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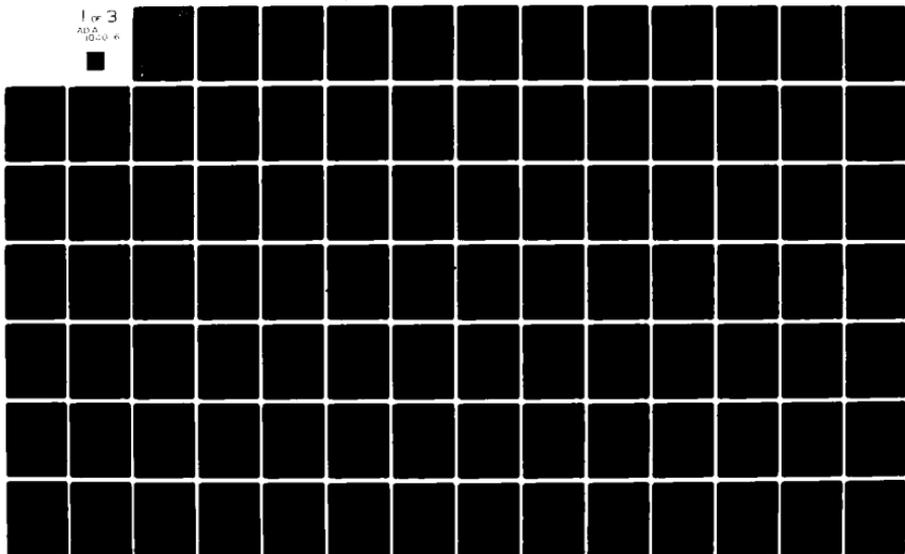
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DEFENSE ENERGY INFORMATION SYSTEM (DEIS):
DEIS-80 DESIGN SYSTEM SPECIFICATION.

REVISION A

July 1981

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Joan Lengel

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PREFACE

The Defense Energy Information System (DEIS) is an automated system used by the Department of Defense to monitor its supplies and consumption of energy. During 1978-80, DEIS-80, an improved DEIS, was developed: a System Specification was published in August 1980. Since that date, several design features have been identified that require clarification and modification, thus, this Revision A.

The functions of DEIS-80 are described in this System Specification. DEIS-80 contains two subsystems. The DEIS I subsystem processes data for, and reports on, inventories, acquisition and consumption of petroleum products within DoD. The DEIS II subsystem processes data for, and reports on, the inventories (where appropriate), consumption, and conservation of utility energy within DoD.

DEIS-80 will provide data base management capabilities for energy management throughout the DoD. The system will be used by the Defense Energy Policy Office to improve management of DoD energy resources. Periodic DEIS-80 output reports will be provided to the Military Services for their internal energy management purposes and distribution to major commands and their installations.

In this latest version of the System Specification, revised pages are identified by Rev. A (indicating Revision A) in the lower right-hand corner of each page containing any change from the original specification. A bar on the right-hand margin indicates where changes have been made. New Appendix E is identified by New A in the lower right-hand corner of each page.

This specification adheres to the requirements of DoD Standard 7935.1-S, "Automated Data Systems Documentation Standards," (Comptroller), September 1977.

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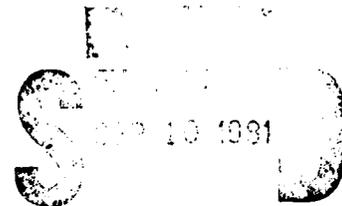


TABLE OF CONTENTS

	<u>Page</u>
PREFACE	ii
LIST OF TABLES	vii
LIST OF FIGURES	viii
 <u>Section</u>	
1. GENERAL	1-1
1.1 Purpose of the System Specification	1-1
1.1.1 Purpose and Scope	1-1
1.1.2 DEIS Functions and Capabilities	1-2
1.1.3 Current DEIS Organizations	1-3
1.1.4 Existing Methods and Procedures	1-3
1.2 Project References	1-5
1.2.1 Logistics Management Institute Documentation	1-5
1.2.2 Other DEIS and Related References	1-6
1.3 Terms and Acronyms	1-6
1.3.1 Terms	1-6
1.3.2 Acronyms	1-7
2. SUMMARY OF REQUIREMENTS	2-1
2.1 System Description	2-1
2.2 DEIS System Functions	2-2
2.2.1 Collect and Report Data	2-2
2.2.2 Maintain Data with a DBMS	2-2
2.2.3 Separate DEIS I and II Data	2-5
2.2.4 Perform Initial Sort	2-5
2.2.5 Edit and Convert Data	2-5
2.2.6 Update Data Base (Batch)	2-5
2.2.7 Maintain Tables	2-6
2.2.8 Perform On-Line Data Entry of Corrections	2-6
2.2.9 Archive Data Base	2-6
2.2.10 Produce Preformatted Reports	2-6
2.2.11 Generate Ad Hoc Reports	2-6
2.2.12 Add Data from Other Systems	2-6
2.3 Accuracy and Validity	2-7
2.3.1 Manual Procedures	2-7
2.3.2 Data Transmission	2-7
2.3.3 Automated Edits and Calculations	2-7
2.3.4 Scheduling and Timing	2-7
2.4 Flexibility	2-8

Table of Contents (Cont.)

<u>Section</u>	<u>Page</u>
3. DEIS ENVIRONMENT	3- 1
3.1 Equipment Environment	3- 1
3.2 Support Software Environment	3- 2
3.3 Interfaces	3- 2
3.3.1 Interface with DLA	3- 2
3.3.2 Interface with Installations and Housing	3- 2
3.3.3 Interface with National Weather Service	3- 2
3.4 Security and Privacy	3- 3
3.5 Controls	3- 3
4. DEIS I DESIGN DETAILS	4- 1
4.1 General Operating Procedures	4- 1
4.1.1 Data Requirements	4- 1
4.1.2 System Scheduling Requirements	4- 1
4.1.3 Data Base Back-up Procedures	4- 1
4.1.4 Recovery Procedures	4- 3
4.1.5 Access to Archived Data	4- 3
4.1.6 DEIS I Data Monitoring	4- 3
4.2 DEIS I Subsystem Logic Flow	4- 3
4.3 Subsystem Data	4- 5
4.3.1 Inputs	4- 5
4.3.2 Outputs	4- 6
4.3.3 Data Base	4- 7
4.4 DEIS I Subsystem Program Descriptions	4- 7
4.4.1 Separate DEIS I and DEIS II Data	4- 7
4.4.2 Sort DEIS I Data	4-11
4.4.3 Edit and Convert Data	4-11
4.4.4 Update Data Base	4-21
4.4.5 Maintain Tables	4-26
4.4.6 Perform On-Line Data Entry of Corrections	4-38
4.4.7 Archive Data Base	4-39
4.4.8 Preformatted Reports	4-42
4.4.9 <u>Ad Hoc</u> Reports	4-76

Table of Contents (Cont.)

<u>Section</u>	<u>Page</u>
5. DEIS II DESIGN DETAILS	5- 1
5.1 General Operating Procedures	5- 1
5.1.1 Data Requirements	5- 1
5.1.2 System Scheduling Requirements	5- 1
5.1.3 Data Base Back-up Procedures	5- 3
5.1.4 Recovery Procedures	5- 3
5.1.5 Access to Archived Data	5- 3
5.1.6 DEIS II Data Monitoring	5- 3
5.2 DEIS II Subsystem Logic Flow	5- 3
5.3 Subsystem Data	5- 5
5.3.1 Inputs	5- 5
5.3.2 Outputs	5- 5
5.3.3 Data Base	5- 7
5.4 DEIS II Subsystem Program Descriptions	5- 7
5.4.1 Separate DEIS I and DEIS II Data	5- 7
5.4.2 Sort DEIS II Data	5- 7
5.4.3 Edit and Convert Data	5- 9
5.4.4 Update Data Base--Data from Other Systems	5-20
5.4.5 Update Data Base--Data from Activities	5-24
5.4.6 Maintain Tables	5-27
5.4.7 Perform On-Line Data Entry of Corrections	5-33
5.4.8 Archive Data Base	5-34
5.4.9 Produce Preformatted Reports	5-37
5.4.10 Ad Hoc Reports	5-44
APPENDIX A DEIS I Data Dictionary	
APPENDIX B DEIS II Data Dictionary	
APPENDIX C DEIS Data Collection Card Formats	
APPENDIX D DEIS Variance Codes	
APPENDIX E NCC/DoDAAC Codes	

LIST OF TABLES

	<u>Page</u>
4- 1	DEIS I Processing Cycle 4- 2
4- 2	PRE-1978 DEIS Data 4- 6
4- 3	Separation of DEIS I and II Data 4- 9
4- 4	Data Edit Items 4-16
4- 5	Data Base Update Data Items 4-25
4- 6	Header File Data Layout 4-27
4- 7	Coded Data Base Items 4-28
4- 8	Region/State/Country Codes 4-29
4- 9	Service/Agency Codes 4-33
4-10	Product Codes 4-34
4-11	DEIS I Report Distribution Codes 4-35
4-12	Consumption Report Data 4-46
4-13	Sources for "Received From" Data 4-50
4-14	Petroleum Report Data 4-52
4-15	Petroleum Report Tape Layout 4-56
4-16	Navy/Marine Installation Summary Tape Layout 4-77
5- 1	DEIS II Processing Cycle 5- 2
5- 2	DEIS II Master File Layout 5- 6
5- 3	DEIS II Monthly Data Edits 5-11
5- 4	Standard Conversion Factors 5-15
5- 5	DFIS II Data from Other Systems 5-23
5- 6	Coded Data Base Items 5-28
5- 7	Utility Product Identification Codes 5-29
5- 8	DEIS II Report Distribution Codes 5-30
5- 9	MEB 5 Record Layout 5-47
A- 1	DEIS I Dynamic Data A- 2
A- 2	DEIS I Static Data A- 5
B- 1	DEIS II Dynamic Data B- 2
B- 2	DEIS II Static Data B- 4
C- 1	DEIS I - MEA 2 Card Layout C- 2
C- 2	DEIS I - MEA 3 Card Layout C- 3
C- 3	DEIS I - MEA 4 Card Layout C- 4
C- 4	DEIS II - MEB 1 Card Layout C- 5
C- 5	DEIS II - MEB 2 Card Layout C- 6
C- 6	DEIS II - MEB 4 Card Layout C- 7
C- 7	DEIS II - MEB 5 Card Layout C- 8
C- 8	DEIS II - MEB 6 Card Layout C-10
C- 9	DEIS II - MEB 7 Card Layout C-11

LIST OF FIGURES

		<u>Page</u>
2- 1	DEIS System Flowchart	2- 3
2- 2	Organization Flow of DEIS Data	2- 4
4- 1	DEIS I System Flowchart	4- 4
4- 2	DEIS I Data Base Schema	4- 8
4- 3	Separate DEIS I and DEIS II Data	4-10
4- 4	DEIS I Data Sort	4-12
4- 5	DEIS I Edit and Convert Data	4-14
4- 6	Accepted Records Listing	4-20
4- 7	DEIS I Activities Not Reporting	4-22
4- 8	DEIS I Activities with Product Changes	4-23
4- 9	DEIS I Error Statistics	4-24
4-10	Maintain DEIS I Data	4-37
4-11	DEIS I On-Line Corrections	4-40
4-12	Schema of DB before and after Archival	4-41
4-13	Archive DEIS I Data Base	4-43
4-14	DEIS I Report Header	4-45
4-15	Monthly Consumption Summary	4-47
4-16	Quarterly Consumption Summary	4-48
4-17	Cumulative Consumption Summary	4-49
4-18	DEIS I Monthly Petroleum Report	4-54
4-19	DEIS I Service Summary	4-55
4-20	Cumulative Petroleum Report	4-59
4-21	Cumulative Petroleum Service Summary	4-60
4-22	Monthly Installation Summary	4-63
4-23	Monthly Summary by DOE Region/CINC	4-64
4-24	DEIS I Monthly Summary by DOE Region/CINC--Vessel Summary	4-66
4-25	DEIS I Monthly Summary by DOE Region/CINC--Region Summary	4-67
4-26	Monthly CONUS Summary Report	4-68
4-27	Worldwide Summary Report	4-70
4-28	Worldwide Category Summary	4-71
4-29	Cumulative Worldwide Category Summary	4-73
4-30	Cumulative Worldwide Summary Report	4-74
4-31	Cumulative CONUS Summary Report	4-75
5- 1	DEIS II System Flowchart	5- 4
5- 2	DEIS II Schema	5- 8
5- 3	DEIS II Edit and Convert Data	5-12
5- 4	Housing Data Base Update Processing Logic	5-17
5- 5	Accepted Records Listing	5-18
5- 6	Transaction Proof Listing	5-19
5- 7	DEIS II Activities Not Reporting	5-21
5- 8	DEIS II Activities with Product Changes	5-22
5- 9	Weather Data Base Update Processing Logic	5-25
5-10	Transaction Proof Listing (Weather)	5-26
5-11	Maintain DEIS II Data	5-32
5-12	DEIS II On-Line Corrections	5-35
5-13	Schema of DB before and after Archival	5-36
5-14	Archive DEIS II Data Base	5-38

List of Figures (Continued)

		<u>Page</u>
5-15	DEIS II Report Header Sheet	5-39
5-16	DEIS II Utilities by Region/State	5-41
5-17	DEIS II Utilities by DOE Region/CINC	5-42
5-18	Service Energy Consumption Reports	5-43
5-19	DEIS II Conservation Performance Report	5-45
5-20	DEIS II Buildings Report	5-46
5-21	DEIS II Energy Use Report	5-48

SECTION 1. GENERAL

1.1 Purpose of the System Specification

The System Specification for the Defense Energy Information System (DEIS): DEIS-80 Design is written for the Office of the Assistant Secretary of Defense for Manpower, Reserve Affairs and Logistics (OASD(MRA&L), to fulfill the following objectives:

- a. To provide detailed definition of the system functions.
- b. To communicate details of the on-going analysis between the user's operational personnel and the appropriate development personnel.
- c. To define in detail the interfaces with other systems and subsystems and the facilities to be utilized for accomplishing the interface.

1.1.1 Purpose and Scope

The purpose of this System Specification (SS) is to specify the DEIS-80 system design. It is written using the "Automated Data Systems Documentation Standards," Department of Defense (OASD-Comptroller), 7935.1-S, September 1977, as a guideline and contains the following sections.

- Section 1--General Information: This section provides an introduction to DEIS, its subsystems DEIS I and II, the current operational environment, and reference documents.
- Section 2--Summary of Requirements: This section presents a general description of DEIS-80 and specifies how its functions satisfy the operational requirements goals. This section also specifies system performance in the areas of accuracy and validity of data, scheduling and timing, and system flexibility.
- Section 3--DEIS-80 Environment: This function describes the equipment, support software, and system interfaces which comprise the DEIS-80 environment.
- Section 4--DEIS I Design Details: This section specifies the DEIS I subsystem of DEIS-80. The specification includes subsystem functional capabilities, design approach and logic flow, processing required to support each function, definition of the inputs and outputs for each function, and the computer program flow of each function.
- Section 5--DEIS II Design Details: This section specifies the DEIS II subsystem of DEIS-80, in the manner described above for DEIS I.
- Appendix A--DEIS I Data Dictionary: This appendix provides a data element dictionary for all items specified as part of the DEIS I data base.

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- Appendix B--DEIS II Data Dictionary: This appendix provides a data element dictionary for all items specified as part of the DEIS II data base.
- Appendix C--DEIS Data Collection Card Formats: This appendix contains the card columns and data items on each of the DEIS data input cards.

1.1.2 DEIS Functions and Capabilities

The primary objective of DEIS-80 is to improve current procedures and data availability in order to provide more timely, accurate, and flexible service to system users.

DEIS is composed of two major independent subsystems which are carried over from the existing DEIS; DEIS I and DEIS II.

1.1.2.1 DEIS I Subsystem

DEIS I reports the acquisition, inventory, disposition, and consumption of petroleum products such as aviation gasoline, jet fuels, motor gasolines, distillate, and residual oil within DoD. DEIS I software capabilities include the initial sort and edit of input data, loading and maintenance of the DEIS I data base, loading and maintenance of DEIS I header information and tables, identification of changes in reporting activity status, production of standard reports, and the capability for receiving ad hoc reports.

The modified DEIS I subsystem provides all the capabilities of the existing DEIS I. In addition, it incorporates new petroleum products and, through its DBMS, the flexibility to add new data elements (by reorganizing the data base) and produce new reports without major program modifications.

1.1.2.2 DEIS II Subsystem

DEIS II reports the consumption of utility energy products, such as electricity, natural gas, purchased steam/hot water, fuel oil, coal, solar/thermal power, and wind power. This subsystem also reports environmental data such as degree days during a reporting period, size of buildings in use, and the type of activity (such as storage or housing) for which the buildings are used. DEIS II software capabilities include the initial sort and edit of input data, unit conversions where required, loading and maintenance of the DEIS II data base, loading and maintenance of DEIS II header information and tables, extraction of changes in reporting activity status, production of standard reports, and the capability for receiving ad hoc reports.

The modified DEIS II subsystem provides all the capabilities of the existing DEIS II. In addition, it incorporates several new products and environmental data. Through the use of a DBMS, DEIS II provides the flexibility to add other data elements and produce new reports without major program modifications.

1.1.3 Current DEIS Organizations

DEIS-80 is designed to function within the current data collection and reporting system, although the data processing system will be new. This subsection describes the current DEIS environment; however, some efforts are underway to make short-term improvements in the timeliness and accuracy of DEIS reporting, as well as in the collection of new data elements.

DEIS depends on input from over 1,400 military bases and facilities, naval vessels, and DoD agencies. Some locations report both DEIS I and DEIS II data, while others may only need to report data in one subsystem. The data are transmitted monthly to the Defense Logistics Agency (DLA) computer center at Cameron Station, Alexandria, Virginia, via AUTODIN or DoD's message communication system. The data are input, sorted, and used to produce DEIS I and DEIS II monthly and quarterly reports and are then retained on tapes (historical data exist from fiscal year 1975). DEIS output reports are distributed to major commands in the Military Services, the reporting DoD agencies, and to various offices in DoD that perform energy-management related functions.

The Air Force Data Services Center (AFDSC) will provide programming, implementation, and operational support for the DEIS-80 functions in this System Specification. DLA will continue to provide data collection, printing, and distribution support.

DEIS reports reflect inventory data, how energy sources are utilized, and how products are issued from an activity either for bulk transfer or for consumption. The reports are currently used for supply management, energy conservation management, energy policy analysis, readiness assessment, and research and development. The Defense Energy Policy Office under the Deputy Assistant Secretary of Defense (DASD) for Energy, Environment, and Safety (EES) has overall project management responsibility for DEIS. The Defense Energy Data Analysis Panel (DEDAP) includes the Services and provides a forum for discussion of energy management information (DEIS) needs.

1.1.4 Existing Methods and Procedures

Current data reporting procedures vary between and within the Services. Each Service delegates data collection responsibility and accountability and provides automated support in the way it considers best. The following paragraphs present a general description of the activities in the existing system, including data sources and input methodologies, output reports and automated processing. More complete documentation can be found in "Defense Energy Information System (DEIS): Current System Documentation," Logistics Management Institute, ML917, March 1980.

1.1.4.1 DEIS Data Sources

DEIS I and II data are collected, coded, and reported to DLA from over 1,400 military bases and facilities, ships, and DoD agencies that use energy. Utility energy for facilities leased or managed by other Federal agencies is not included in DEIS.

The Petroleum Oil and Lubricants Officer, the Fuels Officer, the Supply Officer, or the Engineering Officer on the base or facility consolidate inventory and usage data for all petroleum products used. A base or facility's engineering or public works office is usually responsible for collecting and reporting utility inventory and usage data. Data are usually consolidated and reported for each base or facility even if several commands are represented on the base.

1.1.4.2 Input Methodologies and Data Flow

All data are transmitted in an 80-column punched card format. DEIS I requires three card formats for each petroleum product reported; DEIS II requires one card for each utility product. The majority of those reporting DEIS data submit data monthly to the DLA computer center using AUTODIN-I or the standard message form (DD Form 173). There are several major exceptions, as follows:

- a) DEIS I data collected by the Air Force are included in their stock fund system and reported to DLA after accounting reconciliations have been made.
- b) DEIS data for Army bases under FORSCOM and TRADOC flow through command headquarters.
- c) DEIS II data are reported monthly by Army bases and facilities. These data were reported quarterly prior to October 1980.
- d) National Guard headquarters receive and review DEIS data from their activities before transmitting the data to DLA.
- e) Ships at sea report by ship-to-shore communications to an on-shore station. These data are then transmitted in the same manner as the station's reports.
- f) A few activities do not have access to a communications network. Any DEIS data from these activities are sent to DFSC personnel at DLA via facsimile or mail.

1.1.4.3 Output Reports

DEIS reports have the same data fields as are input by the reporting activities, with the addition of subtotals and totals for some data fields. These reports reflect inventory data, how petroleum and utility energy were consumed, and how petroleum products were issued. Fifty-eight DEIS I and DEIS II output reports are produced regularly. These reports differ by their sort sequence, content, frequency and recipients. There are only 12 substantially different output report formats. DEIS-80 will produce these same reports. In addition to printed reports, DEIS data tapes are provided monthly to the Army Management System Support Agency, AFDCS, and the Naval Ship Research and Development Center for interface with other reporting systems. These tapes are described in Section 4.4.8.

1.1.4.4 DEIS Data Processing

DEIS data processing is completed using a variety of data entry equipment and a computer at the DLA facility at Cameron Station. None of this equipment is used exclusively or even primarily for DEIS data processing. Data entry equipment includes such devices as keypunches, teletype-compatible equipment, and computers which produce DEIS input as a result of local processing. The DLA computer center consists of an IBM 370/155 mainframe using the OS operating system. Several tapes and some disk storage of this system are used by DEIS.

The existing DEIS programs are written in COBOL and perform the file update, sorting, and report formatting functions in a batch mode.

DEIS data are maintained sequentially on magnetic tapes (one per fiscal year). The tapes contain all data since DEIS was established in 1974. Data for fiscal 1975 are currently used as the "base year" data for energy conservation measurement purposes.

This five-year history consists of approximately 41 megabytes of data. Approximately 4,600 records are reported each month; each year contains approximately 55,000 records (8.25 megabytes). DEIS I records contain three card images of 80 characters (since October 1979, previous fiscal years have 150-character records), and DEIS II records contain 170 characters.

DEIS "header" data are maintained on magnetic tape. There is a separate file of header data for DEIS I and DEIS II. These files contain descriptive data elements, such as an activity's name, Service, major command, geographic location, and DoD activity address code. The files are updated as changes are reported, but the individual items rarely change.

1.2 Project References

This System Specification utilizes documentation from previous DEIS studies, analysis, and direct contact with DEIS users, data collectors, and data processors.

1.2.1 Logistics Management Institute Documentation

"Review of the Defense Energy Information System (DEIS)," Logistics Management Institute, ML800, June 30, 1978.

"Defense Energy Information System (DEIS): Base Case Description," Logistics Management Institute, WN-ML809-1, November 20, 1978.

"Defense Energy Information System (DEIS): Current DEIS Assessment," Logistics Management Institute, WN-ML809-2, February 9, 1979.

"Defense Energy Information System (DEIS): Alternative System Concepts," Logistics Management Institute, WN-ML809-3, March 16, 1979.

"Defense Energy Information System (DEIS): Recommended Design Modifications," Logistics Management Institute, ML809, June 1979.

"Defense Energy Information System (DEIS): Current System Documentation," Logistics Management Institute, ML917, March 1980.

1.2.2 Other DEIS and Related References

"Defense Energy Information System," Department of Defense, DoD 5126.46-M, May 12, 1978.

"Defense Energy Information System Modification Specifications," Department of Defense, DoD 5126.46-M, August 1978.

"Defense Energy Information System - A Preliminary Analysis," Stanford Research Institute, SRI Project 2513-4, November 1973.

"Automated Data Systems Documentation Standards," Department of Defense, (OASD-Comptroller), 7935.1-S, September 13, 1977.

1.3 Terms and Acronyms

The following terms and acronyms have been used in this report.

1.3.1 Terms

Back-Up Copy: A copy of a file or data set that is kept for reference in case the original file or set is destroyed.

Back-Up Procedures: Procedures which allow systems to be restored and interrupted processing to resume while maintaining system integrity.

Batch Processing: Pertaining to the control technique of grouping computer programs or data for input to a computer system for handling at the same time.

Data Base: The collection of computer-stored data which is accessed by a processing system and is fundamental to the performance of the capabilities of that system.

Data Base Administrator: The person responsible for the efficient organization and operation of the data base.

Data Element: A group of characters that specify an item, for instance, "month." A data element contains no subordinate items.

File: One or more records concerning places or things that are closely related and handled together for processing.

Function: One of several individual processes performed by a computer program, for instance, sorting a data base.

Interactive Processing: Pertaining to processing in which each entry elicits a response.

On-Line: (1) Pertaining to equipment or devices under control of the computer; (2) Pertaining to a user's ability to give the computer instructions and receive output without delay. Interactive processing is one type of on-line activity.

Record: A set of data elements closely related in the sense that they pertain to the same place or thing. An example is a "DoDAAC product record", which contains consumption information about a particular product at one DoD activity.

Software: Computer programs or routines prepared by computer professionals to simplify and facilitate the use of the computer.

Subsystem: A coordinated group of components which form a secondary or subordinate system usually capable of operating independently of, or asynchronously with, a controlling system.

System: A coordinated organization of people, hardware, methods and procedures that operate together to achieve a predetermined set of objectives.

1.3.2 Acronyms

AFDSC - Air Force Data Services Center

ASD(MRA&L) - Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics)

COM - Computer Output to Microfilm

DASD(EES) - Deputy Assistant Secretary of Defense (Energy, Environment, and Safety)

DBA - Data Base Administrator

DBMS - Data Base Management System

DEIS - Defense Energy Information System

DEIS-80 - Revised Defense Energy Consumption Information System

DEIS I - Petroleum Products Portion of DEIS

DEIS II - Utility Energy Usage Portion of DEIS

DFSC - Defense Fuel Supply Center

DFSC-CB - DFSC, Office of Comptroller, Management Information & Analysis Division

DLA - Defense Logistics Agency

DoD - Department of Defense

DoDAAC - DoD Activity Address Code

GSA - General Services Administration

I&H - Installations and Housing
NAVFAC - Naval Facilities Engineering Command
NESO - Navy Environmental Support Office
OASD - Office of the Assistant Secretary of Defense

SECTION 2. SUMMARY OF REQUIREMENTS

The design of DEIS-80 is based on the procedures and capabilities identified and described in the "Defense Energy Information System (DEIS): Recommended Design Modifications," Logistics Management Institute, ML809, June 1979, and approved by the DASD (EES) and the Defense Energy Policy Council. This section describes DEIS-80, its functions, and its performance requirements.

2.1 System Description

DEIS-80 is a system for collecting, summarizing, and reporting mobility and utility energy usage information. It depends on input from Service or agency field activities or major commands and on DFSC inventory data.

The purpose of the system is to produce a series of monthly reports reflecting inventory data, how energy sources are utilized (consumed), and how products are issued from an activity, either for bulk transfer or for consumption. These reports are useful in estimating future energy requirements.

The implementation of DEIS-80 will significantly change existing data processing programs and will require the use of on-line terminals and additional software (a DBMS and application programs). AFDSC will provide the program development and implementation staff. AFDSC will also provide access to the mainframe used to process DEIS-80. Since the data are not classified and on-line access by various users is required, the INQUIRE DBMS as implemented on an unclassified computer will be used. DEIS-80 as described in this System Specification could be implemented on any large system with a generalized DBMS, however.

To minimize inconvenience to the 1,400 data collectors, DEIS data will continue to be transmitted to DLA using AUTODIN or the DoD message communication system. Revised instructions and formats will be published in the revised DEIS user's manual (DoD 5126.46-M).

To produce the reports, data must be collected and maintained. DEIS-80 has two subsystems. DEIS I covers mobility fuels and DEIS II covers energy used for utility purposes. Each subsystem has a data base which is maintained separately. There is no interaction between the two subsystems. The subsystems differ as to the type of data collected and the persons collecting the data, but the automated functions are very similar. In this section, the subsystems are treated together, although the detailed functions (described in Sections 4 and 5) and data bases are specified separately for DEIS I and DEIS II.

DEIS-80 offers the following improvements over the existing DEIS:

- a. Improved utility - DEIS-80 provides new data items needed for current user requirements, as well as the capability to support such features as ad hoc reporting, on-line queries, or trend analysis of energy data.
- b. Increased flexibility - Recent developments in national energy policy, changing energy technologies, and decreasing fuel supplies

create user requirements for more and varied data. The data base structure of DEIS-80 will provide the needed flexibility.

- c. Higher degree of accuracy - Problems in the current DEIS have resulted in a lack of confidence in, and reduced usefulness of, DEIS data. DEIS-80 simplifies and facilitates data entry and correction.
- d. More timely data collection and processing - Problems with data collection in the existing DEIS have resulted in late or incomplete reports. DEIS-80 simplifies data collection and includes a DBMS to facilitate processing of the data.

The Defense Energy Policy Office, ODASD (EES), has overall project management responsibility for DEIS. The Management Information and Analysis Division of the Office of the Comptroller, Defense Fuel Supply Center, is the DEIS system operator.

2.2 DEIS System Functions

This subsection addresses both the manual and automated functions designed to meet DEIS requirements. Each of the automated functions will be described in greater detail in Sections 4 and 5. Since the functions are very similar for DEIS I and DEIS II, they will not, for the most part, be discussed separately in this section. The following functions are displayed in the system flowchart in Figure 2-1. The subsection numbers, where applicable, are noted on the flowchart. Figure 2-2 shows the organizations responsible for these DEIS functions.

2.2.1 Collect and Report Data

DoD activities report DEIS I and DEIS II data monthly. Both the accuracy and timeliness of the reported data will be improved by the use of self-checking input worksheets. Appendix C contains the card layout for each of the input forms.

2.2.2 Maintain Data with a DBMS

DEIS flexibility and utility will be improved through use of a generalized DBMS. There are no programming requirements for developing the DBMS, since an existing system, INQUIRE, will be used. The DBMS should have the following capabilities and features:

- Multiple user on-line access
- Host language interface to the programming language to be used for applications programs
- Automatic restart/recovery for system crashes
- Automatic logging of updates
- Ability to add new data fields (non-keyed) to existing data base records

FIGURE 2-1

DEIS SYSTEM FLOWCHART

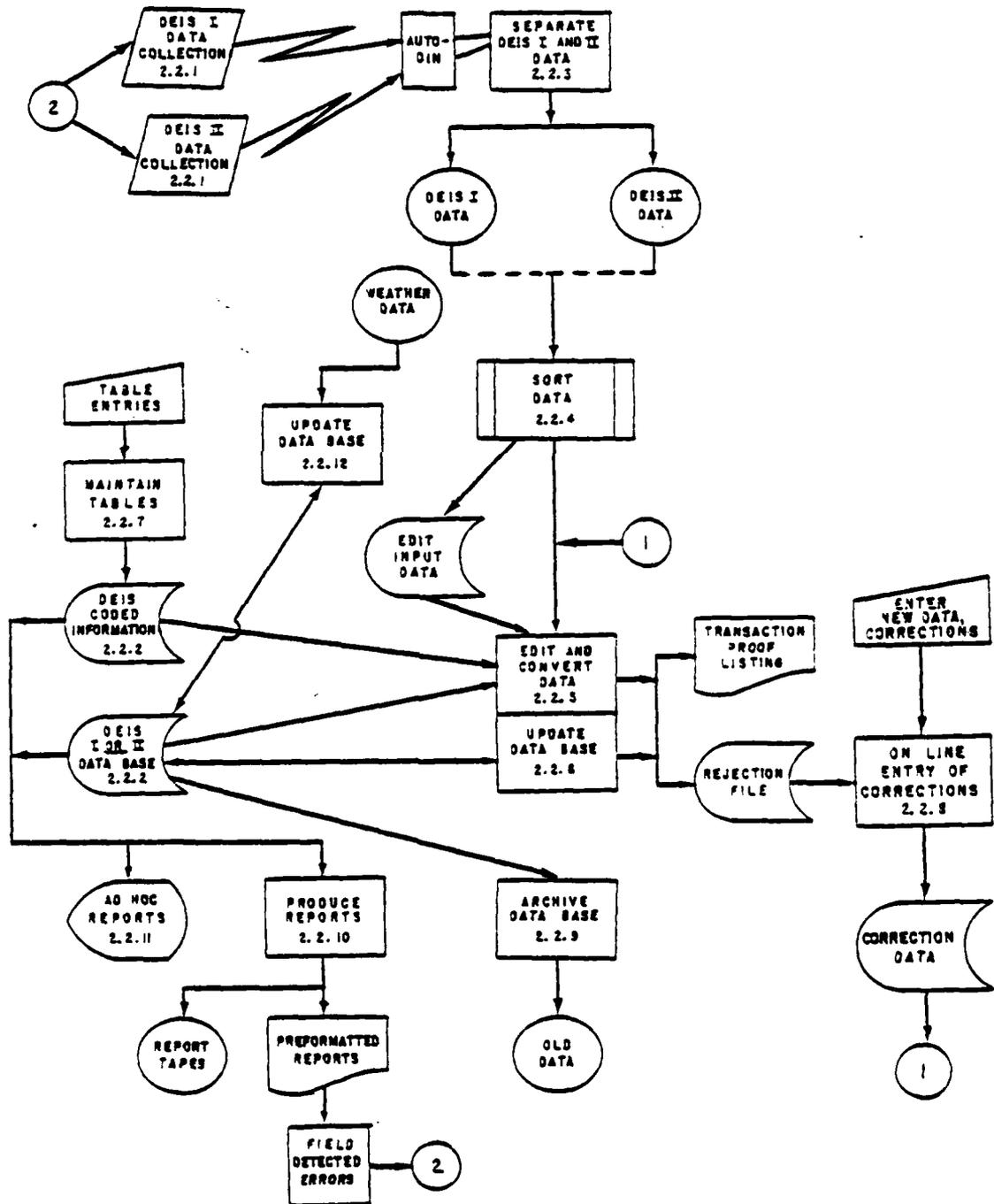
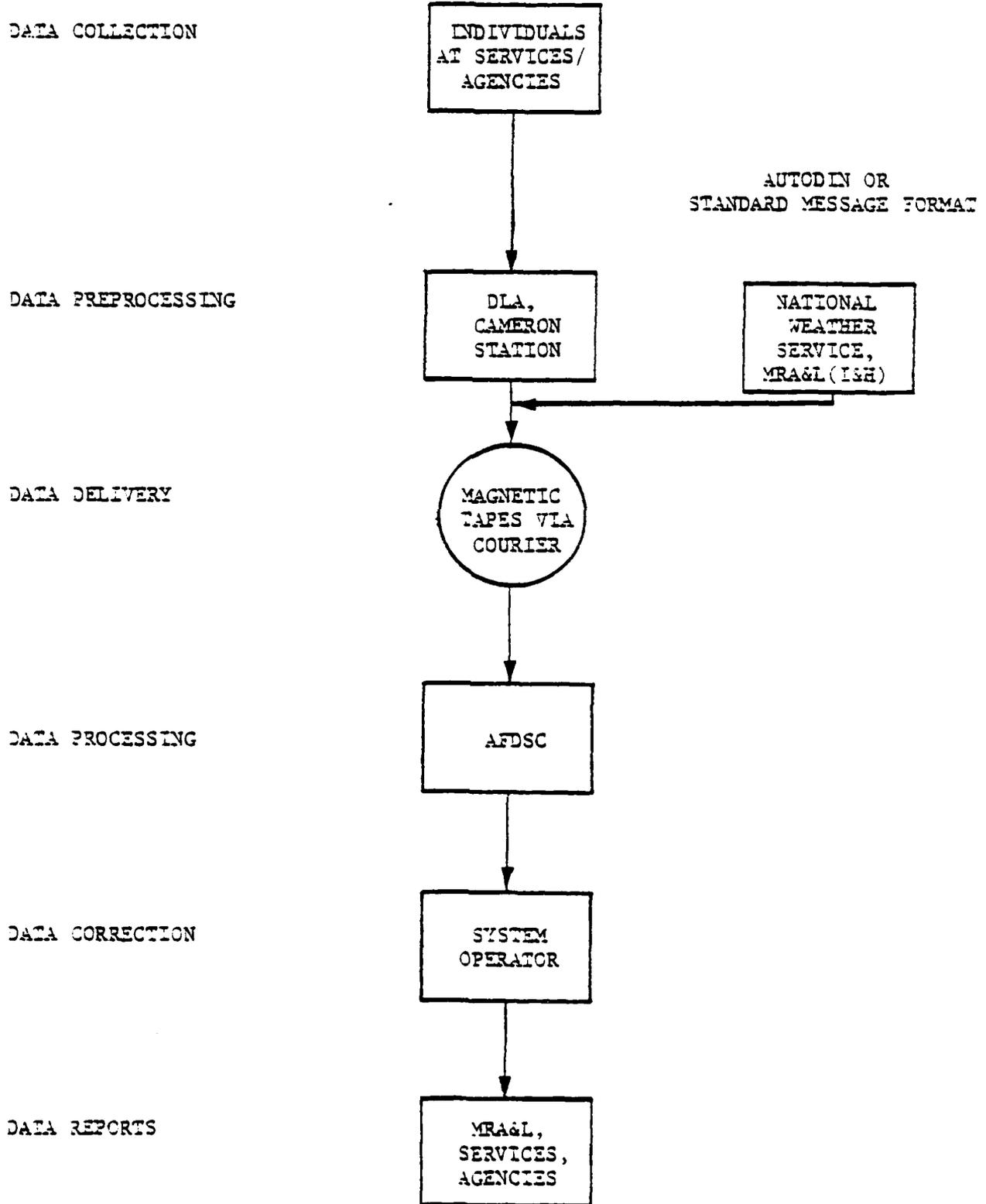


FIGURE 2-2

ORGANIZATION FLOW OF DEIS DATA



- Batch update capabilities via host language program
- User password locks at the record level (will be needed when field data input starts, one to two years after DEIS-80 implementation)
- On-line query and report generation capabilities

2.2.3 Separate DEIS I and II Data

Both DEIS I and DEIS II data are collected and reported from activities monthly. All DEIS data are addressed to the DLA computer center in a similar way. The initial separation of these data facilitates later editing and processing by each of the subsystems. The outputs of this process are separate DEIS I and DEIS II data tapes for delivery to AFDSC and further processing.

2.2.4 Perform Initial Sort

For increased efficiency in updating the data base, input data may be sorted and written to an edit input file. As indicated above, DEIS I and DEIS II data will be on separate files for this and all subsequent functions and will be processed in similar but distinct runstreams.

2.2.5 Edit and Convert Data

All data will be converted to a format compatible with that required for updating the DBMS. All data will also be edited in an attempt to eliminate errors. The edits will include checks for missing data, correct format, and form (alphabetic or numeric). Those data items which pass the edit criteria will be converted (if necessary) to standard units and ultimately applied (added) to the data base. Records containing data items which fail the edit criteria will be placed on a Rejection File. Outputs from this function are: 1) a list of records with possible errors, and a list of activities reporting late, not reporting, reporting product changes, and reporting significantly different product usage; 2) a Rejection File containing erroneous, out-of-date, or questionable data; and 3) an Update File (or data base) containing accepted records. Error statistics will be collected and reported to the system operator (DFSC-CB).

2.2.6 Update Data Base (Batch)

The actual data base update is performed through the generalized DBMS capabilities and provides for applying records with correct data to the data base. This function will be performed at least once each month. Due to late reporters and changes, the data base may be updated two or three times each month. Features of the DBMS, such as the ability to log updates automatically and create a Rejection File of records thought to be in error are also used in conjunction with the data base update.

In the future, the need to add or delete new data files or otherwise reorganize the data base may occur. The features of the DBMS will permit such updating, should it become necessary.

2.2.7 Maintain Tables

Part of the DEIS data base will contain clear (uncoded) text of header and product coded data, conversion factors, and distribution lists for each report. Maintenance of these tables will be performed by AFDSC in cooperation with the system operator.

2.2.8 Perform On-Line Data Entry of Corrections

This function provides the procedure to correct and resubmit records on the Rejection File, to change items in the data base, and to submit new data records for editing and updating the data base. Macros and screen formats may be provided to facilitate corrections and updates by infrequent users. All on-line corrections and updates will be entered on the Correction File for editing before data base updating.

2.2.9 Archive Data Base

The DEIS-80 on-line data base consists of monthly data for the most recent 13 months and for the baseline year. It also contains quarterly summaries of monthly data for 5 previous years. This function will provide processing to incorporate the monthly data into quarterly data if necessary, unload unneeded monthly data to an Archival File, delete the appropriate data from the on-line data base, and create a history file in standard DBMS format.

2.2.10 Produce Preformatted Reports

DEIS-80 will provide a series of standard reports and tapes on a scheduled basis. These reports may be prepared through host language interface with the DBMS for data retrieval. The scheduled reports include all the existing DEIS reports. The reports will be sent to the system operator for distribution to the Services, agencies, MRA&L(EES) and others as specified by the Defense Energy Policy Office.

2.2.11 Generate Ad Hoc Reports

All data in the DEIS data base will be accessible to authorized users for generation of special, one-time, or new reports. Through use of the generalized DBMS, this function will provide an easy-to-use, interactive capability to access, retrieve, format, and print data for these reports. Interface to certain data reduction and statistical functions will also be provided. The final output will be directed to the terminal originating the request or to a specified hard-copy printer as the requester chooses. The requester may also choose to save the symbolic language statements which comprise a report request so that the same report or a modified version may be requested later with minimal effort.

2.2.12 Add Data from Other Systems

Building and weather data needed for DEIS II reports will be received from the Services and agencies on magnetic tape. This function will convert the data to INQUIRE format and update the data base. This function will be performed annually for building data and monthly for weather data.

2.3 Accuracy and Validity

There will be several ways of ensuring the accuracy and validity of DEIS data. Improved manual procedures and controls will increase the likelihood of complete and accurate data being collected and recorded for all DoD bases, ships, installations, and activities. Data transmission errors will be minimized through the use of AUTODIN-I and self-checking worksheets. A number of syntax, format and value edits will be performed by the automated system when new transactions are added to the data base. A final, manual check on the data will be performed by persons who will inspect and evaluate the results of the submissions.

2.3.1 Manual Procedures

Both the accuracy and validity of DEIS data will be increased through conscientious use of self-checking input worksheets (with instructions) and reduction of manual calculations. Any automated or managerial aids the Services can support should be available to persons collecting and submitting DEIS data. In addition, the automated DEIS-80 will provide timely input summary and performance reports of each reporting activity for distribution, through the Services and agencies, to each person collecting data.

2.3.2 Data Transmission

The use of the AUTODIN-I communication system is specified in the existing DEIS and, wherever available, it should continue to be used. AUTODIN contains parity error detection and correction routines which are superior to those used in the teletype-based DoD message communication system.

2.3.3 Automated Edits and Calculations

Various data edits will be performed automatically when new DEIS transactions are added to the data base. All required data items will be examined to verify the presence of data. All data will be verified for format (numeric or alphabetic) and value, as specified in the DEIS I and DEIS II data dictionaries in Appendices A and B.

Calculations in DEIS are limited to unit conversions and summary (totals) calculations. In general, these calculations will result in a whole number; however, certain conversions should be kept to two decimal places (see Appendix B). In either situation, should arithmetic operations result in more than the required accuracy, all amounts with a number greater than or equal to five in the next significant decimal place will be rounded up, and all amounts with a number less than five in that decimal position will be truncated either to two decimal places or to a whole number, as appropriate.

2.3.4 Scheduling and Timing

As of October 1980, all DEIS data will be collected and reported as of the last day of each month. DEIS I data were previously reported as of the last Friday of the month. DEIS I reports must arrive at DLA by the third working day of the following month. DEIS II reports must arrive at DLA by the 28th of the month following the end of the reporting period. Reports are due at the Defense Energy Policy Office by the 10th of each month.

The initial sorting, editing and data base updating should be initiated the day AFDSC receives the input (usually the day after the due date). Between that time and the 9th of the month, most of the interactive processing will take place as data items are corrected and added. The system operator will enter correct or new data in an on-line mode. Late data may also be submitted by DLA on tape if the volume of late reporting activities warrants batch processing. It is expected that on-line activity may be as much as 4 to 6 hours per day for 7 working days preceding the 9th of the month. Syntax edits will be performed and response will be provided in conversational mode within several seconds.

The corrected data will then be edited and applied to the data base by a batch job initiated by the system operator. Much of the batch updating will be completed overnight (as AFDSC scheduling permits), as will production of the regularly scheduled reports (initiated the night of the 9th of each month). Depending on the volume of update transactions, the system operator may request overnight processing or processing that should be completed within two to three hours.

Ad hoc reports and queries will be provided within a few minutes to four hours, depending on the complexity of the request and whether the output is directed to the originating terminal or to a printer. Simple queries, such as those requiring no sorting and output of less than 500 lines, will be provided within 15 minutes under normal circumstances. Queries which result in sorting, extensive accumulation of data, and a larger amount of output will be provided within four hours.

2.4 Flexibility

Use of a generalized DBMS is the basis of DEIS flexibility. The DBMS permits acceptance of new data elements as they become relevant to DEIS users, easy creation of new reports, and on-line queries and corrections, and provides analytical capabilities as well.

A number of changes and improvements to DEIS have been discussed and may be implemented in the future. To ensure consistent support of DoD energy goals, any change which constitutes a change in DEIS requirements must be approved by the DASD (EES) and the Defense Energy Policy Council prior to development or implementation.

SECTION 3. DEIS ENVIRONMENT

3.1 Equipment Environment

DEIS-80 will depend on unclassified equipment at AFDSC for the bulk of its data processing. For optimal processing, at least three separate disks should be available for data base storage.

Based on the size of the data dictionary for DEIS I and DEIS II (see Appendices A and B) and the level of reporting currently processed, it is estimated that the DEIS I data base will contain 36 million characters, and the DEIS II data base, 45 million characters. These estimates do not include any overhead required by the DBMS, which may require 50 percent more disk space. The DEIS I data base will contain 7 index fields, the DEIS II data base, 10 index fields.

Based on the size of existing DEIS programs, about 38,000 lines of code may be generated, with typical programs requiring a region size of approximately 100K. This does not include the size of the DBMS (INQUIRE).

In addition to the computer mainframe, the following equipment will be utilized:

- a. Communications network: DEIS data will continue to be transmitted over AUTODIN-I or the DoD message communication network (teletype-compatible terminals) in most instances.
- b. DLA computer center: DEIS data will continue to be transmitted to DLA's computer center where magnetic tapes of the data will be produced for courier delivery to AFDSC. In the future, DEIS data may be routed to AFDSC and the courier service will be unnecessary.
- c. Tape drives: In addition to the disk drives and packs required for on-line data and program storage, tape drives will be required both to read DEIS data as submitted from DLA and to record data for archival purposes.
- d. I/O devices: A card reader, high-speed printer, terminals (CRT, graphics, hard copy), and COM capabilities are required. The system operator requires three terminals (preferable bisynchronous) for entry of data and queries. In addition, the system operator needs a 300-line-per-minute printer for small error reports and queries. The Defense Energy Policy Office requires one terminal (portable, hard copy) for queries. It is expected that not more than three terminals will be accessing the DEIS data base at any one time.

In the future (3 to 4 years), installations that have terminals may submit DEIS data directly to a file at AFDSC for rudimentary on-line editing. It is expected that less than one-fourth of the users would submit data in this manner and each user would submit an average of 30 and a maximum of 300 card images.

3.2 Support Software Environment

The support software required is already available at AFDSC and DLA and includes the following:

- a. An operating system
- b. At least one high-level programming language (COBOL or PL/I)
- c. Communications software (to monitor and ensure accuracy of data transmission)
- d. Data base management software (INQUIRE).
- e. Statistical packages
- f. Software similar to IBM's Structured Programming Facilities (to enhance the ease of on-line editing capabilities)

This support software provides the basis for AFDSC to produce the DEIS-80 application software.

3.3 Interfaces

There is no direct hardware or software interface between DEIS and any other automated system. However, DEIS interfaces with other automated systems via data transmissions, as described below.

3.3.1 Interface with DLA

The DLA computer center will provide tapes containing DEIS data as submitted through AUTODIN, DoD's message communication system, or hard copy. This may include data which have undergone pre-DEIS processing from any of the Services. Service data submitted on magnetic tape must be in the same form as those produced by DLA for AFDSC, that is, they must contain DEIS data card images as described in Appendix C.

After DEIS-80 is completed (including parallel testing) and fully operational, the DEIS routing indicator may be changed so that data come directly to AFDSC. This would save the time needed to transport the tapes.

3.3.2 Interface with Installations and Housing

Each of the Services, through Installations and Housing, will provide a magnetic tape of building data (see Appendix B) for each base and facility. Building information will be processed annually for the Army, Marine Corps, Air Force, and Navy for inclusion in the DEIS II data base.

3.3.3 Interface with the National Weather Service

Each month the National Weather Service will provide a magnetic tape containing monthly degree days at its weather stations near DoD bases/ installations. Those data will be included in the DEIS II data base.

3.4 Security and Privacy

DEIS contains no classified information and no information on individuals and, therefore, does not have any specific privacy and security requirements. Procedures to ensure the integrity of the data base are discussed in the following subsection.

3.5 Controls

Once DEIS implementation is substantially completed, operational control will be imposed by the Defense Energy Policy Office administrative functions. This office will be the focal point for policy concerning the needs of numerous users and a widely distributed input process. The Defense Energy Policy Office has also delegated the function of the Data Base Administrator (DBA) to the system operator (DFSC-CB).

The major required DBA functions are:

- a. Review of inputs to ensure completeness and accuracy of data submissions
- b. Consultation with users and AFDSC to determine if data base contents or organization requires change
- c. Development of standard definitions for data items
- d. Review of data base and system statistics
- e. Control over initiation of update runs, restart/recovery procedures, data base back-up procedures, and initiation of report generation (initially through liaison with the AFDSC)

SECTION 4. DEIS I DESIGN DETAILS

The overall requirement for the DEIS I subsystem is to provide reports and easy access to data so that petroleum product usage and inventories within DoD can be monitored easily and accurately. With this general design criterion as a guideline, the following requirements were developed. First, DEIS I data will be maintained on an unclassified system and use a DBMS that supports on-line queries through standard data base retrieval routines. Second, the DBMS will provide the capability to add or delete data element fields when new requirements arise. Third, data entry will be easy for users and yet controllable by those responsible for managing DEIS. Fourth, data editing, including both format and reasonableness criteria, will provide increased accuracy. Finally, code translation capabilities and report generation procedures will be included in DEIS I to increase the readability of the reports and the responsiveness of the system. The specific functions designed to meet these requirements are described in the following paragraphs.

4.1 General Operating Procedures

4.1.1 Data Requirements

The capability must be provided to input DEIS I data on-line to the Correction File as well as from cards and card images on magnetic tape. Edit procedures will prevent double entry of data; duplicate records will be printed on an error report (called a Transaction Proof Listing).

All data submitted from a field activity will be handled as an add transaction unless data for the same date, DoDAAC and product code exist in the data base. DFSC-CB will retain a listing of the original data submitted from the field activities for one year, either on the DD173 message form or a listing of validated punched cards received via AUTODIN.

4.1.2 System Scheduling Requirements

DEIS I data are due at DLA, Cameron Station, by 0800 hours on the third working day of the month. DEIS I data are due at AFDSC by 0800 hours on the next day of the month. Initial data editing, including the production of preliminary reports and the nonreporting activities report, should be completed by 0800 hours on the seventh day of the month. Data from late reporters and changes due to the initial editing will be entered between the seventh and ninth days of the month. Final reports should be provided to the Defense Energy Policy Office and the designated defense components not later than the tenth day of the month. The system operator will initiate the request for these final reports. Table 4-1 summarizes the processing cycle for DEIS I. This schedule is the optimal processing cycle and will be revised after the system is operational. The AFDSC will advise the system operator of any machine or scheduling problems affecting this schedule.

4.1.3 Data Base Back-up Procedures

The information containing DEIS I data received from DLA will be retained for three months at AFDSC and then returned to DFSC-CB. Transactions entered on-line will be retained for 24 hours. All files of transactions in error

TABLE 4-1

DEIS I PROCESSING CYCLE

<u>Day of the Month</u>	<u>Responsible Party</u>	<u>Actions Required</u>
last	Activity/Installation	Collect DEIS I data.
1-4	Activity/Installation	Submit DEIS I data for transmission.
5	DLA	After 0800 hours, separate DEIS data, produce tape, and send to AFDSC.
6	AFDSC*	Run update. Send list of errors, non-reporters, and non-current data to DFSC-CB.
6-9	DFSC-CB	DFSC-CB will work with AFDSC to run edits as required to produce an accurate data base.
7	DFSC-CB	Notify non-reporters, confirm non-current data and start error corrections.
8	DLA	Separate late-arriving DEIS data, produce tape, and send to AFDSC.
9	AFDSC*	Update data base with new data. Deliver report tape to DLA.
10	DLA	Produce, bind, and deliver reports to Defense Energy Policy Office and the Service energy offices.
11-15	DFSC-CB	Enter remaining corrections, and late reports. Request edit, update, report cycle, if necessary.
15	AFDSC	Archive data.
all	DFSC-CB	Maintain tables and coded information. Enter corrections to data base.

* 24-hour or less turnaround is preferred but some delay is acceptable.

will be backed up and saved until the 15th of the month. A file of all changes to the data base will be saved and backed up. This file will be deleted on the 15th of the month or when specified by the system operator. The back-up of this file will be retained for one year. The entire data base will be backed up annually in October. Monthly archive tapes of the data base (detail monthly data and summary data no longer needed on-line) will be kept for 5 years on tape or disk. This monthly archiving of data will use relevant INQUIRE capabilities so that the data base can be easily recreated.

4.1.4 Recovery Procedures

Restart and recovery procedures will conform to standard AFDSC procedures. Transaction logging, retention of DEIS I data tapes, and data base back-up will permit recovery of a damaged data base. AFDSC will develop recovery actions consistent with their operating procedures.

4.1.5 Access to Archived Data

Occasionally, data not contained in the on-line data base will be needed. Procedures (using INQUIRE capabilities) will exist to create a temporary INQUIRE data base containing archived data for use in on-line data retrieval and data reporting. Since archived data are not updated, this data base may need to be updated before it is used to generate reports.

4.1.6 DEIS I Data Monitoring

The Defense Energy Policy Office has management responsibility for DEIS I, and AFDSC has programming responsibility. DLA manages DEIS operations through the DEIS system operator at DFSC-CB. The DEIS system operator is authorized direct communication with all reporting activities to request late reports and to verify reported data. The DEIS system operator is responsible for making (with Defense Energy Policy Office authorization) all changes to data more than 90 days old. DFSC-CB also coordinates with AFDSC any changes to coded or tabular information in the data base and any changes concerning authorized users. DFSC-CB enters data on fuels in transit and works with the Defense Energy Policy Office and AFDSC when changes to DEIS are anticipated.

4.2 DEIS I Subsystem Logic Flow

The general system flow of DEIS I is designed to provide functions to process and access petroleum product data in a timely manner. Figure 4-1 illustrates the logical flow of the subsystem.

Data enter DEIS I through AUTODIN, the DD173 message form, or other communications media. The data are collected at DLA, Cameron Station, and DEIS I data are separated from other data and recorded on magnetic tape. The DEIS I data are then transmitted to AFDSC for further processing.

At AFDSC, DEIS I data are sorted and edited for format and validity (compared to data already in the data base). Records believed to be in error are placed on the Rejection File for review. Records with a date older than 90 days are also placed on the Rejection File. In addition, those activities which have not submitted DEIS I data are identified and reported. Data which pass these edits are converted to the INQUIRE data base format, and the data base is updated.

Data records believed to be in error are corrected and resubmitted for editing, conversion, and data base updating. Data relating to installations, such as the name and address, product names, and conversion factors, are maintained on an INQUIRE coded information file.

DEIS I reports will be produced once the monthly reporting cycle is completed or by the 10th of each month. Ad hoc reports and data base queries will be made on an as-needed basis. Errors in reports detected by the data submitters can be corrected by submitting corrections via AUTODIN or notifying the system operator of the corrections.

The data base will contain detail data for installation (DoDAAC) petroleum product usage for the most recent 13 months and for the baseline (1975) 12 months. Quarterly summary data will be in the data base for each installation and each petroleum product used for the 5 years prior to the earliest of the most recent 13 months. Each month, the appropriate monthly and quarterly data will be removed from the on-line data base and saved off-line for possible reload and retrieval.

4.3 Subsystem Data

Included in this subsection are a description of the inputs, outputs, and data used.

4.3.1 Inputs

A description of the data elements used in DEIS I, including the data element number and name, source format, and acceptable values, is contained in Appendix A. All data items from the field will be submitted monthly according to the schedule described in 4.1.2. Approximately 883,200 characters will be submitted monthly. Coded information items will be submitted on an as-needed basis.

Table 4-2 shows the layout of the data (monthly) on the master files for fiscal years 1975 through 1978. These data have been edited and may be accumulated without any further editing into quarterly data (as described in Section 4.4.7) and loaded into the data base. These tapes (one per fiscal year) are 7 track, unlabeled, even parity, 800 BPI. The record size is 150 and the blocking factor is 23. The 77T quarter and all prior fiscal years have been converted; so that the fiscal year for all years is the current October 1 to September 30 timeframe.

Monthly data for fiscal years 1979 and 1980 are in MEA 2, 3 and 4 card format. These data also have been edited. The 1979 data may be accumulated into quarterly data and loaded into the data base. The monthly data for 1980 may be loaded into the data base almost unchanged. The Julian date must be converted to a month and year date. These tapes are 7 track, unlabeled, even parity, 800 BPI. The record size is 80 and the blocking factor is 40.

Rev. A

TABLE 4-2

PRE-1978 DEIS DATA

<u>DATA ELEMENT NUMBER</u>	<u>DATA ELEMENT DESCRIPTION</u>	<u>LENGTH</u>	<u>RECORD POSITION</u>
9	DoDAAC	6	1-6
38	TAC	1	7
	Filler	1	8
28	Region Code	2	9-10
	Filler	1	11
37	State Code	2	12-13
	Filler	1	14
21	Product Code	3	15-17
	Filler	1	18
19	Opening Inventory	9	19-27
	Filler	1	28
15	Base Issues*	9	29-37
	Filler	1	38
4	Receipts-Commercial	9	39-47
	Filler	1	48
11	Receipts-DoD	9	49-57
	Filler	1	58
3	Closing Inventory	9	59-67
	Filler	1	68
14	Installation Name	40	69-108
	Julian Year	2	109-110
	Julian Day	3	111-113
	Filler	1	114
17	Major Command	10	115-124
	Filler	24	125-148
32	Service Code	1	149
	Filler	1	150

* Total Consumption = Base Issues for these records except when TAC = 9 (DFSC wholesale data). The Region, State, Installation Name, Major Command and Service Code fields are not processed since these fields exist for the DoDAAC on the Header File.

4.3.2 Outputs

The following is a list of the reports generated by the DEIS I subsystem. More detail on the report formats is contained in the descriptions of the functions.

- Transaction Proof Listing
- DEIS I Monthly Activities Not Reporting

Rev. A

- DEIS I Activities Reporting Changes
- Monthly, Quarterly, and Cumulative Consumption Reports
- Monthly Petroleum Report
- Cumulative Petroleum Report
- Monthly/Quarterly Installation Summary
- State Summary Totals
- Vessel Summary Totals
- Region Summary Totals
- Monthly/Quarterly/Cumulative CONUS Summary Report
- Monthly/Quarterly/Cumulative Worldwide Summary Report
- Monthly/Quarterly/Cumulative Worldwide Category Summary
- Ad Hoc Reports

4.3.3 Data Base

The DEIS I data base will be constructed using the INQUIRE DBMS. Figure 4-2 shows a schema of the data base. It is expected that the on-line data base will contain (not including any overhead) approximately 55,000 records of 150 characters.

4.4 DEIS I Subsystem Program Descriptions

DEIS I subsystem programs are described in the following paragraphs. The functions are presented in the sequence in which they will typically be used during a DEIS I reporting cycle.

4.4.1 Separate DEIS I and DEIS II Data

The processing required for this function exists at DLA and will be used without modification.

4.4.1.1 Purpose

Although DEIS I and DEIS II data may arrive at DLA on the same day, the two subsystems are separate and require separate editing and processing steps. All data transmitted to DLA via AUTODIN or the DoD standard message form contain both a system and a routing identifier. The system identifier is contained in the first three positions of each card image. The identifier assigned to DEIS I is MEA, and the identifier assigned to DEIS II is MEB. To facilitate handling, the DEIS I and DEIS II data are separated and written on separate tapes before further processing.

FIGURE 4-2

DEIS I DATA BASE SCHEMA

	<u>length</u>	
<u>DoDAAC*</u>	6	
- <u>TAC</u>	1	
- <u>Service</u>	1	
- <u>Major Command</u>	10	
- <u>DOE Region</u>	2	
- <u>State/Country</u>	<u>2</u>	
	22	
<u>DATES</u> (45)	4	
- <u>PRODUCT CODES</u>	3	Variable number of products for each date
- Opening Inventory	7	
- Issues	7	
- Commercial Receipts	7	
- DoD Receipts	7	
- Closing Inventory	7	
- Primary Use	6	
- Secondary Use	6	
- Tertiary Use	6	
- Total Consumption	7	
- Average Daily Consumption	6	
- Loss/Downgrade	6	
- Aviation	6	
- Quantity Issued to 1	5	
- Quantity Issued to 2	5	
- Quantity Issued to 3	5	
- Inter-Service Transfers	6	
- Non DoD Transfers	5	
- Intra-Service Transfers	6	
- Service Use 3	6	
- Service Use 4	5	
- Date of Update	4	
- Correction Code	<u>1</u>	

129 characters per Product Code

Assuming an average of 5 products per DoDAAC and 1400 DoDAACs, data base size is 42.3 million bytes.

Assuming an average of 3 products per DoDAAC and 1400 DoDAACs, data base size is 26 million bytes.

* Keys are underlined

4.4.1.2 Data Definition

The only data items of the input records that need to be examined for this function are the first three positions of each input record (card image). These positions should contain MEA or MEB. Table 4-3 lists the common data fields on the input records.

TABLE 4-3
SEPARATION OF DEIS I AND II DATA

<u>Data Dictionary Element Number</u>	<u>Element Name</u>	<u>Comments</u>
	Card Type	System Identifier MEA or MEB
	Card No.	2, 3, or 4
10	DoDAAC	First letter designates Service
38	TAC	9 or blank
29	Rpt Date	Reporting date (month, year)
21	PROD CODE	Product Code
	Detail data	Remaining MEA or MEB record contents

4.4.1.3 Processing Logic

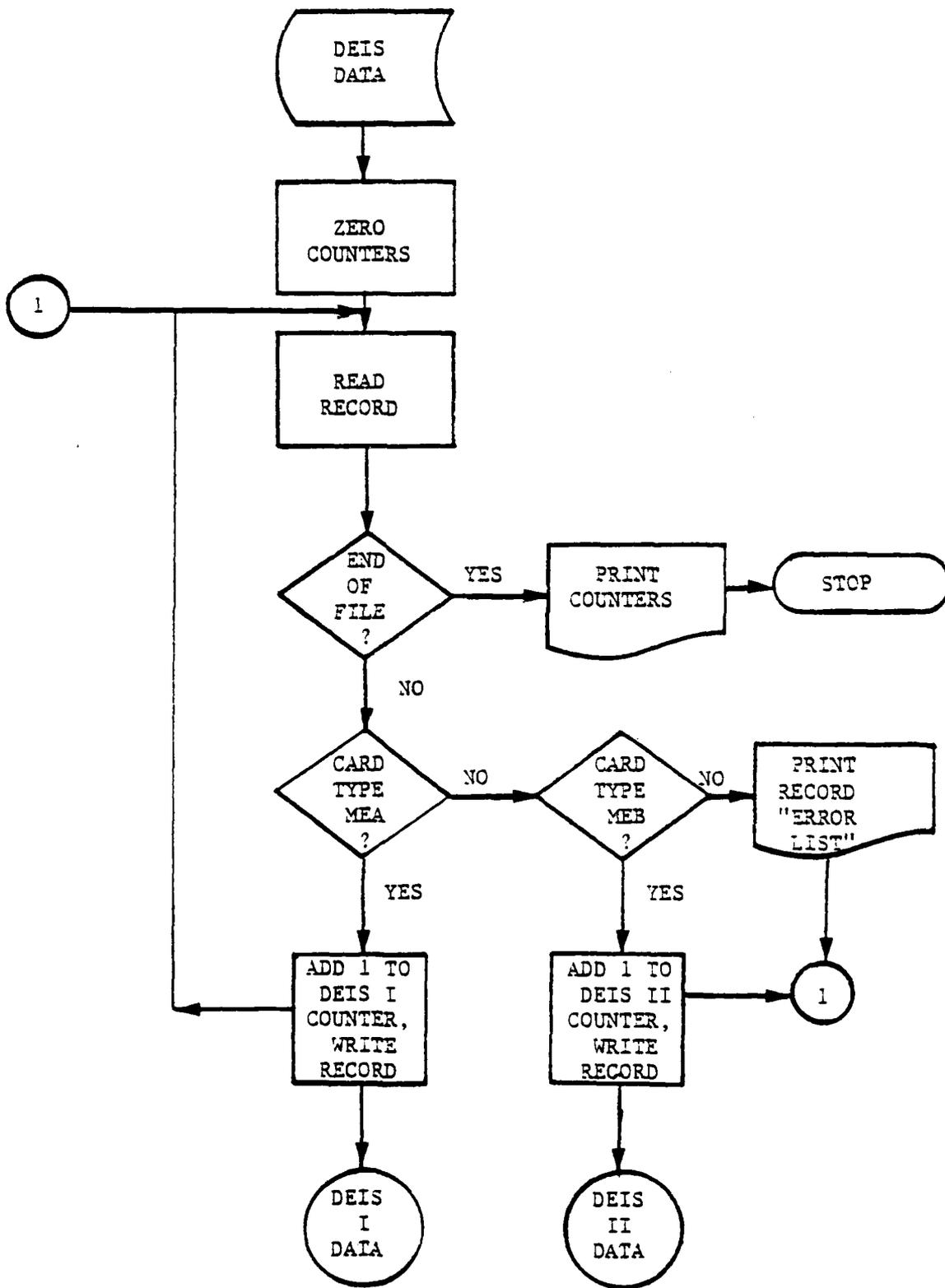
This function will be run as often as necessary to retrieve DEIS data received from DoD activities. The flowchart in Figure 4-3 details the major processing steps. If the record does not contain MEA or MEB in the first three positions, it will be placed on an error listing for examination by DLA for possible misrouting.

4.4.1.4 Outputs

The DLA output of this function reflects the input. Two tapes are produced--one for DEIS I data and one for DEIS II data. Each tape contains 80-character records (same format as the data input), with 44 records in a block. The label records are standard, the recording mode is F, and the tapes are written by DLA's IBM 370/155 facility at Cameron Station. These tapes will be delivered by courier to AFDSC for further processing.

FIGURE 4-3

SEPARATE DEIS I AND DEIS II DATA



4.4.2. Sort DEIS I Data

The processing required for this function entails a standard ascending sort on five fields of data. There will be approximately 13,000 card images to be sorted each month.

4.4.2.1 Purpose

The purpose of this function is to order the data elements for more efficient updating of the data base and editing of the data in subsequent processing steps.

4.4.2.2 Data Definition

The following data will be used in the listed sequence as sort keys:

- DoDAAC
- Reporting Date (Year)
- Reporting Date (Month)
- Product Code
- Card Number

A more detailed description of these data items can be found in Appendix A.

4.4.2.3 Processing Logic

All records will be processed by this function and passed to the edit and convert function (4.4.3). The flow chart in Figure 4-4 details the major processing steps of the DEIS I sort function.

4.4.2.4 Output

The output of this function is a file containing sorted records.

4.4.3 Edit and Convert Data

This function will test to ensure that there are three cards (MEA 2,3,4) for each product, test numeric fields, check whether the data were previously edited, check the data for reasonableness, and convert the data to the format required to update the data base.

4.4.3.1 Purpose

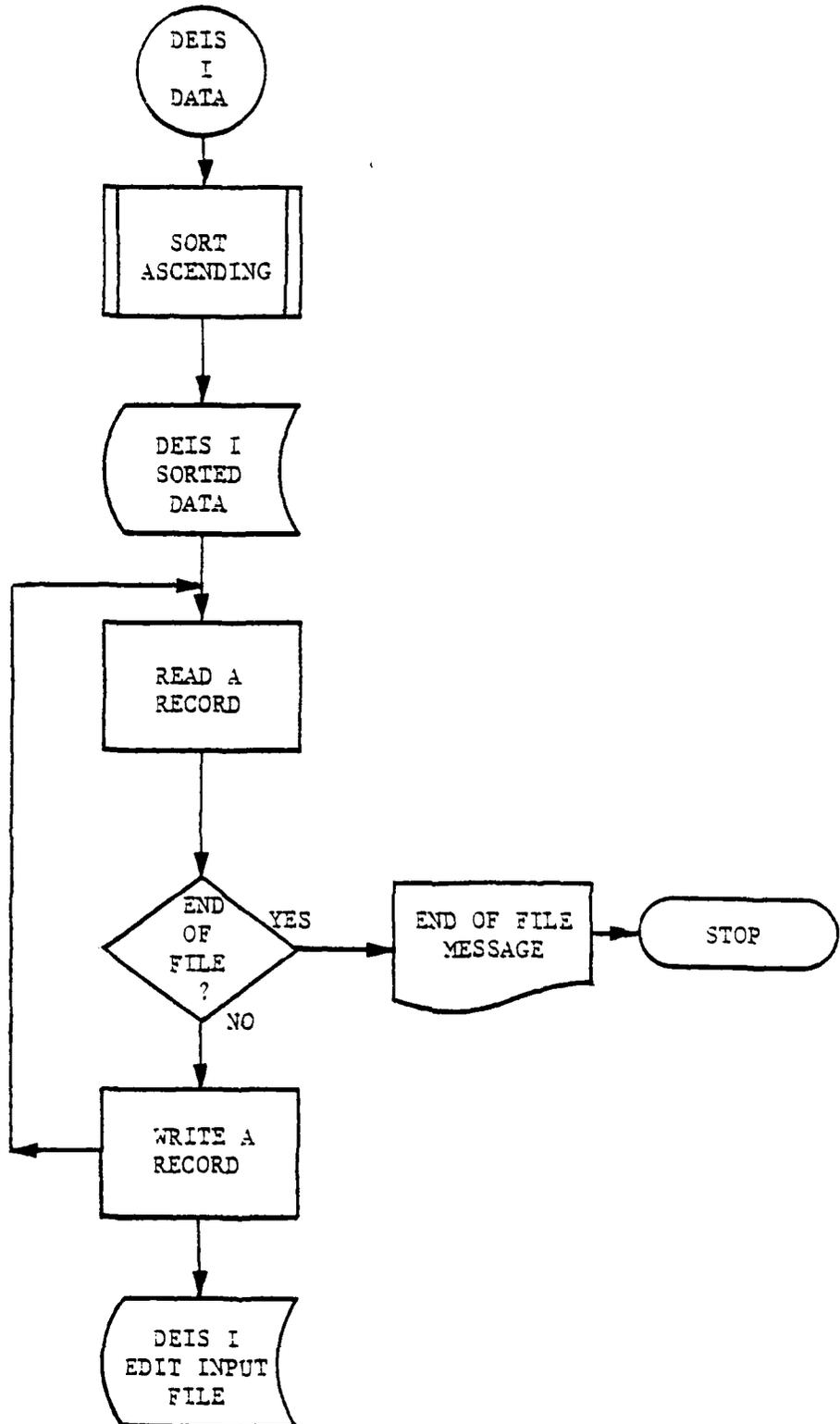
The purpose of this function is to edit/validate DEIS I product information, to produce the Transaction Proof Listing of those records which fail the edit criteria, and to format the data for updating the data base.

4.4.3.2 Data Definition

The data items input to this function are described in more detail in Appendix A. In this section, when the words "product record" appear, they mean all the data contained on the MEA 2,3, and 4 input cards in either card image format or another format.

FIGURE 4-4

DEIS I DATA SORT



4.4.3.3 Processing Logic

A previously edited, revised, and/or correct product record will contain an E in position 79. If this product record fails a second edit, it will be placed on the Rejection File and the Transaction Proof Listing (with a message that the second edit failed). The data from this product record will also be placed on the Accepted Records File so that correct data that fail the edit criteria can still be processed. The following paragraphs specify the edit criteria.

Figure 4-5 provides a flowchart of major processing steps in the data edit and conversion function.

4.4.3.3.1 Common Data Edits

Due to transmission errors, the data may be offset by one column. Some of these errors are recoverable. If the blank is missing or there are two blanks between

- MEA (Card Type) and Card Number,
- Card Number and DoDAAC,
- DoDAAC and Reporting Date, or
- Reporting Date and Product Code,

the blank space will be inserted (or deleted) and the edit process will continue. These card images will be printed as they were submitted on the Transaction Proof Listing with a message that a space was inserted (deleted) and the position (card column) where the change was made. Misalignment in other fields of the input record are not recoverable. The error message for these records will indicate that the blank field is filled (and the card column) at the misalignment.

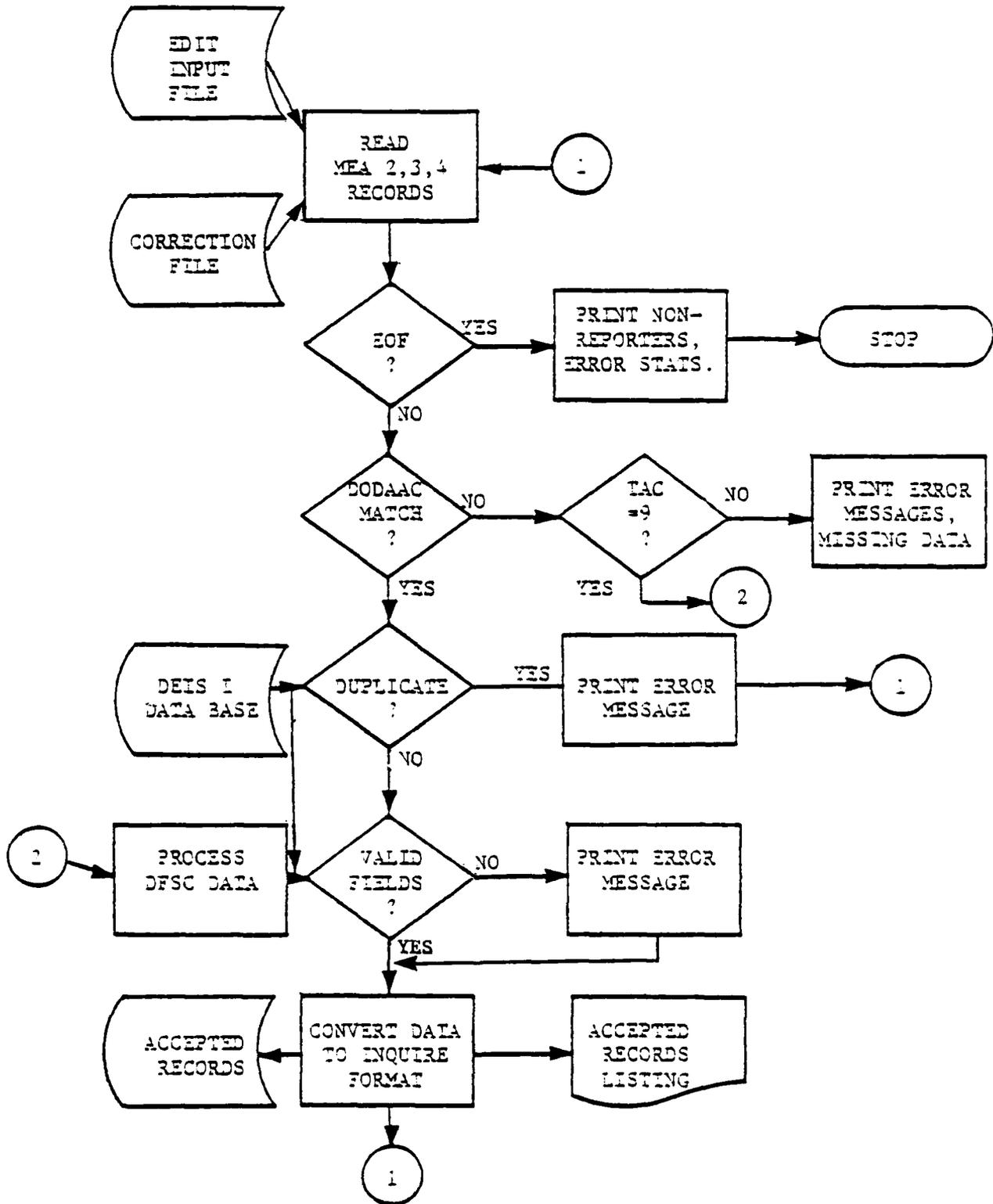
Three data elements are common to the MEA 2, MEA 3, and MEA 4 data formats: DoDAAC, Date, and Product Code. Validation of these three elements is as follows.

The DoDAAC of the MEA 2/3/4 input must match a DoDAAC in the data base. (Before this validation occurs, all DoDAACs beginning with R or V (vessels) on the MEA 2/3/4 input must first be converted to N for comparison purposes.) If the DoDAACs do not match, the record must be indicated with an error message on the Transaction Proof Listing.

The date (MO,YR) of a MEA 2/3/4 triplet must be less than or equal to the date of the period being reported. To facilitate this validation, the correct date may be submitted on a PARM card. If the input date is older than three months, the record/records should be printed with an error message indicating that the change is out-of-date and placed on the Rejection File. If the input date is ahead of the correct date (such as 04,91 when the correct date is 04,81), the area message should indicate an invalid date.

FIGURE 4-5

DEIS I EDIT AND CONVERT DATA



The Product Code on a MEA 2/3/4 card must match acceptable/valid product codes established on the coded information portion of the data base. Before this match is made, however, the following conversion should be accomplished. If the Product Code on the MEA 2/3/4 card is NFD, convert it to NDF. If the Product Code is NFS, convert it to NSF. If the Product Code is DFZ, convert it to DF2. If the Product Code is JPS, convert it to JP5. If there is a hyphen in the Product Code, remove it and shift the subsequent fields before the misalignment of the fields is checked.

If, after the above conversion and a match with valid product codes, the Product Code on the input is not valid, print the record on the Transaction Proof Listing with a message such as INVALID PRODUCT CODE and place the record on the Rejection File.

4.4.3.3.2 MEA-Specific Edits

Validation of other data on the MEA-2/3/4 input is summarized in Table 4-4.

Each retail activity reporting will submit a MEA 2, MEA 3, and MEA 4 card for each product reported. The only exception will be the DFSC activities which have only MEA 2 data. For this DFSC (wholesale) data, there is a 9 in column 13. If all three data cards are not input for all other activities, print a message on the Transaction Proof Listing indicating missing MEA 2, MEA 3, or MEA 4 as appropriate. The exception is for data already in the data base. If the card has the same Reporting Date, DoDAAC, and Product Code as a record on the data base for a prior period, it will be treated as a change (see Section 4.4.3.3.3 below). Accepted transactions will be listed as discussed in 4.4.3.4. This verification applies to all activities other than DFSC.

Upon receipt of MEA 2 data, the following calculation will be made to verify inventory data. Calculate closing book inventory by the following formula: Opening Inventory + Commercial Receipts + DoD Receipts - Issues = Closing Inventory. Compare this calculated inventory to the Closing Inventory (CC 55-61) of the MEA 2. If the difference is more than 1 percent of the calculated closing book inventory, print an information message on the Transaction Proof Listing indicating CLOSING INVENTORY OUT OF BALANCE and continue processing the record.

Every transaction will be checked for duplication of either previous reported data in the current month, or duplication of a data base record (a change transaction). If the record duplicates a record type, DoDAAC, Product Code and Reporting Date of a record in the current month update, an error message indicating DUPLICATE should be reflected. If all 80 columns are duplicated, ignore the second record. Change transactions are discussed in Section 4.4.3.3.3.

If a record being input matches a record on the data base exactly (all 80 columns), ignore the new record and print no error message. If an add transaction being input matches a record on the data base on DoDAAC, Product Code, and Reporting Date, print an error message DUPLICATE. Print this product record error together with the master record. Identify the master record on the listing with a FROM DATA BASE message. Place the input product record on the Rejection File. Section 4.4.3.3.3 will expand further on these "changes".

Rev. A

TABLE 4-4

DATA EDIT ITEMS

<u>Card</u>	<u>Data Element</u>	<u>Card Column</u>	<u>Validity Checks</u>
MEA 2	Opening Inventory	22	Blank
		23-29	Numeric, equal to last month's Closing Inventory
	Issues	30	Blank
		31-37	Numeric, Positive
	Commercial Receipts	38	Blank
		39-45	Numeric, positive
	DoD Receipts	46	Blank
47-53		Numeric, positive	
Closing Inventory	54	Blank	
	55-61	Numeric, positive	
Action Code	62-79	Not used by DEIS I	
	80	Blank or C	
MEA 3	Primary Use	22	Blank
		23-28	Numeric, positive
	Secondary Use	29	Blank
		30-35	Numeric, or blank
	Tertiary Use	36	Blank
		37-42	Numeric or blank
	Downgraded and Losses	43	Blank
		44-49	Numeric or blank
Aviation Special	50	Blank	
	51-56	Numeric, positive or blank	
Action Code	57-79	Not used by DEIS I	
	80	Blank or C	
MEA 4	Quantity Issued to Service 1	22	Blank
		23-27	Numeric
	Quantity Issued to Service 2	28	Blank
		29-33	Numeric
	Quantity Issued to Service 3	34	Blank
		35-39	Numeric
	Non-DoD Issues	40	Blank
		41-45	Numeric or blank
	Intra-Service Transfers	46	Blank
		47-51	Numeric or blank
Inter-Service Transfers	52	Blank	
	53-57	Numeric or blank	
Action Code	58-79	Not used by DEIS I	
	80	Blank or C	

All numeric quantity fields on the MEA 2/3/4/ will be validated. If the field is not numeric, print the product record with a message such as FIELD NOT NUMERIC.

Match MEA 2, MEA 3, and MEA 4 data cards for a DoDAAC and Product Code. Once matched data are identified, perform the following mathematical verification of Issue Quantity (CC 31-37) of the MEA 2 card.

Add: Quantity of product used: Primary Use (CC 23-28) + Secondary Use (CC 30-35) + Tertiary Use (CC 37-42) + Downgrade and Loss (CC 44-49) = Product used.

The Primary Use field must be positive; if it is not, print a message to that effect. If the Tertiary Use field is negative, add it from the Secondary Use field and made the Tertiary Use field zero. If the Secondary Use field is negative, add (the negative amount) to the Primary Use field and make the Secondary Use field zero. Negative numbers will contain an over punch in the last column of the data field. The sum of Primary, Secondary, and Tertiary must be greater than or equal to zero.

This quantity of product used will then be added to the quantity of product issued to others: (CC 23-27) + (CC 29-33) + (CC 35-39) + (CC 41-45) + (CC 47-51) + (CC 53-57) of the MEA 4 card to give an issues check. This issue check data must equal (or be within 1 for the Air Force) the Issue quantity (CC 31-37) of the MEA 2 card. This applied only to those activities other than DFSC that are required to submit all three data cards. DFSC product quantities should always be in whole units of a thousand, that is the last three digits of the quantities should be 000.

If the MEA 2 is input from an activity with an Opening Inventory (CC 23-29) not equal to the Closing Inventory of the prior month's submission, print an error message on the Transaction Proof Listing. This message should indicate INVALID OPENING INVENTORY, the prior Closing Inventory, and the date when that inventory was reported.

All product records in error will be printed on the Transaction Proof Listing and written on the Error File. Product records containing an error will update the data base if they have been previously edited and contain an "E" in column 79 (see on-line correction function). The MEA 2, 3, and 4 data will be printed for each product record in error.

In addition to the error information messages explained above, provide for a message such as REVIEW VALUES. This will apply when a 6- or 7-digit quantity is input in the Issues, Receipts-Commercial or Receipts-From DoD fields of MEA 2 or in the aviation field of MEA 3.

Calculate value for the Consumption data element by summing the following MEA 2 and 3 fields: Primary Use + Secondary Use + Tertiary Use + Aviation. The Average Daily Consumption data element is calculated by dividing Consumption by the number of days in the reported month. For DFSC facilities (TAC = 9), Consumption and Average Daily Consumption are zero.

Rev. A

4.4.3.3 Change Transaction Edits

Change transactions (a matching record in the data base for a previous reporting period) may be submitted from the field activities or by the system operator. These transactions must match a record in the data base on DoDAAC, Product Code and Date. If no match is found, print a message beside the transaction on the Transaction Proof Listing stating UNMATCHED. The entire contents of a card will be submitted for a change of a field on that card.

New zero entries will replace existing entries provided that they pass the edits. A set (MEA 2, 3, 4) is not necessary for a change transaction. If the change matches a data base record, overlay the old data with the new data. This overlay will not, however, be accomplished before all of the validation identified for an add transaction is performed. If the change data fail the edits, reject the new data, print the data as an error on the Transaction Proof Listing, and place it on the Rejection File. Included in the validation of data submitted on a change transaction is the mathematical verification of issues between data on the MEA 2 (issues) and the total of consumption (MEA 3) and issues to others (MEA 4). This procedure is explained in 4.4.3.3 for add transaction validation. If the change data to one of the MEAs (2, 3, or 4) results in this mathematical check being out of balance, the change transaction is rejected and printed with the applicable error message.

The change transaction, if being input to MEA 2 for an activity other than a DFSC activity, must also meet the criterion: $\text{Opening Inventory} + \text{Commercial Receipts} + \text{DoD Receipts} - \text{Issues} = \text{Closing Inventory}$, plus or minus 1 percent. If the resulting record will not meet this check, the transaction will update the data base, but an error message (as indicated in 4.4.3.3.2) will print on the Transaction Proof Listing.

4.4.3.3.4 Delete Transaction Edits

Delete transactions (CC 1-5 = MEA 2 and CC 80 = D) must match on the DoDAAC, Date, and Product Code. If an exact match does not occur, print the transaction on the Transaction Proof Listing with a message such as UNMATCHED and place the transaction on the Rejection File. If there is an exact match, delete the master record. Beside the transaction on the Transaction Proof Listing, print MASTER DELETED and the data which were deleted.

4.4.3.3.5 Non-Reporting Activities Edits

Those activities (DoDAACs) in the data base for which no data (no MEA cards at all) were received should be printed on the DEIS I Activities Not Reporting listing. A listing will also be provided showing the activities not reporting the same products as reported in the previous months. If the Ship Date is the same as the current reporting period and no data were received, reflect this unreported activity on the listing.

The listings will indicate the Region/CINC Code, State/Country Code, Installation Name, Major Command and Service/Agency Code for each DoDAAC. These data will be taken from the coded information file.

Rev. A

Should the activity not reporting be one that has not reported for more than the prior month, print all of the coded information data but leave the Product Code field blank. Since no report in the prior month will be available to determine the missing Product Code, there is no assurance that the activity should report a given product. Should a DoDAAC not report for three consecutive months, print a message such as REVIEW HEADER. Activities not reporting for more than three consecutive months will no longer be printed and will be considered closed or inactive.

For those activities reporting changes in products used, the Product Code will be determined as follows: If no data (MEA 2/3/4) are submitted for a Product Code reported on the previous month report, reflect this unreported product along with the closing inventory of the previous month.

The above will apply to all Service/agency activities in the coded information file. DFSC activities (TAC=9) will have no MEA 3 or MEA 4 data submission, but should be listed as non-reporting activities if the MEA 2 data were not submitted.

4.4.3.3.6 Conversion

Data will be converted from MEA card format to the format required for INQUIRE data base updating.

4.4.3.4 Outputs

There are seven outputs from this function:

1. Records which have passed the data edits and are converted to INQUIRE data base update format will be written on the Accepted Records File (in the data base). As many as 2000 records (MEA 2/3/4 combination) may pass the data edits at one time.
2. Records which have passed the data edits will be printed on the Accepted Records Listing in DoDAAC order within each Service. A sample of this report layout is given in Figure 4-6.
3. Records which fail the data edits will be written on the Rejection File. As many as 1000 records may fail the data edits at one time. Because of this volume, this file should be arranged for selective as well as sequential access.
4. Records which fail the data edits will be printed on the Transaction Proof Listing in DoDAAC order within each Service. This listing will contain the images of the records on the Rejection File and the appropriate error messages (specified in 4.4.3.3). Multiple error messages may be printed. A sample of this report layout is also given in Figure 4-6.
5. Activities which did not submit data will be reported on the DEIS I Monthly Activities Not Reporting listing. Page breaks are needed only when the print limitation of the page is reached. The total number of

Rev. A

activities not reporting, by MEA type, will be printed at the end of the report. A sample of this report layout is given in Figure 4-7.

6. Activities not reporting the same Product Codes as reported in the prior month will be reported on the DEIS I Activities Reporting Product Changes listing.

This listing will be developed by comparing data reported for a DoDAAC in the current month to data reported for that same DoDAAC in the prior month. If a DoDAAC reported a product in the prior month, but not in the current month, that DoDAAC and product will be printed on the listing along with the error message NON-SUBMISSION. The type of data not submitted will also be identified, i.e., MEA 2, MEA 3 and/or MEA 4. If a DoDAAC reports a product not reported in the prior month, the line will be printed as above but will be identified as a new submission. Page breaks are needed only when the print limitation of the page is reached. A sample of this report layout is shown in Figure 4-8.

7. DEIS I Error Statistics giving the number of times each error message is printed will be printed at the end of each edit run. This listing will be sent to the system operator. A sample of this report layout is given in Figure 4-9.

4.4.4 Update Data Base

This function is performed mainly through the generalized DBMS capabilities and provides for applying records with correct data to the data base. The data base update will occur at least once a month. Since there will usually be late reporters and changes, the update will probably occur six times each month.

4.4.4.1 Purpose

The purpose of this function is to add, change, and delete data in the data base. This includes the ability to add new data fields or delete existing ones by reorganizing the data base. Fields will be added or deleted infrequently and only after consultation with AFDSC. Records with data items found to be in error during the update will be placed on the Rejection File, for on-line editing of the error records.

4.4.4.2 Data Definition

The data items input to this function are shown in Table 4-5. A more detailed description of each data item can be found in Appendix A.

4.4.4.3 Processing Logic

Those records that passed the edits described in 4.4.3 will be applied to the DEIS I data base in batch mode by means of the DBMS. The input records will be saved as a transaction log. Any data rejected by INQUIRE at this stage will also be placed on the Rejection File for subsequent data correction.

Rev. A

FIGURE 4-8

DEIS I ACTIVITIES WITH PRODUCT CHANGES

INSTALLATION NAME	SERVICE CODE	PRODUCT CODE	REGION CODE	STATE CODE	MESSAGE
XXXXXXXXXX	X	XXXX	XX	XX	NON - SUBMISSION
XXXXXXXXXX	X	XXXX	XX	XX	NEW SUBMISSION

TABLE 4-5

DATA BASE UPDATE DATA ITEMS

<u>Data Dictionary Element Number</u>	<u>Element Number</u>	<u>Comments</u>
2	AVG DAY	Average Daily Consumption
9	DODAAC	
29	RPTDATE	Reporting Date (Month, Year)
21	PRODCODE	Product Code
19	OPENINV	Opening Inventory
15	ISSUES	
4	COMMER	Commercial Receipts
11	DODRCPT	DoD Receipts
3	CLOSINV	Closing Inventory
22	PRIMARY	Primary Use
30	SECOND	Secondary Use
39	THIRD	Tertiary Use
5	CONSUM	Total Consumption
16	LOSSD	Downgraded and Losses
1	AVIATION	Aviation Special, Credit Cards, Form 15/44, Into-Plane
23	QUAN1	Quantity Issued to Service 1
24	QUAN2	Quantity Issued to Service 2
25	QUAN3	Quantity Issued to Service 3
12	INTERTRAN	Interservice Transfers
18	NONDOD	Non-DoD Issues
13	INTRATRAN	Intraservice Bulk Transfers
7	DTEUP	Date of Update
6	CORRECT	Correction Code
33	SERVICE3	Service Use MEA 3
34	SERVICE4	Service Use MEA 4

4.4.4.4 Output

The outputs of this function are an updated DEIS I data base and the Rejection File. The data to be written on the Rejection File may be converted to MEA card image format for ease of user correction. The error messages will also be placed on the Transaction Proof Listing.

4.4.5 Maintain Tables

Part of the DEIS I data base will contain clear text for coded data and distribution lists for each report. Maintenance of these tables will be controlled through AFDSC.

4.4.5.1 Purpose

This function will provide for maintenance of tables to translate a DoDAAC to its Installation Name and to translate Service Codes, Product Codes, Major Command Codes, Region/CINC and State/Country Codes. These codes ensure that when summaries by major command, region, state, or Service are required, the appropriate accumulations can be performed. Maintenance of distribution lists for each of the DEIS I reports on this file will help ensure that all persons receive their reports promptly.

4.4.5.2 Data Definition

The data items maintained by this function are input on-line. A more detailed description of each data item is shown in Appendix A. The current DEIS maintains a Header File on magnetic tape that contains DoDAAC-related data. Table 4-6 gives the layout of this tape. The record length is 80, and the blocking factor is 20. The tapes are 7 track, unlabelled, 800 BPI.

4.4.5.3 Processing Logic

Queries, translations, and updates to that part of the DEIS I data base containing coded information are supported through AFDSC.

Table 4-7 contains the edit criteria used for adding new data or validating changes to existing data. A DoDAAC is never deleted from the file, but it may be marked as inactive. Ships may become inactive when they are drydocked. The system operator may insert an expected date of return to service for these DoDAACs. To inactivate coded information about an installation, the DoDAAC must match one on the file. Table 4-8 contains translations of Region Codes and State/Country Codes. Table 4-9 contains translations of Service/Agency Codes. Product Code translations are in Table 4-10. Distribution Codes are in Table 4-11.

Actual update of the data base need not be completed on-line. An on-line update will be included in the macros, as a user option, since timely reports are a system requirement and correct codes are needed before any reports are run. Figure 4-10 shows the major processing steps of this function.

TABLE 4-6
HEADER FILE DATA LAYOUT

<u>DATA NUMBER</u>	<u>DATA ELEMENT DESCRIPTION</u>	<u>HEADER FILE POSITION</u>	<u>COMMENTS/ VALUE</u>
NA	Document Identifier	1-3	MEA
	Blank	4	
NA	Card Code	5	1
	Blank	6	
9	DoDAAC	7-12	
38	TAC	13	9 or blank
	Blank	14	
28	Region Code	15-16	
	Blank	17	
37	State Code	18-19	
	Blank	20	
14	Installation Name	21-60	
17	Major Command	61-73	
	Blank	74-78	
32	Service Code	79	
10	DoDAAC Delete Code	80	blank, A(add), C(Change), D>Delete)

Rev. A

TABLE 4-7

CODED DATA BASE ITEMS

Data Element Number	Data Element Description	EDIT Criteria/Comments
9	DoDAAC	Cannot be blank or zero. Must match a DoDAAC in the file.
10	DoDC	D or blank, DoDAAC delete code
38	TAC	9 or blank
28	Region Code	Cannot contain blanks or be zero. Must match a code in Table 4-6. Two characters long.
37	State/Country Code	Cannot contain blanks or be zero. Must match a code in Table 4-6. Two characters long.
14	Installation Name	Cannot contain only blanks.
17	Major Command	Cannot contain only blanks.
32	Service/Agency Code	Must be A, B [*] , F, H ^{**} , N, M, D, S, or T.
35	Shipdate	Blank or numeric; month, year ship is to be returned to service
21	Product Code	Cannot contain blanks or zeros. Must match a code in Table 4-8. Three characters long.
8	Distribution Code	Cannot contain blanks or zeros. Table 4-9 contains the valid codes and their translations.

* This code is G on the existing Header File and must be converted to B.

** This code is V on the existing Header File and must be converted to H.

TABLE 4-8

REGION/STATE/COUNTRY CODES*

<u>REGION/CINC</u>	<u>REGION CODE</u>	<u>STATE/COUNTRY CODE</u>
REGION 1	01	
Connecticut	01	09
Maine	01	23
Massachusetts	01	25
New Hampshire	01	33
Vermont	01	50
Rhode Island	01	44
REGION 2	02	
New Jersey	02	34
New York	02	36
REGION 3	03	
Delaware	03	10
District of Columbia	03	11
Maryland	03	24
Pennsylvania	03	42
Virginia	03	51
West Virginia	03	54
REGION 4	04	
Alabama	04	01
Florida	04	12
Georgia	04	13
Kentucky	04	21
Mississippi	04	28
North Carolina	04	37
South Carolina	04	45
Tennessee	04	47
REGION 5	05	
Illinois	05	17
Indiana	05	18
Michigan	05	26
Minnesota	05	27
Ohio	05	39
Wisconsin	05	55

* The region table will have the region code and the region/CINC name.
The state table will have the state code, the region code and the state name.

TABLE 4-8 (Cont.)

REGION/CINC	REGION CODE	STATE/COUNTRY CODE
REGION 6	06	
Arkansas	06	05
Louisiana	06	22
New Mexico	06	35
Oklahoma	06	40
Texas	06	48
REGION 7	07	
Iowa	07	19
Kansas	07	20
Missouri	07	29
Nebraska	07	31
REGION 8	08	
Colorado	08	08
Montana	08	30
North Dakota	08	38
South Dakota	08	46
Utah	08	49
Wyoming	08	56
REGION 9	09	
Arizona	09	04
California	09	06
Nevada	09	32
REGION 10	10	
Idaho	10	16
Oregon	10	41
Washington	10	53
CINCS		
CANADA & GREENLAND	**	
Western Canada	3X	CA
Argentina, Eastern Canada	3D	CA
Greenland	3E	GL
CINCAL		
Alaska	1A	02
Aleutian Islands	1B	02

** When multiple codes appear in a CINC, each code will have its own region name.

TABLE 4-8 (Cont.)

REGION/CINC	REGION CODE	STATE/COUNTRY CODE
CINCSOU		
Canal Zone	6A	PQ
Easter Island (Chile)	6A	CI
CINCEUR		
Belgium	4K	BE
Crete (Greece)	4Q	GR
Cyprus	4Q	CY
France	4M	FR
Germany	4K	GE
Italy	4P	IT
Malta	4S	MT
Morocco	4R	MO
Netherlands	4K	NL
Norway	4J	NO
Sardinia	4P	SD
Sicily	4P	SI
Spain	4N	SP
Portugal	4N	PO
Turkey	4Q	TU
United Kingdom (Great Britain & Northern Ireland, including Channel Islands)	4L	UK
MISCELLANEOUS CINC		
Ceylon	7F	CE
Eritrea (Ethiopia)	7C	ET
Lebanon	7D	LE
Saudi Arabia	7D	SA
CINCLANT		
Ascension Island	2R	SH
Azores	2K	AZ
Bermuda	2D	BD
Cuba	2C	CU
Haiti	2C	HA
Iceland	2H	IC
Puerto Rico	2C	RQ
Virgin Islands	2C	VQ
West Indies--includes		
Leeward Islands	2C	LW
Windward Islands	2C	WI
French West Indies	2C	FW
Jamaica	2C	JM
Dominican Republic	2C	DR
Netherlands West Indies	2C	NA
Trinidad	2C	TD

TABLE 4-8 (Cont.)

REGION/CINC	REGION CODE	STATE/COUNTRY CODE
CINCPAC		
Australia	5E	AS
Diego Garcia	5S	MR
Hawaii	5N	15
Japan	5H	JA
Johnston Island	5N	JQ
Korea	5H	KS
Laos	5D	LA
Marianas Islands	5G	MS
Marshall Islands (Pacific Islands)	5B	TQ
Midway Island	5N	MQ
New Zealand	5V	NZ
Philippines	5C	RP
Ryukyu Islands	5H	YQ
Samoa Islands	5F	AQ
Taiwan	5C	TW
Volcano Islands	5G	BJ
Wake Island	5F	WQ
South Vietnam	5D	VS
Thailand	5D	TH
Malaysia	5D	MY
Singapore	5D	SN
VESSELS	98	98

TABLE 4-9
SERVICE/AGENCY CODES

<u>Code</u>	<u>Translation*</u>
A	Army
B	Army National Guard
F	Air Force
H	Air National Guard
N	Navy
M	Marine Corps
D	DFSC
S	DLA
T	Other DoD Agencies

* When summarizing Army, include both "A" and "B"
When summarizing Air Force, include both "F" and "H"

TABLE 4-10
PRODUCT CODES

<u>Aviation Gasoline*</u>	<u>Distillates</u>
130	DFM
131	DFW
135	DF1
145	DF2
887	DFA
996	DFB
	NDF
<u>Jet Fuel - JP4</u>	DFS
	<u>Fuel Oil Distillates</u>
JP4	
JR1	
JAA	FS1
JAB	FS2
JTS	KSN
JAI	KSD
<u>Jet Fuel - JP5</u>	<u>Fuel Oil Residuals</u>
JP5	FS4
JR2	FS5
	FS6
<u>Jet Fuel - JP8</u>	FSL
JP8	<u>Lubricating Oils</u>
<u>Residuals</u>	LA2
NSF	<u>Gasohol</u>
<u>Automotive Gasoline</u>	GUS
	GUP
	GUR
MG1 MUR	<u>Slop</u>
MG2 MUP	
MGP MLL	
MGR MLP	SLP
MGU MLR	
MUS	<u>Other</u>
	SII

*Each product code has a Product Category name associated with it.

TABLE 4-11

DEIS I REPORT DISTRIBUTION CODES

<u>Code</u>	<u>Report Name</u>	<u>Report Recipients</u>
	Monthly	
IM01	Installation Summary*	(a)
IM02	Air Force Detail Summary	OASD(MRA&L), Air Force
IM03	Army Detail Summary	OASD(MRA&L), Army
IM04	Navy Detail Summary	OASD(MRA&L), Navy
IM05	MC Detail Summary	OASD(MRA&L), Marine Corps
IM06	DLA Detail Summary	OASD(MRA&L), DLA
IM07	DoD Detail Summary (DIS, DNA)	OASD(MRA&L), DIS, DNA
IM08	DFSC Detail Summary	OASD(MRA&L), DFSC
IM09	Activities Not Reporting	OASD(MRA&L), DFSC-CB
IM10	Activities Reporting Product Changes	OASD(MRA&L), DFSC-CB
IM11	Petroleum Product Summary**	(b)
IM12	Consumption Summary	(b)

(a) DFSC, Naval War Research Center/Stanford Research Institute (NWRC), OJCS, Atlantic Command, Panama Canal (Navy), USEUCOM, DALO-TSE-A, AFLGY/F, OASD(MRA&L), USAGMPA, AFDSC, Naval Ship R&D Center.

(b) DFSC-CE, AFLGY/P, AFBCC, AFCOS/LGRX, OASD(MRA&L), DA, USAGMPA, CINCPAC, CNET, CINCLANT, CINCEUR, CNO OP-41, NWRC, USMC(HQ), DNA, DLA-WS, USAMSSA, Naval Ship R&D Center

* Includes the following reports (in sequence):

Cumulative Worldwide Category Summary; Cumulative Worldwide Summary Report; Cumulative CONUS Summary Report; Monthly Worldwide Category Summary; Monthly Worldwide Summary Report, Monthly CONUS Summary Report; Monthly Summary by DOE Region/CINC, Region Summary Totals; Monthly Summary by DOE Region/CINC, Vessel Summary Totals; Monthly Summary by DOE Region/CINC, State Summary Totals; and Monthly Installation Summary. As for monthly overall summaries, a separate report is provided for each Service/Agency.

** As for the Overall Summary reports, a separate report is provided for each Service/Agency.

TABLE 4-11

DEIS I REPORT DISTRIBUTION CODES (Continued)

<u>Code</u>	<u>Report Name</u>	<u>Report Recipients</u>
	Quarterly	
1Q01	Installation Summary*	(c)
1Q02	Consumption Summary	OASD(MRA&L), Services, Agencies
1Q03	Army Consumption Detail & Summary	OASD(MRA&L), Army
1Q04	Air Force Consumption Detail & Summary	OASD(MRA&L), Air Force
1Q05	Navy Consumption Detail & Summary	OASD(MRA&L), Navy
1Q06	Marine Corps Detail & Summary	OASD(MRA&L) Marine Corps
1Q07	DLA Detail & Summary	OASD(MRA&L), DLA
1Q08	DoD Detail & Summary (DIS, DNA)	OASD(MRA&L), DIS, DNA
1Q09	DFSC Detail & Summary	OASD(MRA&L), DFSC
1Q10	Conservation Performance Report	OASD(MRA&L), Services, Agencies
1Q11	Petroleum Product Summary	OASD(MRA&L), Services, Agencies

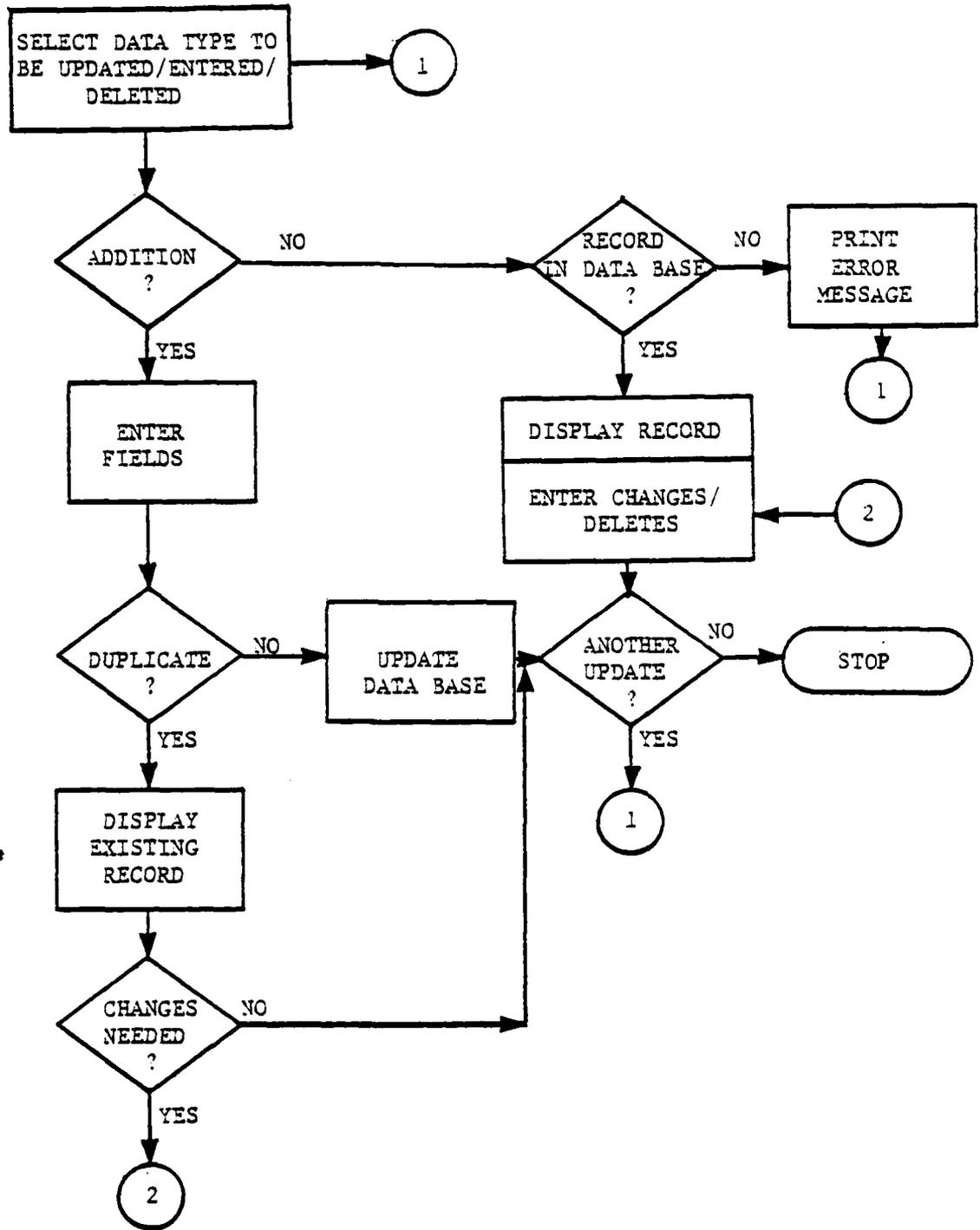
(c) DFSC-CB, OASD(MRA&L), AFLGY/F, DA(DCS/L), USAGMPA, CINCPAC, CINCLANT, CINCEUR, CNO OP-41, NWRC, USMC(HQ), DAL-O, OJCS, Naval Facilities Engineering Command

* Includes the following reports (in sequence):

Quarterly Worldwide Category Summary; Quarterly Worldwide Summary Report; Quarterly CONUS Summary Report; Quarterly Summary by DOE Region/CINC, Region Summary Totals; Quarterly Summary by DOE Region/CINC. Vessel Summary Totals; Quarterly Summary by DOE Region/CINC. State Summary Totals; and Quarterly Installation Summary.

FIGURE 4-10

MAINTAIN DEIS I DATA



4.4.5.4 Outputs

Outputs from this function are updated coded information tables. In addition, on request through the user macro, a copy of any category of coded information (data elements in Table 4-7) may be requested. At the user's option, the output from this request may be printed or displayed at the user's terminal or directed to a printer at AFDSC for mailing to the user. Listings by Installation Name will be arranged in alphabetical sequence by installation and will contain the following fields:

- Installation Name
- Major Command
- DoDAAC
- Service/Agency Code
- Region Code
- State/Country Code

Listings by DoDAAC will be in alphabetical sequence by DoDACC and will contain the fields listed above, DoDAAC being printed first on the line rather than Installation Name. For both of these reports, one line will be skipped when the first letter in the Installation Name changes.

Listings of the other codes will be in the order specified in Tables 4-8 through 4-11. For all the reports, page breaks are required only when the page limit is reached.

4.4.6 Perform On-Line Data Entry of Corrections

This function is performed only through the system operator (DFSC-CB). The system operator will have both a hard copy listing of the records in error (with an error message) and access to the Rejection File. The Rejection File will be in the same order as on the hard copy, but processing may begin at any point in the file. All errors or questionable data from the edit and convert data and data base update functions will be on one Rejection File. Records which are changed (or marked as changed) during the correction process will contain a "C" in column 80 of each card image believed to be in error. All records will undergo subsequent reediting, and those card images containing an "E" in column 79 will update the data base even if the edit fails (as specified in 4.4.4). Records can be completely deleted or added through this function.

4.4.6.1 Purpose

This function provides an easy-to-use, fast method to correct errors or add records and submit the corrected data for further processing. Multiple users (three or four) may be correcting different segments of data on the Rejection File at the same time. (Corrections are now done by Service). The capability of concurrent updating of the Correction File(s) must exist for the system operator.

4.4.6.2 Data Definition

The data items input to this function usually are the MEA card images described in Table 4-3 and in Appendix A. Data relating to bulk transfers and sales by DFSC are also processed by this function. Data items for DFSC activities are the same as the MEA 2 data shown in Table 4-3.

4.4.6.3 Processing Logic

All records in error will be on the Rejection File. Each record selected will be displayed for the system operator to correct, to mark as correct with an "E", or to enter a "C" so that further editing may again reject the record. All corrected records from the Rejection File will be placed on the Correction File. The data in the Rejection File are then deleted so that data from subsequent editing will be the only data on the Rejection File. Figure 4-11 gives the major processing steps of this function.

4.4.6.4 Output

The output of this function is a Correction File(s) of MEA format records and other input records. The data on this file are described in 4.4.6.2.

4.4.7 Archive Data Base

After the time-sensitive processing of DEIS I data is complete, data base maintenance in the form of archiving will be performed. This archiving entails creating quarterly summaries for data older than 15 months and deleting detail data no longer needed on-line from the data base. Figure 4-12 shows a schema of the data base before and after archival.

4.4.7.1 Purpose

The archival process provides a method for keeping all needed DEIS I data on-line without overloading the data base to the point where processing time and data storage requirements are excessive. Monthly detail data are needed for the baseline (1975) and for the most recent 13-month period. Quarterly summary data are kept for the 5 years prior to the most recent 13-month period. Data deleted from the on-line data base will be kept off-line in a format that allows easy creation of a data base for the specified time period. After monthly data have been archived, only the quarterly (on-line) data will be updated. In addition, this function will supplement AFDSC procedures to back up the on-line data base.

4.4.7.2 Data Definition

Data items used in this function include the date (for selection purposes) and all data elements in the data base. The data are transferred to off-line storage and deleted from on-line storage. First, however, new quarterly totals are calculated by summing all the fields in the data base for a given DoDAAC (Command, Service, Region, and Country fields are fixed identification fields) Product Code, and the given 3-month period (quarter). Average daily consumption for the quarterly records is the sum of the average daily consumptions in the quarter divided by three. The data items are described in Appendix A.

Rev. A

FIGURE 4-11

DEIS I ON-LINE CORRECTIONS

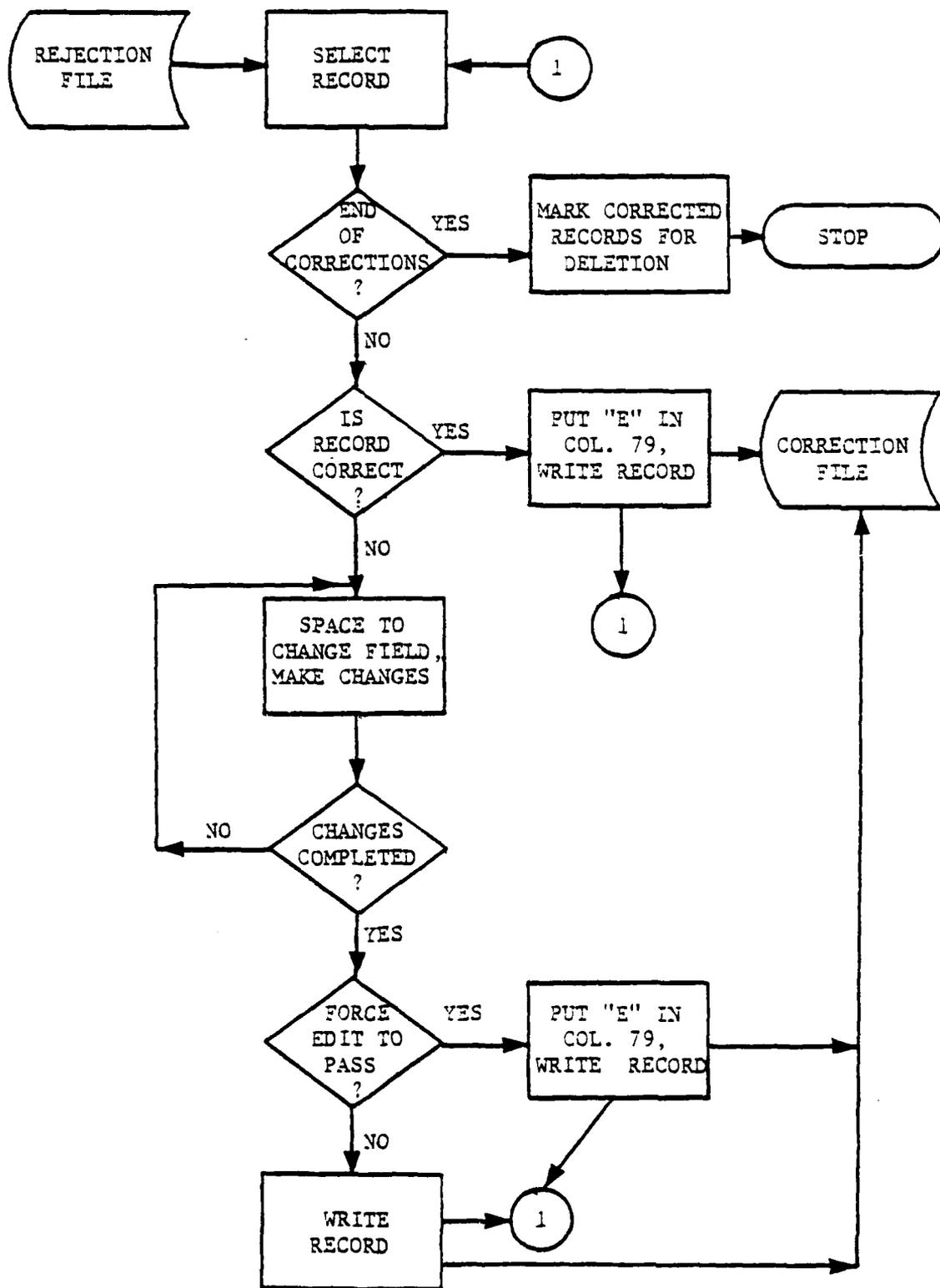
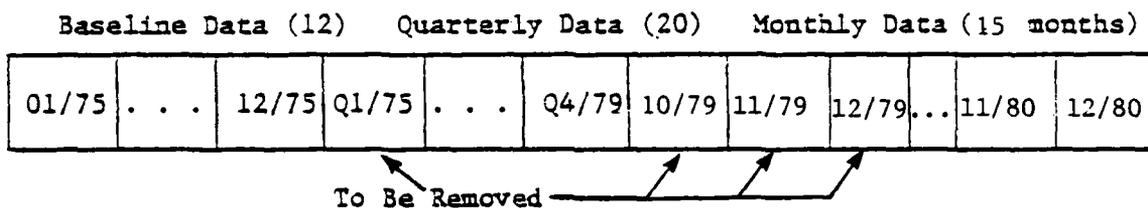


FIGURE 4-12

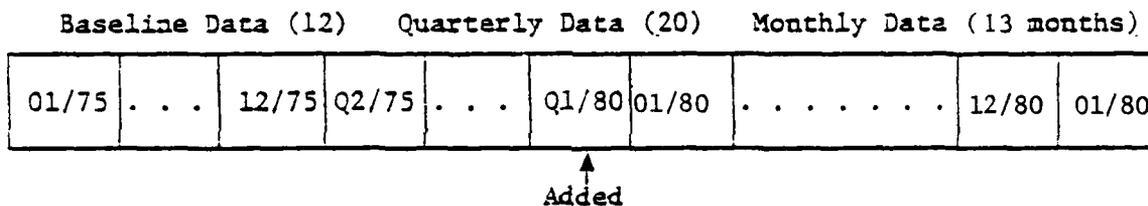
SCHEMA OF DB BEFORE AND
AFTER ARCHIVAL

Case 1—Data to be archived are for a month at the beginning of a quarter—done after update for month 3 of a quarter.

Before

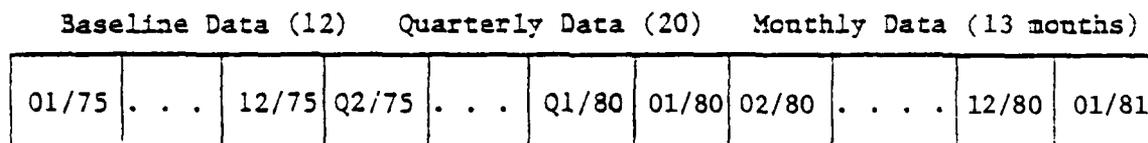


After

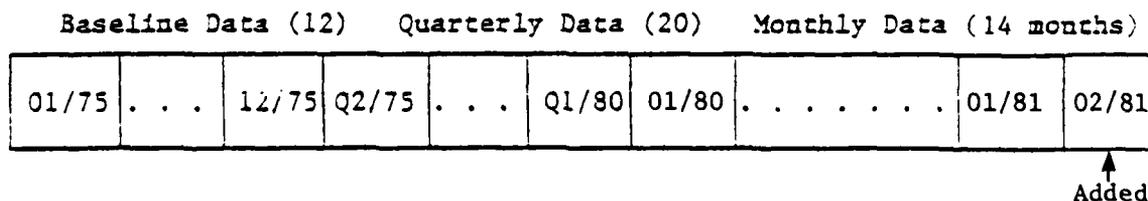


Case 2—Data are for month 1 or 2 of a quarter.

Before



After



4.4.7.3 Processing Logic

Monthly data are placed in archival storage at the end of a quarter. Data for months one and two of a quarter will simply be added to the data base. Thus there will be 14 months of monthly data on-line after data for the first month of a quarter has been added. There will be 15 months of data on-line after data for the second month of a quarter has been added to the data base. There will be 13 months of data on-line after data for the third month of a quarter has been added to the data base and the oldest three months of monthly data has been accumulated into quarterly data.

Quarterly data for that quarter are developed by adding all fields (except for identification fields). The reporting date/ month field will be changed to reflect Q1, Q2, Q3, or Q4 of the fiscal year. All the monthly data items for that DoDAAC can then be written to the archival file and deleted from the on-line data base. If quarterly data are to be taken off-line, the data will simply be copied to archival storage and deleted from the on-line data base. Five years of quarterly data will be maintained in the on-line data base and then quarterly data will also be archived. It is expected that INQUIRE facilities will be used for this function so that creating an INQUIRE data base containing those months or quarters of the archival data can be completed with a minimum of trouble. The request procedure for restoring archival data will be contained in the DEIS user's manual. Figure 4-13 shows the major processing steps of this function.

4.4.7.4 Outputs

The output of this function is an updated data base and an INQUIRE format archival file of the records purged.

4.4.8 Preformatted Reports

This function will produce all the existing regular DEIS I reports. The reports may be prepared through the host language interface with the DBMS.

4.4.8.1 Purpose

DEIS I preformatted reports include all the regularly scheduled reports used by DEIS users. As new reports or changes to existing reports are identified, reports run for regular distribution to one or more persons may be specified as preformatted. Ad hoc reports that become regularly scheduled may be reprogrammed by means of the host language interface to save processing costs.

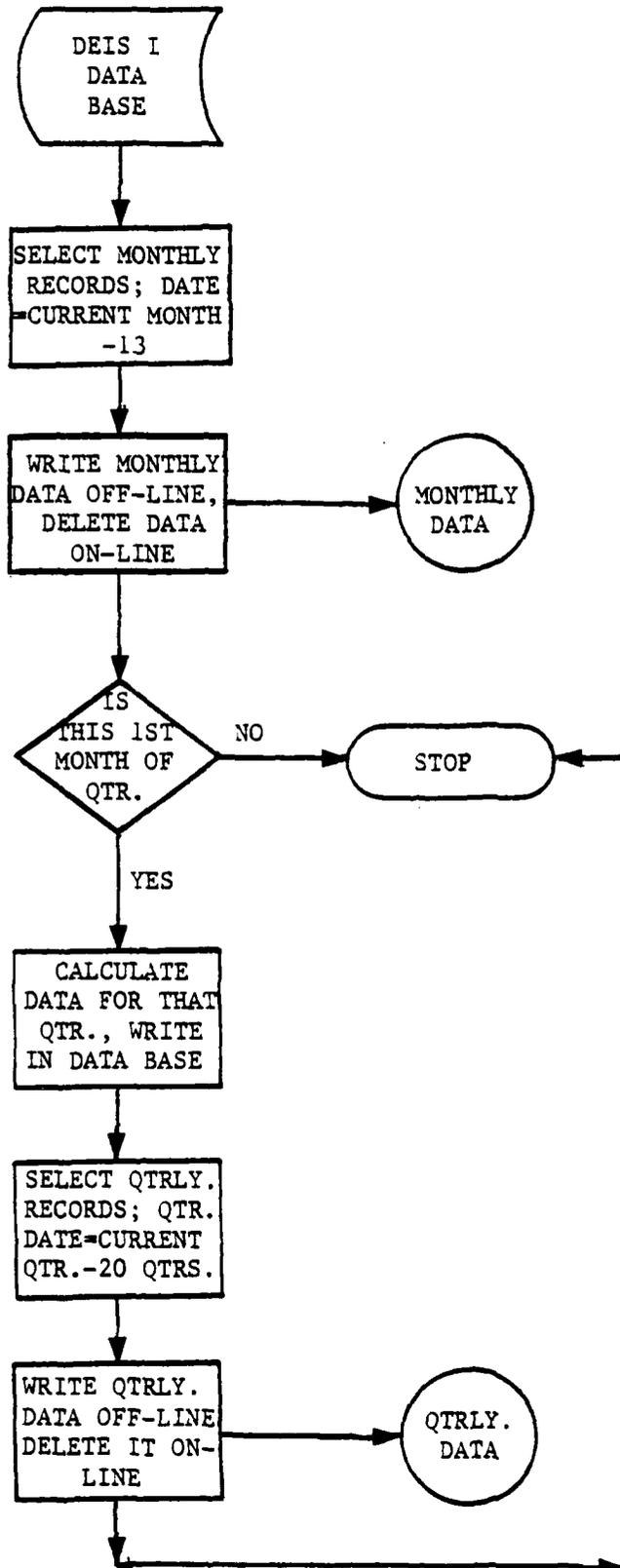
4.4.8.2 Data Definition

All fields contained in the data base (see Appendix A) are used in producing the reports. Except for some code translation and totals in some fields, data from the data base are printed on reports unchanged.

Rev. A

FIGURE 4-13

ARCHIVE DEIS I DATA BASE



4.4.8.3 Processing Logic

The processing logic for each report is provided in the following paragraphs. A list of all product codes and their translations will be provided on a separate page at the beginning of each set (booked) of reports, along with definitions of primary, secondary, and tertiary product uses for each Service. Figure 4-14 shows a sample of this header page.

4.4.8.3.1 Monthly, Quarterly, and Cumulative Consumption Summaries

The DEIS I Monthly, Quarterly, and Cumulative Consumption Summaries report product and Service consumption data for a specified month, quarter, or fiscal year-to-date. These reports require reference to the DEIS I data base, coded information, and some calculations.

Table 4-12 lists the data elements reported on the consumption reports and their sources. For purposes of these reports, all consumption data reported by an individual Service or agency for a specific Product Code will be summarized on one line of the report. The major sequence of the report is by Product Code. Services and agencies are listed within each Product Code. In addition, major command totals are given for each Service. Figures 4-15, 4-16, and 4-17 show the report layout for the monthly, quarterly, and fiscal year-to-date consumption reports. There is a subtotal for each product for each Service Code, as well as a grand total for the report. The sum of all the Total Consumptions for each product must equal the sum of all the detail consumptions (Primary, Secondary, Tertiary, and Aviation). The same verification will be done for the grand total. At the beginning of these reports, category summary pages will be printed. The product categories shown in Table 4-10 will be summarized for each Service.

The following paragraphs explain the calculation of the Received From columns of the report, which differ according to the Service or agency being summarized.

If the Army is being reported, the first Received From column (Quantity Issued Service 1) will be Air Force, the second (Quantity Issued 2) will be Navy, and the third (Quantity Issued 3) will be Marine Corps.

If the Navy is being reported, the first Received From column will be Army, the second Air Force, and the third Marine Corps.

If the Marine Corps is being reported, the first Received From column will be Army, the second will be Air Force, and the third will be Navy.

If the Air Force is being reported, the first Received From column will be Army, the second will be Navy, and the third will be Marine Corps.

To compute the quantity of product to be reported in each of the Received From columns, it will be necessary to summarize all of the Quantity Issued fields for the period being reported.

TABLE 4-12

CONSUMPTION REPORT DATA

Data Element Number	Data Element Description	Source
21	Product Code	Data base (DB)
31	Service/Agency	DB and decoded for printout
22	Primary	DB, accumulated
30	Secondary	DB, accumulated
39	Tertiary	DB, accumulated
1	Aviation	DB, accumulated
23	Quantity Issued Service 1	DB, accumulated by Service use Alias - Received From Field 1
24	Quantity Issued Service 2	DB, accumulated by Service use Alias - Received From Field 2
25	Quantity Issued Service 3	DB, accumulated by Service use Alias - Received From Field 3
5	Total Consumption	DB, accumulated
2	Average Daily Consumption	Calculated, Total Consumption ÷ days in month Total Consumption ÷ days in quarter Total Consumption ÷ days in FY to date

For example, if the Service/agency within the Product Code is Army, the following summaries must be made. All Quantity Issued data reported by the Navy must be reviewed, and every transaction indicating a quantity of product issued to the Army (Quantity Issued to Service 1 by the Navy) must be summarized. This quantity will then be reported as being Received From the Navy on the appropriate Army line on the consumption report.

The above calculation will be required to determine Army receipts from the Air Force and from the Marines. ** Caution: Quantity Issued to the Army by the Navy, Marines and Air Force is always Quantity Issued to Service 1. However, when receipts from the other Services for the Navy, Marine Corps or Air Force are to be determined, various "Quantity Issued" fields on the data base must be examined. Table 4-13 gives the appropriate source of data for calculating the "Received From" data for this report.

TABLE 4-13

SOURCES FOR
"RECEIVED FROM" DATA

<u>Service being Summarized*</u>	Received From <u>Air Force</u> Quantity Issued to Service 1(QI1)	Received From <u>Navy</u> QI1	Received From <u>Marine Corps</u> QI1
Army	Received From <u>Army</u> QI2	Received From <u>Air Force</u> QI2	Received From <u>Marine Corps</u> QI3
Navy	Received From <u>Army</u> QI1	Received From <u>Navy</u> QI2	Received From <u>Marine Corps</u> QI2
Air Force	Received From <u>Army</u> QI3	Received From <u>Air Force</u> QI3	Received From <u>Navy</u> QI3
Marine Corps			

* If agency data are being summarized, there will be no entries in the three Received From columns.

Service Total Consumption is the total of the Primary Use, Secondary Use, Tertiary Use, Aviation, and the three received from quantities. The Average Daily Consumption is calculated by dividing the Service Total Consumption for the line reported by the number of days in the period being reported. The number of days in each reporting period will be obtained through a parameter card submitted by DFSC-CB. The number of days in the month will be in columns 4 and 5, the number of days in the quarter in columns 9 and 20, and the number of days-to-date in the fiscal year will be right-justified in columns 13-15. If a report (such as the quarterly report) is not being requested, the number of days column can be blank.

These reports will normally be run twice a month, the first being a preliminary report. All preliminary reports will be run on one-part paper and forwarded to the system operator (DFSC-CB). Page breaks are required only when the page limit is reached.

4.4.8.3.2 Monthly Petroleum Report

This report is primarily a print report, taking data submitted by the Service or agency and printing them in the prescribed format. The second part of the report is a Service Summary, which takes all detail data printed in Part I for the Service or agency and provides a summary by Product Code. The data elements printed on the Monthly Petroleum Report are listed in Table 4-14.

The Quantity Issued to Service data elements listed in Table 4-14 are reported in the Sold To fields on the reports. The Sold To fields will vary with the Service being reported. If the installation being reported is Army, the first Sold To field will be Air Force, the second will be Navy, and the third will be Marine Corps.

If the installation being reported is Navy, the first Sold To field will be Army, the second will be Air Force, and the third will be Marine Corps.

If the installation being reported is Marine Corps, the first Sold To field will be Army, the second will be Air Force, and the third will be Navy.

If the installation being reported is Air Force, the first Sold To field will be Army, the second will be Navy, and the third will be Marine Corps.

The following guidelines should facilitate the proper arrangement of the Sold To data.

- If the installation being reported is Army, the source of data for Sold To Air Force is the Quantity Issued to Service 1 (QI1), the Sold To Navy data is from QI2, and the Sold To Marine Corps is from QI3.
- If the installation being reported is Navy, the Sold To Army data come from QI1, the Sold To Air Force data come from QI2, and the Sold To Marine Corps data come from QI3.
- If the installation being reported is Marine Corps, the Sold To Army data come from QI1, the Sold To Air Force data come from QI2, and the Sold To Navy data come from QI3.
- If the installation being reported is Air Force, the Sold To Army data come from QI1, the Sold To Navy data come from QI2, and the Sold To Marines data come from QI3.

The Monthly Petroleum Report will include detail data for individual installations; these installations will be identified as to Major Command, and Major Commands identified to Service/agency. That is, the major print sequence is Major Command within Service/agency, and the minor print sequences are DoDAAC within Major Command and Product Code within DoDAAC. All data for each Major Command will be subtotaled, with each product within the command summarized, to produce a grand total of all products for the command. Part II of the report will summarize all data (by product) for the Service/agency and provide a grand total of all products for the Service/agency. Command consumption (sum of Primary, Secondary, Tertiary and Aviation fields) will be calculated for each product. Totals will also be given for each Major Command for the

TABLE 4-14

PETROLEUM REPORT DATA

Data Element Number	Data Element Description	Source/Comments
21	Product Code	Data Base
19	Opening Inventory	Data Base
15	Issues	Data Base
4	Receipts-Commercial	Data Base
11	Receipts from DoD	Data Base
3	Closing Inventory	Data Base
16	Loss/Downgrade	Data Base
	Gain/Loss	Calculated from book inventory*
33	Service MEA-3	Data Base
34	Service MEA-4	Data Base
22	Primary	Data Base
30	Secondary	Data Base
39	Tertiary	Data Base
1	Aviation Into-Plane	Data Base
23	Quantity Issued to Service 1	Data Base--varies by Service-- alias Sold To Field 1
24	Quantity Issued to Service 2	Data Base--varies by Service-- alias Sold To Field 2
25	Quantity Issued to Service 3	Data Base--varies by Service-- alias Sold to Field 3
18	Quantity to Non-DoD	Data Base
13	Transfers Intra	Data Base
12	Transfers Inter	Data Base
	Average Daily Issues	Calculated, ISSUES ÷ number of days in month/quarter/year to date

* Calculated book inventory = Opening Inventory + Receipts (Commercial) + Receipts from DoD Issues. If the value = Closing Inventory, gain/loss is 0. If the value is greater than Closing Inventory, there is a loss and the value will be indicated with a (-) sign.

product types (e.g., aviation gasoline) shown in Table 4-10. Figures 4-18 and 4-19 show the layout of these reports.

In addition a category summary will be printed after each Command Total for that command and after each Service Total for that Service/agency. The category summary pages will utilize the Primary, Secondary, Tertiary and Aviation data only. The categories will be those shown in Table 4-10 except that the jet fuel categories will be combined.

All the data elements listed in Table 4-12 will be applicable (if reported on MEA 2-4 input) to all activities, except DFSC. The printed report, which includes DFSC activities, will only reflect Opening Inventory, Issues, Receipts-Commercial, Receipts From DoD and Closing Inventory. There will be an Average Daily Issue calculated for these activities.

Part I of the report should have page breaks at each change of Major Command, as well as when the page limit is reached. Part 2 of the report (Service Summary) will provide a page break for each Service as well as when the page limit is reached. Each Service/agency report will be booked separately. These reports will normally be run twice a month, the first run being a preliminary one. All preliminary reports will be run on one-part paper and distributed to DFSC-CB.

4.4.8.3.3 Navy Petroleum Report Tape

This tape will include all the data required to produce the Navy portion of the Monthly Petroleum Report. It will be produced in conjunction with the Monthly Petroleum Report, before any further updates to the data base are made. Selection criteria will be the data for the DoDAACs identified with an "N" Service/Agency Code. The tape is not in print image format. The record layout is given in Table 4-15. The tape labels are standard, the external label is DSA.H26.NAV00420, the record size is 210, the blocking factor is 30, and the recording mode is F. The tape is 9-track, labeled, odd parity, 800 BPI.

4.4.8.3.4 Navy/Marine Petroleum Report Tape

This tape will include all the data required to produce the Navy and Marine Corps portion of the Monthly Petroleum Report. Selection criteria will be the data for the DoDAACs identified with an "N" or an "M" Service/Agency Code. As in 4.3.8.3.3, the tape will be produced in conjunction with the Monthly Petroleum Report and will contain raw data rather than print images. The tape record layout is given in Table 4-15. The tape labels are standard, the external label is DSA.H26.NAV00410, the record size is 210, the blocking factor is 30, and the recording mode is F. The tape is 9-track, labeled, odd parity, 800 BPI. It should be mailed to:

David W. Taylor Naval Ship Research and Development Center
Code 2705
Annapolis, Maryland 21402.

TABLE 4-15

PETROLEUM REPORT TAPE LAYOUT

Field Name Description	Number of Bytes	Field Location		Picture	Usage
		From	To		
DoDAAC	7	1	7		
DoDAAD	6	1	6	X	DISPLAY
TAC	1	7	7	X	
FILLER	1	8	8	X	
REGION	2	9	10	X	
FILLER	1	11	11	X	
STATE	2	12	13	X	
FILLER	1	14	14	X	
PRODUCT	3	15	17	X	
FILLER	1	18	18	X	
INSTALLATION NAME	40	19	58	X	
FILLER	1	59	59	X	
MAJOR COMMAND	10	60	69	X	
FILLER	1	70	70	X	
SERVICE	1	71	71	X	
FILLER	1	72	72	X	
JULIAN DATE - REPORT CYCLE	5	73	77		
JULIAN YEAR	2	73	74	9	DISPLAY
JULIAN DAY	3	75	77	9	
FILLER	1	78	78	X	
OPENING INVENTORY	11	79	89	9	
FILLER	1	90	90	X	
TOTAL CONSUMPTION	11	91	101	9	

TABLE 4-15

PETROLEUM REPORT TAPE LAYOUT (Continued)

Field Name Description	Number of Bytes	Field Location		Picture	Usage
		From	To		
FILLER	1	102	102	X	DISPLAY
TOTAL RECEIPTS CONTRACT	11	103	113	9	
FILLER	1	114	114	X	
TOTAL RECEIPTS DoD AND OTHER	11	115	125	9	
FILLER	1	126	126	X	
CLOSING INVENTORY	11	127	137	9	
FILLER	1	138	138	X	
AVERAGE DAILY CONSUMPTION	9	139	147	9	
FILLER	1	148	148	X	
FIRST QUANTITY ISSUED	6	149	154	9	
FILLER	1	155	155	X	
SECOND QUANTITY ISSUED	6	156	161	9	
FILLER	1	162	162	X	
QUANTITY TO DoD AND OTHER	6	163	168	9	
FILLER	1	169	169	X	
PRIMARY USE	6	170	175	9	
FILLER	1	176	176	X	
SECONDARY USE	6	177	182	9	
FILLER	1	183	183	X	
TERTIARY USE	6	184	189	9	
FILLER	1	190	190	X	
SERVICE FIRST USE	6	191	196	9	
FILLER	1	197	197	X	
SERVICE SECOND USE	6	198	203	9	DISPLAY
FILLER	7	204	210	X	DISPLAY

4.4.8.3.5 Army Petroleum Report Tape

This tape will include all the data required to produce the Army portion of the Monthly Petroleum Report. Selection criteria will be the data for the DoDAACs identified with an "A" or "B" Service/Agency Code. The tape will be produced in conjunction with the Monthly Petroleum Report and will contain raw data rather than print images. The tape record layout is given in Table 4-15. The tape labels are standard, the external label is DSA.H26.ARM00420, the record size is 210, the blocking factor is 30, and the recording mode is F. The tape is 9-track, labeled, odd parity, 800 BPI. It should be mailed to:

Commander USAMSSA
DASC-AMF-B
ATTN: Charles Joyce
Room 8D997, Pentagon
Washington, D. C. 20310.

4.4.8.3.6 Cumulative Petroleum Reports

The criteria for producing the Cumulative Petroleum Reports are the same as for the monthly reports as described in 4.4.8.3.2. The only differences are the following:

- The cumulative reports will reflect fiscal year-to-date (all monthly input).
- The calculation of Average Daily Issues will be made by dividing the cumulative total issues by the total number of days which have elapsed during the fiscal year.

The sequence, subtotals, page breaks, and reporting cycle will be the same as for the monthly reports. The first page will show the definitions of Product Codes, and Primary, Secondary and Tertiary as on the monthly reports. Figures 4-20 and 4-21 show the layout of the Cumulative Petroleum Reports.

4.4.8.3.7 Monthly/Quarterly Installation and Other Summary Reports

The following series of reports will be printed in sequence on both a monthly and quarterly basis.

Part 1 - DEIS I Monthly Worldwide Category Summary

Part 2 - DEIS I Monthly Worldwide Summary Report

Part 3 - DEIS I Monthly CONUS Summary Report

Part 4 - Region Summary Totals

Part 5 - Vessel Summary Totals

Part 6 - State Summary Totals

Part 7 - DEIS I Monthly Installation Summary

Rev. A

FIGURE 4-20

CUMULATIVE PETROLEUM REPORT

PRODUCT	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOB	CLOSING INVENTORY	DETER LOSS/ICN/GRATE	GAIN/LCSS	SERVICE MEA-3	SERVICE MEA-4
PRIN ON III	XXX XX								
AS CE	XXXXXXXXXX	19XX							
SERVICE	XXXXXXXXXX								
MAJOR COMMAND	XXXXXXXXXX								
PRODUCT CODE	PRIMARY	SECONDARY	TERTIARY	INTO-PLANE	SOLD TO	SOLD TO	SOLD TO	TRANSFERS	TRANSFERS
				FWL15/44	XXXXXXX	XXXXXXX	NON ICN	INTER	ISSUES
DDIANC	XXXXXX	INSTALLATION	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX			
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
DDIANC	XXXXXX	INSTALLATION	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX			
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTALS	XXXXXXXXXX	(MAJOR COMMAND)							
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTALS	XXXXXXXXXX	(MAJOR COMMAND)							
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTALS	XXXXXXXXXX	(MAJOR COMMAND)							
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTALS	XXXXXXXXXX	(MAJOR COMMAND)							

PAGE 1, XXXX

These reports will generally be run twice a month, the first run being a preliminary report. All preliminary reports will be run on one-part paper and forwarded to DFSC-CB.

The reports will be run in the same sequence on a quarterly basis. The selection criteria will not change, except that the data selected to print will be for three months instead of one.

The above series consists of one detail report (Part 7), preceded by various summaries of that detail. Hence, criteria for selecting data for the detail report will be developed first, followed by discussion of the other six reports in reverse order.

Part 7 - DEIS I Monthly Installation Summary

The major sequence of this report is DOE Region/CINC. The sequence within this major sort, which will be followed for the report is as follows.

The 10 regions within CONUS will come first, in numerical order. The sequence of CINCs will be CINCAL, CINCLANT, Canada and Greenland, CINCEUR, CINCPAC, CINCSOU, MISCELLANEOUS CINC, and then a list of vessels. The title of the last portion will be VESSELS.

The next sequence is State/Country within Region/CINC. The sequence for CONUS regions will be the states within the region in alphabetical order. For CINCs, it will be the countries within a CINC in alphabetical order. There will be no sub-sort within the VESSELS portion of the report.

After this initial breakout, activities within a State/Country will be divided between DFSC and Retail Activities, with DFSC Activities printed first. After this segregation, activities will be printed in DoDAAC sequence. The last sequence will be Product Code within DoDAAC. Product Codes will be printed in alphabetical order within DoDAAC, with numerical codes in order first, followed by alphabetical codes.

The data elements printed on the report and their sources are as follows:

- DOE Region/CINC--Determined by matching the DoDAAC of the submitting activity to the coded information file
- State/Country--Determined by referring to the coded information file
- DoDAAC--Data base
- Installation Name--Determined from coded information
- Product Code--Data base
- Opening Inventory--Data base
- Issues--Data base

Rev. A

- Receipts-Commercial--Data base
- Receipts from DoD--Data base
- Closing Inventory--Data base
- Average Daily Issues--Calculated value of Issues divided by number of days in reporting period

No summaries, subtotals, or totals are required for this part. Figure 4-22 gives a sample layout of this report. Page breaks are required for each change in State/Country, for each change in Region/CINC, and when the page limit is reached.

Quarterly Reports

The sequence, subtotal, page break, and other criteria will be the same for the quarterly as for the monthly Installation Summaries. The heading will change from Monthly to Quarterly, and the date from Month Of to As Of.

The quarterly report will be printed at the end of the quarter and will include data for the three months of that quarter only. The Opening Inventory will be the inventory at the beginning of the first month of the quarter. Issues, Receipts-Commercial, and Receipts From DoD will be an accumulation of the three months within the quarter being reported. The Closing Inventory is the inventory at the end of the last month in the quarter. Average Daily Issues will be calculated using the number of days in the quarter.

Part 6 - State Summary Totals

This report has the same sort sequences (Region/CINC and State/Country within Region/CINC) as the detail report. However, individual DoDAACs are not listed. This part of the report summarizes detail installation data at the DFSC and retail levels, by Product Code, for each State/Country. Within each Product Code, a summary line is printed for Retail activities within the State/Country, and for DFSC activities, as well as a total (Retail & DFSC) for the State/Country. A total of all Product Codes is provided at the end of each State/Country summary.

The source of data for this accumulation is the detail report (Part 7). Average Daily Issues is again a calculated value (Issues ÷ days reported). Vessels are not summarized in this report, as they cannot be assigned a State/Country.

Figure 4-23 provides a sample format for this report. Page breaks are required for each change in State/Country, each change in Region/CINC, and when the page limit is reached.

As in Part 7, the sequence, subtotal, page break and other criteria will be the same for the quarterly reports as for the monthlies. The heading will be changed from Monthly to Quarterly, and the date from Month Of to As Of.

FIGURE 4-22

MONTHLY INSTALLATION SUMMARY

DETS	MONTHLY INSTALLATION SUMMARY	STATE/COUNTRY	RECEIPTS FROM DOD	RECEIPTS COMMERCIAL	ISSUES	OPENING INVENTORY	PRODUCT CODE	INSTALLATION NAME	PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
00000000	DOE REGION/CINC: XXXXXXXXXX	STATE/COUNTRY: XXXXXXXXXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXX	XXXXXXXXXXXXXXXXXXXX	XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXX,XXX
00000000	DOE REGION/CINC: XXXXXXXXXX	STATE/COUNTRY: XXXXXXXXXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXX	XXXXXXXXXXXXXXXXXXXX	XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXXX,XXX,XXX	XXX,XXX

FIGURE 4-23

MONTHLY SUMMARY BY DOE REGION/CINC

DOE REGION/CINC	STATE/COUNTRY	RECEIPTS FROM DoD	RECEIPTS COMMERCIAL	ISSUES	OPENING INVENTORY	CLOSING INVENTORY	AVERAGE DAILY ISSUES
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTAL - ALL PRODUCTS							
RETAIL ¹	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
DFSC ²	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTAL ³	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX

PAGE 6 XXXX

THIS MONTHLY SUMMARY BY DOE REGION/CINC STATE SUMMARY TITLIS MONTH OF XXXXXXXX 19XX

¹This total is calculated by summing all the Retail lines for all the Product Codes.

²This total is calculated by summing all the DFSC lines for all the Product Codes.

³This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total Retail and DFSC values.

The quarterly report will include data for the three months of the quarter being reported only. The Opening Inventory will be the inventory at the beginning of the first month of the quarter. Issues, Receipts-Commercial and Receipts-From DoD will be an accumulation of the three months within the quarter being reported. The Closing Inventory is the inventory at the end of the last month in the quarter. Average Daily Issues will be calculated using the number of days in the quarter.

Part 5 - Vessel Summary Totals

This report summarizes the vessel detail data from Part 7 in the same manner as Part 6 summarized State/Country data. Again, this part of the report will not include a State/Country, and the Region/CINC will be identified as Vessels. Data elements printed are the same as those in the State/Country Summary: Product Code, Opening Inventory, Issues, Receipts-Commercial, Receipts From DoD, Closing Inventory, and Average Daily Issues. All data are a total of detail printed in Part 7, summarized by Product Code. The report furnishes a total of all products, also segregated by Retail and Total.

Figure 4-24 provides a sample layout of this report. Page breaks are needed only when the page print limit is reached.

Quarterly reports have the same criteria as the monthly reports, with the same heading and data changes as specified for the Part 7 quarterlies.

Part 4 - Region Summary Totals

This part summarizes all detail data by Region/CINC, and excludes Vessels, already summarized in Part 5. Data elements are DOE Region/CINC, Product Code, Opening Inventory, Issues, Receipts-Commercial, Receipts From DoD, Closing Inventory, and Average Daily Issues. Detail data within each Region/CINC is totalled by Product Code for each Retail and DFSC activity, and printed. A total is also required for each Product Code, and the report will provide a total of all products, broken out by Retail, DFSC and Total.

Figure 4-25 gives a sample format of this report. Page breaks are required at each new Region/CINC.

Quarterly reports have the same criteria as the monthly reports, with heading and data changes as specified for the Part 7 quarterlies.

Part 3 - DEIS I Monthly CONUS Summary Report

This part of the report is a summary of all installations within CONUS. It summarizes all data on Regions 1 through 10 by Product Code. A total is calculated for the Retail and DFSC lines for each Product Code. The Grand Total totals all Retail, DFSC and Total lines. Figure 4-26 gives a sample format for this report.

Rev. A

FIGURE 4-24

DEIS I MONTHLY SUMMARY BY DOE REGION/CINC

VESSEL SUMMARY

DOE REGION/CINC	VESSELS	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
XXX	RETAIL						
XXX	DFSC						
XXX	TOTAL						
TOTAL - ALL PRODUCTS							
	RETAIL ¹						
	DFSC ²						
	TOTAL ³						

SAME DETAIL AS ON REGION/CINC SUMMARY (FIGURE 4-23)

¹ This total is calculated by summing all the Retail lines for all the Product Codes.
² This total is calculated by summing all the DFSC lines for all the Product Codes.
³ This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total of the Retail and DFSC lines.

FIGURE 4-25

DEIS I MONTHLY SUMMARY BY DOE REGION/CINC

REGION SUMMARY

PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIVS COMMERCIAL	RECEIVS FROM DOD	CLOSING INVENTORY	AVERAGES DAILY ISSUES
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL - ALL PRODUCTS						
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX

¹This total is calculated by summing all the Retail lines for all the Product Codes.
²This total is calculated by summing all the DFSC lines for all the Product Codes.
³This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total Retail and DFSC values.

FIGURE 4-26

MONTHLY CONUS SUMMARY REPORT

PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
RETAIL						
DFSC						
TOTAL						
GRAND TOTAL - ALL PRODUCTS						
RETAIL						
DFSC						
TOTAL						

1 This total is calculated by summing all the Retail lines for all the Product Codes.
 2 This total is calculated by summing all the DFSC lines for all the Product Codes.
 3 This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total retail and DFSC values.

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LOGISTICS MANAGEMENT INST WASHINGTON DC
DEFENSE ENERGY INFORMATION SYSTEM (DEIS); DEIS-80 DESIGN SYSTEM—ETC(U)
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MDA903-81-C-0253

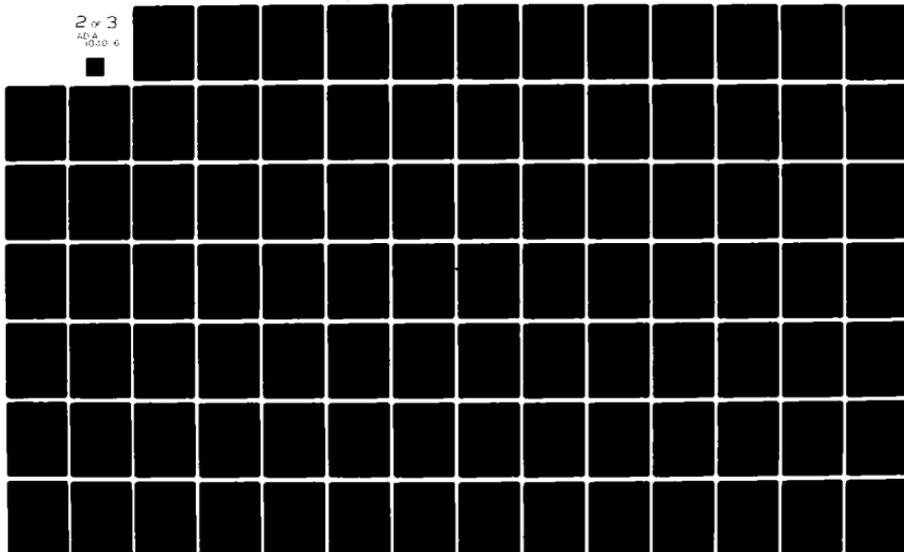
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Part 2 - DEIS I Monthly Worldwide Summary Report

This part of the report is an overall summary of all detail data in Part 7, and is a compilation of data from the 10 CONUS Regions, all CINCs, and Vessels. The data elements summarized are the same as in all the other summaries. Figure 4-27 gives a sample format of this report. The report is in Product Code sequence, each Product Code having a Retail, DFSC, and Total line.

When the Grand Total is calculated, it must be verified. The total of all Retail lines within each Product Code will be added to get the Grand Total-Retail. The same will be done for the DFSC and Total lines. The Grand Total will then be verified by adding the Grand Total-Retail and DFSC lines. This report is a consolidation by Product Code of all data reported for the month for all CONUS Regions, all overseas CINCs, and Vessels.

Page breaks are needed only when the maximum lines of print are reached.

The sequence subtotal, page break, and other criteria will be the same for the quarterly reports as for the monthly reports. The heading will be changed from Monthly to Quarterly, and the date of the report will be changed from Month of to As Of.

The quarterly report will include data for the three months of the quarter being reported only. The Opening Inventory will be the inventory at the beginning of the first month of the quarter. Issues, Receipts-Commercial and From DoD will be an accumulation of the three months within the quarter being reported. The Closing Inventory is the inventory at the end of the last month in the quarter. Average Daily Issues will be calculated using the number of days in the quarter.

Part 1 - DEIS I Monthly Worldwide Category Summary

This part of the report contains the same data as Part 2, except that categories of products are reported instead of Product Codes. The sequence in which the Product Categories should be printed is as displayed in Figure 4-28. This summary will be produced for each Service and for all DoD.

See Table 4-9 for criteria for consolidating Product Codes into Product Categories. Heating Fuels (Distillates and Residuals) will be added to provide Total Heating Fuels. This report will contain a Grand Total-All Categories, which must equal the Total line on the Monthly Worldwide Summary Report.

The sequence, subtotal, page break, and other criteria will be the same for the quarterly reports as for the monthlies. The heading will be changed from Monthly to Quarterly, and the date from Month Of to As Of. The first page of both the monthly and quarterly reports will contain a list of all Product Codes in each Product Category, a definition of each Product Code, and definitions of Primary, Secondary, and Tertiary for each Service.

Rev. A

FIGURE 4-27

WORLDWIDE SUMMARY REPORT

PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DGD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
GRAND TOTAL - ALL PRODUCTS						
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX

PAGE 2 XXXX

DETS 1 MONTHLY WORLDWIDE SUMMARY REPORT

MONTH OF XXXXXXXXXX 19XX

¹ This total is calculated by summing all the Retail lines for the Product Codes.

² This total is calculated by summing all the DFSC lines for all the Product Codes.

³ This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total Retail and DFSC values.

FIGURE 4-28

WORLDWIDE CATEGORY SUMMARY

PRODUCT CATEGORY	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
AVIATION GASOLINES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
JET FUELS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DISTILLATES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
AUTOMOTIVE GASOLINES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
RESIDUALS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
HEATING FUEL - DISTILLATES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
HEATING FUEL - RESIDUALS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL - HEATING FUELS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
GRAND TOTAL - ALL CATEGORIES	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX

PAGE 1. KKKK

The quarterly report will include data for the three months of the quarter being reported only. The Opening Inventory will be the inventory at the beginning of the first month of the quarter. Issues, Receipts-Commercial, and Receipts From DoD will be an accumulation of the three months within the quarter being reported. The Closing Inventory is the inventory at the end of the last month in the quarter. Average Daily Issues will be calculated using the number of days in the quarter.

4.4.8.3.8 Cumulative Reports

The three-part cumulative summary report produced each month will be generated in the same manner as the monthly summaries. The cumulative reports are:

Part 1 - DEIS I--Cumulative Worldwide Category Summary

Part 2 - DEIS I--Cumulative Worldwide Summary Report

Part 3 - DEIS I--Cumulative CONUS Summary Report

These three summaries include the same data elements as the monthly summaries. The only difference is that the data reflected on the cumulative reports are fiscal year-to-date as of the date that the report is run. These summaries are merely totals of all previous monthly reports for the fiscal year.

Average Daily Issues on the cumulative reports are calculated by dividing Total Issues by the number of days reported to date in the fiscal year. Opening inventory is the opening inventory at the beginning of the fiscal year and closing inventory is the current closing inventory.

This set of reports will be in the same sequence, will provide the same sub-totals and page breaks as the monthly reports of the same name (see 4.3.8.3.7). Figures 4-29 and 4-30, and 4-31 show sample layouts of these reports.

These cumulative reports should be printed and booked immediately in back of Parts 1 through 3 of the monthly reports of the same name.

These reports will not be included in the quarterly series of reports.

The cumulative reports will normally be run twice a month, the first being a preliminary report. All preliminary reports will be run on one-part paper and forwarded to DFSC-CB.

4.4.8.3.9 Navy/Marine Corps Installation Summary Tape

This tape will include all the data required to produce the monthly installation summary reports for all Navy and Marine Corps activities. Selection criteria will be the data for those DoDACCs identified with a "M" or "N" Service/Agency Code. This tape will be produced in conjunction with the Monthly Installation Summary (4.4.8.3.7), before any further changes to the data base are processed.

Rev. A

FIGURE 4-29

CUMULATIVE WORLDWIDE CATEGORY SUMMARY

PRODUCT CATEGORY	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
AUTOMATION GASOLINES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
JET FUELS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DISTILLATES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
AUTOMOTIVE GASOLINES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
RESIDUALS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
HEATING FUEL - DISTILLATES	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
HEATING FUEL - RESIDUALS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL - HEATING FUELS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
GRAND TOTAL ALL CATEGORIES	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	X,XXX,XXX,XXX	XX,XXX,XXX

FORM AD-68 (REV. 7-73)

FIGURE 4-30

CUMULATIVE WORLDWIDE SUMMARY REPORT

PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM DOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
GRAND TOTAL - ALL PRODUCTS	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
RETAIL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
DFSC	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX
TOTAL	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	X,XXX,XXX

¹This total is calculated by summing all the Retail lines for all the Product Codes.

²This total is calculated by summing all the DFSC lines for all the Product Codes.

³This total is calculated by summing all the Total lines for the Product Codes. It must also equal the sum of the total Retail and DFSC values.

FIGURE 4-31

CUMULATIVE CONUS SUMMARY REPORT

PRODUCT CODE	OPENING INVENTORY	ISSUES	RECEIPTS COMMERCIAL	RECEIPTS FROM LOD	CLOSING INVENTORY	AVERAGE DAILY ISSUES
XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX
XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX
XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX
GRAND TOTAL - ALL PRODUCTS						
RETAIL ¹	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX
DFSC ²	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX
TOTAL ³	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	XXX, XXX, XXX	X, XXX, XXX

¹This total is calculated by summing all the Retail lines for all the Product Codes.

²This total is calculated by summing all the DFSC lines for all the Product Codes.

³This total is calculated by summing all the Total lines for the Product Codes.

This tape contains raw data, not print images. The tape record layout is given in Table 4-16. The tape labels are standard, the external label is DSA.H26.NAV00110, the record size is 150, the blocking factor is 23, and the recording mode is F. This tape is a 7-track, unlabeled, even parity, 800 BPI. It should be mailed to:

David Taylor Ship Research and Development Center
Code 2705
Annapolis, Maryland 21402

4.4.9 Ad Hoc Reports

This function will provide macros to extract data from the DEIS I data base.

4.4.9.1 Purpose

Queries to the DEIS I data base from users other than the system operator will be of two types. One type of query is simply to retrieve certain data elements, based on user-specified selection criteria, and display the data. At times, simple arithmetic operations may be requested on the data. For this type of ad hoc report, the macros should assign any files, invoke any processors, and assist the user to create query statements.

The second type of query is to extract and store selected data elements for further processing by statistical package software such as SPSS. In particular, linear regression, time series, cross tabulation, and one-way analysis of variance statistical procedures will be performed on selected data elements.

4.4.9.2 Data Input

The user should provide a minimum of data to produce ad hoc reports. Defaults for table headings should exist. The user should be allowed to direct the output from the session.

The following are samples of the queries that may be requested.

- Display the data for DoDAAC = XXXXXX, Date = MMY, Product Code = XXX.
- What is the total consumption of jet fuels (or automotive gasoline) for quarter 2 of the current fiscal year (or of last year)? Multiply this number by 42 to give total consumption in gallons.
- What is the percent change in total consumption (or average daily consumption) for Major Command = X---X, between this month and this month a year ago (or this quarter and the previous 5 quarters) for distillates (or fuel oil)?
- What is the total consumption for each Service for the past 12 months? Multiply this by the current fuel price (input value).

4.4.9.3 Output

Output will be printed on the originating terminal, directed to another (high-speed) printer, or saved in a file for further processing. In addition,

TABLE 4-16

NAVY/MARINE INSTALLATION SUMMARYTAPE LAYOUT

Field Name Description	Number of Bytes	Field Location	
		From	To
DoDAAC	7	1	7
DoDAAD	6	1	6
TAC	1	7	7
FILLER	1	8	8
REGION	2	9	10
FILLER	1	11	11
STATE	2	12	13
FILLER	1	14	14
PRODUCT CODE	3	15	17
FILLER	1	18	18
FIRST QUANTITY ISSUED TO	6	19	24
FILLER	1	25	25
SECOND QUANTITY ISSUED TO	6	26	31
FILLER	1	32	32
QUANTITY TO DoD & OTHER	6	33	38
FILLER	1	39	39
PRIMARY USE	6	40	45
FILLER	1	46	46
SECONDARY USE	6	47	52
FILLER	1	53	53
TERTIARY USE	6	54	59
FILLER	1	60	60
SERVICE USE	6	61	66
FILLER	1	67	67
SERVICE USE	6	68	73
FILLER	1	74	74
INSTALLATION NAME	40	75	114
FILLER	1	115	115
REPORT CYCLE DATE	5	116	120
MONTH	2	116	117
BLANK	1	118	118
YEAR	2	119	120
FILLER	1	121	121
MAJOR COMMAND	20	122	131
FILLER	1	132	132
SERVICE	1	133	133
FILLER	14	134	150

at the user's option, the statements used to generate the query may be saved for future use and modification.

SECTION 5. DEIS II DESIGN DETAILS

The overall requirement for the DEIS II subsystem is to provide data and reports for easy and accurate monitoring of utility energy consumption within DoD. With this general design criterion as a guideline, the following requirements were developed. First, DEIS II data will be maintained on an unclassified system and use a DBMS that supports on-line queries through standard data base retrieval routines. Second, the DBMS will provide the capability to add and delete data element fields when new requirements arise. Third, DEIS II data editing, including both format and reasonableness criteria, will provide increased accuracy. Fourth, code translation capabilities and ad hoc report generation procedures will be included in DEIS II to increase the readability of reports and the responsiveness of the system. Finally, DEIS II data reporting requirements will request data in the unit of measurement commonly used for consumption so that data collection is simplified. The specific automated functions designed to meet these DEIS II requirements are described in the following paragraphs.

5.1 General Operating Procedures

5.1.1 Data Requirements

Most DEIS II data will be collected by the field activities in the MEB format shown in Appendix C. The capability must be provided to input data to the DEIS II data base on-line, as well as from MEB cards and card images on magnetic tape. Edit procedures will prevent double entry of data. Duplicate records will be printed on an error report (called a Transaction Proof Listing).

All data submitted from a field activity will be handled as add transactions unless data for the same date, installation and product (if applicable) exist in the data base. The DEIS system operator (DFSC-CB) will retain a listing (for one year) of the data submitted from the field activities, either the DD 173 message form or a listing of validated punched cards received via AUTODIN.

5.1.2 System Scheduling Requirements

DEIS II has a monthly reporting cycle for all activities. Data are reported as of 0800 hours local mean time on the last day of each month. Data are due at DLA, Cameron Station, by 0800 hours on the 28th day of the following month. Initial data editing, including production of the Nonreporting Activities Report, should be completed by 0800 hours on the 29th of the month. Data from late reporters and changes due to the initial editing and preliminary reports will be entered between the 29th and the 6th of the next month. Final reports will be provided to the Defense Energy Policy Office and the designated components not later than the 10th day of the month. These final reports will reflect end-of-month data as of five to six weeks previously. DFSC-CB will initiate the request for these final reports. Table 5-1 summarizes the processing cycle for DEIS II. This schedule shows an optimal processing cycle and may be revised after the system is operational.

Rev. A

TABLE 5-1

DEIS II PROCESSING CYCLE

<u>Day of the Month</u>	<u>Responsible Party</u>	<u>Actions Required</u>
last	Activity/Installation	Collect DEIS II data.
1-27	Activity/Installation	Submit DEIS II data for transmission.
28	DLA	After 0800 hours, separate DEIS data produce tape, and send to AFDSC.
29-8	DFSC-CB	Run edits as required.
29	AFDSC*	Run initial update. Send list of errors and non-reporters to DFSC-CB.
29	AFDSC	Process weather/I&H data, update data base.
29	DFSC-CB	Notify non-reporters, start error corrections.
30-8	DLA	Separate any remaining DEIS data, produce tape, and send to AFDSC.
9	AFDSC*	Update data base with new data. Deliver report tapes to DLA.
10**	DLA	Produce, bind, and deliver reports.
11-15	DFSC-CB	Enter remaining corrections and late reports. Request edit, update, report cycle, if necessary.
15	AFDSC, DFSC-CB	Archive data from on-line data base.
all	DFSC-CB	Maintain tables and coded information. Enter corrections to data base.

* AFDSC will plan to provide less than 24-hour turnaround on jobs submitted, however, machine availability/scheduling may delay the output.

** DEIS II reports delivered approximately 40 days after the activity "cut-off" date, that is, the reports reflecting January consumption are available by March 10.

5.1.3 Data Base Back-up Procedures

The data base back-up procedures for DEIS II are the same as those for DEIS I (see 4.1.3).

5.1.4 Recovery Procedures

Restart and recovery procedures will conform to standard AFDSC procedures. Transaction logging, retention of DEIS II data tapes, and the data base back-up will permit recovery of a damaged data base. AFDSC will develop such procedures, consistent with their operating procedures.

5.1.5 Access to Archived Data

Occasionally data not contained in the on-line data base will be needed. Procedures (using INQUIRE capabilities) will exist to create a temporary INQUIRE data base containing archived data for use in on-line data retrieval and data reporting.

5.1.6 DEIS II Data Monitoring

The Defense Energy Policy Office has management responsibility for DEIS II, and AFDSC has programming responsibility. DLA manages automated operations through DFSC-CB. The DEIS system operator is authorized direct communication with all reporting activities to request late reports and to verify reported data. The DEIS system operator is responsible for making (with Defense Energy Policy Office authorization) all changes to data more than 120 days old. DFSC-CB also coordinates with AFDSC any changes to coded or tabular information in the data base, and works with the Defense Energy Policy office when programming changes to DEIS are anticipated.

5.2 DEIS II Subsystem Logic Flow

The general system flow of DEIS II is designed to provide functions to process and access utility usage data in a timely manner. The flowchart in Figure 5-1 illustrates the DEIS II subsystem logical flow.

Source data enter DEIS II from energy-consuming facilities through AUTODIN, the DD173 message form, or other communications media. DEIS data are collected at DLA, Cameron Station, where DEIS II data are separated from other data and recorded on magnetic tape. The DEIS II tape is then transmitted to AFDSC for further processing.

At AFDSC, DEIS II data are sorted and edited for format and validity (compared to data already in the data base). Records believed to be in error are placed on both the Transaction Proof Listing and the Rejection File for review. All data with a date older than 120 days are placed on the Transaction Proof Listing and the Rejection File for review, acceptance or rejection, and resubmission of data. In addition, those activities which have not submitted DEIS II data are identified and reported. Data which pass the edits are converted to the INQUIRE data base format, and the data base is updated.

Data records believed to be in error are corrected and resubmitted for editing, conversion, and data base updating. DEIS II data relating to installations, such as name, address, and conversion factors, are maintained on an INQUIRE coded information file.

DEIS II reports will be produced once the data reporting cycle is completed or by the 10th of each month. Ad hoc reports and data base queries will be made on an as-needed basis. Errors in reports detected by data submitters can be corrected via AUTODIN or by notifying the system operator.

The data base will contain detail data for installation (DoDAAC) utility usage for the most recent 13 months and for the baseline (1975) 12 months. Quarterly summary data will be for each installation and each utility product used for the 5 years prior to the earliest of the most recent 13 months. Each month, the appropriate monthly and quarterly data will be removed from the on-line data base and saved off-line for possible reload and retrieval.

5.3 Subsystem Data

This subsection describes inputs, outputs, and the data base used for DEIS II.

5.3.1 Inputs

The data elements used in DEIS II, including number, name, source, format, and acceptable values, are described in Appendix B. Table 5-2 shows the layout of the data (quarterly) on existing master files for the fiscal years 1976-1980. The Julian date must be converted to the appropriate fiscal year quarter. No other data editing is necessary for these data. The tape for each quarter is 7 track, unlabeled, even parity, 800 BPI. The record size is 170 and the blocking factor is 20.

The data elements for fiscal year 1975 consist of the DoDAAC, Date, Product Code, and Consumption fields for each month. This data will be provided on tape by DLA along with a record layout and tape specifications. The data elements for data starting in fiscal year 1981, consist of MEB 2 card images. Prior to October 1981, any value in the Btu Content (cc 34-39) field of MEB 2 should be ignored and the standard conversion factor will be placed in this field. In addition, prior to October 1981, the Funded Consumption field (cc 53-60) data on the MEB 2 should be ignored and a value of zero placed in that field except for Navy and Marine activities. This data will be provided on tape by DLA along with the tape specifications.

All data items from the field and the National Climatic Center data will be submitted monthly according to the schedule described in 5.1.2. Approximately 939,300 characters will be submitted monthly. Housing data (approximately 59,400 characters) will be submitted annually in October. Coded information items will be submitted on an as-needed basis.

Rev. A

TABLE 5-2

DEIS II MASTER FILE LAYOUT

<u>DATA ELEMENT NUMBER</u>	<u>DATA ELEMENT DESCRIPTION</u>	<u>RECORD POSITION</u>	<u>FIELD TYPE *</u>
12	DoDAAC	1-6	Alphanumeric
NA	TAC	7	Alphanumeric
	Filler	8	
27	Region Code	9-10	Coded information
	Filler	11	
33	State Code	12-13	Coded information
	Filler	14	
24	Product Code	15-17	Alphanumeric
	Filler	18	
17	Inventory	19-27	Numeric, positive or blank
	Filler	28	
NA	Baseline 73	29-37	Not used in DEIS II
	Filler	38	
8	Consumption	39-47	Numeric, positive or zero
	Filler	48	
NA	Service Use 1	49-57	Not used in DEIS II
	Filler	58	
NA	Service Use 2	59-67	Not used in DEIS II
	Filler	68	
16	Installation Name	69-108	Coded information
	Julian Year	109-110	Alphanumeric
	Julian Days	111-113	Numeric
	Filler	114	
18	Major Command	115-124	Coded information
	Filler	125-146	
35	Variance Code	147-148	Numeric
30	Service Code	149	Coded information
NA	Report Code	150	
NA	Dummy Record Code	151	
NA	Service 75 Consumption	152-160	Actual 1975 data used
	Filler	161	
NA	DSA 75 Consumption	162-170	Not used in DEIS II

* Alphanumeric is Picture X, Numeric is Picture 9.

Rev. A

5.3.2 Outputs

The DEIS II subsystem generates the reports listed below. More detail on their formats is contained in the function descriptions.

- Transaction Proof Listing
- DEIS II Monthly Activities Not Reporting
- DEIS II Activities Reporting Changes
- Monthly/Quarterly Region and State Summary
- Monthly Utilities by DOE Region/CINC
- Energy Consumption Report
- Conservation Performance Report
- Building Conservation Report
- Energy Use Report
- Ad Hoc Reports

5.3.3 Data Base

The DEIS II data base will be constructed using the INQUIRE DBMS. Figure 5-2 shows a schema of the data base. It is expected that the on-line data base will contain (not including any overhead) approximately 19,340,000 characters. See Appendix B for descriptions of the data items.

5.4 DEIS II Subsystem Program Descriptions

DEIS I subsystem programs are described in the following paragraphs. The functions are presented in the sequence in which they will typically be used during a DEIS II reporting cycle.

5.4.1 Separate DEIS I and DEIS II Data

The processing required for this function exists at DLA and will be used without modification. This function is explained in more detail in 4.4.1.

5.4.2 Sort DEIS II Data

The processing required for this function includes a standard ascending sort on five data fields.

FIGURE 5-2

DEIS II SCHEMA

	<u>length</u>
<u>DoDAAC*</u>	6
<u>-Service</u>	1
<u>-Major Command</u>	10
<u>-DOE Region</u>	2
<u>-State/Country</u>	<u>2</u>
	21

DATES (4 characters - 47 occurrences)

<u>PRODUCTS</u>		<u>ENVIRONMENT</u>		<u>ANNUAL DATA</u>	
Inventory	8	Degree Days (heat)	4	Old Bldgs.	
				Owned - Number	5
Consumption	8	Degree Days (cool)	4	- Sq. Ft.	6
Variance Code	2	Personnel Days	6	Old Bldgs.	
		(resident)		Leased - Number	4
Funded Consumption	8			- Sq. Ft.	5
Btu Content	6	Personnel Days	<u>6</u>	New Bldgs.	
		(industrial)		Owned - Number	4
Component Use	8			- Sq. Ft.	5
Date of Update	6			New Bldgs.	
				Leased - Number	4
Correction Code	1			- Sq. Ft.	5
New Building				ECIP (\$000)	5
Consumption	<u>6</u>			O&M (\$000)	<u>5</u>
TOTAL	53	TOTAL	20	TOTAL	48

Average of 3 products per date = $3*(6+4+3+53)+20 = 218$ characters per date
 47 dates = 10,246 characters per DoDAAC per year.

1100 DoDAACs give a data base size (excluding annual data) of 11.3 million characters.

Annual data are $(48+6) * 1100 = 59,400$ additional characters.

* Keys are underlined

5.4.2.1 Purpose

The purpose of this function is to order the data elements for more efficient editing of the data and updating of the data base in subsequent processing steps.

5.4.2.2 Data Definition

The following data will be used as sort keys:

- DoDAAC
- Reporting Date (Year)
- Reporting Date (Month)
- Product Code (for MEB 2 cards only)
- Card Number

A more detailed description of these data items can be found in Appendix B.

5.4.2.3 Processing Logic

All records submitted from the field will be sorted and passed to the edit and convert data function described in 5.4.3.

5.4.2.4 Output

The output of this function is a file containing sorted records.

5.4.3 Edit and Convert Data

This function will test MEB card data items for format, completeness, and reasonableness. It will convert any units not reported in Btu to Btu equivalents. In addition, this function will check whether the data were previously submitted and convert data which pass the edits to the format required to update the DEIS II data base.

5.4.3.1 Purpose

The purpose of this function is to edit/validate DEIS II product information, to produce a Transaction Proof Listing and file of those records which fail the edit criteria, and to format acceptable data for updating the data base.

5.4.3.2 Data Definition

DEIS II data items fall into four categories. The first category (described in this section) is the energy usage data received monthly from field activities. The second category is the annual building-related data and energy conservation funding data received annually from field activities. The second category is also described in this section. The third category consists of degree day data received monthly from the National Climatic Center. The fourth category is coded information, which is changed infrequently. The third category is defined in 5.4.4 and the fourth is defined in 5.4.6. All data items are described in more detail in Appendix B.

Rev. A

5.4.3.3. Processing Logic

A previously edited, revised, and/or corrected record will contain an "E" in position 79. If this product record fails a second edit, it will be placed on the Rejection File and the Transaction Proof Listing (with a message that the second edit failed). It will also update the data base. In this way, correct data that fail the edit criteria for the data can be processed. The following paragraphs specify the edit criteria for the data common to both MEB card types and the MEB-specific data listed in Table 5-3. Figure 5-3 provides a flow chart of the major processing steps in the data edit and conversion function.

5.4.3.3.1 Common Data Edits

There are five MEB data cards, MEB 2, MEB 4, MEB 5, MEB 6 and MEB 7. (There is no MEB 3 card.) Data may be offset by one column because the space is missing between the card type (MEB) and the card number. Similarly, there may be a missing blank or an extra blank between the card number and the date, the date and the DoDAAC, or the DoDAAC and the product code (on MEB 2). If this is the case, insert or delete the blank before checking the validity of the data. A card image of the data as submitted and the action taken will be printed on the Transaction Proof Listing. Other misalignments will be errors.

Two data elements are common to the MEB data cards: DoDAAC and Reporting Date. In all instances, the DoDAAC being submitted must match a DoDAAC in the data base. If there is no match, the input record will be written on the Rejection File and printed on the Transaction Proof Listing with a message such as DoDAAC NOT ON FILE.

The date (month, year) of each MEB card must be less than or equal to the date of the period being reported. To facilitate this validation, the correct date may be submitted on a parameter card. If the input date is more than four months older than the reporting period date, the record/records must be printed with an error message indicating an OUT-OF-DATE-CHANGE.

If the input date is ahead of the correct date (such as 0491 when the correct date is 0481), the record will be written on the Rejection File, and printed with an error message such as INVALID DATE.

The Product Code on the MEB 2 must match acceptable/valid Product Codes established on the coded information portion of the data base. If there is no match, write the record on the Rejection File and print it on the Transaction Proof Listing with a message INVALID PRODUCT CODE.

There are no further edits of the MEB 5 card. Its use is described further in 5.4.9.3.6. Annual data submitted on the MEB 6 and MEB 7 cards are described in 5.4.3.3.7.

5.4.3.3.2 MEB-Specific Edits

All data will be treated as new (add) transactions unless there is a "C" in column 80, a record already in the data base, or "D" (delete code) in column

Rev. A

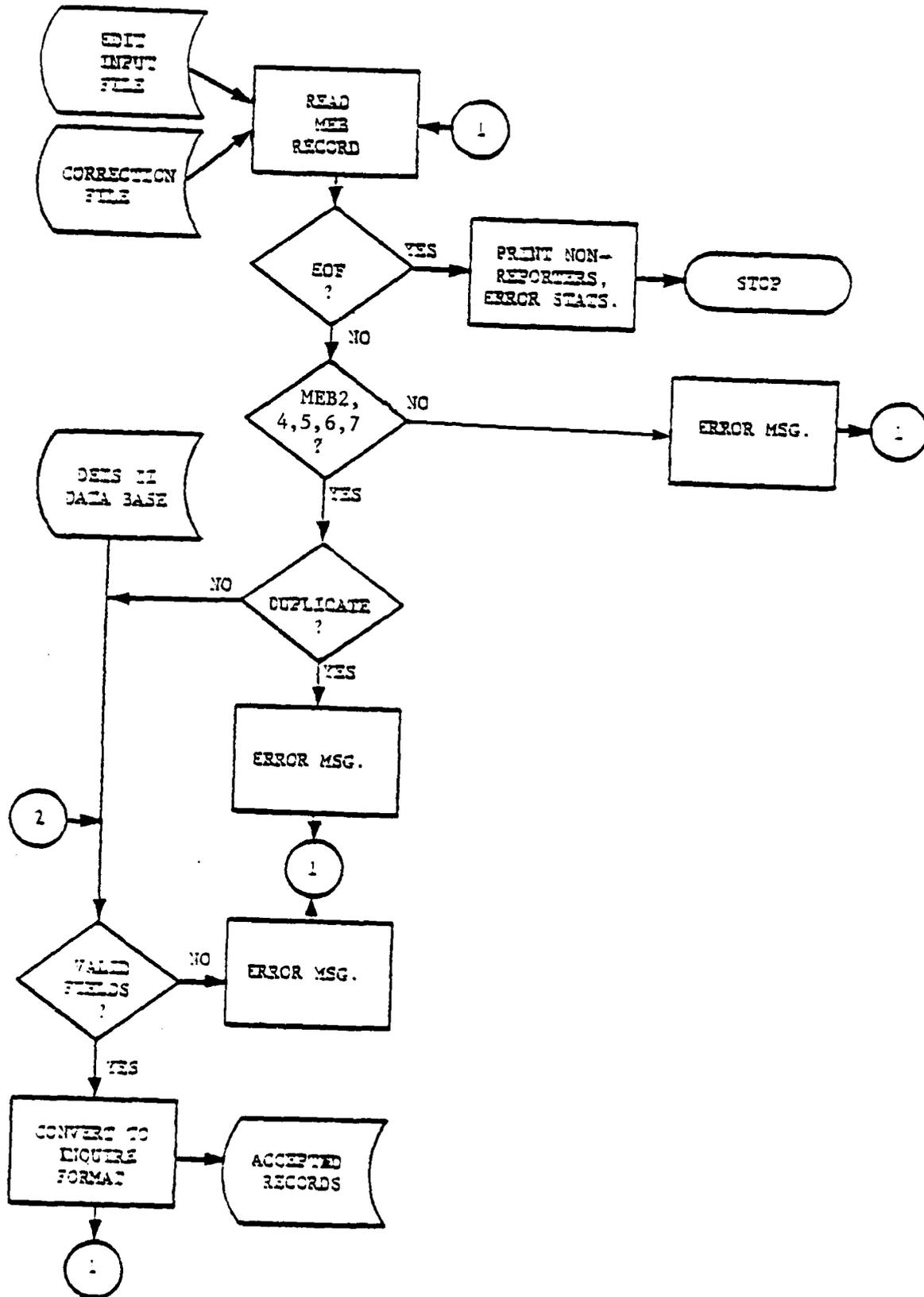
TABLE 5-3

DEIS II MONTHLY DATA EDITS

Card	Data Element Description	Card Column	Edit Criteria/Comments
MEB 2		22	Must be blank
	Inventory	23-30	Numeric, zero or blank. If numeric within 10% of value of inventory a year ago. Used only for product codes ANC, COL, PPG and WUD otherwise an error
		31-33	Must be blank
	Btu Conversion	34-39	Numeric, zero, or blank. If numeric positive, within 10% of standard value for this product. If blank, insert the standard value
		40	Must be blank
	Consumption	41-48	Numeric, within 10% of value of this month a year ago
		49	Must be blank
	Variance Code	50-51	Numeric or blank. If numeric, must be valid code for this Service. Valid codes are in Appendix D
		52	Must be blank
	Funded Consumption	53-60	Numeric, zero, or blank; less than or equal to Consumption
		61	Must be blank
	Component Use	62-69	Numeric or blank
		70-79	Not used by DEIS II
	80	For use by DFSC	
MEB 4		22	Must be blank
	Personnel-Qtr	23-28	Numeric or blank
		29	Must be blank
	Personnel-Ind	30-35	Numeric or blank
		36	Must be blank
	Degree days, cooling	37-40	Numeric or blank. If numeric, must be within 10% of Weather Service report
		41	Must be blank
	Degree days heating	42-45	Numeric or blank. If numeric, must be within 10% of Weather Service report
		46	Must be blank
	New Building Consumption	47-52	Numeric, zero or blank
	53-79	Not used by DEIS II	
	80	For use by DFSC	

FIGURE 5-3

DEIS II EDIT AND CONVERT DATA



80. Every add transaction will be checked for duplication either of previously reported data in the month (for example, two MEB 2 cards with the same Product Code DoDAAC, and Date) or duplication of a data base record. If there are two MEB 2 add transactions with the same DoDAAC, Product Code and Date, the second record will be written on the Rejection File and printed on the Transaction Proof Listing with a message DUPLICATE. This indicates that a correction has been made and one set of data is incorrect. If all 80 columns are duplicated, the second transaction will be ignored. If the add transaction matches a record on the data base exactly, the add transaction will be ignored. If the add transaction matches a record on the data base on just the DoDAAC, Product Code, and Date, treat the transaction as if it is a change transaction (see Section 5.4.3.3.3.).

There may or may not be a MEB 4 card submitted. There should be only one MEB 4 card submitted from each DoDAAC each month. If there are multiple MEB 4 cards for the same date and DoDAAC, print an error message such as DUPLICATE, print the card images, and place the record on the Rejection File.

All numeric quantity fields on the MEB 2/4 will be validated. If the field is neither blank nor numeric, print the entire input record with a message indicating FIELD NOT NUMERIC.

If blank columns of the MEB 2/4 are filled, this indicates an error, and the input record should be placed on the Rejection File. The input record will be placed on the Transaction Proof Listing with a message such as DATA OVERLAP.

Validation of other data on the MEB 2/4 input records is shown in Table 5-3. The Consumption and Funded Consumption fields may need to be converted from reported units to Btu before the edit criteria are met. See 5.4.3.3.6 for conversion criteria. All records in error will be printed on the Transaction Proof Listing. If no prior inventory or degree day data are available, print an informational message indicating BLANK VALUES, DATA NOT VERIFIED. Records containing an error will not update the data base unless they have been previously edited and contain an "E" in column 79.

5.4.3.3.3 Change Transaction Edits

Change transactions (cc 80 = C or a MEB card for a record in the data base) must match a record in the data base on DoDAAC, Product Code and Date. If no match is found, print a message beside the transaction on the Transaction Proof Listing indicating UNMATCHED. If the change matches a data base record, overlay the old data with the new data. This overlay will not, however, be accomplished before all of the validation identified for an add transaction is performed. If the change data fail the edits, reject the new data, print the data as an error on the Transaction Proof Listing, and place it on the Rejection File.

5.4.3.3.4 Delete Transaction Edits

Delete transactions (CC 1 - 5 = MEB 2 and CC 80 = D) must match on the DoDAAC, Date, and Product Code (for MEB 2). If an exact match does not occur, print

Rev. A

the delete transaction on the Transaction Proof Listing with a message indicating UNMATCHED and place the transaction on the Rejection File. If there is an exact match, delete the data associated with the DoDAAC, Date, and Product Code combination from the data base. Beside the transaction on the Transaction Proof Listing, print a message indicating DATA BASE DELETION and the data which were deleted.

5.4.3.3.5 Non-Reporting Activities Edits

Those activities (DoDAACs) in the data base for which no data were received should be printed on the Activities Not Reporting listing. This listing will print the DoDAAC and its header data (Region/CINC Code, State/Country Code, Installation Name, Major Command and Service/Agency Code for the DoDAAC). These data will be taken from the coded information file. In addition, all the Product Codes reported for this DoDAAC the previous month will be listed.

Should the activity not reporting be one that has not reported for more than the prior month, print all of the header data but leave the Product Code field blank. If the activity has not reported for 3 consecutive months, also print a message such as REVIEW HEADER. Activities not reporting for more than 3 consecutive months will be considered closed or inactive.

Activities not reporting the same Product Codes as in the prior month will be reported on the Activities Reporting Changes listing. This listing will be developed by comparing data reported for a DoDAAC in the current month to data reported for that same DoDAAC in the prior month. If a DoDAAC reported a product in the prior month, but not in the current month, that DoDAAC and Product Code will be printed with a message such as NON-SUBMISSION.

If a DoDAAC reports a product not reported in a prior month, the data base will be updated (if all edits are passed), and the line will be printed as above, identified as a NEW-SUBMISSION.

During the October (annual) reporting cycle, those activities which have not submitted MEB 5, MEB 6 and MEB 7 data will also be included on the Activities Not Reporting Listing.

5.4.3.3.6 Conversion

For products not reported in Btu, the Inventory, Consumption, and Funded fields will be converted to Btu. These fields will be stored in the data base in Btu, not in the original reported units. The calculations, Consumption x Btu Content = Consumption and Funded x Btu Content = Funded, will be rounded to the nearest whole number. If a Btu Conversion Factor is input, it will be used. If the Btu Conversion Factor field is blank (zero), the standard conversion factor will be entered into the field. The standard conversion factors are given in Table 5-4.

Data which pass the edits will be converted from MEB card format to the format required for INQUIRE data base updating. Data that fail the edit criteria will be written on the Transaction Proof Listing and the Rejection File in their original units.

Rev. A

TABLE 5-4

STANDARD CONVERSION FACTORS

<u>Product Code</u>	<u>Reporting Unit</u>	<u>Btu Conversion Factor</u>
ELC	MWH	11,600,000 Btu/MWH
NAG	SCF	1031 Btu/SCF
DF1, DF2, FS1, FS2 KSN, KDS, NSF, FSX	Barrels	5,825,000 Btu/Barrel
FS4, FSS, FS6, FSL	Barrels	6,287,000 Btu/Barrel
SHW	Pounds of Steam	1340 Btu/Pound of Steam
ANC	Short Ton	25,400,000 Btu/Short Ton
COL	Short Ton	24,580,000 Btu/Short Ton
PPG	Gallon	95,000 Btu/Gallon
PHO	KWH	11,600 Btu/KWH
SOL	KWH	3412 Btu/KWH
WNE	KWH	3412 Btu/KWH
WUD	Short Ton	17,000,000 Btu/Short Ton
SLP	Barrels	5,000,000 Btu/Barrel
GEO	Pounds of Steam	1340 Btu/Pound of Steam
HYD	KWH	3412 Btu/KWH
RDF	Short Ton	6,000,000 Btu/Short Ton
FCL	KWH	11,600 Btu/KWH
FOR	Barrels	5,000,000 Btu/Barrel

5.4.3.3.7 Annual Data Edits

Building data will be added to the data base annually in October via the MEB 6 data input card. Eight fields, number of existing buildings that are owned, total square footage for these buildings, number of existing buildings that are leased, total square footage for these buildings, number of new buildings that are owned and their total square footage, and the number of new buildings that are leased and their total square footage. The record layout for MEB 6 is shown in Appendix C. Each of these fields contains a blank (zero) or positive numeric value and should be within 3% of the value reported the prior year. If no data are available for the prior year, the value should be within 10% of the value reported in the baseline year. If there are no data available for the baseline year, a message to that effect should be printed and the data added to the data base. Other records in error will be listed on the Transaction Proof Listing and will be placed on the Error File. Figure 5-4 shows the processing logic for this function.

Energy conservation funding data will be added to the data base in October via the MEB 7 data input card. Two types of fields, one containing ECIP money expended for the current and prior four years (in \$000s) and the other containing O&M money expended in \$000s for energy conservation projects will be reported. The record layout for MEB 7 is shown in Appendix C. Each of these fields should contain a blank (zero) or positive numeric value. No other editing is done on these fields. These funding data will not be reported until fiscal year 1983.

MEB 5 data reporting the types of energy used is not stored in the data base. It is described in more detail in 5.4.9.3.6.

5.4.3.4 Outputs

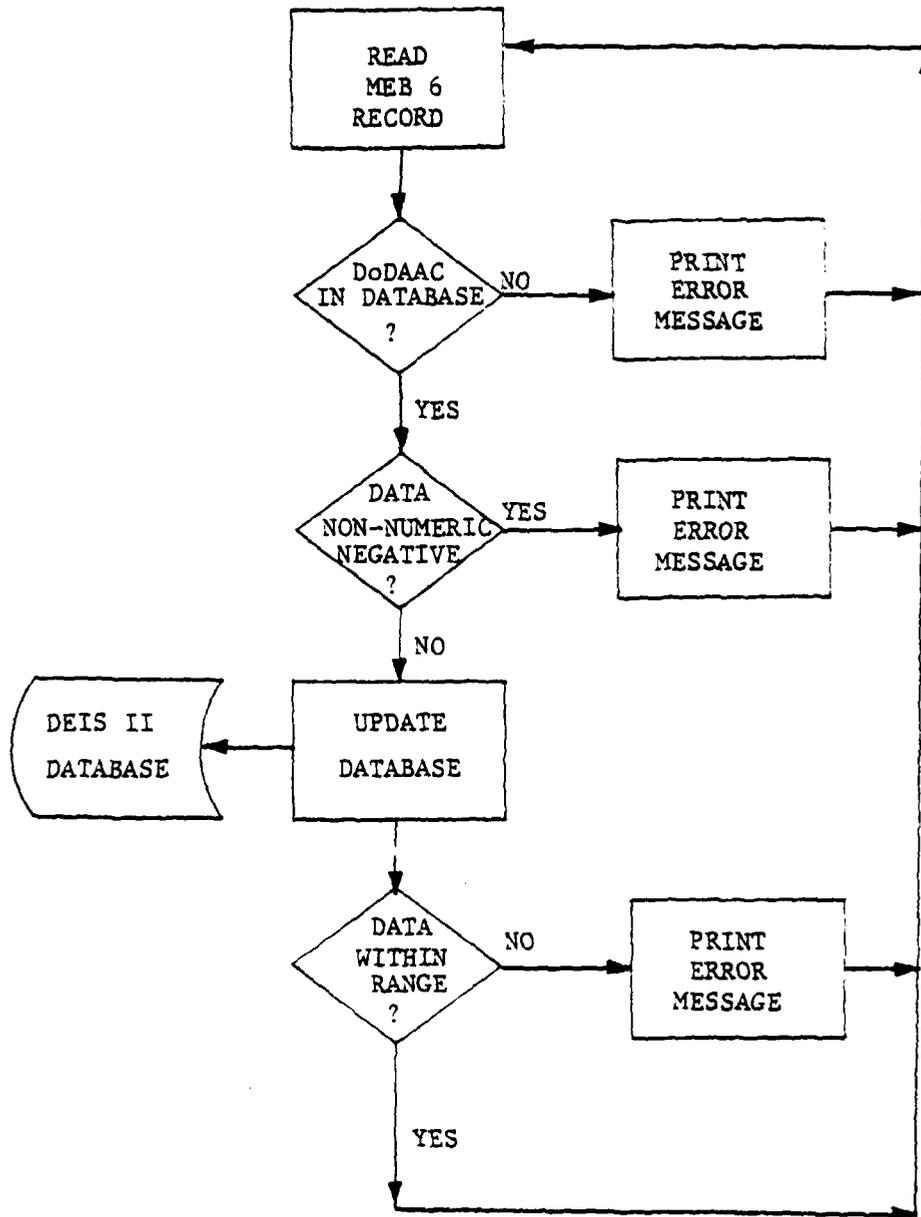
There are six outputs from this function:

1. Records which have passed the data edits and are converted to INQUIRE data base update format will be written to the data base. As many as 2400 records may pass the data edits at one time.
2. Records which have passed the data edits will be printed in DoDAAC order on an Accepted Records listing. A sample of this report layout is given in Figure 5-5.
3. Records which fail the data edits will be written on the Rejection File. As many as 1000 records may fail the data edits at one time. Because of this volume, this file should be arranged for selective as well as sequential access.
4. Records which fail the data edits will be printed on the Transaction Proof Listing. This listing will contain the image of the record on the Rejection File and the appropriate error messages. Multiple error messages may be printed. A sample of this report layout is given in Figure 5-6.

Rev. A

FIGURE 5-4

HOUSING DATA BASE UPDATE PROCESSING LOGIC



5. Activities which did not submit data, or submitted changes in Product Codes, will be printed on the DEIS II Monthly Activities Not Reporting and DEIS II Activities Reporting Product Changes listings. Samples of these reports are given in Figures 5-7 and 5-8.
6. Error statistics showing the number of error messages for each DoDAAC is printed, will be produced at the end of each edit run. This listing will be sent to the system operator, DFSC-CB.

5.4.4 Update Data Base--Data from Other Systems

One type of data from other systems will be used to create part of the DEIS II data base. This data is related to heating and cooling degree days at each reporting installation. Degree day information will be processed monthly. The actual data base update is performed mainly through features of the generalized DBMS.

5.4.4.1 Purpose

The purpose of this function is to add data needed in DEIS II but collected by other reporting systems. Data need be reported by an installation/activity only if it is known that data from the central source are inaccurate (for example, the climate at a base may differ from the climate at the nearest weather station).

5.4.4.2 Data Definition

The data items input to this function are shown in Table 5-5. The degree day data will be received on magnetic tape from the National Climatic Center. This tape will contain the heating and cooling degree days for each month for fiscal years 1975 to 1980 for weather stations identified by a six-digit number. Appendix E shows the correspondence of weather station identifiers to DoDAACs. Both heating degree days and cooling degree days are four-digit numeric (positive or zero) fields. The data input tape will contain 23-character records. There will be 20 records in a block. The tapes will be written as unlabeled, 800 BPI, 9 track, EBCDIC odd parity tapes. There will be one month of data per file on the tape.

5.4.4.3 Processing Logic

The weather station identifier and degree days will be read from the NCC tape, and the corresponding DoDAAC or DoDAACs will be located by means of Appendix E. Degree days may also be submitted by an activity on a MEB 4 card. If no data have been entered in the data base for the DoDAAC, both the heating and cooling degree days will be added to the data base. If degree days were reported by the DoDAAC, they will not be changed by NCC data. If the NCC data differs from that submitted by the activity (DoDAAC) by more than 10%, an information message will be printed.

The degree days for the current month will be compared to the degree days of the same month a year ago. If the difference between the yearly data is more than 10%, a message to that effect (HEATING (or COOLING) DEGREE DAYS MORE

Rev. A

TABLE 5-5

DEIS II DATA FROM
OTHER SYSTEMS

Data Element No.	Data Element Description	NCC Record	Edit Criteria/Comments
NA	Weather Station ID	1-6	Match a table of valid ID and translate to DoDAAC
NA	Date (YY,MM)	7-10	Valid year, month (Oct. 74 to present)
	Blank	11	
15	Heating Degree Days	12-15	Numeric, positive, or zero
	Blank	16	
7	Cooling Degree Days	17-20	Numeric, positive, or zero
NA	Base Temp.	21-23	Not used in DEIS II

(LESS) THAN 10% ABOVE (BELOW) LAST YEAR) will be printed. The DoDAAC, date, current degree days and previous year's degree days will also be printed. Figure 5-9 shows the processing logic of the weather data update.

In addition, all weather data will be numeric, non-negative integers. Data submitted which are non-numeric or negative will be printed with the appropriate error message. All data will be added to the data base unless they are non-numeric or negative.

5.4.4.4 Outputs

The outputs of this function are an updated DEIS II base and a Transaction Proof Listing containing the error messages specified above. Figure 5-10 gives a sample of the messages on the Transaction Proof Listing for this function. If a DoDAAC has weather data but is not on the DEIS II data base, an error message will be printed.

5.4.5 Update Data Base--Data from Activities

This function is performed through the generalized DBMS capabilities and provides for updating the data base with records that have passed the edits. The data base update will occur at least once a month, and possibly two or three times each month, because of changes and late reports.

5.4.5.1 Purpose

The purpose of this function is to add, change, and delete data in the data base. This includes the ability to add new data fields or delete existing ones through reorganization of the data base. (Such reorganization will only take place after consultation with users and AFDSC.)

5.4.5.2 Data Definition

The data items used in this function are shown in Table 5-3. A more detailed description of each data item can be found in Appendix B.

5.4.5.3 Processing Logic

Records that passed the edits described in 5.4.5 will be applied by means of the DBMS to the DEIS II data base in batch mode. The input records will be saved as a transaction log. Any data rejected by the DBMS will be placed on the Rejection File for subsequent data correction.

5.4.5.4 Output

The outputs of this function are an updated DEIS II data base, a Rejection File containing MEB data, and a Transaction Proof Listing containing MEB data and error messages.

Rev. A

5.4.6 Maintain Tables

Part of the DEIS II data base will contain clear (uncoded) text for the coded data and distribution lists for each report. There will also be a list of Conversion Factors for converting products submitted in various units to a standardized Btu value. Maintenance of these tables will be coordinated by the DEIS system operator. The actual update of these tables will be performed by AFDSC.

5.4.6.1 Purpose

This function will provide for maintenance of data tables used for translating codes and converting consumption values. The codes ensure that when summaries by Major Command, Region/CINC, State, or Service are required, the appropriate accumulations can be performed. Maintenance of distribution lists for each of the DEIS II reports will help ensure that all persons receive their reports promptly. The Conversion Factors will help ensure accurate conversion of the data collected.

5.4.6.2 Data Definition

The data items maintained by this function are listed in Table 5-6. These data items may be input on-line. The current DEIS II maintains a Header File on tape with MEB 1 records as shown in Appendix C. A more detailed description of each data item is shown in Appendix B.

5.4.6.3 Processing Logic

Queries, translations, and updates to the part of the DEIS II data base containing coded information are supported through AFDSC.

Table 5-6 contains the edit criteria for adding new data or validating changes to existing data. A DoDAAC is never deleted from the file, but it may be marked INACTIVE when an installation/facility is closed. To inactivate coded information about an installation, the DoDAAC must match one on the file. Table 4-8 contains the translations for Region Codes and State/Country Codes.

Table 4-9 contains the translations for Service/Agency Codes. Product Code translations are in Table 5-7. Distribution list codes are in Table 5-8.

Actual update of the data base need not be completed on-line. However, there may be occasions when corrected codes are needed before reports are run and timely report generation is a requirement. Figure 5-11 shows the major processing steps of this function.

5.4.6.4 Outputs

Outputs from this function are updated coded information tables. In addition, on request, a copy of any category of coded information (data elements in Table 5-6) may be requested. At the user's option, the output from this request may be printed/displayed at the user's terminal or directed to a printer at AFDSC for mailing to the user. Listings by Installation Name will

Rev. A

TABLE 5-6

CODED DATA BASE ITEMS

Data Element No.	Data Element Description	MEB 1 Card Column	EDIT Criteria/Comments
NA	Identification	1-5	MEB 1
12	DoDAAC	12-17	Cannot be blank or zero. Must match a DoDAAC in the file
13	DODC	18	DoDAAC delete code, D or blank
26	Region Code	19-20	Cannot contain blanks or be zero. Must match a code in Table 4-7. Two characters long
33	State/Country Code	22-23	Cannot contain blanks or be zero. Must match a code in Table 4-7. Two characters long
16	Installation Name	25-64	Cannot contain only blanks
19	Major Command	65-78	Cannot contain only blanks
30	Service/Agency Code	79	Must be A, B, F, H, N, M, D, S, or T
24	Product Code	NA	Cannot contain blanks or zeros. Must match a code in Table 5-8. Three characters long
6	Conversion Factors	NA	Numeric, positive. Table 5-4 contains the valid values
11	Distribution Code	NA	Cannot contain blanks or zeros. Table 5-9 contains the valid codes and their translations

TABLE 5-7

UTILITY PRODUCT IDENTIFICATION CODES

<u>Product</u>	<u>Product Code</u>
Electricity	ELC
Natural Gas	NAG
Coal (Bituminous)	COL
Coal (Anthracite)	ANC
Purchased Steam/ Hot Water	SHW
Fuel Oil	FSX, DF1, DF2, FS1, FS2, KSN, KDS, NSF, FSX, FS4, FS5, FS6, FSL
Photovoltaic	PHO
Solar Thermal	SOL
Wind Power	WND
Wood	WUD
Geothermal	GEO
Propane, Butane, LNG	PPG
Refuse-Derived Fuels	RDF
Hydroelectric	HYD
Fuel Cells	FCL
Off Specification Fuel	SLP
Fuel Oil Reclaimed	FOR

TABLE 5-8
DEIS II REPORT DISTRIBUTION CODES

<u>Code</u>	<u>Report Name</u>	<u>Report Recipients</u>
	Monthly	
2M01	Region and State Summary	(a)
2M02	Energy Consumption Report	OASD(MRA&L)
2M03	Air Force Utilities	OASD(MRA&L), Air Force
2M04	Navy Utilities	OASD(MRA&L), Navy
2M05	Marine Corps Utilities	OASD(MRA&L), Marine Corps
2M06	Army Utilities	OASD(MRA&L), Army
2M07	DLA Utilities	OASD(MRA&L), DLA
2M08	Utilities Report by DOE Region/CINC	(a)
2M09	Activities Not Reporting	OASD(MRA&L), DFSC
2M10	Activities Not Reporting by Product	OASD(MRA&L), DFSC

(a) DFSC, Naval War Research Center/Stanford Research Institute (NWRC), OJCS, Atlantic Command, Panama Canal (Navy), USEUCOM, DALO-TSE-A, AFLGY/F, OASD(MRA&L), USAGMPA.

TABLE 5-8

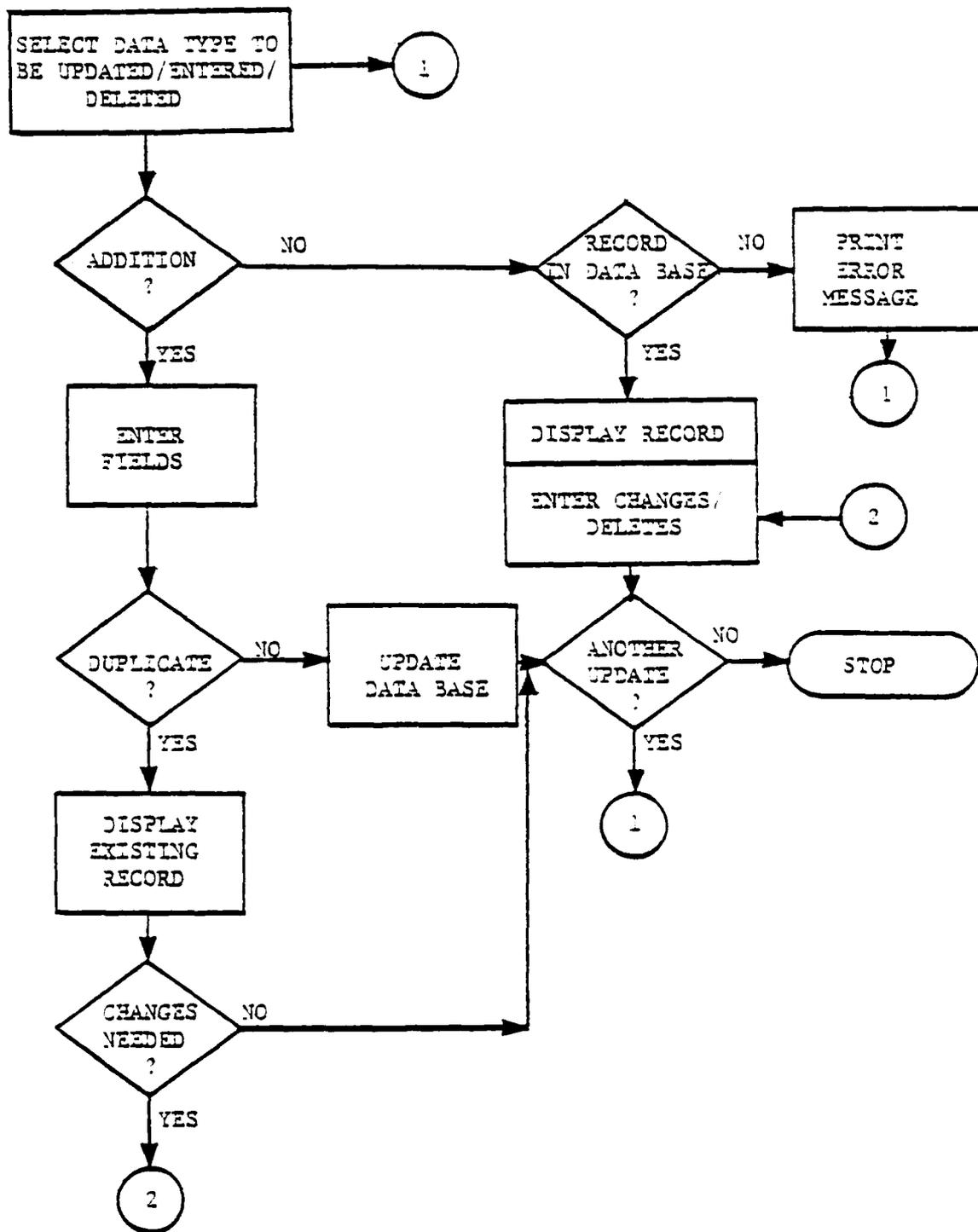
DEIS II REPORT DISTRIBUTION CODES (Continued)

<u>Code</u>	<u>Report Name</u>	<u>Report Recipients</u>
	Quarterly	
2Q01	Region and State Summary	(b)
2Q02	Energy Consumption Report	OASD(MRA&L)
2Q03	Air Force Utilities	OASD(MRA&L), Air Force
2Q04	Navy Utilities	OASD(MRA&L), Navy
2Q05	Marine Corps Utilities	OASD(MRA&L), Marine Corps
2Q06	Army Utilities	OASD(MRA&L), Army
2Q07	DLA Utilities	OASD(MRA&L), DLA
2Q08	Conservation Performance Report	(b)

(b) DFSC-CB, OASD(MRA&L), AFLGY/F, AFBC, AFCOS/LRGX, DA(DCS/L), USAGMPA, CINCPAC, CNET, CINCLANT, CINCEUR, CNO OP-41, NWRC, USMC(HQ)

FIGURE 5-11

MAINTAIN DEIS II DATA



be arranged in alphabetical sequence by name and will contain the following fields:

Installation Name
Major Command
DoDAAC
Service/Agency Code
Region Code
State/Country Code

Listings by DoDAAC will be in alphabetical sequence by DoDAAC and will contain the same six fields listed above, the DoDAAC being printed first on the line rather than Installation Name. For both of these reports, one line will be skipped when the first letter in the name/DoDAAC changes.

Listings of the other codes will be in the order specified on Tables 4-8, 4-9, 5-4, 5-8, and 5-9. For all the reports, page breaks are required only when the page limit is reached.

5.4.7 Perform On-Line Data Entry of Corrections

This function is performed only through the system operator (DFSC-CB). The system operator will have both a hard copy listing of the records in error with error messages (Transaction Proof Listing) and access to the Rejection File. The Rejection File and the listing will be in the same sequence. All errors or questionable data from the edit and convert data and data base update functions will be on one Rejection File. Corrections may be made by up to four people simultaneously or to different segments of the Rejection File. Response to the entering of data on the Correction File should be 1 to 3 seconds under normal circumstances.

Records which are changed (or marked as changed) during the correction process may contain a "C" in column 80 or an "E" in column 79 of the record believed to be in error. All these records will undergo subsequent re-editing, and those card images containing an "E" in column 79 will update the data base even if the data fail the edits specified in 5.4.4. Records can also be completely deleted or added through this function.

5.4.7.1 Purpose

This function provides an easy-to-use, fast method to correct errors or add records and submit the corrected data for further processing.

5.4.7.2 Data Definition

The data items input to this function are corrections to the MEB card images described in Table 5-3 and in Appendix B.

5.4.7.3 Processing Logic

All records in error will be on the Rejection File in the original (as submitted) units. Each record will be displayed for the system operator to

Rev. A

correct, to mark as correct with an "E," or to leave unmarked so that further editing may again reject the record. All corrected records from the Rejection File will be placed on the Correction File. The data on the Rejection File are then deleted so that unchanged and subsequent editing errors will be the only data on the Rejection File. Figure 5-12 gives the major processing steps of this function.

5.4.7.4 Output

The output of this function is a Correction File containing MEB records for input to the edit and convert data function. The data on this file are the same as those described in 5.4.7.2.

5.4.8 Archive Data Base

After the time-sensitive processing of DEIS II data is complete, data base maintenance in the form of archiving will be performed. This archiving entails creating quarterly summaries for data older than 13 months and deleting detail no longer needed on-line from the data base. Figure 5-13 shows a schema of the data base before and after archival.

5.4.8.1 Purpose

The archival process provides a method for keeping all needed DEIS II data on-line without overloading the data base to the point where processing time and data storage requirements are excessive. Monthly detail data are needed for the baseline (1975) and for the most recent 13-month period. Quarterly summary data are needed for the 5 years prior to the most recent 13-month period. After monthly data has been archived, only the quarterly (on-line) data will be updated. The Service/agency is responsible for keeping a record of all of these individual monthly transactions in the event that they wish to update and receive new monthly reports from the archived data.

Data deleted from the on-line data base will be kept off-line in a format that allows easy creation of a data base for the specified time period. In addition, this function will supplement AFDSC procedures to back up the on-line data base.

5.4.8.2 Data Definition

Data items used in this function include the Reporting Date (for selection purposes) and all data items in the data base. The data are transferred to off-line storage and deleted from on-line storage. First, however, new quarterly totals may be calculated for a given DoDAAC and Product Code. The data items are described in Appendix B.

5.4.8.3 Processing Logic

Monthly data are placed in archival storage at the end of a quarter. Data for months one and two of a quarter will simply be added to the data base. Thus there will be 14 months of monthly data on-line after data for the first month of a quarter has been added. There will be 15 months of data on-line after

Rev. A

FIGURE 5-12

DEIS II ON-LINE CORRECTIONS

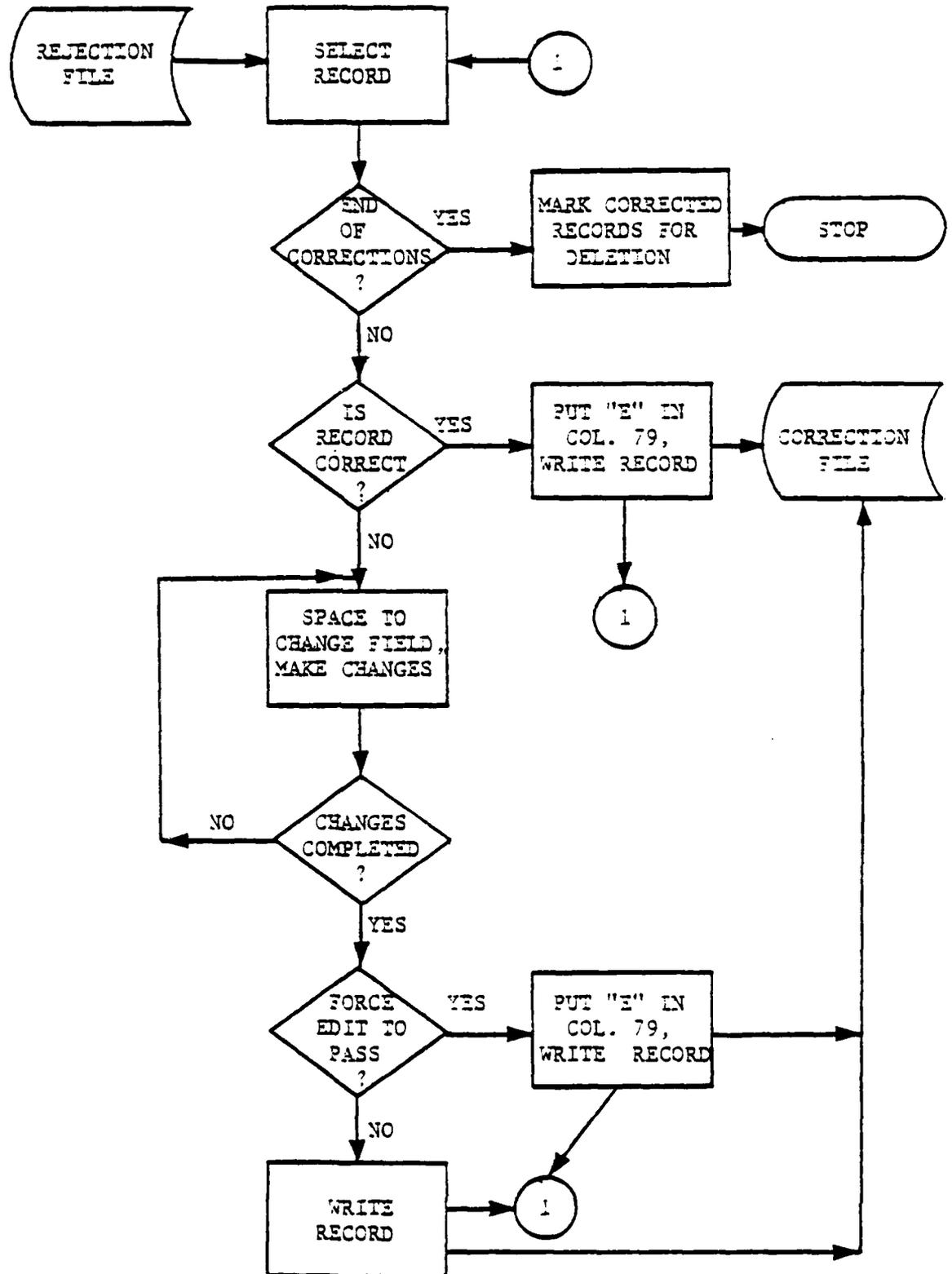
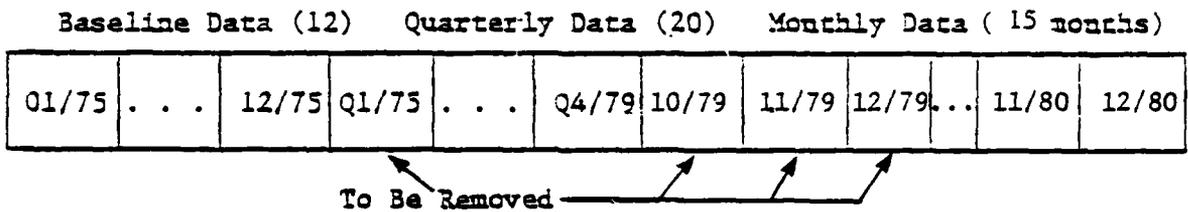


FIGURE 5-13

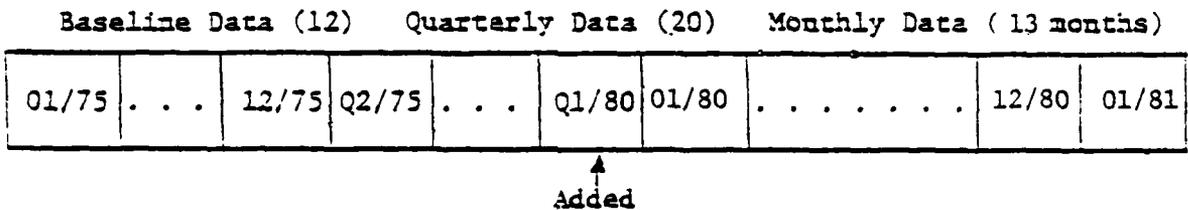
SCHEMA OF DB BEFORE AND
AFTER ARCHIVAL

Case 1—Data to be archived are for a month at the beginning of a quarter—done after update for month 3 of a quarter.

Before

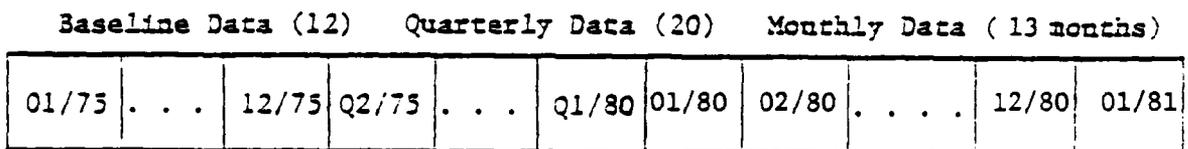


After

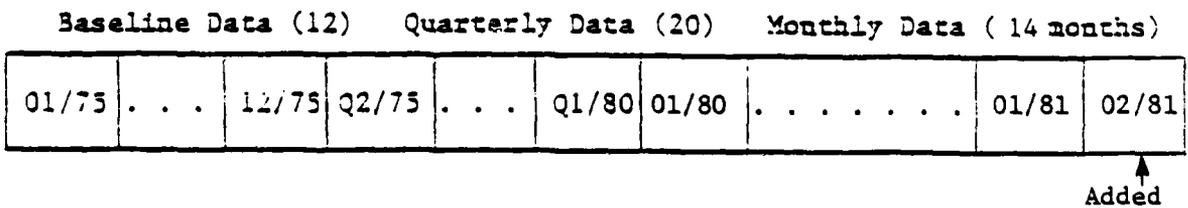


Case 2—Data are for month 1 or 2 of a quarter.

Before



After



data for the second month of a quarter has been added. There will be 13 months of data on-line after data for the third month of a quarter have been added to the data base and the oldest three months of monthly data have been accumulated into quarterly data.

Quarterly data for that quarter will be developed by adding all fields except identification fields. The identification fields are the Command, Service, Region, State, and Product fields for each DoDAAC. The Reporting Date (month) field will be changed to reflect Q1, Q2, Q3, or Q4 of the fiscal year. The monthly data items for that DoDAAC can then be written to the archival file and deleted from the on-line data base. If the quarterly data are to be taken off-line, the data will simply be copied to archival storage and deleted from the on-line data base. Five years of quarterly data will be maintained in the on-line data base and the quarterly data will also be archived.

It is expected that INQUIRE facilities will be used for this function so that creating an INQUIRE data base containing those months or quarters of the archival data can be completed with a minimum of trouble. The request procedure for restoring archival data will be contained in the DEIS user's manual. Figure 5-14 shows the major processing steps of this function.

5.4.8.4 Outputs

The output of this function is an updated data base and an INQUIRE format archival file of the records purged.

5.4.9 Produce Preformatted Reports

The function will produce all regular existing DEIS II reports. The reports may be prepared through the host language interface with the DBMS.

5.4.9.1 Purpose

DEIS II preformatted reports include all regularly scheduled reports distributed to DEIS users. As new reports or changes to existing reports are identified, reports that are run regularly for distribution to one or more persons may be specified as preformatted. Ad hoc reports that become regularly scheduled may be reprogrammed, using the host language interface.

5.4.9.2 Data Definition

All fields contained in the data base (see Appendix B) are used in producing the preformatted reports. Except for some code translation and totals of some fields, data from the data base are printed on the reports unchanged.

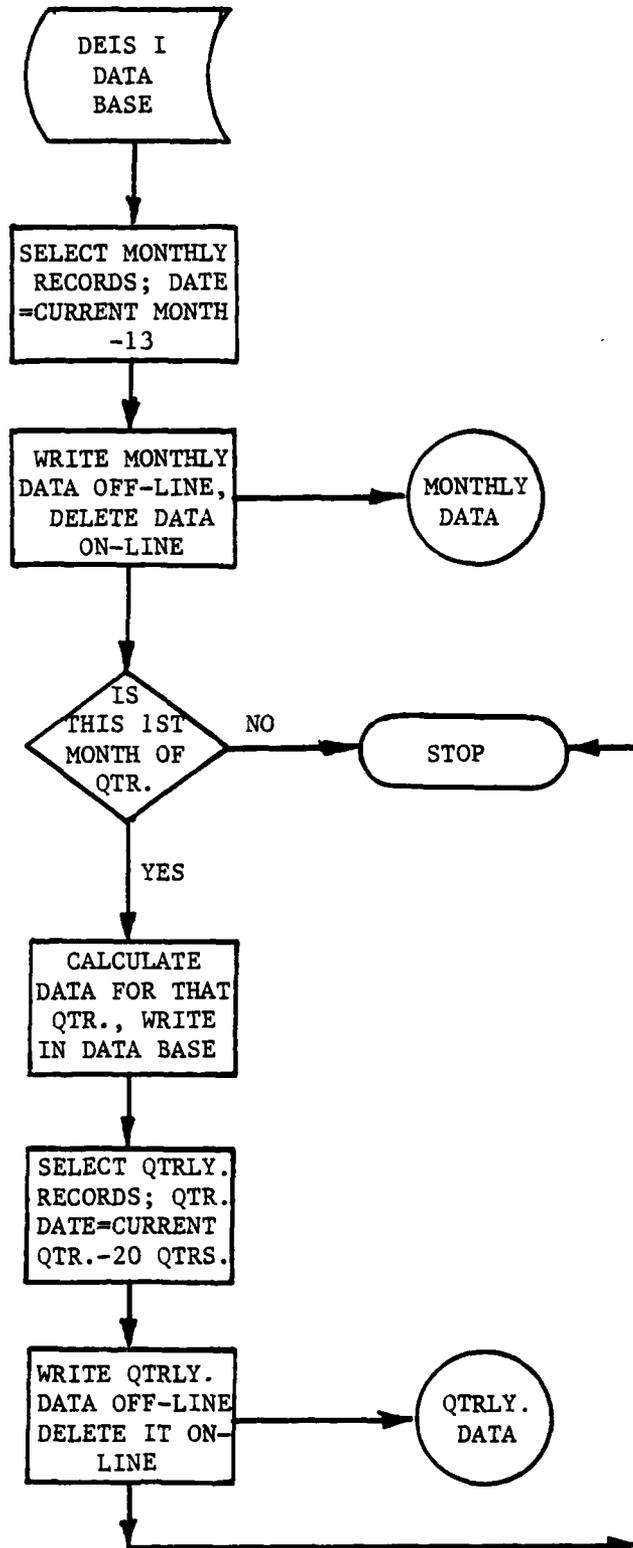
5.4.9.3 Processing Logic

The processing logic for each report is explained in the following paragraphs. A list of all the Product Codes and their translations will be provided on a separate page at the beginning of each set of reports. Figure 5-15 shows a sample of this header page.

Rev. A

FIGURE 5-14

ARCHIVE DEIS II DATA BASE



5.4.9.3.1 Monthly/Quarterly Region and State Summary

The DEIS II Monthly/Quarterly Region and State Summaries are reports of product/consumption data for the specified month or quarter. These reports require reference to the DEIS II data base, coded information, and some calculations.

Figure 5-16 shows the layout for the monthly report. The quarterly report is the same except that the data are for the quarter specified in the title. There are subtotals for each product for each DoDAAC for the quarter.

There is a subtotal for each region as well as a grand total for the report. Regions and states will be printed in the order listed in Table 4-6. The report should have page breaks at each change of region as well as when the page limit is reached.

5.4.9.3.2 Monthly/Quarterly/Cumulative Utilities by DOE Region/CINC

The DEIS II Monthly Utilities by DOE Region/CINC summary reports product consumption data, including the amount of product used in the units originally reported. Because the data base stores only Btu, the Btu Conversion Factor must be used to convert data to the original units for the report.

Figure 5-17 shows the layout for this report. Regions will be printed in the order listed in Table 4-8, and fields will contain the subtotals for that region. The sum of all the subtotals must equal the sum of all the detail Current Consumption fields. Page breaks are required at each change of region as well as when the page limit is reached.

The quarterly and cumulative reports provide the same information as the monthly report except that all the data (excluding inventory) are cumulative for the quarter or year-to-date, respectively. Inventory is the end of reporting period inventory value. There are subtotals for each product and DoDAAC for the quarter/year-to-date. The title is changed to DEIS II QUARTERLY UTILITIES BY DOE REGION/CINC, X QUARTER 19XX for the quarterly report, and to DEIS II CUMULATIVE UTILITIES BY DOE REGION/CINC, END OF XXXXXXXXXXXX (Month) 19XX for the cumulative report.

There are subtotals for each Major Command for each product listed after the detail data. The final pages of the report contain totals for each Service.

5.4.9.3.3 Energy Consumption Reports

The monthly/quarterly/year-to-date Energy Consumption Report lists Service consumption data by DoDAAC within Major Command. Each product used by a DoDAAC is reported. Totals of each product are produced for each Service/Agency and for all DoD. Figure 5-18 shows the layout for this report.

5.4.9.3.4 Conservation Performance Report

The DEIS II Conservation Performance Report is produced quarterly to show the change in consumption over the same period in 1975. Each Service/Agency's

Rev. A

FIGURE 5-16

DEIS II UTILITIES BY REGION/STATE

REGION/STATE	PRODUCT TYPE	CURRENT INVENTORY	BASELINE CONSUMPTION	CURRENT CONSUMPTION	% CHANGE
DEIS III MONTECALA UTILITIES					
REGION/STATE SUMMARIES					
MONTH OF XXXXXXXXXX 19XX					
DOE REGION/COUNTR: X				STATE/COUNTRY: X	
PRODUCT TYPE					
X	ELECTRICITY	795,330	795,600	X,XXX,XXX,XXX,XXX	X,XXX,XXX,XXX,XXX
					-10.11
DOE REGION/COUNTR: X				STATE/COUNTRY: TOTAL	
PRODUCT TYPE					
X				X,XXX,XXX,XXX,XXX	X,XXX,XXX,XXX,XXX

PAGE XXXX

total product consumption is shown for both CONUS and overseas. There are also CONUS, overseas, and worldwide summary pages. Figure 5-19 shows the layout of this report. A page break is required for each new Service and for the CONUS, overseas, and worldwide summary pages.

5.4.9.3.5 Buildings Report

The DEIS II Buildings Report is produced annually to show energy consumed and the square footage of buildings within the DoD. The heating and cooling degree days and personnel days are the total for the fiscal year. Figure 5-20 shows the layout of this report for each Service and for total DoD. A page break is required for each new Service and for the total.

5.4.9.3.6 Type of Energy Used Report

The DEIS II Type of Energy Used Report is produced annually to show the uses of energy on an installation. These data are gathered each October on the MEB 5 data cards and are not stored in the data base. In the event that a product code is not reported by an installation during the MEB 5 submission, there will be no output line produced for the unreported products. Table 5-9 shows the layout for the MEB 5 cards. There may be up to three MEB 5 cards per DoDAAC. Figure 5-21 shows the layout of this report.

5.4.10 Ad Hoc Reports

This function will provide macros to extract data from the DEIS II data base.

5.4.10.1 Purpose

Queries to the DEIS II data base from users other than the system operator will be of two types. One type of query will be simply to retrieve certain data elements, based on user-specified selection criteria, and display the data. At times, simple arithmetic operations may be requested on the data. For this type of ad hoc report, the macros should assign any files and invoke any processors that may be needed, as well as assist the user to create query statements.

The second type of query will be to extract and store selected data elements for further processing by SPSS or equivalent programs. In particular, linear regression, time series cross tabulation, and one-way analysis of variance statistical procedures may be performed on selected data elements.

5.4.10.2 Data Input

The user should have to provide a minimum of data to produce ad hoc reports. Defaults for table headings should exist. The user should be allowed to direct the output from the session.

The following are samples of the queries that may be requested:

- Display the data for DoDAAC = XXXXXX, Reporting Date = MMY, and Product Code = XXX.

Rev. A

FIGURE 5-19

DEIS II CONSERVATION PERFORMANCE REPORT

PRODUCT TYPE	ITIU CONTENT	BASELINE CONSUMPTION (ORIGINAL UNITS)	CURRENT CONSUMPTION (ORIGINAL UNITS)	% CHANGE	CURRENT DEGREE DAYS	% CHANGE	CURRENT EDNS/JMP BT(DKII),/DKG,000
QUARTER ENGINE X	X 19XX						
ARMY CONSUM							
X	XXXXXX,XXX	X,XXX,XXX,XXX,XXX	X,XXX,XXX,XXX,XXX	+XXXX,XX	XXXX,XX	+XXXX,XX	XXX,XXX,XXX
ELECTRICITY	III,6	1,234,567,890	1,111,234,566	-11,03	5656	III,9	

PAGE XXXXX

FIGURE 5-20

DEIS II BUILDINGS REPORT

RUN ON DD MM YY

DEIS II BUILDINGS REPORT

PAGE XXXX

AS OF SEPTEMBER 30, 19XX

DODAAC INSTALLATION NAME

XXXXX X-----X

BUILDINGS

EXISTING OWNED NUMBER SQ. FT. (000)	EXISTING LEASED NUMBER SQ. FT. (000)	NEW OWNED NUMBER SQ. FT. (000)	NEW LEASED NUMBER SQ. FT. (000)	TOTAL NUMBER SQ. FT. (000)	DEGREE DAYS HEAT COOL	PERSONNEL DAYS
XXXXX XXX,XXX	XXXX XX,XXX	XXXX XX,XXX	XXXX XX,XXX	XXXXXX XXX,XXX	XXXX XXXX	XXXX

TABLE 5-9
MEB 5 RECORD LAYOUT

Card Column	Data Item	Value/Comments
All Cards 1-5	Card ID	MEB 5
6	Blank	
7-12	DoDAAC	
13	Blank	
14-17	Reporting Date	Month, Year
18-20	Blank	
21	Card 1,2, or 3	
22	Blank	
Card 1 23-26	Uses for Electricity	H,W,P,C,V or zero
27	Blank	
28-31	Uses for Natural Gas	H,W,P,C,V or zero
32	Blank	
33-36	Uses for Fuel Oil	H,W,P,C,V or zero
37	Blank	
38-41	Uses for Steam/Hot Water	H,W,P,C,V or zero
42	Blank	
43-46	Uses for Anthracite Coal	H,W,P,C,V or zero
47	Blank	
48-51	Uses for Bituminous Coal	H,W,P,C,V or zero
52	Blank	
53-56	Uses for Propane/LPG	H,W,P,C,V or zero
57	Blank	
58-61	Uses for Diesel	H,W,P,C,V or zero
62-80	Blank	
Card 2 23-26	Uses for Photovoltaic	H,W,P,C,V or zero
27	Blank	
28-31	Uses for Solar Thermal	H,W,P,C,V or zero
32	Blank	
33-36	Uses for Wind Power	H,W,P,C,V or zero
37	Blank	
38-41	Uses for Wood	H,W,P,C,V or zero
42	Blank	
43-46	Uses for Off Specifi- cation Fuel	H,W,P,C,V or zero
47	Blank	
48-51	Uses for Geothermal	H,W,P,C,V or zero
52	Blank	
53-56	Uses for Cogeneration	H,W,P,C,V or zero
57	Blank	
58-61	Uses for Refuse- Derived Fuels	H,W,P,C,V or zero
62-80	Blank	
Card 3 23-26	Uses for Reclaimed Bilge/ Lub Oil	H,W,P,C,V or zero
27	Blank	
28-31	Uses for Hydroelectric	H,W,P,C,V or zero
32	Blank	
33-36	Uses for Fuel Cells	H,W,P,C,V or zero
37-80	Blank	

FIGURE 5-21

DEIS II ENERGY USE REPORT

DEIS II ENERGY USE REPORT PAGE XXXX
 AS OF SEPTEMBER 30, 19XX

DODAAC	INSTALLATION NAME	PRODUCT TYPE	1 (MAJOR)	2	3	4	HEATING	COOLING	PERSONNEL
XXXXXX X		X X	X	X	X	X	77 CURR.	75 CURR	DAYS
N03467	WASHINGTON SHIP YARD	-----X	X	X	X	X	XX XX	XX XX	XX
		ELECTRICITY	II	C	W	V	70 75	80 85	70

TOTAL CONSUMPTION	PERCENT	CONSUMPTION PER SQUARE FOOT	PERCENT
75	CHANGE	75	CHANGE
XXX,XXX	XXX	X,XXX	XXX
XXX,XXX	XXX	X,XXX	XXX

- What is the total consumption of electricity for quarter X of fiscal year X (including the current fiscal year)? Multiply this number by 11.6 to give total consumption in MBTU.
- What is the total consumption of Product Codes SHW, WUD, SOL for quarter X of the current fiscal year?
- What is the total consumption of each Product Code multiplied by the Btu Content Conversion factor? What is the total of the resulting Btu consumptions?
- What fraction of total consumption (measured in Btu calculated as above) comes from electricity, natural gas, coal, solar?
- Compare the current year's total consumption divided by total square footage to 1975 total consumption divided by total square footage. What is ratio of square footage of old buildings to that of new buildings?
- Compare the current month's total consumption divided by degree days to the total consumption divided by degree days for this month last year. What is the percentage change?

5.4.10.3 Output

Output will be printed on the originating terminal, directed to another (high-speed) printer, or saved in a file for further processing. In addition, at the user's option, the statements used to generate the query may be saved for future use and modification.

APPENDIX A
DEIS I DATA DICTIONARY

This description of the DEIS I data items is separated into two categories, static data and dynamic data. Static data are defined as those data which are used mainly for reference during an operation and are usually generated or updated in timeframes independent of normal runs. In the DEIS-80 environment, this consists of the coded information portion of the data base.

Dynamic data include all data which are intended to be added, changed, or deleted by a normal run or during on-line operations. For DEIS I, this is the installation/activity data about petroleum products.

Within each category, the elements are listed in alphabetical order. The format type, length (no characters), source, number of occurrences, frequency of update or submission, definition, and edit criteria are given for each data element. The dynamic data are shown in Table A-1. The static data are shown in Table A-2.

TABLE A-1

DEIS I DYNAMIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
1	AVIATION	N 6	MEA 3 cc 51-56	No	1 per Product Code, per DoDAAC	Monthly	Numeric,* positive or blank**	Credit Cards, Form 15/44, into Plane
2	AVG DAY	N 7	Calculated	Yes, unless TAC-9	1 per Product Code, per DoDAAC	Monthly	Numeric, 1 decimal place	Average Daily Consumption
NA	CARDNO	N 1	MEA cc 5	Yes	1 per Card	NA	2, 3, or 4	Not kept in DB
NA	CARDTY	A 3	MEA cc 1-3	Yes	1 per Card	NA	MEA	Not Kept in DB
3	CLOSINV	N 7	MEA 2 cc 55-61	Yes	1 per Product Code, per DoDAAC	Monthly	Numeric, positive	Closing Inventory
4	COMMERC	N 7	MEA 2 cc 39-45	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive	Commercial Receipts
5	CONSUM	N 7	Calculated, Sum of elements numbers	Yes, unless TAC-9	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or zero if TAC-9	Total Consumption
6	CORRECT	N 1	Generated	No	1 per Product Code, per DoDAAC	As Needed		Number of Changes to this Record (up to 9)
7	DATEUP	N 6	System Date	No	1 per Product Code, per DoDAAC	As Needed	Month, Day, Year	Date of latest Update
9	DOBDAAC	AN 6	MEA cc 7-12	Yes	1 per Card, up to 1400 unique codes	Monthly	Valid code on file	DoD Activity Address Code, UIC, Base/Facility ID
11	DOBRCT	N 7	MEA 2 cc 47-53	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank	Receipts from DoB
12	INTERTRAN	N 6	MEA 4 57-57		1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank	Inter-Service Transfers
13	INTRATRAN	N 6	MEA 4 cc 47-51	No	1 per Product Code	Monthly	Numeric, positive	Intra-Service Transfers

* All numeric (N) fields are integer values unless a decimal value is specified.

** Numeric fields that are blank on input are registered as zero in the data base.

TABLE A-1 (continued)

DEIS I DYNAMIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/ Alias
15	ISSUES	N 7	MEA 2 cc 31-37	Yes	1 per Product Code, per DoDAAC	Monthly	Numeric, positive	All fuel issued
16	IASSD	N 6	MEA 3 cc 44-49	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank	Amount downgraded or lost
18	NONIAD	N 5	MEA 4 cc 41-45	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive	All issues to non-DoB
19	OPENINV	N 7	MEA 2 cc 23-29	Yes	1 per Product Code, per DoDAAC	Monthly	Numeric, positive equal to CLOSINV of previous month	Opening Inventory
21	PROICODE	AN 3	MEA cc 19-21	Yes	Up to 43 per DoDAAC	Monthly	Valid code on file	Product Code
22	PRIMARY	N 6	MEA 3 cc 23-28	Yes, unless TAC=9	1 per Product Code, per DoDAAC	Monthly	Numeric, positive	Primary Use
23	QUANI	N 5	MEA 4 cc 23-27	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank (0)	Quantity Issued to "a," Sold To
24	QUAN2	N 5	MEA 4 cc 29-33	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank (0)	Quantity Issued to "b," Sold To
25	QUAN3	N 5	MEA 4 cc 35-39	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank (0)	Quantity Issued to "c," Sold To
29	RPTDATE	AN 4	MEA cc 14-17	Yes	1 per card	Monthly	Month (01 to 12) and Year > 75 and < current year or quarter (Q1, Q2, Q3, Q4) and year	Reporting date, AS OF or Quarter for Summary data

TABLE A-1 (continued)

DEIS I DYNAMIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
30	SECOND	N 6	MEA 3 cc 30-35	No	1 per Product Code, per DoDAAC	Monthly	Numeric or blank	Secondary Use
33	SERVICE3	N 6	MEA 3 cc 58-63	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank	Service Use MEA 3
34	SERVICE4	N 5	MEA 4 cc 59-63	No	1 per Product Code, per DoDAAC	Monthly	Numeric, positive or blank	Service Use MEA 4
38	TAC	N 1	MEA 2 cc 13	No	1 per card	Monthly	Blank or 9	DFSC Facility
39	THIRD	N 6	MEA 3 cc 37-42	No	1 per Product Code, per DoDAAC	Monthly	Numeric or blank	Tertiary Use

TABLE A-2

DEIS I STATIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
8	DISTRIB	AN 4	DBA	Yes	25	As Needed		Distribution Code
9	DoDAAC	AN 6	DoD 4000.25D	Yes, if it consumes energy	1400	As Needed		DoD Activity Address Code UIC, Base/Facility ID
10	DoDC	A 1	DBA	No	1 per DoDAAC	As Needed	Blank or D	DoDAAC delete code
14	INSTALL	AN 50	Services	Yes	1 per DoDAAC	As Needed		Installation Name
17	MAJCOM	AN 10	Services	Yes	1 per DoDAAC	As Needed		Major Command
20	PROD	A	DoD 4140.25M	Yes	43	As Needed		Products
21	PRODCODE	AN 3	DoD 4140.25M	Yes	43	As Needed	Valid Code	Product Codes
27	RECIPIENT	AN 150	DBA	Yes	40	As Needed		Address of Recipients of Reports
27	REGION	AN 28	Table 4-6	Yes	18	As Needed		Region/CINC Name
28	REGIONC	AN 2	Table 4-6	Yes	18	As Needed	Valid Code	Region/CINC Code
31	SERVICE	A 20	Table 4-7	Yes	9	As Needed		Service/Agency Name
32	SERVICEC	A 1	Table 4-7	Yes	9	As Needed	Valid Code	Service/Agency Code
35	SHIPUTE	N 4	DBA	No	<106	As Needed	9 or Blank	Date ship is to be returned to service
36	STATE	A 28	Table 4-6	Yes	120	As Needed		State/Country
37	STATEC	AN 2	Table 4-6	Yes	120	As Needed	Valid Code	State/Country Code
38	TAC	N 1	DBA	No	<100	As Needed	9 or Blank	DFSC facility

APPENDIX B

DEIS II DATA DICTIONARY

This description of the DEIS II data items is separated into two categories, static data and dynamic data. Static data are defined as those data which are used mainly for reference during an operation and are usually generated or updated in timeframes independent of normal runs. This includes square footage data since these data are entered annually. Also included as static data is the coded information portion of the data base.

Dynamic data include all data which are intended to be added, changed, or deleted by a normal run or during on-line operations. For DEIS II, this is the installation/activity data about utility energy consumption and the data supplied by the National Climatic Center on degree days.

Within each category of data, the elements are listed in alphabetical order. The format type, length (in characters), source, number of occurrences, frequency of updates or submission, edit criteria and definition are given for each data element. The dynamic data are shown in Table B-1, the static data are shown in Table B-2.

TABLE B-1

DEIS II DYNAMIC DATA

Data Element Number	Element Name	Format Type	Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alies
5	BTUCUN	N*	6	MEB 2 cc 34-39	No	1 per Product Code, per DoDAAC	As Needed	Within 10% of Std. value	Btu Content of Fuel, contains decimal point, as appropriate
NA	CARIND	N	1	MEB cc 5	Yes	1 per Card	NA	2 or 3	Not kept in DB
NA	CARDY	A	3	MEB cc 1-3	Yes	1 per Card	NA	MEB	Not kept in DB
7	CDDAY	N	4	MEB 4 cc 37-40 or Nat'l. Climatic Center (NCC)	Yes	1 per DoDAAC	Monthly	Numeric, if from MEB 3 within 10% of value from NWS	Cooling Degree Days
8	CONSUM	N	8	MEB 2 cc 41-48	Yes	1 per Product Code, per DoDAAC	Monthly	Numeric, positive, within 10% of value this month last year	Consumption, Current Consumption
9	CORRECT	N	1	Generated	No	1 per Product Code, per DoDAAC	As Needed		Number of Changes to this Record (up to 9)
10	DATEUP	N	6	System Date	No	1 per Product Code per DoDAAC	As Needed	Month, day, year	Date of Latest Update
12	DoDAAC	AN	6	MEB cc 12-17	Yes	1 per Card, up to 1200 unique codes	Monthly	Valid code on file	DoD Activity Address Code, Base/Facility ID, DIC
14	FUNDED	N	8	MEB 2 cc 51-60	Yes	1 per Product Code per DoDAAC	Monthly	Numeric, positive, < CONSUM	Service Funded Consumption
15	HDDAY	N	4	MEB 4 cc 42-45 or NCC	Yes*	1 per DoDAAC	Monthly	Numeric, if from MEB 3, within 10% of value from NWS	Heating Degree Days

* All numeric (N) fields are integer values unless a decimal value is specified.

** Numeric fields that are blank on input are registered as zero in the data base.

TABLE B-1 (continued)

DEIS II DYNAMIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
17	INV	N 8	MEB 2 cc 23-30	No, except for Fuel Oil, Coal Propane/IPG/ Butane, Wood	1 per applicable Product Code per DoDAAC	Monthly	Numeric, positive, within 10% of value this month last year	Inventory
19	NECON	N 6	MEB 4 cc 47-52	No	1 per DoDAAC	Monthly	Numeric, positive, or blank	Consumption in New Buildings. Will not be reported until FY83
21	PERSI	N 6	MEB 4 cc 30-35	No	1 per DoDAAC	Monthly	Numeric, positive, or blank	Number of Personnel Days in Industrial Processes (Day workers)
22	PERSQ	N 6	MEB 4 cc 23-28	No	1 per DoDAAC	Monthly	Numeric, positive, or blank	Number of Personnel Days in Quarters
24	PRODCODE	AN 3	MEB cc 19-21	Yes	Up to 30 per DoDAAC	Monthly	Valid code on file	Product Code
28	RPTDATE	N 4	MEB cc 7-10	Yes	1 per Card	Monthly	Month (01 to 12) and Year > 75 and < current year	Reporting Date, AS OF Date
34	UCOM	N 8	MEB 2 cc 62-69	No	1 per Product Code per DoDAAC	Monthly	Numeric, positive, or blank	For use by component
35	VAR	N 2	MEB 2 cc 50-51	No	1 per Product Code per DoDAAC	Monthly	Numeric or blank, if numeric, must be valid code for this Service	Variance Code

TABLE B-2

DEIS II STATIC DATA

Data Element Number	Element Name	Format		Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
		Type	Length						
1	DI-EASN	N	4	MEB 6 cc 54-57	No	1 per DoDAAC, per year	Annually	Within 3% of value in previous year or 10% of base year	Number of New Leased Buildings
2	BLEASO	N	4	MEB 6 cc 32-35	No	1 per DoDAAC per year	Annually	Within 3% of value in prior year or 10% of base year	Number of Old Leased Buildings
3	BOMN	N	4	MEB 6 cc 43-46	No	1 per DoDAAC per year	Annually	Within 3% of value in previous year or 10% of base year	Number of New Owned Buildings
4	BOMNO	N	5	MEB cc 19-23	Yes	1 per DoDAAC per year	Annually	Same as above	Number of Old Owned Buildings
6	BTUCOV	N	6	DBA	Yes	30	As Needed		Standard Btu Conversion Factor for Each Product
11	DISTRIB	AN	4	DBA	Yes	25	As Needed		Distribution Code
12	DODAAC	AN	6	DoD 4000.25D	Yes	1200	As Needed		DoD Activity Address Code, Base/Facility ID, UIC
13	DoDC	AN	1	DBA, MEB 1 cc 18	No	1 per DoDAAC	As Needed	Blank or D, usually blank	DoDAAC Delete Code
16	INSTAL	AN	40	MEB 1 cc 25-64	Yes	1 per DoDAAC	As Needed		Installation Name
18	MAJCOM	AN	10	MEB 1 cc 65-74	Yes	1 per DoDAAC	As Needed		Major Command
19	ECIP	N	5	Computed from MEB 7	No	1 per DoDAAC per year	Annually	Numeric, non-negative	
20	OM	N	5	Computed from MEB 7	No	1 per DoDAAC per year	Annually	Numeric, non-negative	

TABLE B-2 (continued)

DEIS II STATIC DATA

Data Element Number	Element Name	Format Type Length	Source	Required	Number of Occurrences	Frequency of Update/ Submission	Edit Criteria	Description/Alias
23	PROD	AN 30	DoD 4140.25M	Yes	30	As Needed		Products
24	PRODCODE	AN 3	DoD 4140.25M	Yes	30	As Needed		Product Codes
25	RECIPIENT	AN 150	DBA	Yes	40	As Needed		Addresses of Recipients of Reports
26	REGION	AN 28	Table 4-6	Yes	18	As Needed		Region/CINC Name
27	REGIONC	AN 2	Table 4-6, MEB 1 cc 19-20	Yes	18	As Needed		Region/CINC Code
29	SERVICE	A 20	Table 4-7, MEB 1 cc 79	Yes	9	As Needed		Service/Agency Name
30	SERVICEC	A 1	Table 4-7	Yes	9	As Needed	A, G, F, V, N, M, D, S, or T	Service/Agency Code
32	STATE	A 28	Table 4-6	Yes	120	As Needed		State/Country
33	STATEC	AN 2	Table 4-6, MEB 1 cc 22-23	Yes	120	As Needed		State/Country Code
34	SQFTLN	N 5	MEB 6 cc 59-63	No	1 per DoDAAC per year	Annually	Numeric, non-negative within 3% of prior year or 10% of base year	Square Feet of New Leased Buildings
35	SQFTLO	N 5	MEB 6 cc 37-41	No	1 per DoDAAC per year	Annually	Same as above	Square Feet of Old Leased Buildings
36	SQFTON	N 5	MEB 6 cc 48-52	No	1 per DoDAAC per year	Annually	Same as above	Square Feet of New Owned Buildings
37	SQFTOO	N 6	MEB 6 cc 25-30	Yes	1 per DoDAAC per year	Annually	Same as above	Square Feet of Old Owned Buildings

APPENDIX C

DEIS DATA COLLECTION CARD FORMATS

This appendix contains the card layouts for each of the input data cards as they are submitted by field activities for DEIS I and DEIS II. Tables C-1, C-2 and C-3 show the DEIS I input card layouts; and Tables C-4 through C-9 show the DEIS II input card layouts.

TABLE C-1

DEIS I - MEA 2 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEA)	
4	Blank	
5	Card Number (2)	
6	Blank	
7-12	DoDAAC	9
13	Blank	
14-15	Reporting Date (Month)	29
16-17	Reporting Date (Year)	29
18	Blank	
19-21	Product Code	21
22	Blank	
23-29	Opening Inventory	19
30	Blank	
31-37	Total Issues	15
38	Blank	
39-45	Commercial Receipts	4
46	Blank	
47-53	Receipts from DoD	11
54	Blank	
55-61	Closing Inventory	3
62-80	Blank	

*if applicable

TABLE C-2

DEIS I - MEA 3 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEA)	
4	Blank	
5	Card Number (3)	
6	Blank	
7-12	DoDAAC	9
13	Blank	
14-15	Reporting Date (Month)	29
16-17	Reporting Date (Year)	29
18	Blank	
19-21	Product Code	21
22	Blank	
23-28	Primary Use	22
29	Blank	
30-35	Secondary Use	30
36	Blank	
37-42	Tertiary Use	39
43	Blank	
44-49	Downgrade/Loss	16
50	Blank	
51-56	Aviation	1
57	Blank	
58-63	Service Use 3	33
64-80	Blank	

*if applicable

TABLE C-3

DEIS I - MEA 4 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEA)	
4	Blank	
5	Card Number (4)	
6	Blank	
7-12	DoDAAC	9
13	Blank	
14-15	Reporting Date (Month)	29
16-17	Reporting Date (Year)	29
18	Blank	
19-21	Product Code	21
22	Blank	
23-27	Quantity 1	23
28	Blank	
29-33	Quantity 2	24
34	Blank	
35-39	Quantity 3	25
40	Blank	
41-45	Quantity to Non-DoD	18
46	Blank	
47-51	Intra Service Transfers	13
52	Blank	
53-57	Inter Service Transfers	12
58	Blank	
59-63	Service Use 4	34
64-80	Blank	

*if applicable

TABLE C-4

DEIS II--MEB 1 CARD LAYOUT

<u>Card Columns</u>	<u>Data Description</u>	<u>Data Element Number*</u>
1- 3	Card Type (MEB)	
4	Blank	
5	Card Number (1)	
6-11	Blank	
12-17	DoDAAC	12
18	Blank	
19-20	Region Code	27
21	Blank	
22-23	State Code	33
24	Blank	
25-64	Installation Name	16
65-74	Major Command	18
75-78	Blank	
79	Service Code	30
80	Action Code	

TABLE C-5

DEIS II - MEB 2 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEB)	
4	Blank	
5	Card Number (2)	
6	Blank	
7-8	Reporting Date (Month)	28
9-10	Reporting Date (Year)	28
11	Blank	
12-17	DoDAAC	12
18	Blank	
19-21	Product Code	24
22	Blank	
23-30	Inventory	17
31-33	Blank	
34-39	Btu Content	5
40	Blank	
41-48	Consumption	8
49	Blank	
50-51	Variance Code	35
52	Blank	
53-60	Funded Consumption	14
61	Blank	
62-69	Component Use	34
70-80	Blank	

*if applicable

TABLE C-6

DEIS II - MEB 4 CARD LAYOUT

<u>Card Columns</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEB)	
4	Blank	
5	Card Number (4)	
6	Blank	
7-8	Reporting Date (Month)	28
9-10	Reporting Date (Year)	28
11	Blank	
12-17	DoDAAC	12
18-22	Blank	
23-28	Personnel Days in Quarters	22
29	Blank	
30-35	Industrial Process Personnel Days	21
36	Blank	
37-40	Cooling Degree Days	7
41	Blank	
42-45	Heating Degree Days	15
46	Blank	
47-52	New Building Consumption	19
53-80	Blank	

*if applicable

TABLE C-7

DEIS II - MEB 5 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
1-3	Card Type (MEB)	
4	Blank	
5	Card Number (5)	
6	Blank	
7-8	Reporting Date (Month)	28
9-10	Reporting Date (Year)	28
11	Blank	
11-17	DoDAAC	12
18-19	Blank	
20	Card (1, 2, or 3)	
21	Blank	
23-26	Product 1 Uses**	
27	Blank	
28-31	Product 2 Uses	
32	Blank	
33-36	Product 3 Uses	
37	Blank	
38-41	Product 4 Uses	
42	Blank	
43-46	Product 5 Uses	
47	Blank	
48-51	Product 6 Uses	
52	Blank	

*if applicable

**Products 1-8 on each MEB 5 card are predefined (see Tables 5-10). The usage codes are single letter codes (up to 4 for each product).

TABLE C-7

DEIS II - MEB 5 CARD LAYOUT
(Cont.)

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number</u> *
53-56	Product 7 Uses	
57	Blank	
58-61	Product 8 Uses	
62-80	Blank	

TABLE C-8

DEIS II - MEB 6 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number*</u>
1-3	Card Type (MEB)	
4	Blank	
5	Card Number (6)	
6	Blank	
7-8	Reporting Date (Month)	28
9-10	Reporting Date (Year)	28
11	Blank	
12-17	DoDAAC	12
18	Blank	
19-23	Number of Old Owned Buildings	4
24	Blank	
25-30	Thousands of Feet of Old Owned Buildings	37
31	Blank	
32-35	Number of Old Leased Buildings	2
36	Blank	
37-41	Thousands of Square Feet of Old Leased Buildings	35
42	Blank	
43-46	Number of New Owned Buildings	3
47	Blank	
48-52	Thousands of Square Feet of New Owned Buildings (000)	36
53	Blank	
54-57	Number of New Leased Buildings	1
58	Blank	
59-63	Thousands of Square Feet of New Leased Buildings (000)	34

* If applicable.

TABLE C-9

DEIS II - MEB 7 CARD LAYOUT

<u>Card Column</u>	<u>Data Description</u>	<u>Data Element Number*</u>
1-3	Card Type (MEB)	
4	Blank	
5	Card Number (7)	
6	Blank	
7-8	Reporting Date (Month)	
9-10	Reporting Date (Year)	
11	Blank	
12-17	DoDAAC	
18	Blank	
19-23	ECIP Spent Using Current Year Funds (\$000)	
24	Blank	
25-28	ECIP Spent Using Prior Year Fund (\$000)	
29	Blank	
30-33	ECIP Spent Using Funds of 2 Years Ago (\$000)	
34	Blank	
35-38	ECIP Using Funds of 3 Years Ago (\$000)	
39	Blank	
40-43	ECIP Using Funds of 4 Years Ago (\$000)	
44	Blank	
45-49	Current Year O&M Funds Expended (\$000)	
50	Blank	
51-54	Prior Yea. O&M Funds Expended during Current Year (\$000)	
55-80	Not Used	

* If Applicable.

APPENDIX D

VALID VARIANCE CODES

Applicable to All Services

00, 01, 05-12, 15-17, 20-22, 25-27, 30-39

Special Coded

40-59 For Army Use Only

60-79 For Navy/Marine Corps Only

80-99 For Air Force Only

APPENDIX E

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
SUBBASE NEW LONDON, GROTON, CT	N00129, B00129, D00129	063207
ORANGE ANG STATION CONNECTICUT NEW HAVEN	FP6071	065266
SUBSCOL NEW LONDON, GROTON, CT	N00750	063207
SUBMEDCTR NEW LONDON, GROTON, CT	N61726	063207
NUSC NEW LONDON, GROTON, CT	N70024	063207
CONNECTICUT ARNG HARTFORD	W11M93	063451
NSGA WINTER HARBOR, ME	N00702, D00702	170371
NAS BRUNSWICK, ME	N60087, 060087	170934
NRS CUTLER, ME, EAST MACHIAS, ME	D63038, N63038	174183
LORING AFB, LIMESTONE, MAINE	FB4678	174625
TRAFAC, BANGOR, MAINE	N68437	170355
MAINE ANG	FP6181	174183
MAINE ARNG AUGUSTA	W12L3Z	170275
USA ENGINEER DISTRICT WALTHAM, MA	A1322D	190770
NAS SO WEYMOUTH, BOSTON, MA	D00101, N00101	190770
L G HANSCOM FIELD, BEDFORD, MA	FP2835	199923
MA #1 ANG, WESTFIELD, MA	FP6201	191430
FORT DEVENS MA	W13GN5	199923
SUBASE BANGOR	D68436, N68436, P68436	170355
OTIS AFB, FALMOUTH, MA	FP6202	199923
WESTOVER ARB MASS, CHICOPEE, MA	FP6606	191430
MA #2 ANG, WELLESLEY, MA	FP6202	192975
NWIRP BEDFORD	N63880	199923
NIROP PITTSFIELD, MA	N91041	198181

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
ARMY MATS/MECH RESEARCH CTR, WATERTOWN, MA	W13BW5	190770
US ARMY R&D COMD NARADCOM, NATICK, MA	W13G07	192975
MASSACHUSETTS ARNG, NATIC	W13N92	192975
COLD REGION R AND D LAB, HANOVER, NH	A14210	274656
NSY PORTSMOUTH, NH	N00102, D00102	276660
PEASE AFB NH, HEWINGTON, NH	FP4623	276660
NH SATELLITE TRACKING STATION	FY8049	271683
USPFO CONCORD, NH	W14KUL	271683
NETC NEWPORT, RI	D62661, N62661, B62661	375215
ANG, RI	FP6391	375215
NAVAL WAR COLLEGE, NEWPORT, RI	N00124	375215
CBC DAVISVILLE, RI	D62578, N62578	374266
REDCOM NEWPORT	N68351	375215
NUSC ANDROS ISLAND	N63821	375215
NUSC NEWPORT, RI	N66604	375215
NRMC NEWPORT, RI	N68068	375215
RHODE ISLAND ARNG, PROVIDENCE	W17KZB	376698
MILITARY OCEAN TERMINAL, BAYONNE	W15U97	286026
NEW JERSEY ANG	FG6303	288883
PICATINNY SENAL, DOVER	W15BW9	072730
VT ANG, SOUTH BURLINGTON, VT	FP6451	431081
VERMONT ARNG WINOOSKI	W18670	431081
NAD EARLE, NJ	B60478, D60478, N60478	286026
MCGUIRE AFB ANG NEW JERSEY	FG6302	285410
MCGUIRE AFB, WRIGHTSTOWN, NJ	FP4484	285410

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
GIBBSBORO NJ AFS, GIBBSBORO, NJ	FY7994	288883
NAPTC TRENTON, NJ	N62376	288883
NATTC LAKEHURST, NJ	N63094	288816
NAEC LAKEHURST	D68335, N68335	288816
FORT DIX	W15A9X	285410
FT MONMOUTH NJ RED BANK	W15HZZ	286026
NEW JERSEY ARNG TRENTON	W15MCC	288883
DIST ENGR NY, NY	W16ROE	305811
USA ENGINEER DISTRICT BUFFALO, NY	A16DMF	301012
NSA BROOKLYN, NY	D61174, N61174	305811
BROOKLYN MTMC	A16795	305811
NIAGARA FALLS, NIAGARA FALLS, NY	FP6670	305827
PLATTSBURGH AFB, PLATTSBURGH, NY	FP4615	306659
GRIFFISS AFB, ROME NY	FP4616	308383
SCHENECTADY NY ANG, SCHENECTADY, NY	FG6321	300042
HANCOCK FIELD, NY	FP6324	308383
ROSLYN ANG NEW YORK, ROSLYN, NY	FG6321	304207
MONTAUK NY, AFS, MONTAUK, NY	FY9756	300889
HQ 1ST MC DIST GARDEN CITY	M80001	305811
NIRPO ROCHESTER, NY	N90691	307167
NWIRP BETHPAGE, NY	N90845	307134
NWIRP CALVERTON, NY	N96095	307134
USMA WEST POINT & STEWART ANNEX, NY	W16BCT	309140
SENECA ARMY DEPOT, ROMULUS NY	W16G1A	308383
WATERVLIET ARSENAL, WATERTOWN, NY	W16H1F	309005
NEW YORK ARNG, ALBANY	W16L6S	300042

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAVFAC LEWES, DE	D57040, N57040	075320
DOVER AFB DE, DOVER, DE	FP4497	072730
DELAWARE ANG, GREATER WILMINGTON ARPT, NEWCASTLE, DE	FP6081	079595
DELAWARE ARNG, WILMINGTON, DE	W21LRB	079595
NRL WASHINGTON DC	D00173, N00173	448906
NAVAL OBSERVATORY WASHINGTON DC	D62285, N62285	448906
BOLLING AFB, WASHINGTON, DC	FP4200	448906
MARINE BARRACKS WASHINGTON DC	M54900, K54900	448906
COM NDW WASHINGTON DC	N00171, D00171	448906
NAVRADTRANS FAC, ANNAPOLIS	D35328, N35328	180193
SER CNO WASH DC	N67597	448906
REDCOM 6 WASHINGTON	N68306, B68306	448906
NPC WASHINGTON DC	N62844	448906
WESA WASHINGTON DC	N62908	448906
NAVSECSTA WASH DC	D70092, N70092	448906
DISTRICT OF COLUMBIA ARNG DC	W74LSD	448906
NOS INDIAN HEAD, MD	N00174, D00174	185080
NAS PATUXENT RIVER, MD	D00421, N00421	186915
INDIANTOWN GAP MILITARY RES	W25DLJ	364896
NCS WASH DC	D00788	448906
NAVSUPPFAC THURMONT, MD	D0417A, N0417A	183975
DC ARNG ANDREWS	FG6511	448906
ANDREWS AFB MD, CAMP SPRINGS, MD	FP4425	448906
MARTIN AIRPORT ANG, BALTIMORE, MD	FP6191	180465
USNA ANNAPOLIS, MD	N00161, D00161	180193
NH ANNAPOLIS, MD	N00162	180193

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NSDC BETHESDA, MD	N00167	187705
NAT NAV MEDCEN BETHESDA	D00168, N00168	187705
FORT DETRICK, MD	W23GIL	183975
NCU WASH, DC	N00788	448906
NEODF INDIAN HEAD, MD	N0464A	185080
NSWC WHITE OAK, MD	N60921	187705
FORT MEADE, MD	W23BDJ	187705
NALC PAX RIVER	N68520	186915
NSRDC ANNAPOLIS, MD	N61533	180193
NSWCFLDBR SOLOMONS, MD	N62339	188405
NSEOD INDIAN HEAD, MD	N62640	185080
DODECAC	N63822	448906
NESTED PAX RIVER, MD	N65980	186915
NH PAX RIVER, MD	N66098	186915
NAVREC CTR SOLOMONS	N66843	188405
USA ENGINEER DISTRICT BALTIMORE, MD	W23HAV	180465
ABERDEEN PROVING FROUND, MD	W23HYY	180015
FT RITCHIE, CASCADE, MD	W23P47	181530
MARYLAND ARNG, HAVRE DE GRACE	W23R7B	180015
HARRY DIAMOND LAB DC	W71BFJ	448906
USA ENGINEER DISTRICT PHILADELPHIA, PA	A2519B	366889
USA ENGINEER DISTRICT PITTSBURGH, PA	A2521D	366993
NSY PHILADELPHIA, PA	N00151, B00151, D00151	366889
HARRISVILLE	UY7022	363699
PITTSBURGH ANG, CORAOPOLIS, PA	FG6381	366993
WILLOW GROVE AIR RESERVE FACILITY, PA	FP6637	369750

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
GREATER PITTSBURGH IAP, CORAOPOLIS, PA	FP6712	366993
MCSA PHILADELPHIA, PA	M38550	366889
SPCC MECHANICSBURG, PA	N00104, D00104	361234
REDCOM PHIL	B68331, N68331	366889
NAVAL HOME, GULFPORT, MS	N00153	223671
NAS WILLOW GROVE, PA	N00158, D00158	369750
COM 4 PHILADELPHIA, PA	N00175	366889
ASO PHILADELPHIA, PA	D00383, N00383	366889
NAVDISPBR PHILA, PA	N32626	366889
NISMF PHILADELPHIA PA	N55632	366889
NSA PHILADELPHIA PA	N61189	366889
NADC WARMINSTER, PA	N62269, D62269	364385
NDC PHILADELPHIA PA	N62842	366889
NSEC PHILADELPHIA, PA	N65540	366889
MB PHILADELPHIA, PA	N67231	366889
NRMC PHILADELPHIA, PA	D68101, N68101	366889
DPSC PHILADELPHIA	SB0100	366889
FRANKFORD ARSENAL, PHILADELPHIA, PA	W25GIN	366889
LETTERKENNY ARMY DEPOT, CHAMBERSBURG, PA	W25GIQ	361354
NEW CUMBERLAND ARMY DEPOT, PA	W25GIT	363699
TOBYHANNA ARMY DEPOT, PA	W25GIV	368893
SCRANTON AAP, PA	W25HOU	369705
PENNSYLVANIA ARNG, ANNEVILLE	W25KYQ	364896
USA ENGINEER DISTRICT NORFOLK VA	W26GLG	446139

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
RADFORD AAP VA	W26HOQ	446955
HQ ARMY MIL DIST WASHINGTON DC	A7370D	448906
VHFS WARRENTON VA	W73HYU	448888
NSY PORTSMOUTH, VA	B00181, D00181, N00181	446139
PWC NORFOLK, VA	B00187, D00187, N00187	446139
NWS YORKTOWN	D00109, N00109	449151
CAMP ELMORE, NORFOLK	M67391	446139
NAVSECGRUACT NW VA	D63891	448906
FORT BELVOIR	W26AAA	448903
FCDSTCL VA BEACH, VA	N00281, D00281	446295
PHIBASE L CREEK, NORFOLK, VA	B61414, N61414, D61414	446139
NRMC PORTSMOUTH, VA	D66818	446139
LANGLEY AFB, HAMPTON, VA	FP4800	444720
MCB QUANTICO, VA	K00264, M00264	447201
HQBN HQMC ARLINGTON, VA	M67353	448903
NSWC DAHLGREN, VA	N00178, D00178	443192
ST JULIENS CREEK ANNEX PORTSMOUTH	N00182	446139
NAS NORFOLK, VA	N00188	446139
NSC NORFOLK, VA	N63393, N00189	446139
NORFOLK, VA	N31188	446139
FICEURLANT NORFOLK, VA	N0586A	446139
NSRDC PORTSMOUTH, VA	N30018	446139
NISF PORTSMOUTH VA	N55631	446139
OPSUPP NORFOLK, VA	N57074	446139
LANTFAU NORFOLK, VA	N57095	446139
NAS OCEANA, VIRGINIA BEACH, VA	N60191, D60191	446295

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NS NORFOLK, VA	N62688	446139
AFSC NORFOLK, VA	N61720	446139
FTC NORFOLK, VA	N61797	446139
FORT EUSTIS	W26RK4	446139
NS NORFOLK, VA	N63061	446139
FAAOCLANT	N60951	446139
FLTCOMBTDIRSYS VA BEACH, VA	N63273	446295
FAWTS NORFOLK, VA	N63401	446139
GMSCOL VA BEACH, VA	N64619	446295
NARF NORFOLK, VA	N65887	446139
MB NORFOLK, VA	N67230	446139
VA ANG	FP6461	447201
DGSC RICHMOND	SB0400	447201
VIRGINIA ARNG RICHMOND	W26L8F	447201
ARLINGTON HALL STATION VA	W73G3L	448903
USA ENGINEER DISTRICT HUNTINGTON, W VA	A2706B	464393
WEST VA ANG CHARLESTON, W VA	FP6481	461570
ALLEGANY BALLISTICS LAB	N91571	469522
WEST VIRGINIA ARNG, BUCKHANNAN	W27L8R	461220
USA ENGINEER DISTRICT MOBILE, AL	A35BRB	015478
MAXWELL AFB, MONTGOMERY AL	FP3069	015550
GADSDEN ANG ALA	FP6011	013154
HALL ANG STAT DOTHAN AL	FP6012	015550
NAVSPASUR JORDAN LAKE, MONTGOMERY, AL	N66085	015550
ANNISTON ARMY DEPOT, AL	W31GIY	010272

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
REDSTONE ARSENAL, HUNTSVILLE, AL	W31G3G	014064
ALABAMA ARNG MONTGOMERY	W31LPY	015550
USA ENGINEER DISTRICT JACKSONVILLE, FL	A32040	084358
PWC PENSACOLA, FL	B00204, D65114, N65114	086997
NS MAYPORT, JACKSONVILLE FL	B60201, D60201, N60201	084358
NAS JACKSONVILLE, FL	N00207, D00207	084358
NAS KEY WEST, FL	N00213, D00213	084570
NAS CECIL FIELD, JACKSONVILLE, FL	D60200, N60200	084358
NAS WHITING FLD, MILTON, FL	N60508, D60508	085793
NCSL PANAMA CITY, FL	D61331, N61331	086842
NTC ORLANDO, FL	D65928, N65928	086628
AFETR AAFB CAPE CANAVERAL FL	EY815F	085612
TYNDALL AFB, SPRINGFIELD, FL	FP2586	082660
EGLIN AFB, VALPARISO, FL	FP2823	082660
PATRICK AFB, COCOA BEACH, FL	FP2829	086628
EGLIN AF AUX FLD	FP4808	082660
MACDILL AFB TAMPA, FL	FP4814	088788
HOMESTEAD AFB FL	FP4829	084091
REDCOM JAX	N68358	084091
NARMC PENSACOLA, FL	N00203	086997
NAS PENSACOLA, FL	N00204	086997
FLORIDA ANG	FP6091	082660
NSGA HOMESTEAD	N62892	084091
NAVRAD TRAN FAC KEYS, FLA	N39142	084570
NH KEY WEST, FL	N00267	084570

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NTEC ORLANDO, FL	N61339	086628
NFD JACKSONVILLE, FL	N62566	084358
NSWCFLDBR FT LAUDERDALE, FL	N62701	083163
NTTC PENSACOLA, FL	N63082	086997
NARU JACKSONVILLE, FL	N63099	084358
NCS KEYWEST, FL	N63425	084570
NRMC ORLANDO, FL	N65492	086628
NARF JACKSONVILLE, FL	N65886	084358
NARF PENSACOLA, FL	N65889	086997
NRMC JACKSONVILLE, FL	N68085	084358
NETPDC ELLYSON FIELD JACKSONVILLE, FL	N68322	084358
NRDC PENSACOLA, FL	N68441	086997
FLORIDA ARNG ST AUGUSTINE	W32MUV	087826
USA ENGINEER DISTRICT SAVANNAH, GA	A33280	097847
NAS ATLANTA, GA	D00196, N00196	090451
DOBBINS GA AFB, MARIETTA, GA	FP6703	097847
FORT GORDON	W33M8Q	381939
FORT BENNING	W33BQ9	097535
ROBINS AFB GA, WARNER ROBINS, GA	FP2065	097535
MOODY AFB GA, VALDOSTA, GA	FP4830	098972
WILSON ARPT MACON GA ANG, MACON, GA	FP6102	095443
MCSC ALBANY, GA	K67004, M67004	090140
OCASR ATLANTA	S1102A	090451
NSCS ATHENS, GA	D62741, N62741	090435
NAVSPASUR HAWKINSVILLE, GA	N66086	094170

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAVSPASUR FT STEWART, GA; SAVANNAH, GA	N66087	093538
GEORGIA ARNG ATLANTA	W33QW7	090451
SHEWMAKER ANG BASE LOUISVILLE, KY	FP6161	154954
NOS LOUISVILLE, KY	D00197, N00197	154954
LEXINGTON BLUE GRASS ARMY DEPOT, KY	W22GIF	154746
KENTUCKY ARNG FRANKFORT	W22QW6	153028
USAE WATERWAYS EXPERIMENT STATION, VICKSBURG, MS	A35200	229216
USA ENGINEER DISTRICT, VICKSBURG, MS	A35300	229216
CBC GULFPORT, MS	N62604, D62604	223671
NAS MERIDIAN, MS	D63043, N63043	225776
KEESLER AFT, BILOXI, MS	FB3010	220792
COLUMBUS AFB, COLUMBUS, MS	FP3022	221870
KEY FIELD ANG, MERIDAN, MS	FP6241	225776
DIST ENGR LOUISVILLE, KY	A2220D	154954
FORT CAMPBELL	W34GM7	406402
SUPSHIP PASCAGOULA, MS	N62795	224472
NAVSPASUR SILVER LAKE, GREENVILLE, MS	N66084	223605
MISSISSIPPI ARNG JACKSON	W35KT5	224472
USA ENGINEER DISTRICT WILMINGTON NC	A36380	311730
NAVFAC CAPE HATTERAS NC	D57041, N57041	311458
SEYMOUR JOHNSON AFB, GOLDSBORO, NC	FP4809	313510
POPE AFB NC, SPRINGLAKE, NC	FP4488	316891
DOUGLAS AIRPORT ANG, CHARLOTTE, NC	FP6331	311690
MCAS CHERRY POINT, NC	K00146, M00146	311730

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
MCB CAMP LEJUENE, CHERRY POINT, NC	K67001, M6709	311730
NARF CHERRY POINT, NC	N65923	311730
NRMC CAMP LEJUENE, CHERRY POINT, NC	N68093	311730
NORTH CAROLINA ARNG RALEIGH	W36HUG	317069
NSY CHARLESTON, SC	B00191, N00191	381544
NWS CHARLESTON, SC	B00193, D00193, N00193	381544
CHARLESTON, SC	UY7011	381544
CHARLESTON AFS, SC	FP4418	381544
NS CHARLESTON, SC	D61165, N61165	381544
NH BEAUFORT, SC	D61337, N61337	380559
CHARLESTON AFB, CHARLESTON, SC	FP4418	381544
SHAW AFB, SUMTER, SC	FP4803	388440
MYRTLE BEACH AFB SC	FP4806	386159
SC ANG	FP6041	385665
N CHARLESTON SC AFB	FY8977	381544
MCRD PARRIS ISLAND, BEAUFORT, SC	M00263, K00263	380559
MCAS BEAUFORT, SC	K60169, M60169	380559
NSC CHARLESTON, SC	N00612	381544
SUBGRP SIX CHARLESTON, SC	N55424	381544
COMINWARCOM CHARLESTON, SC	N57011	381544
DIST ENG CHARLESTON	A37230	381544
FMWTC CHARLESTON, SC	N62603	381544
PMF CHARLESTON, SC	N63028	381544
NRMC CHARLESTON, SC	N68084	381544
SOUTH CAROLINA ARNG, COLUMBIA	W37JTM	381939
MILAN AAP, TN	W38HON	406012

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
HOLSTON AAP, KINGSPORT, TN	W38HOE	404858
VOLUNTEER AAP, CHATTANOOGA, TN	W38HOY	401656
USA ENGINEER DISTRICT MEMPHIS, TN	A38950	405954
ARNOLD AFS, MANCHESTER, TN	EY7483	408246
DIST ENGR NASHVILLE	W38XDD	406402
TENN ANG	FP6421	406402
USARMC AND FT KNOX	W22PEQ	154954
RED COM MEMPHIS	N68348	405954
NAS MEMPHIS, TN	D00639, N00639	405954
NRMC MEMPHIS, TN	N60002	405954
NARU MEMPHIS, TN	N63101	405954
DD MEMPHIS	SB3500	405954
TENNESSEE ARNG NASHVILLE	W38NCE	406402
USA ENGINEER DISTRICT CHICAGO, IL	A5212B	111577
JOLIET AAP, IL	W52ACD	114530
ROCK ISLAND ARSENAL, IL	W52HIB	115751
CERL CHAMPAIGN, IL	W52EU2	112140
O'HARE IAP CHICAGO ANG ILLINOIS PARK RIDGE, IL	FP6618	111549
CHANUTE AFG - RANTOUL, IL	FP3018	112140
SCOTT AFB - SHILOH, IL	FP4407	114530
ILLINOIS ANG	FP6122	111549
NTC GREAT LAKES, IL	N00210	119029
NAS GLENVIEW, IL	D00275, N00275	113496
REDCOM GREAT LAKES, IL	N60956	119029
RESUPPL HQ 9ND, GREAT LAKES, IL	D68330, N68330	119024
PWC GREAT LAKES, IL	D65113, N65113	119029

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NRMC GREAT LAKES, IL	N68092	119029
NRDC GREAT LAKES	N68326	119029
SAVANNAH ARMY DEPOT, GA	W52G2J	090451
LITTLE ROCK DIST ENGR	A5259B	034248
FORT SHERIDAN	W52CDE	119029
ILLINOIS ARNG - SPRINGFIELD	W52JUD	118179
NEWPORT AAP	W53HOP	127522
NWSC CRANE, IN	DOO164, N00164	121869
GRISSOM AFB, BUNKER HILL, IND	FP4654	123580
INDIANA ANG	FP6131	123037
NAF INDIANAPOLIS, IN	N00163	124259
USARMY JEFFERSON PROVING GROUNDS, MADISON, IN	W53HZB	125237
INDIANA AAP - CHARLESTON	W53HOF	121425
INDIANA ARNG - INDIANAPOLIS	W53PIL	124259
PONTIAC STORAGE FAC	A56AXB	206658
USA ENGINEER DISTRICT DETROIT, MI	A56LGS	202103
DETROIT ARSENAL FH	W56HZX	202103
KI SAWYER AFB, GWINN, MI	FB4515	204415
WURTSMITH AFB MICHIGAN - OSCODA, MI	FP4585	209110
MICHIGAN #1 ANG - MT CLEMENS, MI	FP6221	205650
MICHIGAN #2 ANG -ALPENA, MI	FP6222	200164
MICHIGAN ARNG LANSING	W56LS9	204641
TWIN CITIES AAP - NEW BRIGHTON, MN	W57HOX	215435
MINNEAPOLIS-ST PAUL ANG MINNESOTA - MINNEAPOLIS, MN	FG6231	215435
MINNEAPOLIS STPL AP	FP6633	215435

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
DULUTH AIRPORT MN	FP2554	212248
DIST ENGR ST PAUL	A5720B	215435
MICHIGAN ARMY MISSILE PLANT	A5619B	202103
REDCOM MINN	D68349, N68349	215435
NIRP ST PAUL	N91741	215435
BAUDETTE AFS MN, BAUDETTE, MN	FY8960	210515
FINLAND AFS MN, FINLAND, MN	FY9779	218419
NIROP MINNEAPOLIS, MN	N91192	215435
MINNESOTA ARNG - LITTLE FALLS	W57LVB	214793
RAVENNA AAP OH	W24HOR	333780
NEWARK AFS, HEATH, OHIO	FP2006	335747
WRIGHT-PATTERSON AFB, FAIRBORN, OHIO	FP2300	332075
RICKENBACKER AFB OH, LOCKBOURNE, OHIO	FP4601	331783
OHIO #2 ANG OHIO	FG6354	334865
CINCINNATI	UY7019	332067
OHIO #1 ANG OHIO	FP6352	331786
YOUNGSTOWN AIRPORT, VIENNA, OHIO	FP6656	339406
NAVPRO COLUMBUS, OH	N62940	331786
DCSC COLUMBUS	SB0700	331786
DESC DAYTON	SB0900	332067
LIMA ARMY MODIFICATION CTR OH	W24HZ0	334551
OHIO ARNG - COLUMBUS	W24L9M	331786
GEN MITCHELL ANG, MILWAUKEE, WI	FP6605	475479
WISCONSIN ANG, CAMP DOUGLAS, WI	FP6492	475178
CAMP McCOY, WI	W5CD3D	470516
ANTIGO AFS WI	FY9735	470239
BADGER AAP - BARABOO, WI	W5CHZ8	470516
WISCONSIN ARNG CAMP DOUGLAS	W5CRZU	475178
USA ENGINEER DISTRICT LITTLE ROCK, AR	A41XDE	034248

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NRMC N. ORLEANS	N66898	166660
NRPC N. ORLEANS	N68327	166660
LITTLE ROCK ANG	FB6031	034248
BLYTHEVILLE AFB AR, BLYTHEVILLE, AR	FP4634	033734
LITTLE ROCK AFB AR, JACKSONVILLE, AR	FP4460	034248
NAVSPASUR RED RIVER, TEXARKANA, AR	N66083	037048
PINE BLUFF ARSENAL, AR	W41G26	035754
ARKANSAS ARNG LITTLE ROCK	W41RAM	034248
LOUISIANA AAP SHREVEPORT	W42HOM	168440
USA ENGINEER DISTRICT NEW ORLEANS, LA	W42HEM	166660
NAS NEW ORLEANS, LA	D00206, N00206	166660
BARKSDALE AFB LA, BOSSIER CITY, LA	FP4608	160515
ENGLAND AFB, ALEXANDRIA, LA	FP4805	160098
JACKSON BARRACKS ANG COMM STAT, LA	FY8228	164034
FOURTH MAWMARTC NEW ORLEANS, LA	M67021	166660
NSA NEW ORLEANS, LA	B00205, D00205, N00205	166660
NARDAC, NEW ORLEANS	N68608	166660
REDCOM NEW ORLEANS, LA	N68307	166660
EPMAC NEW ORLEANS, LA	N68412	166660
LOUISIANA ARNG NEW ORLEANS	W42N6L	166660
USA ENGINEER DISTRICT ALBUQUERQUE, NM	A43300	290234
KIRTLAND AFB, ALBUQUERQUE, NM	FP4469	290234
HOLLOMAN AFB, ALAMAGORDO, NM	FP4801	290199
CANNON AFB, CLOVIS, NM	FP4855	291939
NAVSPASUR ELEPHANT BUTTE, TRUTH OR CONSEQUENCES, NM	N66081	299129
FORT SILL, OK	W44DQ1	340184

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
WHITE SANDS MISSILE RANGE, NM	W43HZD	299686
FT WINGATE DEP ACT GALLUP, NM	W43MNO	293422
NEW MEXICO ARNG SANTE FE	W43MYP	293031
USA ENGINEER DISTRICT TULSA, OK	W44XGQ	348992
TINKER AFB, MIDWEST CITY, OK	FP2039	346661
VANCE AFB OKLA, ENID, OK	FP3029	342912
ALTUS AFB OK, ALTUS, OK	FP4419	340184
OKLAHOMA ANG	FG6563	346661
McALESTER AAP	W44W9M	345664
OKLAHOMA ARNG, OKLAHOMA CITY	W44AAAY	346661
LONE STAR AAP, TEXARKANA, TX	W45HOK	418942
USA ENGINEER DISTRICT FT WORTH, TX	W45XMA	412242
USA ENGINEER DISTRICT GALVESTON, TX	A45280	413430
NAS DALLAS, TX	D00215, N00215	412244
NAS CORPUS CHRISTI, TX	D00216, N00216	412015
NAS KINGSVILLE, TX	D60241, N60241	414810
NAS CHASE FLD, BEEVILLE, TX	D60373, N60376	410639
LACKLAND AFB TEX, SAN ANTONIO, TX	FB3047	417945
BROOKS AFB TX, SAN ANTONIO, TX	FG2857	417945
KELLY AFB, SAN ANTONIO, TX	FP2059	414735
SHEPPARD AFB, WICHITA FALLS, TX	FP3020	419729
REESE AFB, LUBBOCK, TX	FP3060	415411
RANDOLPH AFB UNIVERSAL CITY, TX	FP3089	417423
LAUGHLIN AFB, DEL RIO, TX	FP3099	412360
DYESS AFB TX, ABILENE, TX	FP4661	410016
CORPUS CHRISTI, ARMY DEPOT	W45N7V	412015
FORT SAM HOUSTON	W45B95	414307

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
CARSWELL AFB FORT WORTH, TX	FP4689	411495
BERGSTROM AFB TX AUSTIN, TX	FP4857	410428
TEXAS ANG #1	FP6431	410235
GOODFELLOW AFB, SAN ANGELO, TX	FP3030	417943
TEXAS #2 ANG	FP6433	412244
REDCOM DALLAS	N68359	412244
NRMC CORPUS CHRISTI TEXAS	N00285	412015
CAMP STANLEY, TX	W45PVN	410235
KICKAPOO LAKE, WICHITA FALLS, TX	N66082	419729
NWIRP DALLAS, TX	N91961	412244
RED RIVER ARMY DEPOT, TEXARKANA	W45G18	418942
LONG HORN AAP MARSHALL TX	W45HOL	415618
TEXAS ARNG AUSTIN, TX	W45KOH	410428
IOWA AAP MIDDLETOWN, IOWA	W54HOG	132203
IOWA ANG	FP6141	132203
IOWA ARNG DES MOINES	W54CJX	132203
KANSAS AAP PARSONS	W55HOH	146242
SUNFLOWER AAP LAURENCE	W55HOW	144559
MCCONNELL AFB, WICHITA, KANSAS	FP4621	148830
KANSAS ANG	FP6152	148830
REDCOM, OLATHE	N68332	145972
FORT LEONARD WOOD, MO	W58NQ5	234271
FORT LEAVENWORTH	W55NSO	144588
MARFINCEN KC, MD	M67443, K67443	234358
NARDET OLATHE, KN	N30924	145972
DIPEC FACILITY ATCHISON	SP4303	140405

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
KANSAS ARNG TOPEKA	W55RHF	148167
USA ENGINEER DISTRICT KANSAS CITY	A5823B	234358
USA ENGINEER DISTRICT ST LOUIS MO	A5826B	237455
RICHARDS-GEBAUR AFB, MO	FP4416	237100
WHITEMAN AFB MO, KNOB NOSTER, MO	FP4625	238920
ROSECRANS FIELD ANG, ELWOOD, MO	FP6251	237455
MISSOURI ARNG JEFFERSON CITY, ST LOUIS, MO	W58MYQ	234271
USA ENGINEER DISTRICT OMAHA, NB	A5920B	256255
OFFUTT AFB, BELLEVUE, NB	FP4600	256255
NEBRASKA ANG	FP6271	256255
LAKE CITY AAP INDEP MO	W58HOJ	234850
NEBRASKA ARNG	W59LWG	256255
CORNHUSKER, AAP	W59HOB	253395
ENT AFB, COLORADO SPRINGS, COLORADO	FB2500	051778
LOWRY AFB DENVER, COLORADO	FB3059	052220
USAF ADADEMY, MONUMENT, COLORADO	FB7000	053592
BUCKLEY ANG BASE COLORADO, AURORA, COLORADO	FP6061	050395
PUEBLO DEPOT ACTIVITY COLORADO	W51G2B	056740
ROCKY MOUNTAIN ARSENAL	W51G2F	052220
COLORADO ARNG	W51HVG	052220
ST LOUIS AREA SUPPORT CENTER	W52HO1	234271
MALMSTROM AFB MONTANA, GREAT FALLS, MONTANA	FP4626	243751
GREAT FALLS ANG MONTANA	FP6261	243751

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
GRAND FORKS, ND	UY7021	323616
MONTANA ARNG, HELENA, MONTANA	W64PTP	244055
GRAND FORKS AFB, EMERADO, NORTH DAKOTA	FB4659	323616
MINOT AFB NORTH DAKOTA, MINOT, NORTH DAKOTA	FP4528	325988
HECTOR AIRPORT ANG, FARGO, NORTH DAKOTA	FP6341	322859
NORTH DAKOTA ARNG, BISMARCK	W5ALXU	320819
ELLSWORTH AFB, ELDER, SOUTH DAKOTA	FP4690	396937
SOUTH DAKOTA ANG, SIOUX FALLS	FP6411	397667
SOUTH DAKOTA ARNG	W5EM2T	396937
HILL AFB, OGDEN, UTAH	FP2027	426404
UTAH ANG	FP6441	426404
SSPO MAGNA UTAH	N63319	427598
DD OGDEN	SB3400	426404
TOOLE ARMY DEPOT, UTAH	W67G22	428771
DUGWAY PROVING GROUNDS, UTAH	W67HY8	422257
UTAH ARNG, OGDEN	W67K2Q	426404
FE WARREN AFB, CHEYENNE, WYOMING	FP4613	481675
WYOMING ANG	FP6501	481675
WYOMING ARNG, CHEYENNE	W5DK51	481675
WILLIAMS AFB, CHANDLER, ARIZONA	FP3044	021511
DAVIS-MONTHAN AFB, TUCSON, ARIZONA	FP4877	028820
LUKE AFB, LITCHFIELD PARK, ARIZONA	FP4887	026486
PHOENIX ANG, PHOENIX, ARIZONA	FP6021	026481
MCAS YUMA, ARIZONA	K2974, M62974	029654

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAVSPASUR GILA RIVER, PHOENIX, ARIZONA	N66080	023393
FT HAUCHUCA FAE	W61DEB	023120
USA YUMA PROVING GROUNDS, ARIZONA	W61HZF	029654
ARIZONA ARNG PHOENIX	WP1LP3	026481
NAVAJO DEPOT ACTIVITY FLAGSTAFF	W61MN1	023010
RIVERBANK AAP, RIVERBANK, CA	W62HOT	045738
USA ENGINEER DISTRICT LOS ANGELES	A62222	045114
USA ENGINEER DISTRICT SAN FRANCISCO	A62252	047769
NSY MARE ISLAND, CA	P00221, D00221, N00221	047414
NSC OAKLAND, CA	P00228, D00228	046335
NAS ALAMEDA, CA	N00236, D00236, P00236	040061
NAS NORTH ISLAND, SAN DIEGO, CA	N00246	047740
NAS MOFFETT FLD, CA	N00296, D00296	045748
NCS STOCKTON, CA	N00886, D00886	048558
NAVFAC CENTERVILLE BEACH, CA	D57053, N57053	048045
NAVFAC POINT SUR, CA	D57054, N57053	045795
NS TREASURE ISLAND, SAN FRANCISCO, CA	P60028, D60028	040061
NWS CONCORD, CA	N60036, D60036	045378
NAS MIRAMAR, SAN DIEGO, CA	D60259, N60259	047740
MCRD SAN DIEGO	K00243, M00243	047740
NAS LEMOORE, CA	N63042, D63042	044900
PMTC PT MUGU, OXNARD, CA	N63126, D63126	047022
ANDERSON PEAK	EY1525	047292
LOS ANGELES AFSC	EY7396	045114
PILLAR POINT AFS	EY7765	043714
SANTA YNEZ PEAK, CA	EY9887	041253
VANDENBERG AFB, LOMPOC, CA	FB4610	045064

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
McCLELLAN AFB CA, SACRAMENTO, CA	FP2049	047630
EDWARDS AFB, ROSAMOND, CA	FP2805	044749
MATHER AFB CALIF, RANCHO CORDOVA, CA	FP3067	047630
TRAVIS AFB, FAIRFIELD, CA	FP4427	047630
NORTON AFB, SAN BERNARDINO, CA	FP4448	047723
MARCH AFB, SUNNYMEAD, CA	FP4664	047470
CASTLE AFB, ATWATER, CA	FP4672	045532
BEALE AFB, MARYSVILLE, CA	FP4686	045385
GEORGE AFB, ADELANTO, CA	FP4812	049325
CALIFORNIA ANG	FP6044	044997
SUNNYVALE AFS, SUNNYVALE, CA	FY7895	045748
ALMADEN CA AFS, TWIN CREEK, CA	FY8985	040061
POINT ARENA CA AFS, ANCHOR BAY, CA	FY9749	047009
MCB CAMP PENDLETON, OCEANSIDE, CA	K00681, M00681	046377
MCSC BARSTOW, CA	K62204, M62204	040519
MCB 29 PALMS, CA	K67399, M67339	049099
NSC SAN DIEGO, CA	N00244	047740
NS SAN DIEGO, CA	N00245	047740
NTC SAN DIEGO, CA	N00247	047740
NWS SEAL BEACH ANNEX, CA	N00396, D00396	047769
NSGA SKAGGS ISLAND, CA	N00849	048351
FAWTC SAN DIEGO, CA	N00948	047740
NAVAL DENTAL CLINIC LEMOORE	N35723	044900
NSA SAN FRANCISCO, CA	N60028	047769
MCAS EL TORO, CA	K60050, M60050	047888
NSY LONG BEACH, CA	N60258, P60258	045085

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NWC CHINA LAKE, RIDGECREST, CA	N60530, D60530	049035
NWS SEAL BEACH, CA	N60701, D60701	045085
FCDSTC PACIFIC, SAN DIEGO, CA	N61665	047740
FTC SAN DIEGO, CA	N61690	047740
PHIBASE CORONADO, SAN DIEGO, CA	N62021	047740
PGSCOL MONTEREY, CA	N62271, D62271	045795
MSC PACIFIC, SAN FRANCISCO, CA	N62383	047769
EFD SAN BRUNO, CA	N62474	047769
CBC PORT HUENEME, OXNARD, CA	D62583, P62583, N62583	047022
NBRL OAKLAND, CA	N62759	046335
SUPSHIP SAN DIEGO, CA	N62791	047769
SUPSHIP SAN FRANCISCO, CA	N62798	047769
ONR PASDENA, CA	N62887	046719
FNWC MONTEREY, CA	N63134	045795
NARU ALAMEDA, CA	N63139	040061
COMBTSYSTECHSCOLCOM MARE ISLAND, CA	N63290	047414
PWC SAN DIEGO, CA	N63387, B63387, D63387, P63387	047740
REDCOM SAN DIEGO	N68350	047740
REDCOM TREASURE IS	N68308	040061
NAVELEXSYSENGCEN, VALLEJO	N63274	047414
NSWSES PORT HUENEME, OXNARD, CA	N63394	047022
NSSF SAN DIEGO, CA	N63406	047740
NFMSAEG CORONA, CA	N64267	042031
NARF ALAMEDA, CA	N65885	040061
NARF NORTH ISLAND, SAN DIEGO, CA	N65888	047740
NE SEC SAN DIEGO, CA	N65584	047740

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NUC PT LOMA, SAN DIEGO, CA	N66001	047740
NDC SAN DIEGO, CA	N66022	047740
NAVSPASUR SAN DIEGO, CA	N66079	047740
NH LEMOORE, CA	N66095	044900
NSA MARE ISLAND, CA, VALLEJO	N66890	047414
MT VALLEJO, CA	N67030	047414
NRMC SAN DIEGO, CA	N68056	047740
RNMC LONG BEACH, CA	N68090	045085
NRMC OAKLAND, CA	N68097, D68097	046335
NAF EL CENTRO, CA	D60042, N60042	041048
CEL PORT HEUNEME, OXNARD, CA	N68305	047022
NSA LONG BEACH, CA	N68311, D68311	045085
PWC SAN FRANCISCO, CA	D68378, N68378	047769
NCS SAN DIEGO, CA	N70240	047740
NIROP SUNNYVALE, CA	N91285	045748
NIROP POMONA, CA	N93055	047050
NSC OAKLAND, CA	N00228	046335
PRESIDID OF SAN FRANCISCO	W62PXB	047769
MILL VALLEY AFS	AY9750	047414
MT LAGUNA	FY9785	047470
OAKLAND ARMY BASE HQ	W62PQP	046335
WPNSTA CONCORD, CA	P60036	045378
DEFENSE DEPOT TRACY	SB3200	048999
SACRAMENTO ARMY DEPOT, CA	W62G2Q	047633
SHARPE ARMY DEPOT, STOCKTON, CA	W62G2S	048558
SIERRA ARMY DEPOT, HERLONG, CA	W62G2W	048218
CALIFORNIA ARNG, SAN LUIS OBISPO, CAL	W62M49	047851

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
USA ENGINEER DISTRICT SACRAMENTO, CA	W62N6M	047633
AAP HAWTHORNE, NEVADA	W65W9N	263515
NAS FALLON, NEVADA	D60495, N60495	262780
NELLIS AFB NV, LAS VEGAS	FP4852	264436
NEVADA ANG	FP6281	266779
NEVADA ARNG, CARSON CITY	W65KUC	261485
MOUNTAIN HOME AFB, MOUNTAIN HOME, IDAHO	FP4897	106174
IDAHO ANG	FP6112	101022
IDAHO ARNG, BOISE	W63KQW	101022
USA ENGINEER DISTRICT PORTLAND, OREGON	W66QKZ	356751
NAVFAC COOS HEAD, OREGON	D57055, N57055	356073
KINGSLEY FIELD, KLAMATH FALLS, OREGON	FP2560	354506
OREGON ANG	FP6371	356751
MT HEBO AFS OR, HEBO, OREGON	FY8981	351682
NORTH BEND AFS OREGON	FY9728	356073
OREGON ARNG	W66MRS	356751
USA ENGINEER DISTRICT SEATTLE, WA	A68122	457473
NAVFORPSTA KEYPORT, WA	N00253	450872
NSA SEATTLE, WA	D00255, N00255, P00255	457473
NAS WHIDBEY ISLAND, WA	D00620, N00620	459165
NAVFAC PACIFIC BEACH, WA	D57056, N57056	453807
FAIRCHILD AFB WA, AIRWAY HEIGHTS, WA	FB4620	457938
McCHORD AFB WA, TACOMA, WA	FP4479	458286
25TH AIR DIV (McCHORD AFB WA)	FY5797	458286

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
MAKAH AFS WA, NEAH BAY, WA	FY9755	456858
BLAINE AFS WA, BLAINE, WA	FY9757	450729
NSY BREMERTON, WA	P00251, N00251, D00251	450872
NSC PUGET SOUND, BREMERTON, WA	N00406	450872
NARU WHIDBEY ISLAND, WA	N00621	459165
NISMF PUGET SOUND, BREMERTON, WA	N55639	450872
NRMC BREMERTON, WA	N00254, N68095	450872
SWFPAC KEYPORT, WA	N63402	450872
DIST ENGR WALLA WALLA	A68KAM	457938
REDCOM, SEATTLE, WA	N68328, P68328	457473
NFD MANCHESTER, WA	N65765	457473
NH WHIDBEY ISLAND, WA	N66097	459165
NRS JIM CREEK	N70273	457507
WASHINGTON, ARNG TACOMA	W68N9X	458286
DEWLINE SYSTEM	EY2700	7*
CAPE LISBURNE AFS AK, POINT HOPE, AK	FP5010	501312
CAPE NEWENHAM AFS AK PLATINUM, AK	FP5011	501314
KOTXEBUE AFS AK, KOTZEBUE, AK	FP5012	505076
INDIAN MT AFS AK, HUGHES AK	FP5013	503910
CAPE ROMANZOF AFS, AK, HOOPER BAY, AK	FP5014	501318
TATLINA AFS AK, McGRATH, AK	FP5015	505769
FT YUKON AFS AK, FT YUKON, AF	FP5016	501977
TIN CITY AFS AK, WALES, AK	FP5017	509249
CAMPION AFS AK, GALENA, AK	FP5019	503215
ELEMENFORF AFB AK, ANCHORAGE, AK	FP5000	502820
EILSON AFB AK, NORTH POLE, AK	FP5004	7*

<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
KING SALMON ARPT AK, NAKNEK, AK	FP5007	504766
GALENA ARPT AK	FP5060	503215
ALASKA ANG	FP6520	502820
MURPHY DOME AFS ALASKA, COLLEGE, AK	FY8785	502112
SPARREVOHN AFS ALASKA, ILIAMNA, AK	FP5020	503905
NARL BARROW, ALASKA	N65226	500546
ALASKA ARNG ANCHORAGE	WCLJTW	500280
COLD BAY AFS AK, COLD BAY, AK	FP5018	502102
SHEMYA AFB AK, ATKA, AK	FP5040	508419
NSGA ADAK, AK	N63886	500026
NS ADAK, AK	D60462, N60462	500026
NS GUANTANAMO CUBA	D60514, N61564	783670*
NH GUANTANAMO CUBA	N61564	783670*
NDC GTMO GUANTANAMO CUBA	N62333	783670*
NSGA GTMO GUANTANAMO CUBA	N63906	783670*
DEPSCOL GTMO GUANTANAMO CUBA	N65983	783670*
NAVFAC ANTIGUA	D67049, N67049	*
AFETR AARB 91 ANTIGUA	EY815E	*
NS ROOSEVELT ROADS, PUERTO RICO	B00389, D00389, N00389	785350*
NCS PONCE, PUERTO RICO	D00743, N00743	785260*
NSGA SABANA SECA, PUERTO RICO	N66754, D66754	785201*
NH ROOSEVELT ROADS, PUERTO RICO	N65428	785350*
PUERTO ARNG, PUERTO RICO	WF3SCY	785260*
PUERTO RICO ANG	FP6540	785260*
VIRGIN ISLAND ARNG VI	WF3APY	*
AFETR AAFB 7 GRAND TURK	EY815B	*
AFETR AAFB 3 GRAND BAHAMA	EY815C	780631*

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAS BERMUDA	D62481, N62481	780160*
NAVFAC BERMUDA	N57038	780160*
NUSC BERMUDA	N66721	780160*
NS KEFLAVIK, ICELAND	N63032, D63032	740180*
NCS KEFLAVIK, ICELAND	N63143	740180*
DEPSCOL KEFLAVIK, ICELAND	N65981	740180*
LAJES FIELD, AZORES	FP4486	785090*
AFETR AAFB 12 ASCENSION	EY815A	*
NAVFAC ARGENTIA, NEWFOUNDLAND	D57075, N57075	*
SONDRESTROM AB, HOLSTEINBERG, GREENLAND	FP2547	742310*
THULE AIR BASE THULE, GREENLAND	FP2573	742020*
SPANDAHLEM AB GERMANY	FB5621	706070*
TEMPELHOF CENTRAL AIRPORT, W BERLIN	FB5622	703840*
ZWEIBRUCKEN AB GERMANY	FP5529	707140*
BITBURG AB GERMANY	FP5606	706100*
RAMSTEIN AFB LANDSTUHL, GERMANY	FP5612	706140*
RHEIN MAIN AB FRANKFURT, GERMANY	FP4420	706370*
HAHN AIR BASE, LAUTZENHAUSEN, GERMANY	FP5620	706160*
SEMBACH AB GERMANY	FP5623	707120*
SOESTERBERG AB, NL	FP5688	*
7TH ARMY TNG CMD GRAFENWOHR	W1EKAA	*
USCOB USAB BERLIN, GE	WK4F15	*
26TH SPT CMB, HEIDELBERG, GERMANY	WK4SV4	706140*
VII CORPS STUTTGART GE	WK4E62	107380*
V CORPS STUTTGART GE	W32MAB	107380*

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NSGA EDZELL, SCOTLAND	D63073, N63073	*
NRS THURSO, SCOTLAND	D63395	*
RAF UPPER HEYFORD, UPPER HEYFORD, UK	FB5537	036551*
WETHERSFIELD AB, WETHERSFIELD, UK	FB5643	035771*
RAF SCULTHORPE, FAKENHAM, UK	FG5553	035831*
RAF FAIRFORD	FP5560	*
RAF CHICKSANDS, SHEFFORD, UK	FG5650	035831*
RAF MILDENHALL, UK	FP5518	035771*
RAF GREENHAM COMMON, NEWBURY, UK	FP5537	036551*
RAF LAKENHEATH ENG	FB5587	035831*
RAF ALCONBURY, UK	FP5643	035621*
BENTWATERS-WOODBRIDGE, WOODBRIDGE, UK	FP5644	035961*
RAF WEST RUISLIP, UK	FY9114	*
NAVACT UK, LONDON, ENGLAND	N62585	037760*
NCU THURSO	N63395	*
NAVACTSDET HOLY LOCH, SCOTLAND	N65995	*
NAVFAC BRAWDY WALES	N68165	*
NS ROTA SPAIN	B62863, D62863, N62863	084490*
ZARAGOZA AB SPAIN	FP5571	081605*
MORON AB SPAIN	FP5575	083970*
TORREJON AFB, TORREJON DE ARDOZ, SPAIN	FX5585	082270*
ST MAWGAN, UK	N64981	*
NCS ROTA SPAIN	N63182	084490*
NSA NAPLES ITALY	D62588, N62588	162890*
SAN VITO AS ITALY	FG5517	*

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
AVIANO AB, PORDENONE, ITALY	FP5682	160360*
NRMC NAPLES ITALY	N66096	162890*
NCS NAPLES ITALY	N70294	162890*
SETAF, VICENZA, ITALY	WK9G2D	*
NSO LA MADDALENA, SARDINIA	D32960, N32960	*
NAF SIGONELLA SICILY	D62995, N62995	164594*
NCS SIGONELLA SICILY	N32525	164594*
HELLENIKON APRT, ATHENAI, GREECE	FB5687	167160*
IRAKLION AS CRETE, GOURNES, GREECE	FG5699	167540*
NAVDET SOUDA BAY, CRETE	N66691	167464*
NCS NEA MARKI GREECE	N70295	*
DIYARBAKIR AB TURKEY, DIYARBAKIR, TURKEY	FP5696	172800*
IZMIR	FB5531	172180*
KARAMURSEL CDI	FB5695	*
INCIRLIK AB TURKEY, INCIRLIK, TURKEY	FP5685	*
ANKARA AS TU	FP5693	*
PWC SUBIC PHILIPPINES	D62808, N62808	984260*
JOHN HAY AB PHILIPPINES, BAGUIO, PHIL	FB5250	983270*
WALLACE AS PHILIPPINES, SAN FERNANDO PHIL	FG5250	983270*
CLARK AB, ANGELES, PHIL	FP5250	983270*
NSD SUBIC PHILIPPINES	N00651	984260*
NCS PHILIPPINES	N00927	*
NS SUBIC BAY PHILIPPINES	N61552	984260*
NSRF SUBIC BAY PHILIPPINES	N62807	984260*
NAVMAG SUBIC BAY PHILIPPINES	N62807	984260*

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAS CUBI POINT PHILIPPINES	N62876	984260*
NH SUBIC BAY PHILIPPINES	N65491	984260*
CHING CHUAN KANG AB, PU TZU CHIEN TAIWAN	FP5266	*
NCS HAROLD E HOLT, AUSTRALIA - EXMOUTH	D63427, N63427	*
PWC GUAM AGANA GUAM	D62395, N62395	912120*
ANDERSEN AFB AGANA GUAM	FP4624	912180*
NAVMAG GUAM AGANA	N60872	912120*
NSD GUAM AGANA	N61119	912120*
NAS GUAM AGANA	N61577	912120*
NS GUAM AGANA	N61755	912120*
NDC GUAM AGANA	N62328	912120*
NSRF GUAM AGANA	N62586, P62586	912120*
NAVFAC GUAM AGANA	N66125	912120*
NRMC GUAM AGANA	N68096	912120*
NAVSTA GUAM AGANA	P61755	912120*
CAMP ZAMA	AT5F01	476800*
NAF ATSUGI JAPAN	D62507, N62507	476790*
PWC YOKOSUKA JAPAN	D65115, N65115	476060*
NCS YOKOSUKA JAPAN	D70278, N70278	476960*
MISAWA AB JAPAN	FB5205	475800*
YOKOTA AIR BASE FUSSA & MACHI JAPAN	FP5209	476420*
COMFLEACT YOKOSUKA JAPAN	N61581, P61581	476960*
NSRF YOKOSUKA JAPAN	N62758	476960*
MCAS IWAKUNI JAPAN	K62613, M62613	477640*
NSD YOKOSUKA JAPAN	N62649	476960*
NAVJNTSERVACT SH TOKYO	N43666	

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
USAGO MAKIMINATO JAPAN	WT6KKU	*
NOF SASEBO JAPAN	N62735, P62735	478120*
NRMC YOKOSUKA JAPAN	N68292	476960*
KWANG JU AB, KWANG JU KOREA	FB5284	471580*
TAEGU AB KOREA	FB5294	471420*
KUNSAN AB KOREA	FP5284	471440*
OSAN AB KOREA, SONG TAN KO	FP5294	471220*
EIGHT ARMY KOREA SEOUL	WT4KEK	471110*
KADENA AB OKINAWA RYUKYU IS	FP5270	479310*
NRNC OKINAWA	N68470	479310*
NSGA HANZA OKINAWA	N70284	479310*
JOHNSTON ATOLL HONOLULU, HAWAII	HD3121	511919
NS MIDWAY ISLAND	D62494, N62494	910660
NAVFAC MIDWAY ISLAND	N66126	910660
HAWAII ARNG HONOLULU	WX3JSN	511919
PMRF BARKING SANDS, HAWAII	D0534A, N0534A	911620
PWC PEARL HARBOR HAWAII	D62755, N62755, P62755	511919
NAVMAG LUALUALEI HAWAII	N68297	
NB PEARL	N61449	511919
HICKAM AFB HONOLULU, HAWAII	FP5260	511919
MCAS KANEOHE BAY HAWAII	K00318, M00318	513113
CAMP H M SMITH, HONOLULU, HAWAII	K67385, M67385	511919
CINCPAC, HONOLULU, HAWAII	N00038	511919
NSY PEARL HARBOR, HAWAII	N00311, P00311	511919
SUBASE PEARL HARBOR, HAWAII	N00314	511919

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
NAS BARBERS POINT HAWAII	N00334	510204
NSC PEARL HARBOR, HAWAII	N00604	511919
USASCH FT SHAFTER, HI	W80N69	511919
NISF PEARL HARBOR, HAWAII	N57026	511919
NDC PEARL HARBOR, HAWAII	N62313	511919
FWC PEARL HARBOR, HAWAII	N62362	511919
NS PEARL HARBOR, HAWAII	N62813, P62813	511919
NSTC PEARL HARBOR, HAWAII	N63154	511919
FICPAC PEARL HARBOR, HAWAII	N63186	511919
NAVFAC BARBERS POINT, HAWAII	N66150	510204
NRMC PEARL HARBOR, HAWAII	N68098	511919
NCF DIEGO GARCIA	N68539	719670*
NSA CANAL ZONE PANAMA	D66833, N66833	788060*
HOWARD AFB BALBOA, PC ZONE	FP4810	788060*
NCS BALBOA PANAMA	N00867	788060*
NSGA GALETA IS PANAMA	N70283	788060*
NCSO BAHRAIN	B63005	704270*
ASU BAHRAIN	N63005	704270*
KINGS BAY MTMC	A33610	097847
CAMP DRUM	A16150	307167
CAMP PICKETT	W26DKK	447201
CAMP SD BUTLER	M67400	*
CLEAR AFS	EY7676	500546
CNAVRES	N00072	166660
CNET SER	N00062	086997

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
COMNAVFORKOREA	D32778, N32778, P32778	*
CONSOLIDATED CLOSED	WCB999, FP9999	*
ESCANABA	UY7020	204415
FITZSIMONS ARMY MEDICAL	W51MXS	052220
FORT AP HILL	W26DJS	443192
FORT BENJAMIN HARRISON	W53C46	124259
FOUR MARDIV	M68479	166660
IPAC	N68389	511919
LYNN HAVEN	UY7013	086842
MOT SUNNY POINT	W36VAA	311730
MUKILTEO	UY7029	452675
NAVCAMS EAST PAC	N00950	511919
NAVCAMS LANT	D70272, N70272	446139
NAVCAMS WEST PAC	N70243	*
NAVOCEAN PROFAC	N68593	446139
NAVRADTRANSFAC DRIVER	N0552A	446139
NEWINGTON	UY7004	271683
NIROP McGREGOR	N95918	410428
NORWALK	UY7030	045114
NRMC DISPENSARY	N32528	047022
NRS SUGAR GROVE	D70310, N70310	461570
NSGA NORTHWEST	N63891	446139
NSRDC BAYVIEW	N62182	457938
NWIRP BLOOMFIELD	N92782	063456
NWIRP BRISTOL	N94307	375215
NWIRP SOUTH BRISTOL	N94671	170934

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
OZOL	UY7031	045378
RECCOM SCOTIA	N68357	300042
REDCOM CHASN	N68356	381544
REDCOM RAVENNA	N68329	339406
SATCOMDET NORTHWEST	N42063	446139
SER	D00025, N00070	511919
SER BUMED	N00018	448906
SER LAB/CNM	N00078	448906
SER LANTFLT	N00060	446139
SER NAVCOMM	N00063	448906
SER NAVELEC	N00039	448906
SER NAVEUR	N00061	*
SER NAVSEA	N00024	448906
SER NAVSEC	N00069	448906
STRATFORD ENGINE PLANT	C91547	060806
UMATILLA DEPOT	W66G2Z	457938
VERONA	UY7009	308383
21ST SUPCOM	UA2022	*
FT BLISS	W45NSU	299686
FT BRAGG	W36P07	316891
FT BUCHANAN	WF3HBO	*
FT CARSON	W51HU8	051778
FT HOOD	W45NQ7	412242
FT JACKSON	W37N01	381939
FT LEE	W26ADX	447201
FT LEWIS	W12KAA	458286

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<u>INSTALLATION NAME</u>	<u>DoDAAC</u>	<u>NCC NUMBER</u>
FT McCLELLAN	W31BJO	010272
FT McPHERSON	W33NYU	090451
FT MONROE	W26DHV	446139
FT ORD	W62PN4	045795
FT POLK	W42CW1	160098
FT RICHARDSON	WC1J4Q	500280
FT RILEY	W55CVC	148167
FT RUCKER	W31NWR	013075
FT STEWART	W33NYN	093538
FT AMADOR COMUSRSO	AF6155	*

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The Defense Energy Information System (DEIS) is a worldwide, automated, energy management information system. It provides data on petroleum products used as mobility fuels by the military departments as well as most energy sources used for utility services at DoD installations. DEIS consists of two related information systems. DEIS I reports the disposition and consumption of petroleum products, notably aviation		

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20. (continued)

gasoline, jet fuels, motor gasoline, distillate and residual oils within DoD. DEIS II reports the consumption of utility energy, such as electricity, natural gas, purchased steam/hot water, fuel oil and coal. It reports the consumption and generation of energy from renewable sources.

This document presents the System Specification for the enhanced DEIS (DEIS-80). As specified, DEIS-80 improves the utility of the existing system by including additional data, supporting management queries of the DEIS-80 data bases on-line, and providing the capability for automated data analysis.

Since the publication of the DEIS-80 specifications in August 1980, several design features have been identified that required clarification and modification. The design System Specification will continue to serve as the guide for the computer programming of DEIS-80. It adheres to the requirement for system specification in the Automated Data System Documentation Standards.

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