

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

Release 4.4

NASA-NEMS-VDD-13

PrISMS Contract

August 31, 1999



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

**VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
RELEASE 4.4**

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August 31, 1999

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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). 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, Release 4.4 and has an effective release date of August 31, 1999.

1.2 PURPOSE OF THE RELEASE

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

| <u>CCR</u> | <u>Title</u> |
|------------|--|
| 221 | Transaction I81, edit on CAP-SENS-CODE |
| 223 | Revisions to the NEMS IFM extract |
| 225 | Add IFM-CENTER-CODE field to NEMS-IFM-PROP-INT-TBL |
| 228 | 1324 – Detail listing |
| 229 | Warning message for Inventory by Account |
| 230 | User numbers mandatory |
| 237 | Valid Disposal Condition Codes |

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

| <u>CCR</u> | <u>Title</u> |
|------------|-----------------------------|
| 226 | Capitalization Errors |
| 227 | I14 – ECN not being created |

1.3 SCOPE

This VDD provides the functional and technical user of NEMS with information regarding the contents, status, and structure of Release 4.4, including the following:

- Changes implemented since Release 4.3.
- 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 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)

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

This section is not applicable for 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

This section is not applicable with this release.

3.2 DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in 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 Software Release 4.4 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 Agencywide 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 |
|----------------|------------|--|
| 1.0 | 221 | 04 transaction conveyor field |
| 2.0 | 223 | Revisions to the NEMS IFM extract |
| 3.0 | *225 | Add IFM-CENTER-CODE field to NEMS-IFM-PROP-INT-TBL |
| 4.0 | *226 | Capitalization Errors |
| 5.0 | 227 | I14 – ECN not being created |
| 6.0 | 228 | 1324 – Detail listing |
| 7.0 | 229 | Warning message for Inventory by Account |
| 8.0 | 230 | User numbers mandatory |
| 9.0 | 237 | Valid Disposal Condition Codes |
| | * | Do not have to test these 2 CCRs. |

Details for the validation procedures follow:

1.0 CCR 221 Transaction I81, edit on CAP-SENS-CODE

The CAP-SENS-CODE edit for transaction I81 is incorrect. It is the opposite of what it is for transaction 81 (TRN081P1).

Description of Change

A change was made to make the CAP-SENS-CODE edit the same as for transaction 81.

Functional Impact

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

Validation Procedures

- Execute a transaction I81 (Disposal of NASA held equipment by NEMS Reutilization Coordinator) for an ECN that has a CAP-SENS-CODE of 'M' or 'P' or 'Q' or 'N' and COST greater than or equal \$1000.
Expected result: Transaction should process without error code 568 (ERROR 568 - CAP SENS CODE MUST BE M, N, P OR Q (COST GE \$1000 FOR N)).

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| TRNI81P1 | Delete Transaction I81 (Disposal Of NASA Held Equipment By NEMS Reutilization Coordinator) | Program |

2.0 CCR 223 Revisions to the NEMS IFM extract

There have been several changes to the NEMS IFM extract. 1) Table 060 (FSC/OCC) needs a capitalization indicator added. Object Class Codes that begin with 31 should have an indicator of C (Capitalized) and Object Class Codes that begin with 26 should have an indicator of N (Non-Capitalized). 2) For the Trailer Record Type the correct number of delimiters is two (not three). 3) The sub_gl_acct should be derived the following way: positions 1-2 (first 2 positions of doc_dept), positions 3-4 (hard coded with 00), and positions 5-6 (last two digits of the gl_acct).

Description of Change

Code was changed so that NEMS will get the capitalized Object Class Code. The number of delimiters for the Trailer Record Type (ENDOFFILE) record has been changed to two. The sub_gl_acct field will be derived according to the specifications above.

Functional Impact

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

Validation Procedures

- Make sure the IFM extract process runs (MSD011P1).
Expected result: The Object Class Code field will be populated with the capitalized Object Class Code. The number of delimiters (^) on the ENDOFFILE record should be 2 (one between the first and second fields and one between the second and third fields).

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|----------------------|-------------|
| MSD011P1 | Create IFM flat file | Program |

3.0 CCR 225 Add IFM-CENTER-CODE field to NEMS-IFM-PROP-INT-TBL

The cur_doc_no field must be unique across all centers. The field IFM-CENTER-CODE needs to be added to the NEMS-IFM-PROP-INT-TBL which will allow this field to be crosswalked to the Installation (table 020) or the Activity Address (table 100).

Description of Change

The field IFM-CENTER-CODE field was added to the NEMS-IFM-PROP-INT-TBL file for table 020. The IFM-CENTER-CODE will be included as the 3rd byte of the cur_doc_no field. (L = LARC, A = ARC, C = GRC, D = DFRC, G = GSFC, H = HQ, N = JPL, M = MSFC, J = JSC, K = KSC, and S = SSC).

Functional Impact

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

Validation Procedures

- Make sure the IFM extract process runs (MSD011P1).
Expected result: The IFM-CENTER-CODE will be the third byte of the cur_doc_no field.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|----------------------|-------------|
| MSD011P1 | Create IFM flat file | Program |

4.0 CCR 226 Capitalization Errors

NEMS Central – Transaction 38 is missing a move to work file 6 for the CAPITALIZATION-AMT. NEMS – MOVE is missing for the PREV-CAPITALIZATION-AMT. ADHOC report (955) will not display the new fields.

Description of Change

The missing MOVE statements for the PREV-CAPITALIZATION-AMT fields were added. The 955 report display was corrected.

Functional Impact

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

Validation Procedures

- Schedule ADHOC report (955) to run in the nightly batch cycle. Select several fields to be displayed on the report. Run the nightly batch cycle.
Expected result 1: Report 955 will run with the selected fields displayed on the report.
Expected result 2: The NEMS-CUMM-TRANS file will be created with the PREV-CAPITALIZATION-AMT field on the file.
Expected result 3: For centers that use the NEMS-PRIOR-MONTH file. The NEMS-PRIOR-MONTH file will be created with the PREV-CAPITALIZATION-AMT.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| MSD008P6 | Month To Date Extract Program | Program |
| MSM002P1 | Copy NEMS-MONTH-TRANS to NEMS-CUMM-TRANS and purge | Program |
| MSX001P1 | Copy NEMS-MONTH-TRANS to NEMS-PRIOR-MONTH | Program |
| RPT955P2 | Dynamic ADHOC Batch Report | Program |
| TRN014P2 | Add Transaction 14 – Retag | Program |

5.0 CCR 227 I14 – ECN not being created

On an I14 transaction the old ECN is being written to the History file but the new ECN is not being written to the Equipment file.

Description of Change

Code was changed so that the new ECN will be written to the Equipment file.

Functional Impact

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

Validation Procedures

- Process a transaction I14.
Expected result: The old ECN will be written to the History file and the new ECN will be written to the Equipment file.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|------------------------------------|-------------|
| TRNI14P3 | Transaction I14 Processing Program | Program |

6.0 CCR 228 – 1324 Detail Listing

Currently the 410 report is hard to debug. Users need a detail listing of what makes up the 410 report.

Description of Change

2 new reports were created. The first report (411) will list the summary of transactions and CAP-SENS-CODE for each line of the 410 report. The second report (412) will list the detail and summary information for each line of the 410 report.

Functional Impact

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

Validation Procedures

- Schedule and run the 411 report. (NOTE: The 411 report will automatically run the 410 report.)
Expected results: The 410 and 411 reports should run successfully. The totals on the 411 report for each line should balance to the 410 report. When the 410 report runs it should create a file to be used by the 411 and 412 reports.
- Schedule and run the 412 report.
Expected results: The 412 report should run successfully. The totals for the 412 report should match the 411 and 410 report totals.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| JCLGENP2 | JCL Generator – Reports | Program |
| RPT410P1 | 1324 - Controlled Equipment Report | Program |
| RPT411P1 | 1324 - Controlled Equipment Report (Summary) | Program |
| RPT411P2 | 1324 – Controlled Equipment Report (Summary) | Program |
| RPT412P1 | 1324 - Controlled Equipment Report (Detail) | Program |

7.0 CCR 229 – Warning Message for Inventory by Account

Users need a warning message to let them confirm that they want to close the Inventory by Account. (Menu options from the Inventory Main Menu – 2 (Inventory by Account), 3 (Process/Close Account), 2 (Close Account)).

Description of Change

Code was changed to display a message asking for confirmation to close the Inventory by Account.

Functional Impact

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

Validation Procedures

- Select the menu option to close the Inventory by Account.
Expected result: A message will be displayed asking for confirmation to close the Inventory by Account.
- Enter a 'X' in the confirmation and press ENTER.
Expected result: A message indicating the inventory was not closed will be displayed.
- Select the menu option to close the Inventory by Account.
Expected result: A message will be displayed asking for confirmation to close the Inventory by Account.
- Enter a 'Y' in the confirmation and press ENTER.
Expected result: A message indicating the inventory was closed will be displayed.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|-------------------------|-------------|
| INVPRCP1 | Inventory Process/Close | Program |
| INVPRCP2 | Inventory Process/Close | Program |

8.0 CCR 230 User numbers mandatory

User number is currently only mandatory for sensitive items. Requirement is to make the user number mandatory on all items.

Description of Change

Code was changed to make the User Number a mandatory field.

Functional Impact

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

Validation Procedures

- Execute the following transactions in NEMS: 01, 02, 04, 05, 06, 08, 09, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 26, 39, 41, 46, 52, and 60
Expected result: User number will be a required field.
- Execute the following transactions in NEMS Inventory: I04, I06, I08, I09, I10, I11, I12, I13, I18, I19, I20, I21, I26, and I39.
Expected result: User number will be a required field.
- Execute the following transactions in NEMS PCM: C26, C38, C39, C41, C43, C45, C52, and C60.
Expected result: User number will be a required field.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|---|-------------|
| (NEMS) | | |
| TRN001P1 | Add Transaction 01 (Receipt By Purchase-NASA Funded) | Program |
| TRN002P1 | Add Transaction 02 (Receipt By Purchase-OGA Funded) | Program |
| TRN004P1 | Add Transaction 04 (Receipt By Transfer-From NASA Installation) | Program |
| TRN005P1 | Add Transaction 05 (Receipt By Transfer-From OGA) | Program |
| TRN006P1 | Add Transaction 06 (Receipt By Transfer-From Contractor) | Program |
| TRN008P1 | Add Transaction 08 (Receipt From Lease In) | Program |
| TRN009P1 | Add Transaction 09 (Receipt From Loan In) | Program |
| TRN010P1 | Add Transaction 10 (Receipt From Fabrication) | Program |
| TRN011P1 | Add Transaction 11 (Receipt From Assembly/Disassembly) | Program |
| TRN012P1 | Add Transaction 12 (Receipt From Found On Station) | Program |
| TRN013P1 | Add Transaction 13 (Receipt From Excess) | Program |
| TRN016P1 | Add Transaction 16 (Receipt By Transfer From Real To Personal Property) | Program |
| TRN017P1 | Add Transaction 17 (Receipt from Non-Government Source) | Program |

| | | |
|----------|--|---------|
| TRN018P1 | Add Transaction 18 (Receipt From Not Previously Meeting Criteria for Tagging) | Program |
| TRN019P1 | Add Transaction 19 (Reinstating Items Previously Lost On Survey) | Program |
| TRN020P1 | Add Transaction 20 (Receipt From Borrow In) | Program |
| TRN021P1 | Add Transaction 21 (Receipt - Lease To Purchase) | Program |
| TRN026P1 | Change Transaction 26 (Custodian Account Change) | Program |
| TRN039P1 | Change Transaction 39 (Borrowed Out-Returned) | Program |
| TRN041P1 | Change Transaction 41 (Loan/Lease Out-Returned) | Program |
| TRN046P1 | Change Transaction 46 (Cap/Sens Code And NSN Change) | Program |
| TRN052P1 | Change Transaction 52 (Excess Equipment Turn-In By Custodian) | Program |
| TRN060P2 | Change Transaction 60 (NASA Held Equipment Record Data Change) | Program |
| (INV) | | |
| TRNI04P1 | Add Transaction I04 (Receipt By Transfer-From NASA Installation) | Program |
| TRNI06P1 | Add Transaction I06 (Receipt By Transfer-From Contractor) | Program |
| TRNI08P1 | Add Transaction I08 (Receipt From Lease In) | Program |
| TRNI09P1 | Add Transaction I09 (Receipt From Loan In) | Program |
| TRNI10P1 | Add Transaction 10 (Receipt From Fabrication) | Program |
| TRNI11P1 | Add Transaction I11 (Receipt From Assembly/ Disassembly) | Program |
| TRNI12P1 | Add Transaction I12 (Receipt From Found On Station) | Program |
| TRNI13P1 | Add Transaction I13 (Receipt From Excess) | Program |
| TRNI18P1 | Add Transaction I18 (Receipt From Not Previously Meeting Criteria For Tagging) | Program |
| TRNI19P1 | Add Transaction I19 (Reinstating Items Previously Lost On Survey) | Program |
| TRNI20P1 | Add Transaction I20 (Receipt From Borrow In) | Program |
| TRNI21P1 | Add Transaction 21 (Receipt - Lease To Purchase) | Program |
| TRNI26P1 | Change Transaction I26 (Custodian Account Change) | Program |
| TRNI39P1 | Change Transaction I39 (Borrowed Out-Returned) | Program |
| (PCM) | | |
| TRNC26N1 | Change Transaction 26 | |
| TRNC26P1 | Change Transaction 26 (Custodian Account Change) | Program |
| TRNC38M1 | | Map |
| TRNC39P1 | Change Transaction 39 (Borrowed Out-Returned) | Program |
| TRNC41M1 | | Map |

| | | |
|----------|---|---------|
| TRNC41P1 | Change Transaction 41 (Loaned/Leased Out-Returned) | Program |
| TRNC43P1 | Change Transaction 43 (Loan Pool Out-Returned) | Program |
| TRNC45P1 | Change Transaction 45 (Storage In-Returned) | Program |
| TRNC52M1 | | Map |
| TRNC52N1 | Change Transaction 52 | |
| Subpgm | | |
| TRNC52P1 | Change Transaction 52 (Excess Equipment Turn-In By Custodian) | Program |
| TRNC60P2 | Change Transaction 60 (NASA Held Equipment Data Change) | Program |
| TRNWRNS1 | Basic Inventory Status Check Subprogram | Subpgm |

9.0 CCR 237 Valid Disposal Condition Codes

The valid disposal condition codes are currently 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. The new valid disposal condition codes that GSA will accept are 1 (Excellent), 4 (Usable), 7 (Repairable), X (Salvage), and S (Scrap).

Description of Change

Utility programs were written to change table 510 and the NEMS-EQUIPMENT and NEMS-TRANSFER files.

Functional Impact

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

Validation Procedures

- Find cases on the NEMS-EQUIPMENT file that have condition codes of 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. Run NEUEQPPA in batch.
Expected Results: The cases with condition codes of 1, 4, 7, S, and X should have the same condition codes. The other condition codes should be converted as follows: 2 = 1, 3 = 4, 5 = 4, 6 = 4, 8 = 7, and 9 = 7.
- Find cases on the NEMS-TRANSFER file that have condition codes of 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. Run NEUXFRPA in batch.
Expected Results: The cases with condition codes of 1, 4, 7, S, and X should have the same condition codes. The other condition codes should be converted as follows: 2 = 1, 3 = 4, 5 = 4, 6 = 4, 8 = 7, and 9 = 7.
- Run NEU510PA.
Expected Results: Through the adhoc look at table 510. The values for condition codes should be 1, 4, 7, S, and X.
- Add an item using condition codes 2, 3, 5, 6, 8, and 9.
Expected Results: An error should be displayed indicating the condition code is invalid.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| NEUEQPPA | Update Condition Codes on Equipment file | Program |
| NEUXFRPA | Update Condition Codes on Transfer file | Program |
| NEU510PA | Update Condition Codes on Table 510 | Program |

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 4.4

Introduction

Release information:

System Name: NEMS
Release Number: 4.4
Release Date: August 31, 1999
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)

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.NEMS.PROD.R440.R0899.SRC
- AIMS.NEMS.PROD.R440.R0899.PRD
- AIMS.NEMS.PROD.R440.R0899.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 files as a precautionary measure prior to installation.

2.0 Copy Source/Object Code

2.1 Copy Source Code

A. Source code is installed in three separate libraries. Source code for programs modified in this release version were unloaded in the NATUNLD format, these programs all have specific destination libraries as shown below. All the NEMS programs have a destination of NEMS; NEMSINV programs have a destination of NEMSINV and NEMSPCM have a destination of NEMSPCM.

1. Load the NEMS source library from dataset:

AIMS.NEMS.PROD.R440.R0899.SRC.

The source programs were unloaded using the Natural utility NATUNLD.

The NEMS programs:

- | | |
|--------------|---|
| 1. MSD008P6 | Month To Date Extract Program |
| 2. MSD011P1 | Create IFM flat file |
| 3. MSM002P1 | Copy NEMS-MONTH-TRANS to NEMS-CUMM-TRANS and purge |
| 4. MSX001P1 | Copy NEMS-MONTH-TRANS to NEMS-PRIOR-MONTH |
| 5. NEMS | NEMS Start Program |
| 6. NEUEQPPA | Update Condition Codes on Equipment file |
| 7. NEUXFRPA | Update Condition Codes on Transfer file |
| 8. NEU510PA | Update Condition Codes on Table 510 |
| 9. RPT410P1 | 1324 - Controlled Equipment Report |
| 10. RPT411P1 | 1324 - Controlled Equipment Report (Summary) |
| 11. RPT411P2 | 1324 - Controlled Equipment Report (Summary) |
| 12. RPT412P1 | 1324 - Controlled Equipment Report (Detail) |
| 13. RPT955P2 | Dynamic ADHOC Batch Report |
| 14. TRN001P1 | Add Transaction 01 (Receipt By Purchase-NASA Funded) |
| 15. TRN002P1 | Add Transaction 02 (Receipt By Purchase-OGA Funded) |
| 16. TRN004P1 | Add Transaction 04 (Receipt By Transfer-From NASA Installation) |
| 17. TRN005P1 | Add Transaction 05 (Receipt By Transfer-From OGA) |
| 18. TRN006P1 | Add Transaction 06 (Receipt By Transfer-From Contractor) |
| 19. TRN008P1 | Add Transaction 08 (Receipt From Lease In) |
| 20. TRN009P1 | Add Transaction 09 (Receipt From Loan In) |
| 21. TRN010P1 | Add Transaction 10 (Receipt From Fabrication) |
| 22. TRN011P1 | Add Transaction 11 (Receipt From Assembly/Disassembly) |

| | |
|--------------|---|
| 23. TRN012P1 | Add Transaction 12 (Receipt From Found On Station) |
| 24. TRN013P1 | Add Transaction 13 (Receipt From Excess) |
| 25. TRN014P2 | Add Transaction 14 - Retag |
| 26. TRN016P1 | Add Transaction 16 (Receipt By Transfer From Real To Personal Property) |
| 27. TRN017P1 | Add Transaction 17 (Receipt from Non-Government Source) |
| 28. TRN018P1 | Add Transaction 18 (Receipt From Not Previously Meeting Criteria for Tagging) |
| 29. TRN019P1 | Add Transaction 19 (Reinstating Items Previously Lost On Survey) |
| 30. TRN020P1 | Add Transaction 20 (Receipt From Borrow In) |
| 31. TRN021P1 | Add Transaction 21 (Receipt - Lease To Purchase) |
| 32. TRN026P1 | Change Transaction 26 (Custodian Account Change) |
| 33. TRN039P1 | Change Transaction 39 (Borrowed Out-Returned) |
| 34. TRN041P1 | Change Transaction 41 (Loan/Lease Out-Returned) |
| 35. TRN046P1 | Change Transaction 46 (Cap/Sens Code And NSN Change) |
| 36. TRN052P1 | Change Transaction 52 (Excess Equipment Turn-In By Custodian) |
| 37. TRN060P2 | Change Transaction 60 (NASA Held Equipment Record Data Change) |

will be loaded to the application library NEMS, replacing any existing programs of the same name.

2. Load the NEMSINV source library from dataset:

AIMS.NEMS.PROD.R440.R0899.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSINV programs:

| | |
|--------------|--|
| 1. INV | Inventory Start Program |
| 2. INVPRCP1 | Inventory Process/Close |
| 3. INVPRCP2 | Inventory Process/Close |
| 4. TRNI04P1 | Add Transaction I04 (Receipt By Transfer-From NASA Installation) |
| 5. TRNI06P1 | Add Transaction I06 (Receipt By Transfer-From Contractor) |
| 6. TRNI08P1 | Add Transaction I08 (Receipt From Lease In) |
| 7. TRNI09P1 | Add Transaction I09 (Receipt From Loan In) |
| 8. TRNI10P1 | Add Transaction I10 (Receipt From Fabrication) |
| 9. TRNI11P1 | Add Transaction I11 (Receipt From Assembly/Disassembly) |
| 10. TRNI12P1 | Add Transaction I12 (Receipt From Found On Station) |
| 11. TRNI13P1 | Add Transaction I13 (Receipt From Excess) |
| 12. TRNI14P3 | Transaction I14 Processing Program |

- 13. TRNI18P1 Add Transaction I18 (Receipt From Not Previously Meeting Criteria For Tagging)
- 14. TRNI19P1 Add Transaction I19 (Reinstating Items Previously Lost On Survey)
- 15. TRNI20P1 Add Transaction I20 (Receipt From Borrow In)
- 16. TRNI21P1 Add Transaction 21 (Receipt - Lease To Purchase)
- 17. TRNI26P1 Change Transaction I26 (Custodian Account Change)
- 18. TRNI39P1 Change Transaction I38 (Borrowed Out-Returned)
- 19. TRNI81P1 Delete Transaction I81 (Disposal Of NASA Held Equipment By NEMS Reutilization Coordinator)

will be loaded to the application library NEMSINV, replacing any existing programs of the same name.

3. Load NEMSPCM source library from dataset:

AIMS.NEMS.PROD.R440.R0899.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSPCM Programs:

- 1. PCMMAP
- 2. TRNC26N1 Change Transaction 26
- 3. TRNC26P1 Change Transaction 26 (Custodian Account Change)
- 4. TRNC38M1
- 5. TRNC39P1 Change Transaction 39 (Borrowed Out-Returned)
- 6. TRNC41M1
- 7. TRNC41P1 Change Transaction 41 (Loaned/Leased Out-Returned)
- 8. TRNC43P1 Change Transaction 43 (Loan Pool Out-Returned)
- 9. TRNC45P1 Change Transaction 45 (Storage In-Returned)
- 10. TRNC52M1
- 11. TRNC52N1 Change Transaction 52
- 12. TRNC52P1 Change Transaction 52 (Excess Equipment Turn-In By Custodian)
- 13. TRNC60P2 Change Transaction 60 (NASA Held Equipment Data Change)
- 14. TRNWRNS1 Basic Inventory Status Check Subprogram

will be loaded to the application library NEMSPCM, replacing any existing programs of the same name.

The source module counts included in this release are listed below:

| Natural Source Modules by Type | Count |
|--------------------------------|-------|
| GLOBAL DATA AREA | 0 |
| LOCAL/PARAM DATA AREA | 0 |
| MAPS | 4 |
| HELP ROUTINES | 0 |
| SUBROUTINES | 0 |
| SUBPROGRAMS | 3 |
| PROGRAMS | 64 |
| COPYCODE | 0 |
| TEXT | 0 |
| PROCESS | 0 |
| MISCELLANEOUS OBJECTS | 0 |
| Total: | 71 |

2.2 List of Source Code Modifications

The following are the modules added, and modified, and deleted. **(NOTE: Modules in BOLD have been changes since the Beta release.)**

Added Modules:

RPT411P1 Program
RPT411P1 Program
RPT412P1 Program

Modified Modules:

INV Program
INVPRCP1 Program
INVPRCP2 Program
JCLGENP2 Program
MSD008P6 Program
MSD011P1 Program
MSM002P1 Program
MSX001P1 Program
NEMS Program
NEUEQPPA Program
NEUXFRPA Program
NEU510PA Program
PCMMAP Map
RPT410P1 Program
RPT955P2 Program
TRN001P1 Program
TRN002P1 Program
TRN004P1 Program

| | |
|----------|------------|
| TRN005P1 | Program |
| TRN006P1 | Program |
| TRN008P1 | Program |
| TRN009P1 | Program |
| TRN010P1 | Program |
| TRN011P1 | Program |
| TRN012P1 | Program |
| TRN013P1 | Program |
| TRN014P2 | Program |
| TRN016P1 | Program |
| TRN017P1 | Program |
| TRN018P1 | Program |
| TRN019P1 | Program |
| TRN020P1 | Program |
| TRN021P1 | Program |
| TRN026P1 | Program |
| TRN039P1 | Program |
| TRN041P1 | Program |
| TRN046P1 | Program |
| TRN052P1 | Program |
| TRN060P2 | Program |
| TRNC26N1 | Subprogram |
| TRNC26P1 | Program |
| TRNC38M1 | Map |
| TRNC39P1 | Program |
| TRNC41M1 | Map |
| TRNC41P1 | Program |
| TRNC43P1 | Program |
| TRNC45P1 | Map |
| TRNC52M1 | Map |
| TRNC52N1 | Subprogram |
| TRNC52P1 | Program |
| TRNC60P2 | Program |
| TRNWRNS1 | Subprogram |
| TRNI04P1 | Program |
| TRNI06P1 | Program |
| TRNI08P1 | Program |
| TRNI09P1 | Program |
| TRNI10P1 | Program |
| TRNI11P1 | Program |
| TRNI12P1 | Program |
| TRNI13P1 | Program |
| TRNI14P3 | Program |
| TRNI18P1 | Program |
| TRNI19P1 | Program |
| TRNI20P1 | Program |

| | |
|----------|---------|
| TRNI21P1 | Program |
| TRNI26P1 | Program |
| TRNI39P1 | Program |
| TRNI81P1 | Program |

Deleted Modules:

| | |
|----------|---------|
| LOADMNTN | Program |
| MSDRECVR | Program |
| MSD408P1 | Program |
| MSD408P9 | Program |

2.3 Copy Object Modules

Not applicable with this release.

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

4.1 Data Dictionary Changes

This release will include the new enhancements for version 4.4.0. Details for changes in this release can be found under paragraph 4.1.3 Physical File Changes or by performing Predict reporting on the keyword NEMS-4.4.0.

Use SYSDICBE to load the PREDICT modifications from the dataset AIMS.NEMS.BETA.R440.R0799.PRD.

The following NEMS DDM should be generated after the PREDICT load is completed.

NEMS-IFM-PROP-INT-TBL

4.1.1 Inventory of Objects

The object types and inventory listed below represent a comprehensive count of the Predict object modules for this release.

PREDICT Objects by Type:

| | | |
|------------------------|---|----|
| Keyword | - | 1 |
| ADABAS Files and Views | - | 1 |
| Data Elements | - | 67 |

4.1.2 Storage Considerations

Not applicable with this release.

4.1.3 Physical File Changes

Add the following fields:

| NEMS-IFM-PROP-INT-TBL | | File # 145 | | | | | | | |
|-----------------------|---|----------------------------|----|--------|-------|---|---|----|---|
| Ty | L | Field ID | F | Length | Occ | D | U | DB | S |
| *- | - | ----- | *- | ----- | ----- | * | * | -- | * |
| 1 | | IFM-CENTER-CODE | A | 1.0 | | | | AL | N |
| 1 | | IFM-TXN-RVRSL-IND | A | 1.0 | | | | AM | N |
| 1 | | IFM-DOC-NMBR-DOC-TYPE-CODE | A | 2.0 | | | | AN | N |
| 1 | | IFM-TXN-DOC-NMBR-IND | A | 1.0 | | | | AO | N |

```
ADADBS NEWFIELD FILE=145
ADADBS FNDEF='01,AL,1,A,NU'
ADADBS FNDEF='01,AM,1,A,NU'
ADADBS FNDEF='01,AN,2,A,NU'
ADADBS FNDEF='01,AO,1,A,NU'
```

5.0 Catalog Source Code

The following modules should be changed before the CATALL is run. Modules NEMS, INV, and PCM need to be modified at each center to contain the correct contact name and phone number for each center. Replace the ?? in MSD008P1 and MSD008P5 with your installation number.

Run a batch job to catalog (CATALL) all modules in the NEMS library using the NASA Batch standard parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. **It is not necessary** to catalog the Global Data Area (GDA).

You should receive 39 NATURAL 0303 errors for modules that begin with RPT* that concern page overflow and 32 programs will produce NATURAL 0002 errors. Program MSC005P1 will also not compile. There should be a total of 72 NATURAL errors.

A list of errors found above and dispositions of these results follows:

- To compile the NATURAL 0303 errors correctly, run another CATALL for the RPT* modules in the NEMS library using the NASA Batch standard parameters. You

should receive 12 NATURAL 0002 errors. Ignore the 0002 errors because these objects are dynamic.

- The 32 NATURAL 0002 errors from the first CATALL are to be **IGNORED** because these objects are dynamic.
- MSX001P1 will only compile for centers that use the NEMS-PRIOR-MONTH file.
- **IGNORE** any errors for program MSC005P1.

Run a batch job to catalog (CATALL) all modules in the NEMSINV library using the NASA Batch standard parameters. It is not necessary to catalog the Global Data Area (GDA). There should be no errors received.

Run an online catalog (CATALL) on module TRNI34P1 to prevent problems with access to the second screen.

Run a batch job to catalog (CATALL) all modules in the NEMSPCM library using the NASA Batch standard parameters. It is not necessary to catalog the Global Data Area (GDA). There should be two NATURAL 0043 errors received. See 9.0 Installation Checklist for instructions on how to correct these errors.

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

6.0 Post-Predict Data Conversion

Not applicable with this release.

7.0 Perform Release-Specific Procedures

7.1 Add reports 411 and 412 to table S05

| |
|---|
| NEMS - S05 - REPORT NUMBER TABLE |
| ENTER FUNCTION (A=ADD, C=CHANGE, D=DELETE, X=EXIT): A |
| REPORT NUMBER: 411 |
| REPORT NAME: 1324 - CAPITAL EQUIPMENT (SUMMARY) |
| REPORT OPTIONS (Y/N): N |
| ENTER 'C' TO CANCEL: _ |

NEMS - S05 - REPORT NUMBER TABLE

ENTER FUNCTION (A=ADD, C=CHANGE, D=DELETE, X=EXIT): A

REPORT NUMBER: 412

REPORT NAME: 1324 - CAPITAL EQUIPMENT (DETAIL)

REPORT OPTIONS (Y/N): N

ENTER 'C' TO CANCEL: _

NOTE: It is not necessary to schedule the 410 report when the 411 report has been scheduled. The 411 report automatically runs the 410 report in order to create the file that is used in the 411 and 412 reports. Report 412 should not be run on the same night as the 410 or 411 reports.

7.2 Disposal Condition Codes

Run the following programs in batch to update the condition codes on the NEMS-EQUIPMENT, NEMS-TRANSFER, and table 510 on NEMS-TABLE: NEUEQPPA, NEUXFRPA, and NEU510PA.

8.0 Local JCL Mods

Other JCL changes may be necessary due to differences in each center's JCL. Changes are in **bold**:

NOTE: The change to the following line to turn the wfopfa parm on is no longer necessary. It should not be included.

```
JCLEXEC 100010XXXX X    XX//NEMSNAT1 EXEC N02Z,DD='DD=-000',PRM='WFOPFA=ON'

JCLDD  100300XXXX X    XX//CMWKF01 DD SYSOUT=(A,INTRDR),DCB=(RECFM=F,LRECL=80,BLKSIZE=6160)
JCLDD  100320XXXX X    XX//CMWKF02 DD DSN=MSIRM.NEMS.JOURNAL,DISP=MOD
JCLMSM02100340        M //CMWKF03 DD DSN=&&WORK3,DISP=(NEW,PASS),
JCLMSM02100345        M //                DCB=(RECFM=FB,LRECL=623,BLKSIZE=6230),
JCLMSM02100350        M //                UNIT=SYSDA,SPACE=(CYL,(1,3))
JCLMSM02100360        M //CMWKF04 DD DSN=MSIRM.NEMS.MNTHTRNS(+1),
JCLMSM02100370        M //                DISP=(NEW,CATLG,DELETE),DCB=(NACADM.MD,
JCLMSM02100380        M //                RECFM=FB,LRECL=623,BLKSIZE=6230),UNIT=SYSDA,
JCLMSM02100390        M //                SPACE=(CYL,(1,3))
```

```

JCLDD  100700      X //CMWKF14 DD DSN=MSIRM.NEMS.NTS.TRANSFER(+1),DISP=(,CATLG,DELETE),
JCLDD  100710      X //                      DCB=(NACCADM.MD,RECFM=FB,LRECL=720,BLKSIZE=5760),
JCLDD  100720      X //                      UNIT=SYSDA,SPACE=(CYL,(1,1),RLSE)
JCLDD08 100740     X //CMWKF18 DD DSN=MSIRM.NEMSDD.RPT410.DATA08,
JCLDD08 100742     X //                      UNIT=SYSDA,SPACE=(CYL,(5,5),RLSE),
JCLDD08 100744     X //                      DCB=(RECFM=FB),DISP=(OLD,KEEP,KEEP),
JCLDD81 100750     X //CMWKF18 DD DSN=MSIRM.NEMSDD.RPT410.DATA81,
JCLDD81 100752     X //                      UNIT=SYSDA,SPACE=(CYL,(5,5),RLSE),
JCLDD81 100754     X //                      DCB=(RECFM=FB),DISP=(OLD,KEEP,KEEP)
JCLDD  100780XXXX X XX//CMSYNIN DD *
JCLNATLG100790X XX X X NEDEVL,NEBATCH
JCLNATLG100800X XX X X %*
JCLNATLG100810X XX X X NEBATCH

```

The file(s) for CMWKF18 should be pre-allocated before using. The LRECL=80 and the BLKSIZE=4640. Note: The JCLDD99 (99 is for the subinstallation (08=MSFC, 81=PrISMS)) statement should be added for each subinstallation that will be running the 410, 411, and 412 reports. The dataset names can be whatever you need to make it unique for that subinstallation. You must have at least 1 CMWKF18 for each center.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.1 Copy Source Code
- 4.0 Install Predict
- 5.0 Catalog Source Code
 - Update the Password to the NEMS-PCM-AUTH file in PCM programs: MNUC00P1, MNUC01P1; RPTSUBP1; TRNC00P1; TRNC26P1; TRNC52P1; TRNUPDP1. This step is optional if the Center chooses not to put a password on the NEMS-PCM-AUTH file.
 - A. Find out from your DBA the ADABAS Security password assigned to the NEMS-PCM-AUTH file at your Installation.
 - B. Logon to the NEMSPCM and use the Scan utility to search the NEMSPCM programs listed above for the word:
 - PASSWORD = 'NEMSPCM' and replace it with:
 - PASSWORD = 'Your site Password'. This scan and replace will change all references to the password, found in the newly released NEMS Release Version 4.4.0 modules, with your Installation's password.
- 7.0 Perform Release-Specific Procedures
- 7.1 Add reports 411 and 412 to table S05
- 7.2 Disposal Condition Codes
- 8.0 Local JCL Mods