11.0 MISCELLANEOUS INSTALLATION COMMENTS

11.1 NAM/RBF START-UP PROCEDURES

NAM, RBF, IAF, and TAF installation creates permanent files that when using default setup procedures, have to be transferred to the SYSTEM user index (377777B) in order to start-up the network.

Located below are the names of those files required for network operation:

<table>
<thead>
<tr>
<th>Indirect Access Files</th>
<th>Direct Access Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NAM</td>
<td>14. NAMLOCK</td>
</tr>
<tr>
<td>2. NPU DUMP</td>
<td>15. RBFLock</td>
</tr>
<tr>
<td>3. NAMPROC</td>
<td>16. APPLOCK</td>
</tr>
<tr>
<td>4. JOBS</td>
<td>17. NIPLOCK</td>
</tr>
<tr>
<td>5. JBCS</td>
<td>18. NSLOCK</td>
</tr>
<tr>
<td>6. JOBNVF</td>
<td>19. CSLOCK</td>
</tr>
<tr>
<td>7. JOBTVF</td>
<td>20. NVFLOCK</td>
</tr>
<tr>
<td>8. NETPROC</td>
<td>21. TVFLOCK</td>
</tr>
<tr>
<td>9. NPSDUMP</td>
<td>22. NPSLOCK</td>
</tr>
<tr>
<td>10. NETSS</td>
<td>23. NCFFILE(*)</td>
</tr>
<tr>
<td>11. NETUVSN</td>
<td>24. LCFFILE(*)</td>
</tr>
<tr>
<td>12. RBF</td>
<td>25. CCPFILE(*)</td>
</tr>
<tr>
<td>13. RBFPROC</td>
<td></td>
</tr>
</tbody>
</table>

(*) NCFFILE and LCFFILE are created by the installer using NDLP. CCPFILE is the Gzzz file created by CCP build step CCPLOAD.

11.2 IAF/TAF Start-Up Procedures

IAF and TAF installation creates permanent files that are transferred to the SYSTEM user index (377777B) in order to start up IAF/TAF.

Located below are the names of those files required for IAF/TAF operation that are created by the SYSTEM procedure in DECKOPL.

<table>
<thead>
<tr>
<th>Indirect Access Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IAF (IAF)</td>
</tr>
<tr>
<td>2. TRACIAF</td>
</tr>
<tr>
<td>3. IAFTM</td>
</tr>
<tr>
<td>4. IAPTR</td>
</tr>
<tr>
<td>5. TAFNAM (TAF)</td>
</tr>
</tbody>
</table>

11.3 RHF START-UP PROCEDURE

RHF installation creates a permanent file that must be transferred to the SYSTEM user index (377777B) in order to start up RHF.

The following files are required for RHF operation:

NOS2200E
1. RHF - Indirect file created by SYSTEM procedure in DECKOPL.
2. QTPTxx - Direct file created by the installation.
3. NADTxx - Indirect file created by the installation. (optional)

11.4 **XEDIT HELP File**

XEDIT installation creates an indirect access permanent file XEDITH that has to be transferred to the LIBRARY user index (377776B) in order to use the XEDIT HELP directive. The XEDITH file must be made CT=PU, M=R after moving it to UI=377776B.

11.5 **MOVEPF**

X.MOVEPF can be used to transfer any of the aforementioned files. MOVEPF is documented in the NOS Installation Handbook in the NAM installation section.

11.6 **NOTES ON PRODUCT INSTALLATION**

Several installation jobs exhibit overlapping corrections, non-fatal loader errors, or "COPYL DID NOT FIND" messages. These are not conditions which affect the generated binaries although it is expected that these conditions will be corrected in a future release. The following table details these errors for the associated products. Cases where multiple numbers are provided for a given error with a particular product imply multiple executions of the processor yielding the error. The frequency of occurrence of these conditions as documented below is relative to the products as released. Any local code may change these frequencies. For this information to be applicable, users must install all suggested code.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>NON-FATAL!</th>
<th>NON-FATAL!</th>
<th>UPDATE</th>
<th>PARITIONS</th>
<th>GTR OR</th>
<th>IN COPYL</th>
<th>ERRORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAM1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>113/109/111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALGOL5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BAM</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASIC3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCPBLB</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCPLOAD</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCPH1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCPVB</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCPVAR</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDCS2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COBOL5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBU</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTN</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTN5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F45</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLI</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEXT</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOS2200E 50
SYSJOB

SYSJOB does not show up on REPORT if run from system origin. Therefore, there is no record of it failing or passing and in such a case a useless DAYFILS file will be created on user number SYSTEMX.

FCL1

Notice that FCL1 and FCL2 are actually two parts of the FTN Common Library 4. It is recommended that mods to FCL4 be applied at both times if they are applied at all.

11.7 NOTES ON INSTALLATION VERIFICATION JOBS

Several of the installation verification jobs generate diagnostics in the output file which should not be reason for concern. Several others contain errors which should be corrected as described below. The frequency of occurrence of these conditions as documented below is relative to the products as released. Any local code may change these frequencies.

VALGEDT

Expect 2 diagnostics against line 110, 4 against line 190, and 1 against line 250 of the test program.

VC4C5

Expect several diagnostics against the test program.

VMCS1B

MCS will abort if the procedure file MCSTEST as documented on p. 6-58 of the Installation handbook is used. This will cause VMCS1B to abort.

VALGOL

VALGOL aborts with compilation errors.

VNPS2

VNPS2 fails with "Errors in input - run aborted".

VJOBS

VJOBS call nonexistent jobs: VAAM, VLCS2, VFCS2. These have been replaced by VAAM1, VAAM2, VLCS3, VFCS3.

11.8 RESEQUENCED DECKS

No decks have been resequenced on Level 552/552 NOS 1.4 Operating System.
12.0 DETAILED INSTALLATION NOTES

12.1 SAMPLE LIBDECK WITHOUT ECS

This deck is provided as a reference only.

LIBDECK

*CM PP/CIO,2CA,2CB,2CC,2CD,2CE,2CF,2CG,2CH,2CI
*CM PP/ZNP,NIP,2CK,2CL,2CM (RHF RELATED)
*CM PP/1AJ,TCS,3AE,3AF,LDR
*CM PP/LDD,LDQ
*CM PP/1CK,1MA,1MB,0BF,0DF,0AV,0RP,0FA,0RF
*CM PP/LFM,3LB,3LF,3LG
*CM PP/PFM,3PA,3PB,3PD,3PG,3PI,3PK,3PO
*CM PP/RPU
*CM PP/1RI,3RH,1RO,3RP,3RQ
*CM PP/PFM,3PA,3PB,3PD,3PG,3PI,3PK
*CM PP/1TA,3TK,3TJ,1TO
*CM PP/1MT,3MG,3MH,3ML,3MT
*CM PP/1LS,1DC
*CM PP/1IO,1JS,1SP,OAC,3QS
*CM PP/1DL,9A1,9A5,9A6,9A7 (DSD RELATED)
*CM PP/CPM,TLX,3PO,3CB,2MA,3PH,3RI
*CM PP/CVL,3CA,3MK,9AA,CMS
*CM ABS/PFILES,CATALOG,CATLIST,FILES,MFILES
*CM OVL/LDC
*PROC LIBMOD,GENVAL,GENHELP,JAB
*PROC KRON21,KRON21D,NOS
*PROC NETPLS,SYSMOD,MOVEPF
*PROC PSRSMOD,FEATMOD,CHECK
*FL ABS/NDA-200,OVL/BINEDIT-131
*FL ABS/FTN-6410,ABS/BASIC-6250,ABS/CDCS2-6615,ABS/DDL-6540
*FL ABS/DDL3-6540,ABS/PLI-6600,ABS/DML-6540
*FL ABS/FILE-6030,ABS/ALGOL-6500,ABS/ALGEDIT-6400,ABS/COBOL-6630
*FL ABS/COPYCL-6370,ABS/COBOL5-6600,ABS/SIFT-6410ABS/DDL-6540
*FL ABS/ESTIMATE-6370,ABS/SISTAT-6210,ABS/IXGEN-6650,ABS/DFRCU-6650
*FL ABS/COPYBP-6200,ABS/SORTMRG-6600,ABS/QU-6600,ABS/REPORT-6420
*FL ABS/ALGOL5-6450,F45-6600,FNTN5-6530,CDCSBTF-6600
*FL ABS/PMMP-6410,ABS/IMP-6500,ABS/SORT5-6600,ABS/MERGE-6600
*SC ABS/ADLP,OVL/BINEDIT
*SC ABS/REPORT,QUOMP,DLLF,DML,F45
*SC ABS/COMPASS,FIE,SYMPL,COBOL5,FTN5
*SC ABS/UPDATE,COPYL,ITEMIZE,DFRCV,DFRST
*SC ABS/ALGOL,COBOL,FTN,SIMULA,SORTMRG
*SC ABS/NDA,NDLF,LFQ,REPORTR,SCRIPT,STIM,DLFP
*SC ABS/COPYBP,QU,DLL,DLL,BASIC
*SC ABS/ESTIMATE,SISTAT,IXGEN,ALGOL5
*SC OVL/RUN,ABS/IMF
*SC ABS/DLL3
*SC ABS/CDCS2,DBMSTRD,DRRCVR,DBQRF,DBQRF,CDCCSBTF
*PROC,KRON21D
*PROC,NOS
*PROC,RELOAD

NOTE: If EI200 or RBF are not being used, the respective entries (1LS and 1DC) may be deleted. If RHF is not being used, CIO overlays 2CK, 2CL, and 2CM may be deleted.
12.2 SAMPLE LIBDECK WITH ECS

In the sample LIBDECK below, equipment 11 represents ECS which is not used for swapping. This deck is provided as a reference only.

LIBDECK1
*CM PP/CIO,1AJ,0DF
*CM PP/9A1,9A5,9A6,9A7 (DSD RELATED)
*CM PP/3MB (TAPE ERROR RECOVERY)
*CM PP/1DC (RBF RELATED)
*AD 11,PP/1DL
*AD 11,PP/0RF,0FA,0RP,0BF,0AV,0AU
*AD 11,PP/QAC,3QS
*AD 11,PP/1CJ,1CK,TCS,LDR,1MA,2MA,3AA,3AB,3AD,3AE,3AF,0TD
*AD 11,PP/3AG,LDD,LDQ
*AD 11,PP/2CA,2CB,2CC,2CD,2CE,2CF,2CG,2CH,2CI
*AD 11,PP/1RI,3RG,3RH,3RI,1RO,3RP,3RQ
*AD 11,PP/LFM,3LB,3LF,3LG
*AD 11,PP/PFM,3PA,3PB,3PD,3PE,3PG,3PH,3PI,3PK,3PO
*AD 11,PP/CPM,RPV,3CA,3CB,3CC
*AD 11,PP/1TA,1TO,3TC,3TD,3TE,3TF,3TJ,TLY
*AD 11,PP/1MT,3MG,3MH,3MI,3ML,3MN,3MT
*AD 11,PP/11O,1JS,1SP
*AD 11,PP/1LS (E1200 related)
*AD 11,ABS/FILES,PFILS,CATLIST,CTRL2,CTRL3,EDIT,RESEX
*AD 11,ABS/ACCFAM,MODIFY,LOADER,CHARGE,COPYB,MFILES
*AD 11,OVL/LDC
*AD 11,ABS/COMPASS
*AD 11,OVL/COMP3$,COMP3$,MSORT
*PROC LIBMOD,GENVAL,GENHELP,MVEPPF
*FL ABS/FTN-6410,COBOL-6630
*FL ABS/BASIC-6250,CDCS2-6615
*FL ABS/DDL-6540,DFRVCV-6650
*FL ABS/DDL3-6540,PLI-6600
*FL ABS/DDL-6540,DML-6540,IMF-6500
*FL ABS/FILE-6030,ALGOL-6500,ALGEDIT-6400
*FL ABS/COPYCL-6370,COBOL5-6600,SIIF-6410
*FL ABS/COPYP-6200,SORTMRG-6600,QU-6600
*FL ABS/REPORT-6420,ALGOL5-6450,NDA-200
*FL ABS/F45-6600,FTN5-6530
*FL ABS/CDCS2-6600,PMMDP-6410
*SC ABS/REPORT,QUMIP,DDL,DML,CDCS2TF
*SC ABS/COMPASS,FILE,SYMPL,COBOL5
*SC ABS/UPDATE,COPYL,ITEMIZE,DFRVCV,DFRST
*SC ABS/ALGOL,COBOL,FTN,SORTMRG
*SC ABS/NDA,NDLP,LFG,REPORT,SCRIPT,STIM
*SC ABS/COPYBP,QU,DDL,DDL3,BASIC
*SC ABS/ESTIMATE,SISTAT,IXGEN,ALGOL5
*SC ABS/DQROF,DPQRF,IMF
*SC ABS/F45,FTN5,DLFP,CDCS2,SEMULA,ADLP
*SC ABS/DBMSTRD,DBRCVR
*SC OVL/BINEDIT

NOTE: If EI200 is not being used, the respective entry (E1S) may be deleted. If RHF is not being used, CIO overlays 2CK, 2CL, and 2CM can be deleted.

NOS2200E 53
12.3 **SAMPLE IPRDECK**

This deck is provided as a reference only.

```
LID=TS1,L.
LID=TS2,L.
LID=TS3,L.
LID=MFT,L.
LID=TS4,R.
LID=CY2,L.
LID=N09,L.
LID=M64,L.
LID=M90,L.
LID=M88,L.
LID=TS5,H.
LID=IBM,L.
LID=158,L.
LID=501,L.
TDEN=PE.
TDTR=NT.
CSM=64.
LOCK.
VALID.
RHFAM.
QUEUE,SX,IN,OP7757,LP700,UP3000.
QUEUE,SX,RO,OP6000,LP100,UP1000.
QUEUE,SX,OT,OP400,LP100,UP7700.
SERVICE,SX,PR1,CP100,CM20.
QUEUE,BC,IN,OP2400,LP2000,UP4010.
QUEUE,BC,RO,OP2400,LP1010,UP4004.
QUEUE,BC,OT,OP200,LP100,UP7000.
SERVICE,BC,PR30,CP400,CM200.
QUEUE,IE,IN,OP3400,LP2400,UP4010.
QUEUE,IE,RO,OP3400,LP1400,UP4006.
QUEUE,IE,OT,OP200,LP100,UP7600.
SERVICE,IE,PR30,CP400,CM200.
QUEUE,TX,IN,OP4000,LP3770,UP7006.
QUEUE,TX,RO,OP4004,LP3740,UP7000.
QUEUE,TX,OT,OP200,LP100,UP7000.
SERVICE,TX,PR30,CP40,CM10.
QUEUE,MT,IN,OP6774,LP6700,UP7400.
QUEUE,MT,RO,OP6774,LP4000,UP7400.
QUEUE,MT,OT,OP6000,LP100,UP7700.
SERVICE,MT,PR31,CP400,CM60.
QUEUE,NS,IN,OP7374,LP7360,UP7500.
QUEUE,NS,RO,OP7374,LP7350,UP7500.
QUEUE,NS,OT,OP500,LP100,UP7700.
SERVICE,NS,PR73,CP400,CM200.
DELAY,JS1,CS10,AR1000.
DSD,0,AUTO%X.QREC(NK)
DSD,3,AUTO.
SCP.
MS VALIDATION.
PF VALIDATION.
SRST=640.
```
12.4 NOS EVALUATION CHANGES TO INSTALLATION DEFAULTS

The following code is installed in the NOS Evaluation System. It has been provided for reference only.

LOADER INSTALLATION

The following code is used to turn off the LOAD map and to preset central memory to zero(s).

*IDENT NOS01
*I LDRCOM.13
IP.MAP CEQU 0
IP.PSET CEQU 1
*/ END OF MODSET.

COBOL4 INSTALLATION

The following code is used to turn on the CDCS (Version 1) option.

*IDENT NOS01
*INSERT,ASSEMOP.23
DB1.1 EQU 1
*/ END OF MODSET.

COBOL5 INSTALLATION

The following code is used to turn on CDCS. Set n to 1 for CDCS Version 1 and 2 for CDCS Version 2.

*IDENT NOS01
*PURGE DGMNT
*DELETE CB5TEXT.245
OP.DCS CEQU OP.DCSn CDCS ACTIVE
*DELETE ASSEMOP.36
   DEF CB5$CDCS "CDCSn"; CDCS ACTIVE#
*/ END OF MODSET.

The above code should be placed on file USER when installing the product concerned to insure its proper installation if these options are desired.

12.5 NETWORK HOST PRODUCTS

The following code is installed in the NOS Evaluation System. It has been provided for reference only.
NAM2 (Network Access Method) Installation

*IDENT MULTNODE
*/ LOCAL MOD TO ALLOW TWO FRONT ENDS
*/ AND MAXIMUM NODE NUMBER OF 5 AND UP TO 12
*/ APPLICATIONS.
*D INPARU.160
  DEF NUMHNODE#2#
*D INPARU.161
  DEF MAXAPP#12#
*D INPARU.163
  DEF MAXNN#5#
*C INPARU
*/ END OF MODSET.

12.6 RECOMMENDED INSTALLATION PROCEDURE

GROUP 0

GROUP 0 jobs create the COMPOSITE OPL (SYSOPL). Since none of these jobs assemble code, there is no restriction as to which system they are run under.

GROUP I

GROUP I jobs are to be run in consecutive order on a system deadstarted with an unconfigured D/S tape. No job should be started until the preceding job has finished.

It is required that a deadstart tape be built at the end of this phase.

GROUP II

No GROUP II job should be started until all jobs in GROUP I have been completed. Jobs in GROUP II are not order dependent. Thus, any number can be running at the same time. Care should be taken that system resources are not overcommitted by running too many installation jobs at once.

It is required that a deadstart tape be built at the end of this phase.

GROUP III

Jobs in GROUP III require output that was created by a job in GROUP II. Thus, the GROUP II job must be completed before the corresponding GROUP III job can be started.

It is recommended that a deadstart tape be built at the end of this phase.
Note: All DECKOPL procedures have been changed from KCL to CCL. Refer to the section entitled "Initial Setup" in the Installation Handbook for information regarding the change to CCL procedures and how to obtain listings of the various install decks and procedures on DECKOPL.

The S3 switch can have special meaning in the installation of each product. The COMMENTS section for the product in DECKOPL should be reviewed before the GENJOB CALL is issued. It should be noted that the S3 switch for the SYSTEM job specifies if MSSLIB will be preserved as a permanent file when building MSS.

Note: If TRACER and/or RHF are being installed during Group III system job and a system deadstart has occurred since the FTN5 install job, the SYSTEM job may abort with the message ILLEGAL CONTROL CARD on the FTN5 job card. If this happens, a new deadstart tape must be made and the system deadstarted with it to get FTN5 on the running system.

TECHNICAL INSTALLATION NOTES

With the conversion of the installation decks from KCL to CCL and the expanded parameters used in the build process, it is sometimes impossible to directly enter a command under DIS. The statement "STATEMENT TOO LONG" may be averted by using the *ELS. statement* capability of DIS.
GROUP 0 - UPDATE MODIFY PL'S AND CREATE COMPOSITE OPL

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>!S1!S2!S3! VSN</th>
<th>REQUIRED</th>
<th>PRODUCT TAPE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMBINE</td>
<td>0 0 0 0 RELIA</td>
<td>All MODIFY</td>
<td>1,3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1</td>
<td>PL's</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDYBIN</td>
<td>1 1 1 1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GROUP 0 INSTALLATION NOTES

1) The procedure COMBINE builds the composite OPL (SYSOPL) by merging the MODIFY PL's into one file. Critical code (from file MDYMODS) is automatically added; user code, if present on file USER, is also added. Suggested code from file 6 of REL0 may be installed by placing it on file USER. Refer to COMMENTS section in COMBINE for details on its use.

2) The procedure MDYBIN can be used if a binary installation is desired. Install binaries only.

3) If no user file is provided for job COMBINE, and if all possible DEFINES are defined, COMBINE will abort with modify errors. This will not happen if notes and cautions code is applied on file user as is recommended.
GROUP I - INSTALL IN CONSECUTIVE ORDER

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>SETTINGS</th>
<th>TAPE</th>
<th>TAPE</th>
<th>OTHER</th>
<th>LAST USED</th>
<th>CODE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXT</td>
<td>111101</td>
<td>REL1E</td>
<td>REL1E</td>
<td>TEXT</td>
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<td></td>
</tr>
<tr>
<td>TEXTIO</td>
<td>111101</td>
<td>REL1E</td>
<td>REL1E</td>
<td>TEXT</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPASS</td>
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<td>REL3A</td>
<td>REL3A</td>
<td>COMPASS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>UPDATE</td>
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<td>REL3A</td>
<td>REL3A</td>
<td>TEXTIO</td>
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NOS2200E 59
GROUP I INSTALLATION NOTES

1) Refer to COMMENTS section in SYSTEM for details on its use.
   (NOS, EI200, MMF, XEDIT, TELEX, TAFTS, RHF, IAF, TAFNAM)

2) Note: S2=0.

3) Omit if FTNTS installed.

4) Omit if FTN installed.

5) For the TEXT/TEXTIO/LOADER product installation sequence, it
   should be noted that the output PL (RELIE) created for TEXT
   should be used as the input PL to the TEXTIO job, and the
   TEXTIO output should be used as the LOADER input. This also
   applies to other product set installations where more than
   one product is on the same output tape. A name in the column
   "JOB THAT LAST USED PRODUCT TAPE" indicates this situation.

6) The job SYSTEM (Group I and III) assembles the various Modify
   products using SYSOPL. This job should be run after LOADER
   in Group I and at some time during GROUP III. Each time,
   only those products specified under COMMENTS should be
   installed.

   Group I Modify products are NOS, EI200, MMF, TAFTS, TELEX and
   XEDIT.
   Group III Modify products are TRACER, TAFNAM, IAF, TOOLS, MSS
   and RHF.

7) Run SYSJOB only if CYBERLOG is to be used.

8) Jobs SYSJOB, BCS, BCF, FMD, MTS, NAD, and FCLl produce no
   output tapes.

9) New decks, NAD, IBM, and MIN are provided to install the
   product.

10) Jobs BCS, BCF, FMD, MTS, NAD, IBM, and MIN require
    controlware as additional input in the form of a card deck or
    magnetic tape. Refer to Installation Handbook (IHB) for
    additional details.
GROUP II - INSTALL IN ANY ORDER

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GROUP II INSTALLATION NOTES

1) Refer to COMMENTS section in APL2 and on next page.

2) To install AP2A068 modset, set S1=0 instead of S1=1 on call to GENJOB.

3) Note: S3=1.

4) Refer to COMMENTS section in COBOL5.

5) Refer to COMMENTS section in DECKOPL before using COBOL5Q.

6) A new deck LCS3, replaces the old LCS2 deck.

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1) o See COMMENTS section in DECKOPL procedure APL2.
   o In order to minimize the installation of APL2 the following steps should be kept in mind:

   a) Validate USER numbers APL0(zero) and APL1. See special installation information for APL2 in Section 6 of the IHB. Note that Table 6-1 in the IHB is in error:

   o DS=3 yields 2560 PRU's not 1536 for UN=APL0

   b) BEGIN, GENJOB,, JOB=APL2, T=ttype.

   ttype=terminal type
   (See comments in APL2 installation deck)

   APL2 can also be installed with an 80 character header message.

   EXAMPLE:

   /JOB
   APL2.MESSAGE/ASCII/
   REQUEST (TAPE,MT,F=I,LB=KL,VSN=REL8B,HY)
   DEFINE (RELTAPE=REL8B)
   COPYBR (INPUT,MESSAGE)
   BEGIN, (GENJOB,, JOB=APL2, T=ASCII)
   /EOR
   APL2.1-ASCII TERMINAL
   /EOF

   Step "b" can be omitted if the released binaries are to be used.

   c) BEGIN, GENJOB,, JOB=APLUSR0.

   d) BEGIN, GENJOB,, JOB=APLUSR1.

   APLUSR1 must be installed after APLUSR0.

   Note: File USER must be made local to APLUSR0 and APLUSR1 installation. USER contains USER and CHARGE information.

   e) BEGIN, GENJOB,, JOB=VAPL2.
### GROUP III - PRODUCTS WHICH ARE DEPENDENT ON A GROUP II JOB

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### GROUP III INSTALLATION NOTES

1) Install after BIT8.
2) Install after COBOL5.
3) A new deck, FCS3, replaces the old FCS2 deck.
4) Install after CCG.
5) Install after NAM2.
6) Install after DBU and CDCS2. Refer to COMMENTS section in QU3.
7) Refer to COMMENTS section in SYSTEM for details on its use (IAF, MSS, TAFNAM, TOOLS, TRACER, RHF).
8) Run after all GROUP III jobs have completed.
9) File 3 of REL14 (MSS) and REL1G (TRACER) does not contain relocatable binaries, but is empty.
10) TRACER and RHF both require FTN5 to be installed first.
## VERIFICATION JOBS

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</table>
VERIFICATION JOBS NOTES

1) The verification of CDCS2 is a multi-step process which is outlined in the COMMENTS Section of VCDCS2A.

2) VFCS3 and VLCS3 replace VFCS2 and VLCS2.

3) Submits all verification jobs except VCDCS2A, VCDCS2B, and VQU3. VJOBS sets the output ID to 30 so that all the verification output can be put on one printer.

4) Run as batch job only.

5) The user card and charge card (if necessary) for the installation user index should be on the file USER for VJOBS.

6) When running VJOBS, the densities of the output tapes from other jobs may not match the densities on the request cards. To avoid a mismatch, use the DENSITY=XXXX and TRACK=yy parameters on the GENJOB call to VJOBS.

7) VAAM1 and VAAM2 replace VAAM.

8) VJOBS calls the nonexistent jobs: VAAM, VLCS2, VFCS2. See notes 2 and 7 above.
## CCP/CROSS TAPE AND DISK FILE REQUIREMENTS

<table>
<thead>
<tr>
<th>Order</th>
<th>Name</th>
<th>VSN</th>
<th>Previous VSN</th>
<th>Generated by Input Files</th>
<th>Previous Created Files</th>
<th>User Files</th>
<th>User Perm.</th>
<th>Optional Files</th>
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<td>A</td>
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<td>USERCHG</td>
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<td>CCPH1, REL13E</td>
<td>A</td>
<td>A</td>
<td>UCCP</td>
<td>ZMUX, LMFB</td>
<td>USERCHG</td>
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</table>

* = optional

**NOTES:** (continued on following page)

1. If LIST=PF or LIST=BOTH on the calls to CCPH1, CCPV1, CCPBLB or CCPVAR, the list file will be placed on the appropriate RELTAPE. These list files will be kept as permanent files until the RELTAPE is created and then be purged. Thus, if a job aborts before the RELTAPE is created, the list file will be permanent as described in section 6 of the IHB. If LIST=YES or LIST=NO is specified, the list file will not be placed on the RELTAPE. Specifying LIST=YES or LIST=BOTH will write the list file to output.

2. In order to build CCP for a 63-character set system, it is necessary to add the following statements to the end of the job shown in step 1 of initial setup on page 3-6 of the Installation Handbook.
ATTACH (OPL=DECKOPL/M=W)
MODIFY (F,CV=63,I=0,N,LO=E)
REWIND (OPL,NPL)
COPYEI (NPL,OPL)

Next, perform Step 4 with:

BEGIN(GENJOB,,JOB=GENFILS, DF63=63CSET)

If other modifications need to be applied to DECKOPL at a later time, perform Step 3 with:

BEGIN(GENJOB,, JOB=DECKFIX, DF63=63CSET)

If more than one variant is being built by performing each CCPVAR step in separate batch jobs (or by calling from an interactive job), it is necessary to provide a different NEWL3C tape (or permanent file) for each variant. If all calls to CCPVAR are made from one batch job, the NEWL3C files for all variants will be written on one tape. If you desire to run CCPVAR in separate batch jobs, but prefer to use only one tape, then perform step 3 of initial setup on page 3-7 of the Installation Handbook with the following modification.

*IDENT,INSDRTB
*DECK,DRTBAT1
*I,101
SKIPEI(LFN)

If the released version of the JOBNS permanent file is used (see pages 6-39 and 6-40 of the Installation Handbook), it is necessary to rename the Gzzz file (created by the CCPLOAD step) to "CCPFILE" when moving it to SYSTEMX (User Index 377777).
13.0 INSTALLATION RESPONSE FORM

NOS Field Support maintains a site list of the sites using NOS. In order that we can represent the customer base more effectively, we ask that you fill out the form found below and return it to Field Support. Thank you.

---------------------------------------------

SITE NAME AND CODE

SITE ADDRESS

CONTACT

DATE

PROF. SERVICES ANALYST

LOCATION

This site has installed NOS 1.4 Level 552 and is currently using it in a production environment.

Communications software being used:

( ) TELEX ( ) IAF ( ) RHF

( ) EI200 ( ) RBF

( ) TAFTS ( ) TAFNAM

Please return to:

NOS FIELD SUPPORT - ARH213
CONTROL DATA CORPORATION
4201 Lexington Avenue North
St. Paul, MN 55112

0658K
AM2J078 CONCERNED A CASE WHERE A JOB ABORTED BY TRYING TO WRITE
OUT A BLOCK IN A MIP FILE THAT DID NOT HAVE WRITE PERMISSION.
WRITING OUT THE BLOCK WOULD NOT INJURE THE FILE, AND THE CASE
DID NOT HAPPEN FREQUENTLY, SO WE CORRECTED IT BY BY-PASSING
THE CODE THAT LED TO THE WRITE, IF THE FILE DID NOT HAVE ALL
PERMISSIONS.

IT TURNS OUT THAT THERE IS STILL A WAY TO FALL INTO THAT TRAP.
THE FILE MAY HAVE ALL THE PERMISSIONS, BUT BE OPEN FOR INPUT
ONLY. FOR THE BAD CASE TO ARISE, THERE MUST BE SOME MIP FILE
THAT HAS BEEN ALTERED BY THE CURRENT JOB STEP, BUT IT MAY HAVE
BEEN CLOSED, AND THIS MAY HAVE LED TO THE UNLOADING OF THE
CAPSULES THAT ARE NEEDED ONLY FOR UPDATING. SO THE TEST FOR
ALL PERMISSIONS PASSES, BUT THE JOB ABORTS CALLING AN UNLOADED
SUBROUTINE.

TO CORRECT THIS, WE COULD ADD TO THE TEST IN AM20078 EITHER
A TEST OF THE PROCESSING DIRECTION OF THE CURRENT FILE
(MUST NOT BE INPUT) OR A TEST FOR WHETHER THE MIP-UPDATE
CAPSULE IS NOW LOADED. TO AVOID CONFUSION IF THERE ARE TWO
OPEN FITS FOR THE SAME MIP FILE, ONE OPEN FOR READ-ONLY
(PD=INPUT) AND THE OTHER OPEN FOR READ AND UPDATE, THE
FOLLOWING CORRECTION CODE TESTS FOR THE PRESENCE OF THE
CAPSULE, RATHER THAN THE PD OF THE CURRENT FIT.

A-FRB 10/06/81 MIPDMIP

*COMPILE HISTORY
*I MIPDMIP.10
  PROC PUT$MP;
*I MIPDMIP.38
CONTROL WEAK PUT$MP;
*I AM20078.23 MIPDMIP.1326
  AND LOC( PUT$MP ) GR 0 #UPDATE CAPSULE LOADED#
*COMPILE MIPDMIP
/*/ THERE ARE 38 CORRECTION CARDS INCLUDING THIS COMMENT.
IDENT, DIMA637

/* MODSET: DIMA637 APPLIES TO DECK FMDFT ON REL2B AND PL5A.
BEFORE, HISTORY.2
*
* FMDFT  JMO  81/09/16
* MODSET CORRECTS THE FMDFT PRODUCT OVERLAY SO FMU DOES
* NOT ERROR ON GET SERIAL OR READ FACTORY/UTILITY MAPS
* WITH INCOMPLETE DATA RETURNED TO PP. PSR DIMA637.
*
* COMPILE, HISTORY
* DELETE, DIMA605.7
  STM  IJM3
* DELETE, DIMA605.8
  SOM  IJM3
* INSERT, FMDFT.1638

  IJM3  DATA  0  TIME FOR ONE SECOND
* COMPILE, FMDFT
/* MODSET DIMA637 CONTAINS 19 CARDS INCLUDING THIS COMMENT.
FILE
*IDENT "FILE"
*DECK "FILE"
*D, 260
.MICRO 1,, "A"
*D, 283
.MICRO 1,, "A"
*D, 306
.MICRO 1,, "A"
*D, 325, 326
.IFC NE, "A", 2
.TAG MICRO 1,, "TAG", "A"
/>
END OF MODSET
*IDENT  IAFEX61  JDB.  82/01/14.
*/
****  NOS 1.5 OS.
*/
*****  PROBLEM — A UPPER CASE SHIFT AT THE
*/
END OF A WORD WHICH IS THE END OF THE
*/
POT CHAIN, CAUSES THE 0014 CONTROL BYTE
*/
TO BE INCLUDED IN THE OUTPUT DATA AND
*/
GARBAGE DATA BEYOND THE 0014 CONTROL BYTE
*/
is also included (up to 7 words).
*/
THIS BUG OCCURS ONLY IN EXTENDED CHARACTER MODE.
*/
*/
SOLUTION — TEST FOR 0014 CONTROL BYTE ON
*/
A CONTINUATION TO THE NEXT WORD.
*/
*DECK  IAFEX
*I, N15500.1762  (19641)
 TDM16.1  SX2  ASC.US  SEND UNIT SEPARATOR
         SB3  B1  LAST CHARACTER
         SA1  B4  INDICATE REENTRY TO EOR
         MX7  1  INDICATE UNIT SEPARATOR SENT
         SA7  TDMB
*I, N15500.1771  (19641)
 TDM17.1  SX2  0014B
         LX2  59-11
         BX2  X1-X2  TEST FOR 0014 CONTROL BYTE
         ZR  X2,TDM16.1  IF END OF POT CHAIN
*D, N15500.1825  (19641)
         JP  TDM17.1  74 OR 76 ESCAPE
*/
END OF MODSET.
IDENT KRA881 BRH. 82/01/22.
*
**** NOS 531A.
**** NSOG567.
**** NS05021.
**** PROBLEM - FTN COMPILE WOULD MODE OUT IF ROLLED
OUT AFTER ACQUIRING ECS FOR USE IN THE COMPILE.
*
**** SOLUTION - ECM ROLLOUT/ROLLIN WOULD DESTROY PART
OF THE JOBS CM. SINCE ECM IS READ AND WRITTEN FROM THE
PP FOR ROLLOUT AND ROLLIN, CENTRAL MEMORY AND ECS MAY
BE WRITTEN AS TWO SEPERATE CHUNKS SINCE CM IS NOT
NEEDED AS A BUFFER FOR ECS. THIS PREVENTS THE PROBLEM
FOR ECM.
*DECK 1RO
*D,410
JECO RJM ECM DUMP SOFT ECS
JEC SUBR ENTRY/EXIT
JECZ LDN 0
LDN 1 (IF CME)
NJN JECO IF CME
*D,AN15300.5,AN15300.21 (425)
* ROLLOUT ECS.
LDN ZERL
*D,AN15300.89,AN15300.96 (1091)
LDN 0
*D,1204
PRS6 LDN CPUL
CRD CM
LDD CM+3
SHN 21-10
PJN PRS6.5 IF NO CME
LDC LRDI+CN+2
STM ROMC
LDD FL
STM JFLA
AOM JECZ
PRS6.5
LDD CP
*DECK 1RI
*D,287
JFLZ SBN MCMX/100/2 (IF CME)
PSN (IF CME)
*D,316,AN15300.16
JEC10 RJM ECM LOAD ECM
JEC SUBR ENTRY/EXIT
JECC LDN 0
NJN JEC10 IF CYBER 835
LDN MCMX/100/4
*D,1164
LDN CPUL
CRD CM
LDD CM+3
SHN 21-10
PJN PRS.1
AOM JECC SET CME FLAG
LDN 0
STM JFLZ SET PSN INSTRUCTION
PRS.1 LDN 2 CONSTANT 2
*/
END OF MODSET.
THE CODE IN THIS SIM CAN HELP USERS THAT HAVE MODE4 PRINTERS THAT APPEAR TO BE "HANGING". IF THE MODE4 STATION OR LINE IS POWERED OFF OR HAS A LINE FAILURE, THE NEXT TIME THE STATION IS BROUGHT BACK UP THE LINE (OR PRINTER) WOULD HANG AFTER THE FIRST COMMAND ENTERED. THIS CODE SHOULD REPAIR THIS SITUATION.

*ID CC40602
* B HISTORY.2
CC40602 MODE4 DOES NOT PRINT AFTER A GO,LP.

AFTER A LINE FAILURE, CCP DOES NOT CLEAR THE BSSTSTOP BIT ON CONNECTION INIT. THIS CAUSES BIP TO NOT BACK THE FIRST DEVICE COMMAND TO THE PRINTER CONNECTION, WHICH MAY CAUSE THE CONNECTION TO HANG.

DEPENDENT ON PRU

EPL 01/05/82 PBBPM

SRN=XXXX

* C HISTORY
*I PBBPM.466
BSSTSTOP := FALSE;
 RESET STREAM STOPPED

* C PBBPM
THE CODE IN THIS SIM CORRECTS A PROBLEM IN SENDING TRANSPARENT OUTPUT ON 9600 BPS LINES, TYPICALLY FOR CAD/CAM OR GRAPHICS USERS.

*ID CC4C164
*B HISTORY.2
CC4C164  BAD DATA SENT TO T4014 AT 9600 BAUD

ASYNC TIP DID NOT CHECK THE TRANSPARENT BIT IN THE DBC BEFORE CHECKING FOR FORMAT EFFECTORS ON LINE SPEEDS OF 9600 BAUD

MODIFY THE ASYNC TIP TO CHECK THE TRANSPARENT BIT, AND IF SET IGNORE FORMAT EFFECTOR PROCESSING

EPL/JGS       01/13/82       ASYNCTIP

DEPENDENCIES: CC40248

*C HISTORY
*D ASYNCTIP.713,714
ATFIRST : BOOLEAN;
ATSPR2  : BOOLEAN;
ATSPR3  : BOOLEAN;
ATSPR3  : B02BITS);
*I CC40248.27   NEAR ASYNCTIP.814
  IF NOT AVNDBC.ATSPR
 THEN
 BEGIN
*I CC40248.80   NEAR ASYNCTIP.815
 END _IF NOT AVNDBC.ATSPR ?
*C ASYNCTIP
BIP MAY LOSE BUFFERS IF INPUT IS ENTERED WHILE THERE IS A CONNECTION SWITCH IN PROGRESS.

*ID CC4C198
*B HISTORY.2
CC4C198 TOO MANY LOST BUFFERS
BIP MAY LOSE BUFFERS IF INPUT IS ENTERED WHILE THERE IS A CONNECTION SWITCH IN PROGRESS.

EWB/JGS/EPL 82/02/09 PBUFTS,ASYNCTIP

*C HISTORY
*C PBUFTS,ASYNCTIP
*D PBUFTS.1217,CC4B828.67
END; CONNECTION ESTABLISHED?
PBR9LZRA (BSINPBUF, BDBSIZE);
*I ASYNCTIP.1714
PTAPBUFREL (BSINPBUF);_ RELEASE INPUT BUFFER ?

_A-8_
DUE TO IMPROPER FILE LIMIT PROCESSING IN CCP, A BATCH TERMINAL MAY HANG AFTER PRINTING THE LAST LINE OF A FILE. THIS SITUATION IS INDICATED IN THE RBF DAYFILE BY THE MESSAGE, "DCM STATE TABLE ERROR - 0/ D". UNTIL CCP IS CORRECTED, THE FOLLOWING RBF CODE WILL WORK AROUND THE PROBLEM.

*ID RB20179
*/
*! NOTE: THIS CODE IS A WORK-AROUND SOLUTION DEVELOPED BY FIELD SUPPORT AND SHOULD BE USED ONLY TEMPORARILY UNTIL A FORMAL SOLUTION IS GENERATED.
*!
*B HISTORY.2
RB20179 IGNORE OFC/STPD,RC=FLE (FILE LIMIT EXCEEDED) IF IT OCCURS WHEN PRINTING THE ACCOUNTING MESSAGE AT THE END OF A FILE.
EWB 82/02/08 DCM

*C HISTORY

*D DCM.629

  S"DCM$GOEOF",S"DCM$ERROR",S"DCM$IDLE",
  S"DCM$WTEOF",

*D DCM.696

  S"DCM$A0",S"DCM$A31",S"DCM$AER",
  S"DCM$A21",

*I DCM.903

  ARRAY TRAP S(3);
  BEGIN
    ITEM TRAPMSG C(0,0,28) = ["OFC/STPD,RC=FLE WAS IGNORED."],
    TRAPEOL U(2,48,12) = [0];
  END

*I DCM.2279

  IF DCBS$CURINPUT EQ DCMINPUT"LIMITDCM"
  AND
  DCBS$CURSTATE EQ DCMSTATE"DCM$GOEOF"
  THEN
    BEGIN
      MESSAGE (TRAP, DFLOPT); *
    END

*C DCM
MESSAGE LISTING.  82/03/26.  82/02/19.  82/02/19.  03.11 PM

AUTHOR BROWN EDWIN W III
ENTRY-820219
ORIGIN-820216
PROD NAME CCS 1.2
PROD NUM F521-25
REL LEVEL 552
SIM N062
SUBJ-N062-1 CROSS MACRO ASSEMBLER INCOMPATIBILITY
TYPE CYBER CROSS SYSTEM

CODE FOR PSR XSY0124 AND XSY0136, INTRODUCED AT PSR LEVEL 552, CORRECTS
LONG OUTSTANDING PROBLEMS WITH THE MACRO ASSEMBLER WHICH HAVE BEEN
WORKED AROUND IN THE PAST BY USING CERTAIN CODING TECHNIQUES. THESE
METHODS WILL NOW CAUSE ASSEMBLY ERRORS OR INCORRECT OBJECT CODE.

CCP HAS BEEN MODIFIED BY CODE FOR PSR CC4B832 AND RN1C002 IN ORDER TO BE
COMPATIBLE WITH THE NEW ASSEMBLER. ALL OTHER L552 CCP PSR CODE WAS ALSO
WRITTEN USING THE NEW ASSEMBLER RULES. PLEASE CONSULT FIELD SUPPORT
BEFORE ATTEMPTING TO INSTALL ANY L552 CODE IN L543 CCP USING THE OLD
ASSEMBLER. FAILURE TO DO SO MAY RESULT IN ERRONEOUS OBJECT CODE WITHOUT
WARNING BY THE ASSEMBLER.

ADDITIONALLY, ALL NON-STANDARD CCP CODE (LOCAL MODIFICATIONS AND SPL
PRODUCTS) SHOULD BE INSPECTED FOR ADHERENCE TO THE NEW ASSEMBLER SYNTAX
BEFORE UPGRADING TO PSR LEVEL 552. THE CHANGES AFFECT MACRO CALLS IN
THE FOLLOWING MANNER:

1. THE ADDRESS FIELD STARTS WITH THE FIRST NON-BLANK AFTER THE
OPERATION CODE. IF THE FIRST NON-BLANK DOES NOT OCCUR BEFORE
COLUMN 30, THE ADDRESS FIELD IS CONSIDERED BLANK AND ALL PARAMETERS
NULL.

2. THE ADDRESS FIELD TERMINATES WITH THE FIRST BLANK OR COLUMN 73,
WHICHEVER OCCURS FIRST.

3. IF THE CHARACTER IMMEDIATELY PRECEDING THE TERMINATOR (BLANK OR
COLUMN 73) IS A COMMA, THE MACRO CALL IS CONTINUED ON THE NEXT
LINE.