

SOFTWARE RELEASE BULLETIN

FOR LEVEL 543/538

NOS OPERATING SYSTEM

SM0130211

TABLE OF CONTENTS

1.0	INTRODUCTION	3
1.1	MATERIALS	3
1.2	INSTALLATION TAPE	3
1.3	RELEASE TAPES	3
2.0	INSTALLATION NOTES	5
2.1	CORRECTED SIM PROBLEMS	5
2.2	SIM PROBLEMS INCLUDED ON SUGGESTED CODE FILE	5
2.3	NETWORK PRODUCTS PSR SUMMARIES	5
3.0	TECHNICAL NOTES	6
3.1	OPERATING SYSTEM MODIFICATIONS	6
3.1.1	BINARY PATCH UTILITY (BNP)	6
3.2	NETWORK MODIFICATIONS	7
4.0	FUTURE CHANGES	11
4.1	CEDIAG/KEDIAG DIAGNOSTIC REPLACEMENT	11
4.2	ERROR FLAG CHANGES	11
4.3	INDIRECT ACCESS FILE SIZE	11
4.4	PF AND QUEUE UTILITIES	11
4.5	O26 PROCESSING	12
4.6	FILE QUEUEING	13
4.7	PFLOAD PROCESSING	14
5.0	PRODUCT SET NOTES AND CAUTIONS	15
6.0	KNOWN PROBLEMS	27
7.0	OPERATING SYSTEM CRITICAL CODE	29
8.0	OPERATING SYSTEM SUGGESTED CODE	29
9.0	CONTROLWARE LEVELS	30
10.0	MISCELLANEOUS INSTALLATION COMMENTS	30
10.1	NAM/RBF START-UP PROCEDURES	30
10.2	IAF/TAF START-UP PROCEDURES	31
10.3	XEDIT HELP FILE	31
10.4	MOVEPF	32
10.5	NOTES ON PRODUCT INSTALLATION	32
10.6	NOTES ON INSTALLATION VERIFICATION JOBS	33
10.7	RESEQUENCED DECKS	34
11.0	DETAILED INSTALLATIONS NOTES	36
11.1	SAMPLE LIBDECK WITHOUT ECS	36
11.2	SAMPLE LIBDECK WITH ECS	37
11.3	SAMPLE IPRDECK	38
11.4	NOS EVALUATION CHANGES TO INSTALLATION DEFAULTS ...	39
11.5	NETWORK HOST PRODUCTS	40
11.6	RECOMMENDED INSTALLATION PROCEDURE	40
12.0	INSTALLATION RESPONSE FORM	52

NOS0213A

1.0 INTRODUCTION

1.1 Materials

The NOS 1.4-543/538-REL0 (Installation Tape), the NOS 1.4-543/538 Deadstart Tape, the NOS 1.4-538 Common Product Set release tapes, the NOS 1.4-543 Network Product Set release tapes, and the NOS 1.4-543 Operating System release tapes constitute the materials required for NOS 1.4 level 543/538 installation.

1.2 Installation Tape

The format of the REL0 tape is as follows:

<u>FILE</u>	<u>RECORD</u>	<u>DESCRIPTION</u>
1	1	Procedure to install files from REL0
	2	REP binaries (Installation Summary Report)
	3-n	Installation Decks (MODIFY PL)
	1-n	Operating System Critical Code
*2	1	Product Set Mods (UPDATE PL)
*3	1	PSR Data Base Report
4	1	Operating System PSRs (fixed)
	2	(Empty Record)
	3	538 CPS and 543 NP PSRs (sorted by product and PSR number)
	4	538 CPS and 543 NP PSRs (sorted by product and routine)
	5	538 CPS and 543 NP PSRs (sorted by product and site)
5	1-n	Product Set Suggested Code (TEXT - referred to in this document as UPDSUGG)
6	1-n	Operating System Suggested Code (TEXT - referred to in this document as MDYSUGG).
*7	1	Network Products Mods (UPDATE PL)
*8	1-n	APL Mods (TEXT)

* Logically empty file. Specifically note that there is no O/S critical code with this release.

1.3 Release Tapes

The CCP base PL (REL13B) contains only four files with content. The last four files are empty at this release. If the listings which are retained on those four files are required, then they must be obtained from the REL13B tape output by the CCP build process.

Software Release Bulletin
Level 543/538 NOS Operating System

The file identifiers in the labels of the release tapes for this release are RELxx*NOS541538.

In NOS Installation Handbook, Revision U, the file identifiers are incorrectly identified as RELxx*NOS543538.

2.0 INSTALLATION NOTES

The NOS 1.4-543/538 unconfigured deadstart tape must be used for updating to level 543/538.

The content of the system during the system test cycle consisted of the release level PLs plus Notes and Cautions code and suggested code.

It is strongly recommended that the Notes and Cautions code and the Suggested code be added to the system during installation.

2.1 Corrected SIM Problems

Problems contained in the following SIMs are corrected in the Level 543/538 release materials PLs: A228, A229, N026, N027, N028, N030, N032, N033, N036.

2.2 SIM Problems Included on Suggested Code File

Corrective code contained in the following SIMs are contained in the Operating System Suggested Code file on file 6 of REL0:

A226, A230, A231, A232, A233, A234, A235, A236, A238, A239, A240, A241, A244, A245, A246.

2.3 Network Products PSR Summaries

The PSRs for Network Products were not included in the Level 543 PSR Summary. They will be made available as a separate package identified as PSR Summary level NHP543. These are included on RELO.

3.0 TECHNICAL NOTES

3.1 Operating System Modifications

The following software is being released in binary form only:

- * Hardware Initialization Verification Software (HIVS)
- * Common Test and Initialization (CTI)
- * Binary Patch Utility (BNP)

The procedures described in the Installation Handbook for the stand-alone deadstart binary patch utility (BNP or BINEDIT) must be followed exactly to enter octal corrections to CTI via the display console. Procedures for BINEDIT and BNP are found in the IHB section 5. The Software Information Memo Service (SIMS) process will be used to communicate any necessary corrections to the analyst.

3.1.1 Binary Patch Utility (BNP)

1. BNP is a stand-alone utility which can be deadstarted from a 7 or 9-track tape unit by using the standard deadstart panel setting.
2. The tape contains only one binary deadstart file, referred to as BNP.
3. BNP requires two peripheral processors. One controls the display console, and the other drives the active tape unit.
4. BNP can be used to patch CTI/HIVS and MSL binary tapes when it is not possible to deadstart and use other means to patch them. Other means include the MSL executive, CMSE, or the on-line binary patch utility (BINEDIT) to be released as part of the standard operating system package.
5. A *SC OVL/BINEDIT entry is required in the LIBDECK for SCOPE cracking of BINEDIT parameters.
6. BNP requires at least two tape drives of the same type (60X/65X, 66X, 67X) and both must be seven track or nine track in order to patch CTI.

Cautions

BNP is not designed to patch CP (60-bit) binaries.

CP binaries longer than 7777 octal cannot be patched because the line character limit of 32 characters limits the address field to four characters. CTI has no CP code.

Report problems encountered with BNP through the normal PSR reporting process.

Do not use the same unit number for input and output tape or the tape will be overwritten.

Only the input and output tape must be the same type and number of tracks. If a third tape unit is used to load BNP then it can be either.

3.2 Network Modifications

PRU INTERFACE

The interface between RBF and CCP has been changed from using the BVT data format to a PRU data format. RBF controls the creation of input files and the selection of output files and process commands, but is no longer involved with the reading or writing of data from/to disk. The reading and writing of disk is controlled by the PPU program, PIP, which drives the 255X channel. CCP converts the data in PRU format to terminal format and vice versa as well as accumulating accounting information and checking for file limits exceeded.

The BVT interface has been removed from the HASP and Mode 4 TIPS. The PRU interface is only available to RBF. Therefore, batch devices connected to the HASP, BSC, and Mode 4 TIPS may only communicate with RBF.

The performance impact of the feature is to reduce the total CM and CPU requirements of NIP and RBF. The throughput of CCP may be reduced for configurations of greater than 12 batch lines running at 9600 bps.

2780/3780 SUPPORT

Support has been added to RBF and CCP for IBM 2780/3780 compatible terminals. Blank compression, multi-record transmission, and component selection features are supported. As these terminals have no console, the card reader and line printer may be used to provide limited command input and receive interactive output. The 2780/3780 console may be defined in NDL as having a restricted interactive capability and, therefore, reduce the interactive output sent to the terminal.

A new TIP-type (BSC), two new sub-TIPs and terminal classes (2780, 3780) have been added to NDL.

AUTO-RECOGNITION ENHANCEMENTS

Auto-recognition of BSC and HASP terminals may be specified in NDL. Auto-recognition is performed when the user reads a /*CONFIG card at the terminal card reader. Information that may be placed on the /*CONFIG card is terminal-type, peripheral configuration, and a configuration ordinal. The configuration ordinal may be used to match the terminal with the correct TERMINAL definition in NDL where further terminal options may be specified.

ENHANCED CHARACTER SET SUPPORT

Several enhancements concerning supported data formats have been added to CCP and RBF. 95-character print files (EC=A9) may be sent to HASP and 714 printers with A9 train type. 8-bit plot files (EC=A9) may be sent to HASP plotters with T8 plotter type. HASP and BSC terminals may be defined in NDL as having either 026 or 029 as the default card reader mode. Transparent input may be read from HASP and BSC terminals by the user punching "TR" in columns 79 and 80 of an end-of-record card. The remaining cards will be read and stored on disk without conversion.

The 95-character print files feature for 714 printers with A9 train type is not included in the release materials. Code for this feature will be available from Field Support.

OPTIONAL HASP POST-PRINT SUPPORT

A new HASP sub-TIP and terminal class have been added (HASP-PRE). CCP will send pre-print carriage control characters to HASP workstations which are configured or auto-recognized as HASP-PRE terminals. The 731 terminal class has been replaced by the HASP-PRE terminal class. 731 terminals are supported by the 731/734 terminal class.

USER INTERFACE

Decks with /*EOR and /*EOI record/file separators may be read from Mode 4 terminals. Print lines with Q, R, S, or T as carriage control character will be discarded and not printed by the Mode 4, HASP, and BSC TIPS.

After entering any device control command or a file control command for an active device to RBF, it is not necessary to enter RESUME at a 200 UT to restart batch I/O.

A user interrupt TIP command may be entered by an RBF user to cause RBF to discard commands it has queued for the user but not yet processed.

2563-2 CLA and 8K RAM

The 2563-2 is a buffered HDLC CLA with a V35 interface for use by the LIP. If used in conjunction with the 8K RAM, it will reduce the CPU required to drive a trunk and allow more low speed lines to coexist with high speed trunks. The on-line diagnostics do not support this CLA. Off-line diagnostics are available as MST041.

56K BPS TRUNK SUPPORT

This software feature improves the line utilization of trunks. In conjunction with the 2563-2 CLA and 8K RAM, up to two trunks can be run at 56K bps in conjunction with low speed terminal lines. The operation of this feature has been verified but has not been extensively tested.

MISCELLANEOUS MODIFICATIONS

In earlier releases, if CS was built with DEBUG defined, it would abort when it encountered a Supervision Error. If CS was built with DEBUG not defined, it would abort when it encountered two Supervision Errors. With the current release CS has been changed to never abort on a Supervision Error unless sense switch one is turned on at CS's control point. Sense switch one can be turned on, by either inserting an ONSW(1) control statement in JOBCS or having the operator turn on the sense switch when CS is executing at a control point. Whether DEBUG is defined or not no longer affects CS supervision error aborts.

After an application issues a NETPUT call, the completion bit will usually be set unless a worklist transfer was initiated and the application is running in parallel mode. The downline message will be queued within AIP. In the earlier releases, NETCHEK could then be called to update the status of the I and S bits in the NSP word and no worklist transfer would occur. With the current release, if NETCHEK is called, AIP will initiate a worklist transfer and the completion bit for the NETPUT call will be cleared to indicate it was not completed.

4.0 FUTURE CHANGES

4.1 CEDIAG/KEDIAG Diagnostic Replacement

The diagnostics for Unit Record Equipment written in COMPASS and currently residing in REL2B will be removed. These diagnostics, named CRI for the 405 Card Reader, CPI for the 415 Card Punch and LPI for the 512 Line Printer, execute under the control of CEDIAG/KEDIAG.

The programs CRI, CPI and LPI will be removed from the CEDIAG/KEDIAG libraries for NOS R6 (Release 6) and MALET diagnostics with the same name and capabilities will be provided on the Concurrent Maintenance Library (CML).

4.2 Error Flag Changes

It is anticipated that in NOS R6 the values of the NOS error flags will be changed and new ones added. Sites should insure that programs checking NOS error flag values are using the NOSTEXT symbols so that they will be able to reassemble the programs.

4.3 Indirect Access File Size

At NOS R6, the absolute maximum size for an individual indirect access file will be reduced from 262143D sectors to 131071D sectors.

4.4 PF and Queue Utilities

Several control card parameter inconsistencies exist among the various permanent file and queue utilities. For example, some of the PF utilities have an NU parameter while others do not. The queue utilities use the system default tape type (MT or NT) whereas the PF utilities assume MT unless the NT parameter is specified. None of the utilities have a way to specify the density to use. Rather than add all of the tape related parameters to all of the utilities, it has been decided to remove the tape request from the utilities. It is felt it will simplify the utilities to use the standard tape request control cards instead. The utilities will also be changed to not automatically rewind or unload the dump file before or after the operation. The NR, NU, and NT parameters will be removed from the permanent file utilities. The ME and VSN parameters will be removed from the queue utilities. These changes will be implemented in NOS R6.

Software Release Bulletin
Level 543/538 NOS Operating System

A simple procedure file can be used to request a tape with the desired parameters and then call the utility to bring up the K display or call the utility with the correct parameters. If no tape or other file type is preassigned, the dump utilities will write to a local disk file. PFLOAD, when loading a series of incremental dumps, will request the tapes following the first one. The tape attributes used will be the same as the first tape.

At the same time the DT and TM parameters and the B option of the OP parameter will be removed from the PF utilities because they have been replaced with new parameters. The N option of the OP parameter will be removed because it has no effect. Also, the V parameter will be removed since the VF parameter is sufficient to specify the use of the verify file option.

4.5 O26 Processing

In NOS R6, the OUT command in O26 will be eliminated. Output files may be released to the queue by using the OUT control statement under DIS.

4.6 File Queuing

In NOS R6, the following control statements, macros, and RA+1 requests will no longer be supported:

CONTROL STATEMENTS

<u>Function Being Eliminated</u>	<u>Alternative</u>
DISPOSE control statement	ROUTE control statement
SETID control statement	Specify an ID code with the ID parameter on a ROUTE control statement

MACROS

<u>Name</u>	<u>Function Being Eliminated</u>	<u>Alternative</u>
COMMON	LFM 2 - Enter common file	Use permanent files
RELEASE	LFM 4 - Release print file	Use DSP with the ROUTE macro
RELEASE	LFM 5 - Release 026 punch file	"
RELEASE	LFM 6 - Release PUNCHB file	"
RELEASE	LFM 7 - Release P8 file	"
RELEASE	LFM16B - Release file	"
SETID	LFM17B - Set file ID code	"
RELEASE	LFM30B - Release 029 punch file	"
SUBMIT	SFM 13B - Release file to CYBERLINK queue	None
SUBMIT	QFM 17B - Release file to input queue	Use DSP with the ROUTE macro
NONE	QFM 20B - Assign file to queue device	Use LFM function 15B with the REQUEST macro

RA + 1 REQUESTS

<u>Function Being Eliminated</u>	<u>Alternative</u>
OUT	Use DSP calls

4.7 PFLOAD Processing

PFLOAD currently ignores the secondary mask for direct access files on user indexes above AUIMX (377700B), and loads them to the device where they previously resided (from the PF catalog entry on the dump tape). When reconfiguring, device numbers and masks may change, but PFLOAD still loads these files back to their original device number, where the new secondary mask may not allow them to reside. This can result in files residing on a device where they are not cataloged and whose user indexes do not fall within the device's secondary mask definition.

When using tapes created by PFDUMPS using the DN parameter to reload an individual equipment, the normal process requires selecting tapes based on the equipment's device number and secondary mask. This is to insure that all files residing on the equipment but not cataloged there will also be reloaded. However, because of the potential situation created by PFLOAD, noted above, it is not possible to determine if still additional tapes must be used to guarantee that all required files will be reloaded.

To avoid this problem, PFLOAD will be changed to not override the secondary mask when loading direct access files. The only special case will be to insure that direct access files for user indexes 377760-377767 (the MSF subfamily user indexes) reside on their master device.

The ability of jobs running under user indexes greater than AUIMX to DEFINE an existing file as a direct access permanent file on any device, regardless of its secondary mask, is being retained. Anyone using this feature should be careful to load the proper tapes and be aware of the above changes in the way PFLOAD will handle these files. Permanent files created by DFTERM from terminated dayfiles fall in this category.

5.0 PRODUCT SET NOTES AND CAUTIONS

Following is a list of the Notes and Cautions modsets by associated product. These modsets are contained on file 5 of the RELO tape and are put on permanent file UPDSUGG during the initial setup. These modsets may not exist in the same order on UPDSUGG as is indicated in these lists. It is strongly recommended that these modsets be installed.

Corrective Code to CCP must be saved as permanent file UCCP during the CCP build process.

<u>APL</u>	<u>BAM</u>	<u>COBOL5</u>	<u>FTN5</u>	<u>LOADER</u>	<u>UPDATE</u>
AP2A058	SW1A554	CL5B187	FC5A330	LDRA469	UPDA328
	SW1A567	CL5B194		LDRA472	UPDA341
	SW1A568				UPD0450
					UPD0456

<u>NAM</u>	<u>RBF</u>	<u>CEDIAG</u>	<u>CCP</u>
NA2B651	RB2A511	DIMA555	CC4B931
NA2B654			CC4B948
NA2B664			CC4B961
NA2B665			CC4B962
NA2B666			CC4B965
NA2B591			CC4B968
			CC4B969
			CC4B970
			CC4B975
			CC4B980
			CC4B984
			CC4B988
			CC4C003
			CC4C004
			CC4C005
			CC4C006
			CC4C007
			CC4C008
			CC4C009
			CC4C013
			CC4C025
			CC4C031
			CC40439

NA APL

Problem: FUTIL subroutines do not properly initialize the FTABLE area.

Solution: Install ident AP2A058 from UPDSUGG.

BAM

NA Problem: When the LCM code is turned ON, CRM is reading incorrectly a Z record with a 66-bit terminator. WSA is not blank-filled and an extra blank record is read.

Software Release Bulletin
Level 543/538 NOS Operating System

Solution: Install ident SW1A554 from UPDSUGG.

Problem: Incorrect blank padding on a graphics terminal (ASCII mode) occurs due to modset SW10265.

Solution: Install ident SW1A567 from UPDSUGG.

Caution: The code in ident SW1A536 allows the MOVE routine used by BAM (CTL\$RM) to be built in 3 different versions depending upon the definition of the =CMU= and =NOCMU= micros in TXTCRM.

- CMU code only

=CMU= defined
=NOCMU= defined

core requirement: 32B words

BAM built with these options will not run on CYBER 176 or lower CYBER without the CMU hardware.

- No CMU code only

=CMU= not defined
=NOCMU= defined

core requirement: 66B words

This version of BAM can run on any CYBER machine but will not get optimum performance on a machine with the CMU hardware.

- CMU and NOCMU code

=CMU= defined
=NOCMU= defined

core requirement: 120B words

This version of BAM will run on any CYBER machine and get optimum performance as the availability of the CMU hardware is tested at run time.

Software Release Bulletin
Level 543/538 NOS Operating System

NA Problem: PSR code SW10244 in this release allows some code intended for NOS-BE only use to be assembled on NOS.

Applications using connected files or graphics will fail as a result.

Solution: Purge PSR code ident SW10244 and install PSR code ident SW1A568 from UPDSUGG.

NA Problem: Completion of a BUFFER-OUT on a connected file is incorrectly tested resulting in bad output. The problem is showing up primarily with graphics.

Solution: This will be fixed by code ident SW10292 which will be available from Field Support.

CEDIAG

NA ? Problem: GETLOG aborts with SFM File Empty.

Solution: Install ident DIMA555 from UPDSUGG. This modset must be installed or HPA will not function.

NA ? CDCS2

Problem: Files involved in constraints must be created by CDCS in a particular order to ensure the integrity of the files. When creating files involved in two-file constraints, a file containing the record type designated as parent must be created (that is, opened for creation, provided with records, and closed) before the creation of any file that contains a record type designated as a child of that parent.

To create a file on which a single-file constraint has been imposed, the file should be created with record occurrences of dominant items and closed. Then the file should be opened by input/output processing so that record occurrences of dependent items can be added to the file.

Failure to create constraint files in this manner may result in files containing only partial data. No warning is given by CDCS to indicate that the file has not been created properly.

Software Release Bulletin
Level 543/538 NOS Operating System

Solution: Corrective code is not available at this time but the problem has been reported by PSR CD2A285.

To circumvent this problem we suggest creation of files in the manner described above.

Caution: Two problems exist in using data base procedures written in FORTRAN5:

- 1) While encapsulating a FORTRAN data base procedure which uses certain FORTRAN Common Library (FCL) routines, the CYBER Loader error 504 "NON-STANDARD RELOCATION AT ADDRESS address" may occur.
- 2) Certain FCL modules which perform operations such as the generation of random number, input/output operations, or use of a user-supplied collating sequence may have unpredictable results when executed via a capsule since they require a (0,0) overlay interface which is nonexistent with encapsulated CDCS data base procedures.

Solution:

- 1) The first problem will be corrected as PSR FL5A509.
- 2) Use of FORTRAN5 data base procedures which perform the operations mentioned under (2) above is not recommended.

Problem: CDCS system control point aborted with a mode error in CRM capsule OPNM\$AA while trying to unload the system compression/decompression capsule. There may also be a problem with user-supplied compression/decompression capsules.

Solution: Corrective code is not available at this time, but the problem has been reported as PSR CD2A357. Until corrective code is available, the data compression/decompression feature (with either system or user-supplied capsules) should not be used.

Caution: CDCS2 file structure is changed at this release level by the creation of overlays for CDCS2 and CDCSBTF. The changes eliminate the need of having the operator interface ovcap DB\$INT as part of DMSLIB. NOS users are encouraged to delete this ovcap from their system before generation of a deadstart tape for this level by executing the following control card sequence:

ATTACH (PRODUCT/M=W)
GTR (PRODUCT,LIB) ULIB/DMSLIB
NOTE (IN) ; *D,CAP/DB\$INT
LIBEDIT (P=LIB,I=IN,B=0)
LIBGEN (F=NEW,P=DMSLIB)
LIBEDIT (B=DMSLIB,P=PRODUCT,I=0,C)

COBOL 5

INC
Problem: The message FTM ERROR-SETLOF COMPLETE FLAG
NON-ZERO is given during compilation.

Solution: Install ident CL5B187 from UPDSUGG.

Problem: On a CMU system, alternate collating sequences
specified for sort or merge are ignored and the
record returned by a RETURN statement is
sometimes blank.

Solution: Install ident CL5B194 from UPDSUGG.

WA DATA CATALOGUE

Problem: Execution field length of DCRET exceeds its
Design Requirement.

Solution: In order to reduce the field length requirements
during the execution of DCRET, the QUERY and
GENERATE functions have been separated into two
executable programs. The new permanent file
names of the modules for these functions are as
follows:

<u>PFN</u>	<u>MODULE</u>
QUERY	DCRET (same as before)
GENERATE	DCGEN (new module)

The capability of switching between the QUERY and
GENERATE functions is no longer available as each
function must be called from its own module.

Pseudo sense switch 1 should be turned on during
interactive processing of both DCGEN and DCRET.

The message STATEMENT SEQUENCE ERROR is issued
when the wrong function is requested, i.e.
\$GENERATE is input during execution of the QUERY
module.

FTN5

Problem: Intermittent invalid FTN5 diagnostic occurs:
"CHARACTER DECLARATION CONFLICT EXISTS IN COMMON
BLOCK xxx"

Solution: Install ident FC5A330 from UPDSUGG.

LOADER

Problem: The inclusion of LDR0562 causes certain segmented loads to fail with a CPU error exit. This will happen when the placement of programs in the tree structure requires SEGLOAD to move a program to more than one segment.

Solution: Install ident LDRA469 from UPDSUGG.

Problem: LDR0562 results in improper loading of segmented jobs containing more than 8192 segments and programs and blocks. This correction set was intended to double this limit, but instead, causes the above problem, due to the manner in which the internal table TSEG is handled.

Solution: Install ident LDRA472 from UPDSUGG, which returns the limit to the original 8192, and which also adds a new line to the end of the load map for segment jobs indicating the size of the load with respect to this limit.

UPDATE

Problem: *BEFORE and *ADDFILE directives sometimes cause a mode 1 error trying to store beyond FL.

Solution: Install UPDA328 from UPDSUGG.

Problem: Abbreviated DECK directive following *ADDFILE from input causes a fatal UPDATE error.

Solution: Install ident UPDA341 from UPDSUGG.

Software Release Bulletin
Level 543/538 NOS Operating System

Problem: *MOVE or *COPY directives in a run using a sequential OLDPL may result in duplicate deck name or OLDPL read error.

Solution: Install ident UPD0450 from UPDSUGG.

Problem: *ADDFILE using dname parameter causes a mode 1 error.

Solution: Install ident UPD0456 from UPDSUGG.

CCP

Problem: The X.25 PAD subtip loses the first character after the format effector if the format effector character is the home cursor or top of page and the terminal is a printer-type terminal.

Solution: Install ident CC4B931 from UPDSUGG.

Problem: (CTL)X abort output line does not work.

Solution: Install ident CC4B948 from UPDSUGG.

Problem: *DEL* message from BIP overprints user input.

Solution: Install ident CC4B961 from UPDSUGG.

Problem: PBLOST releases bad blocks after 4 are logged, instead of keeping the last four and releasing possible older blocks.

Solution: Install ident CC4B961 from UPDSUGG.

Problem: The X.25 PAD subtip overwrites the last input if the format effector character is the home cursor and the terminal is a printer-type with the terminal class set to display-type terminal.

Solution: Install ident CC4B962 from UPDSUGG.

Problem: The X.25 PAD subtip does not set the transparent bit in the upline block while the subtip is in transparent mode.

Solution : Install ident CC4B965 from UPDSUGG.

Software Release Bulletin
Level 543/538 NOS Operating System

Problem: Mode 4 Tip causes a halt 0 if a line inoperative is followed by a disable line.

Solution: Install ident CC4B968 from UPDSUGG.

Problem: The async tip does not discard null line and control character for page turn prompts. It, instead, sends them upline.

Solution: Install ident CC4B969 from UPDSUGG.

Problem: The HASP tip does not support non-transparent work stations.

Solution: Install ident CC4B970 from UPDSUGG.

Problem: Mode 4 printer carriage control is incorrect for suppress and double space.

Solution: Install ident CC4B975 from UPDSUGG.

Problem: Non-standard NPU statistics were added to CCP by Modset CC4B626. This code may also cause the NPU to halt with a halt code of 9 after the host goes down. Modset CC4B626 is purged by installing modset CC4B980.

Solution: Install ident CC4B980 from UPDSUGG.

Problem: CCP sends the next BSN on an upline break instead of the BSN of the last backed block.

Solution: Install ident CC4B984 from UPDSUGG.

Problem: If an application switches from transparent to non-transparent mode, the tip may lose a buffer, which may eventually lead to global regulation.

Solution: Install ident CC4B988 from UPDSUGG.

Software Release Bulletin
Level 543/538 NOS Operating System

Problem: There are relative external declarations with PBSCLA which, due to a bug in MPLINK, may cause them not to be linked properly.

Solution: Install ident CC4B994 from UPDSUGG.

Problem: Mode 4 terminals are not polled after a host recovery. This modset is dependent on CC4C031.

Solution: Install ident CC4B996 from UPDSUGG.

Problem: PBACTADD must be loaded into non-paged memory, or a halt 7 may occur.

Solution: Install ident CC4B997 from UPDSUGG.

Problem: The X.25 tip uses the value of the T1 timer incorrectly.

Solution: Install ident CC4C003 from UPDSUGG.

Problem: The X.25 tip may hang if it receives two or more reject frames in a row.

Solution: Install ident CC4C004 from UPDSUGG.

Problem: The X.25 line cannot be reenabled if it was disabled while the line was active (users logged in).

Solution: Install ident CC4C005 from UPDSUGG.

Problem: The X.25 tip may inadvertently restart output on a disabled line.

Solution: Install ident CC4C006 from UPDSUGG.

Problem: The X.25 TIP is unable to activate the line if a hard error occurs while transmitting a frame.

Solution: Install ident CC4C007 from UPDSUGG.

Problem: The X.25 tip gets into an endless loop between packet level and frame level.

Solution: Install ident CC4C008 from UPDSUGG.

Problem: The X.25 frame level tip mishandles receipt of the REJ frame and T1 timer expiration.

Solution: Install ident CC4C009 from UPDSUGG.

Software Release Bulletin
Level 543/538 NOS Operating System

- Problem: The Async tip will attempt to output on top of output when output becomes queued and the tip is in echoplex delay waiting on a created downline message.
- Solution: Install ident CC4C013 from UPDSUGG.
- Problem: Transparent upline data is incorrectly blocked at 150 characters.
- Solution: Install ident CC4C025 from UPDSUGG.
- Problem: User break does not purge the type ahead queue held by CCP after NBL is reached. This mod will purge modset CC4B951 on the PL.
- Solution: Install ident CC4C031 from UPDSUGG.
- Problem: Mode 4A issues a clear write to the wrong terminal address.
- Solution: Install ident CC40439 UPDSUGG.
- Problem: Mode 4C status request is delayed too long because the tip tries Mode 4B if Mode 4C does not respond.
- Solution: Install ident CC40439 from UPDSUGG.
- Problem: 95-character set ASCII file is folded into 64-character set ASCII before printing on 714 printer.
- Solution: This will be fixed by code ident CC4C016 which will be available from Field Support.
- Caution: On-line diagnostics do not support the 2563-2 CLA.
- Caution: If a heavy batch load is being run via Remote Node and the interactive response time is degraded, the problem may be in the frame size. Contact Field Support for advice.

NAM

Problem: It is possible for a level 543 network to load a level 531 or earlier CCP load file into a NPU. Because of the extensive changes made to the network at level 543, if the above is done the network may fail with no indication of what is going wrong.

Solution: Install NA2B591 from UPDSUGG. NS will issue a warning message when a pre-543 CCP load file is loaded.

Problem: If a terminal connection is switched from one application to another (includes NVF) and a user interrupt is entered during the switch process after the connection is made to the new application, user interrupts may no longer be accepted from that terminal until the terminal is logged out. This will also occur if a user interrupt is entered while the terminal is connected to an application that does not support the user interrupt.

Solution: Install ident NA2B651 from UPDSUGG.

Problem: If the system is very busy or PIP is very busy dumping/loading NPUs, it is possible for NIP to fail with a CPU Error Exit.

Solution: Install NA2B654 from UPDSUGG.

Problem: When a terminal user disconnects the line, there may still be downline blocks queued for the terminal in NIP. When PIP processes these downline blocks and PIP detects that the connection no longer exists, it will send the downline blocks back to NIP as BAD NETWORK BLOCKS.

Solution: Install NA2B664 from UPDSUGG. PIP will then only send the downline blocks back to NIP if it was built with DEBUG defined.

Problem: If CCP does not read up the NPU order word and writes out the NPU status word and PIP attempts to write out a new NPU order code, PIP will loop forever waiting for CCP to read up the NPU order word. It will neither time out the NPU, nor pause for storage move, nor check the error flag.

Solution: Install NA2B665 from UPDSUGG.
NOS0213A 25

Software Release Bulletin
Level 543/538 NOS Operating System

Problem: If a coupler error occurs during a dump or load of an NPU, PIP will continuously retry reading or writing the NPU block to the NPU until it is successful. This will cause the host to receive many coupler error messages.

Solution: Install NA2B666 from UPDSUGG.

RBF

Problem: RBF may fail with a CPU Error Exit while it is processing DIS commands.

Solution: Install RB2A511 from UPDSUGG.

6.0 KNOWN PROBLEMS

ASUSE Reports

The ASUSE reports require the following clarification. In the basic report, the totals given for cartridges with zero streams available include any cartridges for which one of the following flags is set: the lost cartridge flag, the inhibit allocation flag, or the excessive write parity errors flag. For both the basic report and report A, only streams which are unallocated and free of errors are counted as being available streams.

When report A is selected without report B, any cartridges having one of the three previously mentioned flags set are omitted. In contrast, report E includes all cartridges in the specified family, subfamily and CSU, regardless of errors. Thus, it is normal for cartridges with errors to appear in report E but not in report A.

Control Statement File

The control statement file is generally accessible to a user's executing program. Therefore, it is not safe to assume that items like user numbers and passwords are secure when they appear in this file. It is intended that the NOS Reference Manual, Volume 1, will reflect this situation. Sites should take this into consideration when generating procedure files and should review their current procedure files for problems that may exist because of this.

DDP Driver

A problem currently exists with the DDP driver in that 6DP doesn't wait on output register clear before issuing the DSWM monitor function. This deficiency manifests itself during rollout of a job with user ECS assigned and results in various forms of system hangs.

The scenario is as follows: LRO uses two CM buffers during rollout of ECS. An ECXM request is written to the output register to fill the first buffer. When the request is complete, a second ECXM is issued to fill the second buffer. Immediately thereafter, before the second request completes, LRO begins writing the first buffer to the rollout device. MTR picks up the ECXM, changes it to ECSM and passes it on to CPUMTR. Meanwhile, 6DP, if the rollout device is DP, writes DSWM parameters into the output register and message buffer destroying the ECXM parameters.

SIM A247 contains corrective code addressing this problem.

*04/11/84
T.M. 02/2/84*

Deadstart Diagnostic Sequencer

It should be noted that where the Operator's Guide refers to installing DDS the HIVS level 124 tape which accompanies this release should be used.

MSSEXEC Error Processing Problems

MSSEXEC is unable to continue processing with error idle set on a device containing MSF files. If MSSEXEC attempts a PFM request on the device with error idle set, it will hang in recall with the message "DEVICE UNAVAILABLE".

MSSEXEC may abort when trying to reclaim an MSF catalog or CSUMAP interlock. If PFM returns the error code INA, PEA or FTF to MSSEXEC, it is not processed correctly (the request should be retried rather than aborting MSSEXEC).

TAF

TAF COBOL5 tasks that end with CEASE or SEND with the CEASE FLAG set are not reusable. To make these tasks reusable, they should be terminated with STOP RUN.

LAJ HANG

LAJ may hang if:

1. The list of files length exceeded the FNT length, and
2. The list of files did not end prematurely.

This problem was introduced by modset KRA775. Corrective code is available from NOS Field Support.

MSSEXEC Abort - CM Out of Range

MSSEXEC may abort with the message "CM Out of Range" if an advance cartridge command fails. This problem was introduced by modset KRA795. Corrective code is available from NOS Field Support.

BML Usage Record

The field in the BML usage record for MSS that should contain the EST ordinal of the CSU has the ordinal of the MST instead. This problem was introduced by modset KRA796. Corrective code is available from NOS Field Support.

ATTACH with NF or FA Parameter

Attaching files from an SSJ= job using the NF or FA parameter may not work as expected. If a non fast attach permanent file and a fast attach permanent file both exist with the same file name the wrong file may be attached. This problem was introduced by modset KRA786. Corrective code is available from NOS Field Support.

7.0 OPERATING SYSTEM CRITICAL CODE

There are no critical modsets with this release.

8.0 OPERATING SYSTEM SUGGESTED CODE

A list of suggested modsets may be obtained by executing the following job statements:

ATTACH (MDYSUGG) ✓
COPYSBF (MDYSUGG)
OUT.

It is strongly recommended that these modsets be installed.

9.0 CONTROLWARE LEVELS

NOS 1.4 Level 543 was tested in an environment containing the following controlware part numbers:

7054/844 (BCS Half Track)	MA710-A13 (PN52706607)
7021/66X (FIRM66X)	MB434-A14 (PN52653361)
2550-100 667X (Emulation)	MC402-E03 (PN74875333)
7154/844 (BCF - Full Track)	MA401-A06 (PN21989621)
7155/885/844-4X (FMD - HT/FT)	MA721-A05 (PN52803639)

and also tested with CML 3.2 Level 126 release.

10.0 MISCELLANEOUS INSTALLATION COMMENTS

10.1 NAM/RBF START-UP PROCEDURES

NAM, RBF, IAF, and TAF installation creates permanent files that 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:

<u>Indirect Access Files</u>	<u>Direct Access Files</u>
------------------------------	----------------------------

- | | |
|-------------|----------------|
| 1. NAM | 14. NAMLOCK |
| 2. NPUDUMP | 15. RBFLOCK |
| 3. NAMPROC | 16. APPLOCK |
| 4. JOBNS | 17. NIPLOCK |
| 5. JOBCS | 18. NSLOCK |
| 6. JOBNVF | 19. CSLOCK |
| 7. JOBTVF | 20. NVFLOCK |
| 8. NETPROC | 21. TVFLOCK |
| 9. NPSDUMP | 22. NPSLOCK |
| 10. NETSS | 23. NCFFILE(*) |
| 11. NETUVSN | 24. LCFFILE(*) |
| 12. RBF | 25. CCPFILE(*) |
| 13. RBFPROC | |

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

10.2 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.

Indirect Access Files

- | | |
|------------|-------|
| 1. IAF | (IAF) |
| 2. TRACIAF | |
| 3. IAFTM | |
| 4. IAFTR | |
| 5. TAFNAM | (TAF) |

10.3 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.

10.4 MOVEPF

X.MOVEPF can be used to transfer any of the aforementioned files. In order to save time, all direct access files can be created under the system user number (SYSTEMX) without using X.MOVEPF.

10.5 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.

	!NON-FATAL!	!NON-FATAL!	UPDATE	! PARTITIONS !	
PRODUCT	! UPDATE	! LOADER	!OVERLAPPING!	NOT REPLACED!	LIBEDIT
	! ERRORS	! ERRORS	!CORRECTIONS!	IN COPYL	! ERRORS
AAM1	!	2	!	!13/109/111	!
ALGOL5	!	!	!	5	!
BAM	1	!	!	!	!
BASIC3	!	!	!	2	!
CCPBLB	!	!	18	!	!
CCPLOAD	!	!	18	!	!
CCPPH1	!	!	18	!	!
CCPOVB	!	!	18	!	!
CCPVAR	!	!	18	!	!
CDCS2	!	!	!	3	!
COBOL5	!	!	!	7	!
DBU	!	1	!	!	!
FTN	!	!	!	!	1
FTNTS	!	!	!	!	1
FTN5	!	!	!	3	!
F45	!	!	!	1	!
PLI	!	!	!	1	!
TEXT	1	!	!	!	!

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.

10.6 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 non-existent jobs: VAAM, VLCS2, VFCS2. These have been replaced by VAAM1, VAAM2, VLCS3, VFCS3.

10.7 RESEQUENCED DECKS

The following have been resequenced:

BYSYNC AND HASP

BSCTIP, BSCLV2, HASPINPS, HASPITXP, HASPOTXP, PTCNFCARD, HASPTIP
BSCL2I, BSCL20, BSCMLI, BSCMLO, ALBSCTIP, ALHASP
BSCC1, BSCC2, BSCC3, BSCLCBL2, BSCLCBML, BSCMGS, BSCEQU
BSCUTC, BSCUVAR, BSCU1TYP1, BSCU1, BSCWCS, FCCRC, ZEXUBSC
ZEXHASP, BSCDBGASM, HASPBUF, HASPCONST, HASPIEQU
HASPLCB, HASPMGS, HASPTCB, HASPTIP, HASPTYPE, HASPVAR
DC3E9, DC3E6, DC4E9, DC4E6
UT1ALAP, UT1ALDF, UT2ALAP, UT2ALDF
UT3ALAP, UT3ALDF, UT4ALAP, UT4ALDF

BLOCK TRANSPORT COMDECKS

PBBLOCKTR, PBBPM, PBDLTS, PBQUEMAIN, PBULTS, PBACCOUNT
PBBIPTH, PBLOST, PBTRNSFR, PILMT, IPTCBFDS, IPVAR, IPZAP, IP

HIP COMDECKS

HIP30, ZXHIP

AUTOLINK COMDECKS

ALINPDIR, ALDEFS, ALRPT, ALPIBUF2, ALTUP, ALINITIA, ALUTOPIA
ALCONSOL, ALMODE4, ALBASESY, ALIVT, ALASync, ALBIP, ALHASP
ALSMOD, ALTGMOD, ALHIP, ALOLDsys, ALHLIP, ALBSCTIP

ASync TIP COMDECKS

ASyncTIP, REL4ASY, REL4ASTYP, ASYMXCONS, VARASync, VALASync
ASyncCBUF, ASyncMLCB, ZARASync, ZEXASync, ASyncCFWD, CONASync
TASync, ZCASync, ASY7TO6PS, ASyncMUX, TYPASync

Software Release Bulletin
Level 543/538 NOS Operating System

MODE 4 COMDECKS

MODE4TIP,REL6MD4,REL6CONST,REL6M4EQU,R6M4IN,R6M4IT,R6M401
R6M402,CONVMACRO,ASKASK,BCDASK,ASKDC4,ASKDC3,BCDDC4,BCDDC3
DC4ASK,DC3ASK,DC4BCD,DC3BCD,CONMD4,TMD4D1,TMD4D2,TMD4D3
TMD4D4,VARMD4,ZARMD4,ZEXMD4,ZCNMD4

SERVICE MODULE COMDECKS

SVM,SVMCONST,SVMTYPE4,SVMVAR,SVMVALUE,SVMFWD,SVMZAP
SVMZAPA,SVMZAPC,SVMZAPV

SYSTEM MODULES

CONSTR4,FORWARD,PTLINIT,PBLCBP,PNSGATH,PTREGL,PGMDECKS
PBHALT,ASMDECKS,SINTHNDLR,PBBREAKPO,PBTOQUE,PILCBS
PIGETABLE,PIDTBL,PBLNO1,PBLNO6,ADDRESSES,BOOTDUMP
PIRAM,PIBUF2,PTCLAS,PBTOPHAT,ZEXBDL,PISIZCORE,PBSCLA
CONSTUSR,TYPEBEGIN,TYPELCB,TYPENCLCB,TYPEUSER,VARUSER
VALUSER,FORWDUSER,USERAPPS,ASMUSER,PIAPPS,ZCONUSER
ZVARUSER,PTIVTCMD,CONIVTC,TYPETCB,ZARRUSR,ZEXUSR,PILMT
PBTOQUE,PBSTRIP,PTREGL,SSRVS

11.0 DETAILED INSTALLATION NOTES

11.1 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/IAJ,TCS,3AE,3AF,LDR
*CM      PP/LCK,1MA,0BF,0DF,0AV,0RP,0FA,0RF
*CM      PP/LFM,3LB,3LF,3LG
*CM      PP/LDD,LDQ,RPV
*CM      PP/LRI,3RH,1RO,3RP,3RQ
*CM      PP/PFM,3PA,3PB,3PD,3PG,3PI,3PK,3PO
*CM      PP/LDC (RBF RELATED)
*CM      PP/LTA,1TO,3TJ,3TK
*CM      PP/LMT,3MG,3MH,3ML,3MT
*CM      PP/LLS (EI200 RELATED)
*CM      PP/2TO (IAF RELATED)
*CM      PP/LIO,1SJ,1SP,QAC,3QS
*CM      PP/9A1,9A5,9A6,9A7,1DL (DSD RELATED)
*CM      OVL/LDC
*PROC    LIBMOD,GENVAL,GENHELP,MOVEPF
*FL      ABS/FTN-6410,COBOL-6630
*FL      ABS/BASIC-6250,CDCS2-6615
*FL      ABS/DDL-6540,DFRCV-6650
*FL      ABS/DDL3-6540,PLI-6600
*FL      ABS/DDLF-6540,DML-6540,IMF-6500
*FL      ABS/FILE-6030,ALGOL-6500,ALGEDIT-6400
*FL      ABS/COPYCL-6370,COBOL5-6600,SIFT-6410
*FL      ABS/ESTMATE-6370,SISTAT-6210,IXGEN-6650
*FL      ABS/COPY8P-6200,SORTMRG-6600,QU-6600
*FL      ABS/REPORT-6420,ALGOL5-6450,NDA-200
*FL      ABS/F45-6600,FTN5-6530
*FL      ABS/CDCSBTF-6600,PMDMP-6410
*SC      ABS/REPORT,QUMIP,DDLF,DML,CDCSBTF
*SC      ABS/COMPASS,FILE,SYMPL,COBOL5
*SC      ABS/UPDATE,COPYL,ITEMIZE,DFRCV,DFRST
*SC      ABS/ALGOL,COBOL,FTN,SORTMRG
*SC      ABS/NDA,NDLP,LFG,REPORTR,SCRIPT,STIM
*SC      ABS/COPY8P,QU,DDL,DDL3,BASIC
*SC      ABS/ESTMATE,SISTAT,IXGEN,ALGOL5
*SC      ABS/DBQRFA,DBQRFI,IMF
*SC      ABS/F45,FTN5,DLFP,CDCS2,SIMULA,ADLP
*SC      ABS/DBMSTRD,DBRCVR
*SC      OVL/BINEDIT
```

NOTE: If EI200, RBF, or IAF are not being used, the respective entries (LLS, LDC and 2TO) may be deleted.

11.2 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.

LIBDCK1

```
*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/2TO (IAF RELATED)
*AD      11,PP/1TA,1TO,3TC,3TD,3TE,3TF,3TJ,TLX
*AD      11,PP/1MT,3MG,3MH,3MI,3ML,3MN,3MT
*AD      11,PP/1IO,1SJ,1SP
*AD      11,PP/1LS (EI200 related)
*AD      11,ABS/FILES,PFILES,CATLIST,CTL2,CTL3,EDIT,RESEX
*AD      11,ABS/ACCFAM,MODIFY,LOADER,CHARGE,COPYB,MFILES
*AD      11,OVL/LDC
*AD      11,ABS/COMPASS
*AD      11,OVL/COMP3$,COMP3$A,MSORT
*PROC    LIBMOD,GENVAL,GENHELP,MOVEPF
*FL      ABS/FTN-6410,COBOL-6630
*FL      ABS/BASIC-6250,CDCS2-6615
*FL      ABS/DDL-6540,DFRCV-6650
*FL      ABS/DDL3-6540,PLI-6600
*FL      ABS/DDLF-6540,DML-6540,IMF-6500
*FL      ABS/FILE-6030,ALGOL-6500,ALGEDIT-6400
*FL      ABS/COPYCL-6370,COBOL5-6600,SIFT-6410
*FL      ABS/ESTMATE-6370,SISTAT-6210,IXGEN-6650
*FL      ABS/COPY8P-6200,SORTMRG-6600,QU-6600
*FL      ABS/REPORT-6420,ALGOL5-6450,NDA-200
*FL      ABS/F45-6600,FTN5-6530
*FL      ABS/CDCSBTF-6600,PMDMP-6410
*SC      ABS/REPORT,QUMIP,DDLF,DML,CDCSBTF
*SC      ABS/COMPASS,FILE,SYMPL,COBOL5
*SC      ABS/UPDATE,COPYL,ITEMIZE,DFRCV,DFRST
*SC      ABS/ALGOL,COBOL,FTN,SORTMRG
*SC      ABS/NDA,NDLP,LFG,REPORTR,SCRIPT,STIM
*SC      ABS/COPY8P,QU,DDL,DDL3,BASIC
*SC      ABS/ESTMATE,SISTAT,IXGEN,ALGOL5
```

Software Release Bulletin
Level 543/538 NOS Operating System

*SC ABS/DBQRFA,DBQRFI,IMF
*SC ABS/F45,FTN5,DLFP,CDCS2,SIMULA,ADLP
*SC ABS/DBMSTRD,DBRCVR
*SC OVL/BINEDIT

NOTE: If EI200, RBF or IAF are not being used, the
respective entries (ILS, LDC, and 2TO) may be deleted.

11.3 SAMPLE IPRDECK

This deck is provided as a reference only.

IPRDECK
TDEN=HY.
CSM=64.
LOCK.
EI200.
VALID.
IAF.
QUEUE,SY,IN,OP7757,LP700,UP3000.
QUEUE,SY,RO,OP6000,LP100,UP1000.
QUEUE,SY,OT,OP400,LP100,UP7700.
SERVICE,SY,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,EI,IN,OP3400,LP2400,UP4010.
QUEUE,EI,RO,OP3400,LP1400,UP4006.
QUEUE,EI,OT,OP200,LP100,UP7600.
SERVICE,EI,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,MAI&X.QREC(NK)
DSD,3,AUTO.
SCP.
MS VALIDATION.
PF VALIDATION.
SRST=40.

11.4 NOS EVALUATION CHANGES TO INSTALLATION DEFAULTS

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

TEXT INSTALLATION

The following code allows the LOADER to access ECS.

```
*IDENT ALLOWECS
*I,IPARAMS.15
  IP.MECS  EQU    7777B
*/ END OF MODSET.
```

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 DMGMNT
*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.

11.5 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 BUILDLEV
*B,HISTORY.2
  BUILDLEV LOCAL MOD TO UPDATE BUILD LEVEL
*C,HISTORY
*D,PSRLEVEL.3
  NAMLV C(1,18,5) = ("543"),
*C,NAMLEV
*/ END OF MODSET.

*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.
```

RBF2 (Remote Batch Facility)

```
*IDENT RBFSTAT
*/ TURNS ON RBF BANDWIDTH COUNTER
*DEFINE STAT
*/ END OF MODSET.
```

11.6 RECOMMENDED INSTALLATION PROCEDURE

GROUP 0

GROUP 0 jobs create the COMPOSITE OPL (YSOPL). 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. 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.

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.

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.

**** WARNING ****

Do not call GENJOB twice under the same DIS package or in the same SUBMIT job.

GROUP 0 - UPDATE MODIFY PL'S AND CREATE COMPOSITE OPL

PRODUCT	! SWITCH ! SETTINGS ! S1! S2! S3!	! PRODUCT ! TAPE ! VSN	! OTHER ! TAPES ! REQUIRED	! JOB THAT ! LAST USED ! PRODUCT TAPE!	! NOTES
COMBINE	! 0! 0! 0!	REL1A	! All MODIFY! ! PL's		! 1,3
MDYBIN	! ! ! !		!	!	! 2

NOTES:

1. The procedure COMBINE builds the composite OPL (SYSOPL) by merging the modify PL's into one file. 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.

Software Release Bulletin
Level 543/538 NOS Operating System

GROUP I - INSTALL IN CONSECUTIVE ORDER

PRODUCT	! SWITCH ! ! SETTINGS !			PRODUCT TAPE VSN	OTHER TAPES REQUIRED	JOB THAT LAST USED PRODUCT TAPE	NOTES
TEXT	!	1!	1!	0!	REL1E	!	5
TEXTIO	!	1!	1!	0!	REL1E	!	5
COMPASS	!	1!	1!	0!	REL3A	!	
UPDATE	!	1!	1!	0!	REL3A	!	
LOADER	!	1!	1!	0!	REL1E	!	5
SYSTEM	!	1!	0!	0!	SYSOPL (INPUT ONLY)	!	1,6
	!	!	!	!	!	!	!
	!	!	!	!	!	!	!
	!	!	!	!	!	!	!
	!	!	!	!	!	!	!
SYSJOB	!	1!	0!	0!	!	!	2,7,8
	!	!	!	!	!	!	!
BCS	!	1!	0!	0!	!	!	2,8,10
BCF	!	1!	0!	0!	!	!	2,8,10
BINEDIT	!	1!	0!	0!	REL3B	!	9
FMD	!	1!	0!	0!	!	!	2,8,10
MTS	!	1!	0!	0!	REL2A	!	2,8,10
FCL1	!	1!	1!	0!	REL4C	!	8
	!	!	!	!	!	!	!
	!	!	!	!	!	!	!
SYMPL	!	1!	1!	0!	REL2E	!	!
BAM	!	1!	1!	0!	REL3B	!	!
FTN	!	1!	1!	0!	REL4A	!	3
	!	!	!	!	!	!	!
FTNTS	!	1!	1!	0!	REL4B	!	4
	!	!	!	!	!	!	!
FCL2	!	1!	1!	0!	REL4C	!	!
SORT	!	1!	1!	0!	REL6A	!	!
AAM1	!	1!	1!	0!	REL3E	!	!
AAM2	!	1!	1!	0!	REL3E	!	!
DDL2	!	1!	1!	0!	REL11F	!	!
DDL3	!	1!	1!	0!	REL11H	!	!
GENSYS	!	0!	0!	0!	!	!	!

NOTES: (continued on following page)

1. Refer to COMMENTS section in SYSTEM for details on its use.
(NOS,EI200,MMF, XEDIT, TELEX,TAFTS)
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 (REL1E) 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.
7. Run SYSJOB only if CYBERLOG is to be used.
8. Jobs SYSJOB, BCS, BCF, FMD, MTS, and FCL1 produce no output tapes.
9. A new deck, BINEDIT, is provided to install the product.
10. Jobs BCS, BCF, FMD, MTS require controlware as additional input in the form of a card deck of magnetic tape. Refer to IHB for additional details.

GROUP II - INSTALL IN ANY ORDER

PRODUCT	!SWITCH	!PRODUCT	!OTHER	!JOB THAT	!
!SETTINGS!	TAPE	TAPES	LAST USED	NOTES	
!S1!S2!S3!	VSN	!REQUIRED	PRODUCT TAPE!		
ALGOL4	! 1! 0! 0!	REL7A	!	!	
ALGOL5	! 1! 0! 0!	REL7B	!	!	
APL2	! 1! 0! 0!	REL8B	!SYSOPL	!	1
	! ! ! !	!	!	!	
BASIC3	! 1! 0! 0!	REL8A	!SYSOPL	!	
	! ! ! !	!REL3A	!	!	
BIT8	! 1! 0! 0!	REL3D	!	!	
CCG	! 1! 0! 0!	REL14B	!	!	
CCL	! 1! 0! 0!	REL3B	!REL3A	! BAM	
CDCS1	! 1! 0! 0!	REL11C	!	!	
CDCS2	! 1! 0! 0!	REL11G	!SYSOPL	!	
	! ! ! !	!REL3E	!	!	
	! ! ! !	!REL11H	!	!	
CEDIAG	! 1! 0! 1!	REL2B	!SYSOPL	!	2
CID	! 1! 0! 0!	REL3F	!SYSOPL	!	
COBOL5	! 1! 0! 0!	REL5C	!	!	3
	! ! ! !	!	!	!	
COBOL5Q	! 1! 0! 0!	REL5C	!	!	4
C4C5	! 1! 0! 0!	REL5D	!	!	
DBU	! 1! 0! 0!	REL11D	!	!	
FCL5	! 1! 0! 0!	REL4G	!REL3A	!	
FDBF	! 1! 0! 0!	REL4D	!REL11H	!	
	! ! ! !	!REL3A	!	!	
FORMAT	! 1! 0! 0!	REL2C	!SYSOPL	!	
F45	! 1! 0! 0!	REL4F	!REL3A	!	
IMF1	! 1! 0! 0!	REL11B	!REL3A	!	
	! ! ! !	!REL11H	!	!	
LCS3	! 1! 0! 0!	REL5B	!	!	5
NAM2	! 1! 0! 0!	REL12A	!SYSOPL	!	
SIFT	! 1! 0! 0!	REL2A	!	!	

NOTES:

1. Refer to COMMENTS section in APL2.
2. Note: S3=1.
3. Refer to COMMENTS section in COBOL5.
4. Refer to comments section in DECKOPL before using COBOL5Q.
5. A new deck LCS3, replaces the old LCS2 deck.

GROUP III - PRODUCTS WHICH ARE DEPENDENT ON A GROUP II JOB

PRODUCT	!SWITCH !SETTINGS! !S1!S2!S3!	PRODUCT TAPE VSN	OTHER TAPES REQUIRED	JOB THAT LAST USED PRODUCT TAPE	NOTES
ALGEDIT	! 1! 0! 0!	REL7A	!	! ALGOL4	!
COBOL4	! 1! 0! 0!	REL5A	!	!	1
DCAT2	! 1! 0! 0!	REL11A	!	!	2
FCS3	! 1! 0! 0!	REL5B	!	! LCS3	3
FORM	! 1! 0! 0!	REL3D	!	! BIT8	!
FTN5	! 1! 0! 0!	REL4E	!REL3A	!	4
	! ! ! !		!REL14B	!	!
MCS	! 1! 0! 0!	REL12F	!SYSOPL	!	5
	! ! ! !		!REL12A	!	!
NPS2	! 1! 0! 0!	REL12D	!SYSOPL	!	5
	! ! ! !		!REL12A	!	!
PLI	! 1! 0! 0!	REL14A	!REL14B	!	4
	! ! ! !		!REL3A	!	!
PMD4	! 1! 0! 0!	REL4C	!REL3A	!FCL2	!
PMD5	! 1! 0! 0!	REL4G	!REL3A	!FCL5	!
QU3	! 1! 0! 0!	REL11E	!SYSOPL	!	6
	! ! ! !		!REL11H	!	!
	! ! ! !		!	!	!
	! ! ! !		!	!	!
RBF2	! 1! 0! 0!	REL12B	!SYSOPL	!	5
	! ! ! !		!REL12A	!	!
SYSTEM	! 1! 0! 0!	SYSOPL	!	!	7
	! ! ! !	! (INPUT	!	!	!
	! ! ! !	! ONLY)	!	!	!
	! ! ! !		!	!	!
	! ! ! !		!	!	!
GENSYS	! 0! 0! 0!		!	!	8
	! ! ! !		!	!	!
	! ! ! !		!	!	!

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).
8. Run after all GROUP III jobs have completed.

Software Release Bulletin
Level 543/538 NOS Operating System

PRODUCT	!SWITCH !SETTINGS! !S1!S2!S3!	! PRODUCT TAPE VSN	! OTHER ! TAPES ! REQUIRED	! JOB THAT ! LAST USED ! PRODUCT TAPE!	! NOTES
VAAM1	! 0! 0! 0!		!	!	7
VAAM2	! 0! 0! 0!		!	!	
VALGEDT	! 0! 0! 0!		!	!	
VALGOL	! 0! 0! 0!		!	!	
VALGOL5	! 0! 0! 0!		!	!	
VAPL2	! 0! 0! 0!		!	!	
VBAM	! 0! 0! 0!		!	!	
VBASIC3	! 0! 0! 0!		!	!	
VBIT8	! 0! 0! 0!		!	!	
VDCS1	! 0! 0! 0!		!	!	
VDCS2A	! 0! 0! 0!		!	!	1
VDCS2B	! 0! 0! 0!		!	!	
VCID	! 0! 0! 0!		!	!	
VCOBOL4	! 0! 0! 0!		!	!	
VCOBOL5	! 0! 0! 0!		!	!	
VCROSS	! 0! 0! 0!	REL13A	!	!	
VC4C5	! 0! 0! 0!	REL5D	!	!	
VDBU	! 0! 0! 0!		!	!	
VDDL2	! 0! 0! 0!		!	!	
VDDL3	! 0! 0! 0!		!	!	
VFCS3	! 0! 0! 0!	REL5B	!	!	2
VFDBF	! 0! 0! 0!		!	!	
VFORM	! 0! 0! 0!		!	!	
VFTN	! 0! 0! 0!		!	!	
VFTNTS	! 0! 0! 0!		!	!	
VFTN5	! 0! 0! 0!		!	!	
VF45	! 0! 0! 0!		!	!	
VIMF1	! 0! 0! 0!		!	!	
VJOBS	! 0! 0! 0!		!	!	3,5,6,8
	! ! ! !		!	!	
	! ! ! !		!	!	
VLCS3	! 0! 0! 0!	REL5B	!	!	2
VMCS1A	! 0! 0! 0!		!	!	
VMCS1B	! 0! 0! 0!		!	!	
VNPS2	! 0! 0! 0!		!	!	
VPLI	! 0! 0! 0!		!	!	
VQU3	! 0! 0! 0!		!	!	4
	! ! ! !		!	!	
VSORT	! 0! 0! 0!		!	!	
VSYMPL	! 0! 0! 0!		!	!	

NOTES: (continued on following page)

1. The verification of CDCS2 is a multi-step process which is outlined in the COMMENTS Section of VDCS2A.
2. VFCS3 and VLCS3 replace VFCS2 and VFCS2.
3. Submits all verification jobs except VDCS2A, VDCS2B, 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 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 800=xxxx and MT=yy parameters on the GENJOB call to VJOBS.
7. VAAM1 and VAAM2 replace VAAM.
8. VJOBS calls the non-existent jobs: VAAM, VLCS2, VFCS2. See notes 2 and 8 above.

CCP/CROSS Tape and Disk File Requirements

!Build! !Step !Order!	!Build! !Step !Name	!Input !Tape !VSN	!Output !Tape !VSN	!Input Files !Generated by !Previous Step!	!User !Input !File	!Perm. !Files !Created!	!Optional !Perm. Files! !Created!	!
! 1	CROSS	!REL13A!	!NEW13A!	!	!UCRS !USERCHG!	! Addd	! LCRD	!
!	!	!	!	!	!CPRD	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 2	CCPPH1	!REL13E!	!	!	!UCCP !USERCHG!	! ZMUX ! PCMB	! LMFB,ZDGN ! PDGN,ZREM	!
!	!	!	!	!	!CNSP	! PCCP	! PREM	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 3	CCPOVB	!	!NEW13E!	! PCMB	!UCCP	!	! LDGB,ZDGN	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 4	CCPBLB	!	!NEW13B!	! ZMUX,LMFB ! PCMB,ZDGN	!UCCP	! BCMB	! LFCA	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 5	CCPVAR	!	!NEW13C!	! PCMB	!UCCP	! Zvvv	! Lvvv	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 6	CCPEDIT	!	!	! Zvvv	!UEDZ	! Zyyy	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 7	CCPLOAD	!	!	! PCMB	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
! 8	CCPPURG	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!
!	!	!	!	!	!	!	!	!

* = optional

NOTES: (continued on following page)

1. If LIST=PF or LIST=BOTH on the calls to CCPPH1, CCPOVB, 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 3-7 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, make the following modifications to DECKOPL by performing Step 3.

```
*IDENT INSCSET
*DECK,DECKFIX
*D,**531**4
IF,DEF,63CSET
MODIFY(Z,LO=E)/*DEFINE,63CSET/*NOSEQ/*EDIT,CCPBLB.XRFBAT1
*ELSE
MODIFY(Z,LO=E)/*NOSEQ/*EDIT,CCPBLB.XRFBAT1
*ENDIF
*DECK,GENFILS
*D,**531**6
*IF,DEF,63CSET
MODIFY(Z,LO=E)/*DEFINE,63CSET/*NOSEQ/*EDIT,CCPBLB.XRFBAT1
*ELSE
MODIFY(Z,LO=E)/*NOSEQ/*EDIT,CCPBLB.XRFBAT1
*ENDIF
```

Finally, perform Step 4 with:

```
CALL(GENJOB(JOB=GENFILS,DF63=63CSET))
```

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

```
CALL(GENJOB(JOB=DECKFIX,DF63=63CSET))
```

3. The CCL procedure RTDBAT1, used by the CCP installation jobs, fails to rewind files if the release tape is copied by hand to disk. To correct this situation use the following:

```
IDENT INSRTDB
*DECK,RTDBAT1
*I,20
ELSE(NOTAPE)
REWIND(LFN)
```

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 NEW13C tape (or permanent file) for each variant. If all calls to CCPVAR are made from one batch job, the NEW13C files for all variants will be written on one tape. If you desire to run CCPBAR 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).

Software Release Bulletin
Level 543/538 NOS Operating System

11.0 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

This site has installed NOS 1.4 Level 543 and is currently using it in a production environment.

Communications software being used:

☐ TELEX	☐ IAF
☐ EI200	☐ RBF
☐ TAFTS	☐ TAFNAM

Please return to:

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

NOS0213A/ms