

VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL

Release 4.1

NASA-NEMSCENT-VDD-13

PrISMS Contract

August 31, 1998



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

**VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL
RELEASE 4.1**

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1. INTRODUCTION

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS) Central. This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1. IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS Central, Release 4.1 and has an effective release date of August 31, 1998.

1.2. PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
171	Modifications to NEMS Central to accommodate JPL data
196	Inventory by Exception (Add 29 & 56)

1.3. SCOPE

This VDD provides the functional and technical user of NEMS Central with information regarding the contents, status, and structure of Release 4.1, including the following:

- Changes implemented since Release 4.0.
- Validation procedures to ensure the reliability of release changes.
- References to other documentation affected by this release.
- Detailed software installation instructions.

No waivers are associated with this release.

1.4. CONTACT POINTS

Sustaining Engineering for NEMS Central is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the function and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1. FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2. FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3. CRITICAL ISSUES

This section is not applicable for this release.

2.4. AFFECTED DOCUMENTS

No documents are affected by this release.

2.5. APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1. TECHNICAL SYSTEM INTERFACES

3.2. DATA DICTIONARY CHANGES

This section is not applicable for this release.

3.3. SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4. DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1. Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2. Inventory of Objects

Refer to Appendix D, Paragraph 2.1, for an inventory of Natural object types.

3.4.3. Storage Considerations

The changes represented by this release should not affect storage requirements.

3.4.4. Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Central Software Release 4.1 for detailed software installation procedures.

3.5. OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. KNOWN AND OPEN PROBLEMS

The are no known or open problems related to this release.

Appendix A - ABBREVIATIONS AND ACRONYMS

CC	Consolidation Center
CCR	Change Control Request
CSC	Computer Sciences Corporation
DBA	Database Administrator
DR	Discrepancy Report
FAX	Electronic Facsimile Transmission
IRM	Information Resources Management
JCL	Job Control Language
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPDMS	NASA Property Disposal Management System
SESAAS	Sustaining Engineering Support for Agency wide Administrative Systems
VDD	Version Description Document

Appendix B - GLOSSARY

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

Appendix C - FUNCTIONAL CHANGE VALIDATION PROCEDURES

Index of validation procedures for changes in this release.

Section	CCR	Title
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1.0	171	Modifications to NEMS Central to accommodate JPL data
2.0	196	Inventory By Exception (Add 29 & 56)

Details for the validation procedures follow:

1.0 CCR 171 Modifications to NEMS Central to accommodate JPL data

Modify the way that NEMS Central processes JPL transaction data.

Description of Change

Code was added to delete all JPL data off of the NEMS-CENT-EQUIP file before adding the new data sent from JPL.

Functional Impact

A new job will be added to NEMS Central to be run once a month to process the JPL equipment data.

Validation Procedures

- Validate that the number of JPL NEMS Central items deleted equals the number of JPL NEMS Central items added the month before.
Expected results: The number of items deleted will match the number of items added from the previous month.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
JPLEQPPA	Expand JPL data to NEMS-EQUIPMENT format	Program

2.0 CCR 196 Inventory By Exception (Add 29 & 56)

Currently NEMS and PCM allow inventory by exception for the following transactions: 26, 31, 39, 41, 43, 45, and 46 (not in PCM). (See CCR 149) Need to add transactions 29 (Equipment Location (Change)) and 56 (Repair Update (Change)).

Description of Change

Code was changed for NEMS and PCM to allow transactions 29 and 56 to be processed as Inventory by Exception transactions.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- In NEMS process transactions 29 and 56 that have a discrepancy flag.
Expected result: The Date Inventoried should be updated with the current date and the discrepancy flag should be removed.
- In PCM process transactions C29 and C56 that have a discrepancy flag.
Expected results: The Date Inventoried should be updated with the current date and the discrepancy flag should be removed.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
TRN029P1	Change Transaction 29 (Equipment Location Change)	Program
TRN056P1	Change Transaction 56 (Repair Update Change)	Program

Appendix D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS CENTRAL SOFTWARE RELEASE 4.1

Introduction

Release information:

System Name: NEMS Central
Release Number: 4.1
Release Date: August 31, 1998
Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

The following datasets are located on the NASA Central Distribution Facility as NASA data sets.

- AIMS.NEMSC.PROD.REL410.REL0898.SRC
- AIMS.NEMSC.PROD.REL410.REL0898.DOC

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS CENTRAL files as a precautionary measure prior to installation.

2.0 Copy Source/Object Code

2.1 Copy Source Code

Load the NEMS Central source library from dataset AIMS.NEMSC.PROD.REL410.REL0898.SRC. The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NEMSCENT, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by Type	
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	2
MAPS	0
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	0
PROGRAMS	6
COPYCODE	0
TEXT	0
PROCESS	0
MISCELLANEOUS OBJECTS	0
Total:	8

2.2 List of Source Code Modifications

The following are the modules added, modified and deleted.

Added Modules

1. JPLEQPPA Expand JPL data to NEMS-EQUIPMENT format

Changed Modules

1. ADHOCENT NEMS Adhoc start program (for centers)
2. NEMS NEMS Central start-up program (for centers)
3. TRN029P1 Change Transaction 29 (Equipment Location Change)
4. TRN056P1 Change Transaction 56 (Repair Update Change)
5. RPT641LA

- 6. RPT641LB
- 7. RPT641P2 Inactive Equipment Available For Redist.

2.3 Delete Source Modules

Not applicable with this release.

2.4 Copy Object Modules

Not applicable with this release.

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

Not applicable with this release.

5.0 Catalog Source Code

Run a batch job to catalog (CATALL) all modules in the NEMSCENT or other named library. It is not necessary to catalog the Global Data Area. You should receive 5 NATURAL 0002 errors for modules beginning with ADHOC21* that concern trying to stow a dynamic program. It is not necessary to attempt to resolve the 5 errors. The NASA Batch standard parameters should be used for the compile.

After all objects are compiled, the NEMS CENTRAL application will run under the NASA On-line standard parameter.

6.0 Post-Predict Data Conversion

There is no post-Predict data conversion required.

7.0 Perform Release-Specific Procedures

There are no release-specific procedures with this release.

8.0 Local JCL Mods

There are no Local JCL Mods with this release.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.1 Copy Source Code
- 5.0 Catalog Source Code