

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

Release 6.1.1

NASA-NEMS-VDD-13

PrISMS Contract

September 30, 2003



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 6.1.1**

Submitted by

| | |
|----------------------|------|
| Neal Cantrell | Date |
| Functional Area Lead | |

Reviewed by

CSC

| | |
|---|------|
| Lindon Gargis | Date |
| Agencywide IRM, Property and Procurement Systems | |

| | |
|--------------------------|------|
| Jim Cofer | Date |
| Configuration Management | |

| | |
|----------------|------|
| Hector Garcia | Date |
| Agencywide IRM | |

| | |
|----------------|------|
| Richard Bishop | Date |
| DBA | |

Prepared by

Computer Sciences Corporation, Contract NAS8-60000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

September 30, 2003

TABLE OF CONTENTS

| Section | Page |
|---|------|
| 1. INTRODUCTION | 1-1 |
| 1.1 IDENTIFICATION OF THE RELEASE | 1-1 |
| 1.2 PURPOSE OF THE RELEASE..... | 1-1 |
| 1.3 SCOPE | 1-2 |
| 1.4 CONTACT POINTS | 1-2 |
| 2. FUNCTIONAL INFORMATION | 2-1 |
| 2.1 FUNCTIONAL CHANGES | 2-1 |
| 2.2 FUNCTIONAL INTERFACES | 2-1 |
| 2.3 CRITICAL ISSUES | 2-1 |
| 2.4 AFFECTED DOCUMENTS | 2-1 |
| 2.5 APPLICATION SYSTEM ADMINISTRATION | 2-1 |
| 3. TECHNICAL INFORMATION | 3-1 |
| 3.1 TECHNICAL SYSTEM INTERFACES..... | 3-1 |
| 3.2 DATA DICTIONARY CHANGES | 3-1 |
| 3.3 SOFTWARE OBJECT CHANGES | 3-1 |
| 3.4 DATABASE ADMINISTRATION..... | 3-1 |
| 3.4.1 Release Dataset Names..... | 3-1 |
| 3.4.2 Inventory of Objects | 3-1 |
| 3.4.3 Storage Considerations | 3-1 |
| 3.4.4 Installation Procedures | 3-1 |
| 3.5 OPERATIONAL PREPARATION | 3-1 |
| 4. KNOWN AND OPEN PROBLEMS | 4-1 |
| APPENDIX A - ABBREVIATIONS AND ACRONYMS | A-1 |
| APPENDIX B - GLOSSARY..... | B-1 |

TABLE OF CONTENTS

| Section | Page |
|---|-------------|
| APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES | C-1 |
| APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 6.1.1 | D-1 |

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 6.1.1 and has an effective release date of September 30, 2003.

1.2 PURPOSE OF THE RELEASE

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

| <u>CCR</u> | <u>Title</u> |
|------------|--|
| 360 | Add NEMS-YEARLY-TRANS file to the batch adhoc report (955) |
| 365 | Bug in Inventory by location report 766 |
| 367 | NEMS History Adhoc – Error 672 |
| 368 | Convert Annual NEMS HQ extract reports to be run for all of NASA |
| 369 | Reports 435 and 422 disagree |
| 370 | VISTA error on Transaction 04, 104 |

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

| <u>CCR</u> | <u>Title</u> |
|------------|--|
| 366 | Duplicate line in ADH992P3 causing error |

1.3 SCOPE

This VDD provides the functional and technical user of NEMS with information regarding the content, status, and structure of Release 6.1.1, including the following:

- Changes implemented since Release 6.1.0;
- 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 is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional 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

The following documents were changed for this release:

NEMS Web Front End User Guide

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, Section 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 6.1.1 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

There 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 | 360 | Add NEMS-YEARLY-TRANS file to the batch adhoc report (955) |
| 2.0 | 365 | Bug in Inventory by location report 766 |
| 3.0 | 366 | Duplicate line in ADH992P3 causing error |
| 4.0 | 367 | NEMS History Adhoc – Error 672 |
| 5.0 | 368 | Convert Annual NEMS HQ extract reports to be run for al of NASA |
| 6.0 | 369 | Reports 435 and 422 disagree |
| 7.0 | 370 | VISTA error on Transaction 04, I04 |

Details for the validation procedures follow:

1.0 CCR 360 - Add NEMS-YEARLY-TRANS file to the batch adhoc report (955)

Description of Change

Code was changed to add the NEMS-YEARLY-TRANS file to the batch adhoc report.

Functional Impact

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

Validation Procedures

- Perform an online NEMS Yearly Trans adhoc for a specified set of data. Then use the same criteria and schedule the batch adhoc report (955) to run against the NEMS Yearly TRANS file.
Expected Results: Output received from the batch adhoc report should match the output received from the online adhoc.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|----------------------------|-------------|
| RPT955P1 | Dynamic Adhoc Batch Report | Program |

2.0 CCR 365 – Bug in Inventory by Location report 766

Location is blank on the Heading Line except for page 1.

Description of Change

Corrected code to add MOVE LOCATION to #LOC after the SORT statement.

Functional Impact

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

Validation Procedures

NEMS

- Schedule and run Inventory report 766 for a center doing an inventory by location.

Expected Results: The 766 report will run successfully and the location will print on all pages of the report.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|---|-------------|
| RPT766P2 | Post Inventory Location Property Report | Program |

3.0 CCR 366 – Duplicate line in ADH992P3 causing error

Received the following error message "NAT0001 Missing / invalid syntax: undefined variable name/keyword on line 440 of program ADH992P3. This error only occurs when there are multiple selections on the second input screen.

Description of Change

Code was changed to comment out the duplicate line.

Functional Impact

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

Validation Procedures

- Perform an Adhoc by field against the Equipment or History file that has selections for the "Where" clause (2nd screen).
Expected Results: Error "NAT0001 Missing/invalid syntax; undefined variable name/keyword" will NOT be received and processing will continue displaying the number of records that match the selection criteria.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|----------------------------|-------------|
| ADH992P3 | Dynamic Adhoc Record Count | Program |

4.0 CCR 367 – NEMS History Adhoc - Error 672

When performing the NEMS History File Adhoc by ECN if more than 1 record is on the History file a screen will be displayed listing the sequence numbers. Since consolidation there are some sequence records that will not be displayed since that record belongs to another installation. If the sequence number for the last record is selected (and not all records are for a center) then error 672 - Must enter a valid sequence number is received. All of the sequence records will be displayed and available on NEMS Central.

Description of Change

Code was changed to remove the check to see if the Sequence Number entered is greater than the Number of History records.

Functional Impact

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

Validation Procedures

- For an ECN that has been deleted by more than 1 installation try to select the highest sequence number displayed.
Expected Results: The ECN information for that sequence number will be displayed.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|---------------------------------------|-------------|
| ADH940P1 | NEMS History File Adhoc ECN Selection | Program |

5.0 CCR 368 – Convert Annual NEMS HQ extract reports to be run for all of NASA

Currently the Annual NEMS HQ extract reports (NEUUEQPA, NEUCEQPA-J) are set up to run for each center. Since the centers have been consolidated the reports should now be set up to run for all of NASA.

Description of Change

Code was added to allow the reports to be run for all of NASA.

Functional Impact

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

Validation Procedures

- Run NEUUEQPA in batch.
Expected Results: This program will create a backup of the NEMS-EQUIPMENT file to be used by the other report programs
- Run NECUEQPA in batch.
Expected Results: This program will produce a work file of total items and total capital value by FSC Code of capitalized items in the NEMS Equipment file.
- Run NEUUEQPB in batch.
Expected Results: This program will produce a work file of Detail data by FSC code of capitalized Items on the NEMS Equipment File.
- Run NEUUEQPC in batch.
Expected Results: This program will produce a work file of Detail data by Heritage code of Heritage Items on the NEMS Equipment File.
- Run NEUUEQPD in batch.
Expected Results: This program will produce a work file of Capital Items that were transferred out to Contractors/Grantees (NEMS TX67) during the last fiscal year.
- Run NEUUEQPE in batch.
Expected Results: This program will produce a work file of Capital Items that were transferred in from Contractors/Grantees (NEMS TX66) during the last fiscal year.
- Run NEUUEQPF in batch.
Expected Results: This program will produce a work file of Capital Items that were transferred to Real Property (NEMS TX 86) during the last fiscal year.
- Run NEUUEQPG in batch.
Expected Results: This program will produce a work file of Capital Items that were disposed of (NEMS TX 80, 81, 90) during the last fiscal year.
- Run NEUUEQPH in batch.
Expected Results: This program will produce a work file of Capital Items that were transferred to Another Agency (NEMS TX 66) during the last fiscal year.
- Run NEUUEQPI in batch.

Expected Results: This program will produce a work file of Capital Items that were transferred from Another Agency (NEMS TX 05) during the last fiscal year.

- Run NEUUEQPJ in batch.

Expected Results: This program will produce a work file of Capital Items that were Reutilized (NEMS TX 13) during the last fiscal year.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| NEUCEQPA | NEMS Capital Equipment by FSC (Summary) | Program |
| NEUCEQPB | NEMS Capital Equipment by FSC (Detail) | Program |
| NEUCEQPC | NEMS Equipment by Heritage Code (Detail) | Program |
| NEUCEQPD | NEMS Capital Equipment – for tx 67 | Program |
| NEUCEQPE | NEMS Capital Equipment – for tx 66 | Program |
| NEUCEQPF | NEMS Capital Equipment – for tx 86 | Program |
| NEUCEQPG | NEMS Capital Equipment – for tx 80, 81, 90 | Program |
| NEUCEQPH | NEMS Capital Equipment – for tx 66 | Program |
| NEUCEQPI | NEMS Capital Equipment – for tx 05 | Program |
| NEUCEQPJ | NEMS Capital Equipment – for tx 13 | Program |

6.0 CCR 369 – Reports 435 and 422 disagree

If a Cap Sens X item was surveyed (before 6.0) and 19ed after conversion, the 435 will pick it up, the 422 (and I imagine the 420) will not. This problem will exist for a long time since Xs that were 71ed before 6.0 could be 19ed at any time.

Description of Change-

Code was added to exclude any Cap Sens Code 'X' items that have been returned.

Functional Impact

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

Validation Procedures

- Schedule and run the 435 report and the 420/422 reports for the same time period..
Expected Results: The counts for the 435 report and the 422 report will match .

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|----------------------|-------------|
| RPT435P1 | Recovery Rate Report | Program |

6.0 CCR 370 – Vista error on Transaction 04, I04

When performing a transaction 04 or I04 depending on how many NEMS History records are found a problem with the VISTA access could occur.

Description of Change-

Code was moved to perform the VISTA access program before the check on the NEMS-HISTORY file.

Functional Impact

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

Validation Procedures

- Process transaction 04 for an ECN that has been Borrowed Out on the NEMS Transfer file.
Expected Results: The transaction will process correctly.
- Process transaction 04 for an ECN that has been Borrowed Out. on the NEMS Transfer file.
Expected Results: The transaction will process correctly.

| <u>MODULE ID</u> | <u>MODULE NAME</u> | <u>TYPE</u> |
|------------------|--|-------------|
| <u>NEMS</u> | | |
| TRN004P1 | Add Transaction 04 (Receipt by Transfer – From NASA Installation) | Program |
| <u>Inventory</u> | | |
| TRNI04P1 | Add Transaction I04 (Receipt by Transfer – From NASA Installation) | Program |

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 6.1

Introduction

Release information:

System Name: NEMS
Release Number: 6.1.1
Release Date: September 30, 2003
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 transient storage DASD volumes under the following data sets names:

MSMOV.NEMS.PROD.R611.R0903.SRC

Where "xx" is replaced by the appropriate NASA Center designation.

AR - ARC
DF - DFRC
GS - GSFC
HQ - HQ
J5 - JSC
KS - KSC
LA - LaRC
LE - GRC (Glenn)
MS - MSFC
SS - SSC

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
- 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

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 programs have a destination of NEMSPCM.

1. Load the NEMS source library from the dataset
MSMOV.NEMS.PROD.R611.R0903.SRC

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

| | | |
|--------------|--|---------|
| 1. ADH940P1 | NEMS History File Adhoc ECN Selection | Program |
| 2. ADH992P3 | Dynamic Adhoc Record Count | Program |
| 3. NEMS | NEMS Banner Screen | Program |
| 4. NEUCEQPA | NEMS Capital Equipment by FSC (Summary) | Program |
| 5. NEUCEQPB | NEMS Capital Equipment by FSC (Detail) | Program |
| 6. NEUCEQPC | NEMS Equipment by Heritage Code (Detail) | Program |
| 7. NEUCEQPD | NEMS Capital Equipment – for tx 67 | Program |
| 8. NEUCEQPE | NEMS Capital Equipment – for tx 66 | Program |
| 9. NEUCEQPF | NEMS Capital Equipment – for tx 86 | Program |
| 10. NEUCEQPG | NEMS Capital Equipment – for tx 80, 81, 90 | Program |

| | | |
|-------------|--|---------|
| 11.NEUCEQPH | NEMS Capital Equipment – for tx 66 | Program |
| 12.NEUCEQPI | NEMS Capital Equipment – for tx 05 | Program |
| 13.NEUCEQPJ | NEMS Capital Equipment – for tx 13 | Program |
| 14.RPT435P1 | Recovery Rate Report | Program |
| 15.RPT766P2 | Post Inventory Location Property Report | Program |
| 16.RPT955P1 | Dynamic Adhoc Batch Report | Program |
| 17.TRN004P1 | Add Transaction 04 (Receipt By Transfer – From NASA Installation) | Program |

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

2. Load the NEMSINV source library from the dataset:
MSMOV.NEMS.PROD.R611.R0903.SRC

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

| | | |
|-------------|---|---------|
| 18.NEMSINV | NEMS Inventory Banner Screen | Program |
| 19.TRNI04P1 | Add Transaction I04 (Receipt By Transfer – From NASA Installation) | Program |

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

3. Load NEMSPCM source library from the dataset:
MSMOV.NEMS.PROD.R611.R0903.SRC

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

None

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 | 0 |
| HELP ROUTINES | 0 |
| SUBROUTINES | 0 |
| SUBPROGRAMS | 0 |
| PROGRAMS | 19 |
| COPYCODE | 0 |
| TEXT | 0 |
| PROCESSOR | 0 |
| MISCELLANEOUS OBJECTS | 0 |
| Total: | 19 |

2.2 List of Source Code Modifications

The following are the modules added, modified, and deleted.

Added Modules:

NEMS

None

INVENTORY

None

PCM

None

Modified Modules:

NEMS

1. ADH940P1 Program
2. ADH992P3 Program
3. NEMS Program
4. NEUCEQPA Program
5. NEUCEQPB Program
6. NEUCEQPC Program
7. NEUCEQPD Program
8. NEUCEQPE Program
9. NEUCEQPF Program

| | |
|--------------|---------|
| 10. NEUCEQPG | Program |
| 11. NEUCEQPH | Program |
| 12. NEUCEQPI | Program |
| 13. NEUCEQPJ | Program |
| 14. RPT435P1 | Program |
| 15. RPT766P2 | Program |
| 16. RPT955P1 | Program |
| 17. TRN004P1 | Program |

Inventory

| | |
|--------------|---------|
| 18. NEMSINV | Program |
| 19. TRNI04P1 | Program |

PCM

None

Deleted Modules:

NEMS

None

Inventory

None

PCM

None

3.0 Pre-Predict Data Conversion

Not Applicable for this release.

4.0 Install Predict

Not Applicable for this release.

5.0 Catalog Source Code

To be performed by the SESAAS DBA.

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 35 NATURAL 0303 errors for modules that begin with RPT* that concern page overflow and 27 programs will produce NATURAL 0002 errors. There should be a total of 62 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. You should also CATALL the JRNRPTP1 module using the NASA Batch Standard Parameters.
- The 27 NATURAL 0002 errors from the first CATALL are to be IGNORED because these objects are dynamic.

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 and TRNILOP3 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 one NATURAL 0043 error received. See Section 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 Parameters.

6.0 Post-Predict Data Conversion

Not Applicable for this release.

7.0 Perform Release-Specific Procedures

Not Applicable for this release.

8.0 Local JCL Mods

Not Applicable for this release.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.0 Copy Source
 - 2.1 Copy Source Code
 - 2.2 List of Source Code Modifications
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
 - 4.1 Data Dictionary Change
 - 4.1.1 Inventory of Objects
 - 4.1.2 Storage Considerations
 - 4.1.3 Physical File Changes
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods