASE : 6
DL/CORRELATIVES : M2;4;5
```

```
CONTRACT-TEST : DL/ID
DICT/CODE : D
DL/BASE : 120
DL/MODULO : 3
DL/SEPARATION : 2
DL/CORRELATIVES : Y41
DL/TYPE : L
DL/MAX : 20


CONTRACT-TEST : 1
DICT/CODE : S
DL/BASE : 1
DL/MODULO : ACT-DT
DL/SEPARATION : 1
DL/CORRELATIVES : Y113
DL/TYPE : RN
DL/MAX : 6
DL/MIN : 6


CONTRACT-TEST : FMC*CONTR-NAME
DICT/CODE : A
DL/BASE : 2
DL/CORRELATIVES : Y211
DL/TYPE : L*L
DL/MAX : 5*100

*****


TRANSACTION 246
STATEMENT LIST CONTRACT-TEST #


CONTRACT-TEST : DAA11-66-C-3667(H)
ACT-DT : 06-25-69
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
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CONTRACTING-AGCY : AVSCOM


CONTRACT-TEST : DAAJ01-69-C-1530(53)
ACT-DT : 06-25-69
FMC*CONTR-NAME : 99207*GENERAL ELECTRIC COMPANY, ENGINE GROUP, MILITARY ENGINE DIVISION, WEST LYNN, MASS
CONTRACTING-AGCY : AVSCOM


CONTRACT-TEST : DAAJ01-68-C-1749(H)
ACT-DT : 06-25-69
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
WBS : 11100 : 10000 : 11000
CONTRACTING-AGCY : AVSCOM
PBS : 1110000C0


*****


TRANSACTION 247
STATEMENT LIST CONTRACT-TEST WITH WBS EQUAL/TO "11100" #


CONTRACT-TEST : DAAJ01-68-C-1749(H)
ACT-DT : 06-25-69
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
WBS : 11100 : 10000 : 11000
CONTRACTING-AGCY : AVSCOM
PBS : 111000000


*****


TRANSACTION 248
STATEMENT LIST FMC*CONTR-NAME AND PBS OF CONTRACT-TEST #
```

```
CONTRACT-TEST : DAA11-66-C-3667(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA


CONTRACT-TEST : DAAJ01-69-C-1530(53)
FMC*CONTR-NAME : 99207*GENERAL ELECTRIC COMPANY, ENGINE GROUP, MILITARY ENGINE DIVISION, WEST LYNN, MASS


CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
PBS : 11100C000

*****

TRANSACTION 249
STATEMENT LIST WBS AND PBS IN CONTRACT-TEST #

CONTRACT-TEST.......  WBS..........  PBS..........

DAA11-66-C-3667(H)
DAAJ01-68-C-1530(53)
DAAJ01-68-C-1749(H)          11100        111C00000
                             10C0C
                             1100C

*****

TRANSACTION 250
STATEMENT LIST WBS AND PBS IN CONTRACT-TEST 'DAAJ01-68-C-1749(H)'  #

CONTRACT-TEST.......  WBS..........  PBS..........
```

```
DAAJC1-68-C-1749(H)             11100       111000000
                                10000
                                11000

*****


TRANSACTION 251
STATEMENT LIST CONTRACT-DATA IN CONTRACT-TEST #


CONTRACT-TEST : DAA11-66-C-3667(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
CONTRACTING-AGCY : AVSCOM


CONTRACT-TEST : DAAJ01-68-C-1530(53)
FMC*CONTR-NAME : 99207*GENERAL ELECTRIC COMPANY, ENGINE GROUP, MILITARY ENGINE DIVISION, WEST LYNN, MASS
CONTRACTING-AGCY : AVSCOM


CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
CONTRACTING-AGCY : AVSCOM
PBS : 111000000

*****


TRANSACTION 252
STATEMENT LIST CONTRACT-DATA IN CONTRACT-TEST 'DAAJ01-68-C-1749(H)' #


CONTRACT-TEST : DAAJ01-68-C-1749(H)
FMC*CONTR-NAME : 36659*LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA
CONTRACTING-AGCY : AVSCOM
PBS : 111000000
```

```
*****

TRANSACTION 253
STATEMENT LIST CONTRACT-DATA IN CONTRACT-TEST 'DAAJ01-68-C-1530(53)' #

CONTRACT-TEST : DAAJ01-68-C-1530(53)
FMC*CONTR-NAME : 99207*GENERAL ELECTRIC COMPANY, ENGINE GROUP, MILITARY ENGINE DIVISION, WEST LYNN, MASS
CONTRACTING-AGCY : AVSCOM

*****

TRANSACTION 254
STATEMENT LIST WBS IN CONTRACT-TEST #

CONTRACT-TEST.......  WBS..........

DAA11-66-C-3667(H)
DAAJ01-68-C-1530(53)
DAAJ01-68-C-1749(H)            1110C
                               10C00
                               1100C

*****

TRANSACTION 255
STATEMENT LIST WBS IN CONTRACT-TEST 'DAAJ01-68-C-1749(H)' #

CONTRACT-TEST.......  WBS..........
```

DAAJ01-68-C-1749(H)

11100
11000
11000

*****

TRANSACTION 256
STATEMENT COUNT PROD-COST-TEST WITH TEST-VARIANCE-4 > "0" #
NUMBER OF ACCEPTABLE ITEMS = 0

TRANSACTION 257
STATEMENT COUNT PROD-COST-TEST WITH TEST-VARIANCE-4 EQUAL/TO OR LESS/THAN "0" #
NUMBER OF ACCEPTABLE ITEMS = 3

TRANSACTION 258
STATEMENT COUNT PROD-COST-TEST WITH TCT-PROJ > "50000000" #
NUMBER OF ACCEPTABLE ITEMS = 1

TRANSACTION 259
STATEMENT COUNT PROD-COST-TEST WITH TGT-G/A < "50000000" #
NUMBER OF ACCEPTABLE ITEMS = 3

TRANSACTION 260
STATEMENT COUNT PROD-COST-TEST WITH TGT-G/A < "30000000" #
NUMBER OF ACCEPTABLE ITEMS = 2

TRANSACTION 261
STATEMENT COUNT PROD-COST-TEST WITH TGT-G/A < "20000000" #
NUMBER OF ACCEPTABLE ITEMS = 1

TRANSACTION 262
STATEMENT COUNT PROD-COST-TEST WITH TGT-G/A < "10000000" #

```
NUMBER OF ACCEPTABLE ITEMS = 0

TRANSACTION 263
STATEMENT COUNT COMPOSED-OF-WBS IN PROD-COST-TEST '10000' #
NUMBER OF ACCEPTABLE ITEMS = 1

TRANSACTION 264
STATEMENT TOTAL SUB-TOT-TGT          IN PROD-COST-TEST #

SUB-TOT-TGT
789,406,319.00

TRANSACTION 265
STATEMENT TOTAL SUB-TOT-ACTL         IN PROD-COST-TEST #

SUB-TOT-ACTL
99,606,513.00

TRANSACTION 266
STATEMENT TOTAL SUB-TOT-PROJ-AT-COMPL IN PROD-COST-TEST #

SUB-TOT-PROJ-AT -COMPL
                942,047,670.00

TRANSACTION 267
STATEMENT TOTAL TOT-TGT              IN PROD-COST-TEST #

TOT-TGT
869,346,951.00
```

```
TRANSACTION 268
STATEMENT TOTAL TOT-ACTL                IN PRCD-COST-TEST #


TOT-ACTL
109,567,161.00


TRANSACTION 269
STATEMENT TOTAL TOT-PROJ                IN PRCD-CCST-TEST #


TOT-PROJ
956,258,437.00


TRANSACTION 270
STATEMENT TOTAL TGT-G/A IN PROD-COST-TEST #


TGT-G/A
79,940,632.00


TRANSACTION 271
STATEMENT TOTAL CONT-TGTSYN          IN PRCD-COST-TEST #


CONT-TGTSYN
789,406,319.00


TRANSACTION 272
STATEMENT TOTAL ACTL-TO-DTSYN        IN PRCD-COST-TEST #


ACTL-TO-DTSYN
99,606,513.00
```

```
TRANSACTION 273
STATEMENT TOTAL PROJ-AT-COMPLSYN   IN PROD-COST-TEST #

PROJ-AT-COMPLSY N
                842,047,670.00

TRANSACTION 274
STATEMENT TOTAL TEST-VARIANCE-3SYN IN PROD-COST-TEST #

TEST-VARIANCE-3 SYN
                -742,441,157.00

TRANSACTION 275                                                    LIST TEST-VARIANCE-1
STATEMENT
          IN PROD-COST-TEST '11100' #
24      THE WORD "TEST-VARIANCE-1" CANNOT BE IDENTIFIED.

TRANSACTION 276
STATEMENT LIST ACTL-TO-DT FOR DEVELOPMENT IN PROD-COST-TEST '10000' #
24      THE WORD "DEVELOPMENT" CANNOT BE IDENTIFIED.

TRANSACTION 277
STATEMENT COUNT COST-CAT-TYPE IN PROD-COST-TEST WITH TEST VARIANCE-3 < "0"  #
24      THE WORD "TEST VARIANCE-3" CANNOT BE IDENTIFIED.

TRANSACTION 278
STATEMENT COUNT PROD-COST-TEST WITH TCT-PROJ > 500000000 #
24      THE WORD "500000000" CANNOT BE IDENTIFIED.
```

NOT REPRODUCIBLE

```
TRANSACTION 279
STATEMENT COUNT COST-CAT-TYPE IN PROD-COST-TEST WITH PROJ-AT-COMPL > "50000000"  #
NUMBER OF ACCEPTABLE ITEMS = 3


TRANSACTION 280
STATEMENT COUNT COST-CAT-TYPE FOR PROD-COST-TEST WITH PROJ-AT-COMPL > CONT-TGT #
71       THE VALUE "CONT-TGT" HAS AN IMPROPER CONNECTIVE.


TRANSACTION 281
STATEMENT COUNT COMPOSED-OF-INV PROD-COST-TEST '10000' #
24       THE WORD "COMPOSED-OF-INV" CANNOT BE IDENTIFIED.


TRANSACTION 282
STATEMENT TOTAL CONT-TGT FOR PROD-COST-TEST #
721      TOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.


TRANSACTION 283
STATEMENT TOTAL SUB-TOT-PROJ          IN PROD-COST-TEST #
24       THE WORD "SUB-TOT-PROJ" CANNOT BE IDENTIFIED.


TRANSACTION 284
STATEMENT SIGNOFF#
SIGNOFF ACKNOWLEDGED  TIME 19.4494   NO. STATEMENTS 283   PROCESSOR TIME .4128   ELAPSED TIME .4223


TRANSACTION 285
STATEMENT TERMINATE#
```