a: TIO Software Personnel

Sent 2-12-82

Announcement of Patch Release 1 to the B1000 Mark 10.0 System Software SUBJECT: (Burroughs internal)

STYLE NO: B1000 BNS

B1000 CB1 B1000 CE1 B1000 COB B1000 DM1

B1000 DM2 B1000 MP2 B1000 NDL B1000 PWR B1000 RPG

B1000 R61 B1000 SMC B1000 UTL B1000 XMT B1030 XMT

PATCH1001 MEDIA ID:

The accompanying tape for Burroughs Support Managers constitutes the first release of patches for the B1000 Mark 10.0 system software. Distribution of the patches is in the form of card-image disk files on a library tape (labeled "PATCH1001"). The tape also contains the recompiled object code files for each of the affected programs, the master recompile files for the MCPII ("MCP.RECOMP/="), and the control decks used to create pseudo decks. The pseudo decks execute the SYSTEM/PATCH pro-gram. Also, included is a printed description of each of the problems corrected by this release.

The card-image patch files and control decks are named as follows:

Object Program Name	Patch Numbers	Patch File-id	Control File-id
BNA/NSM	3 4 5	BNANSM/100003 BNANSM/100004 BNANSM/100005	CONTROL/BNANSM
CANDE	3 -	CANDE/100003 CANDE/REL.INFO	CONTROL/CANDE
COBOL	2 3 4	COBOL/100002 COBOL/100003 COBOL/100004	CONTROL/COBOL
COBOL74	3 4 5 6 7 8 9	COBOL74/100003 COBOL74/100004 COBOL74/100005 COBOL74/100006 COBOL74/100007 COBOL74/100008 COBOL74/100009	CONTROL/COBOL74
COLDSTART/DISK	3	CS.DISK/100003	CONTROL/CS.DISK

	DISKMAP/UTILITY	1	DISKMAP/100001	CONTROL/DISKMAP
	DMPALL	1	DMPALL/100001	CONTROL/DMPALL
	DMS/AUDITANALY	2	AUDITANAYL/100002	CONTROL/AUDITANALY
	DMS/BUILDINQ	1	BUILDINQ/100001	CONTROL/BUILDINQ
	DMS/DASDL	3	DASDL/100003	CONTROL/DASDL
	DMS/INQUIRY	3 4	INQUIRY/100003 INQUIRY/100004	CONTROL/INQUIRY
	DMS/REORG.WRIT	4	REORG.WRIT/100004	CONTROL/REORG.WRIT
	DUMP/ANALYZER	2 3	DMPANALZE/100002 DMPANALZE/100003	CONTROL/DMPANALZE
	FOREIGN/TAPECOPY	1	FOREIGNTC/100001	CONTROL/FOREIGNTC
	MCPII	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	MCPII/100020 MCPII/100021 MCPII/100022 MCPII/100023 MCPII/100024 MCPII/100025 MCPII/100026 MCPII/100027 MCPII/100029 MCPII/100030 MCPII/100031 MCPII/100034 MCPII/100035 MCPII/100035 MCPII/100037 MCPII/100038 MCPII/100039 MCPII/100040 MCPII/100041	CONTROL/MCPII.RCMP
	NDL/DUMP	1	NDLDUMP/100001	CONTROL/NDLDUMP
	NDL/MACRO	3	MACR0/100003	CONTROL/MACRO
•	QWIKLOG	4	QWIKLOG/100001	CONTROL/QWIKLOG
	RJE	1	RJE/100001	CONTROL/RJE
	RJE3780	1	RJE3780/100001	CONTROL/RJE3780
	RPG	2 3	RPĠ/100002 RPG/100003	CONTROL/RPG
	SMCS	2	SMCS/100002	CONTROL/SMCS

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SORT/UTILITY	1	SORTUTIL/100001	CONTROL/SORTUTIL
SYSTEM/COPY	2	SYSCOPY/100002	CONTROL/SYSCOPY
SYSTEM/LOGOUT	1	SYSLOGOUT/100001	CONTROL/SYSLOGOUT
SYSTEM/ODT	6	SYSODT/100006	CONTROL/SYSODT

The following procedure recompiles the object programs, except for the MCPII:

1. Load the card-image patch files and CONTROL files to a user disk labeled "PATCH100" as follows:

COPY AND COMPARE = FROM PATCH1001 TO PATCH100(KIND=DISK);

 Load the appropriate source files to the PATCH100 user disk. From Mark 10.0 source tapes labeled "SOURCE1", "SOURCE2", "SOURCE3", "SOURCE4", and "SOURCE5", the following source files are required:

> SOURCE/AUDITANALY SOURCE/BNANSM SOURCE/BUILDINQ SOURCE/CANDE SOURCE/COBOL SOURCE/COBOL74 SOURCE/CS.DISK SOURCE/DASDL SOURCE/DISKMAP SOURCE/DMPALL SOURCE/DMPANALZE SOURCE/FOREIGNTC SOURCE/INQUIRY SOURCE/MACRO SOURCE/MCPII SOURCE/NDLDUMP SOURCE/QWIKLOG SOURCE/REORG.WRIT SOURCE/RJE SOURCE/RJE3780 SOURCE/RPG SOURCE/SMCS SOURCE/SORTUTIL SOURCE/SYSCOPY SOURCE/SYSLOGOUT SOURCE/SYSODT

- 3. Execute the SYSTEM/LDCONTROL program with the following command: LD; FILE CARD.IN NAME PATCH100/CONTROL/<file-id> DISK DEFAULT; The file-id is the control file name of the software to be patched.
- 4. Activate the pseudo reader with the following command:

RN 1;

Once the pseudo reader is activated, the SYSTEM/PATCH program goes to beginning of job. The SYSTEM/PATCH program merges the patch file(s) with the source file. These patches are specified to the SYSTEM/PATCH program by the INCLUDE statement in the control file. Upon completion, the SYSTEM/PATCH program initiates the compile of the object program as specified in the control file.

Each control file consists of an execute statement and data for the SYSTEM/PATCH program. The data to the SYSTEM/PATCH program includes the compile statement and the name of the patch files to use. The INCLUDE statement(s) designate the patch files which are merged with the original source file for the subsequent compilation. The naming convention used for each patch file is as follows:

<file-idz/100nnn

The file-id is the software name. 100nnn represents the release patch number where 100 is the Mark 10.0 system software release level and nnn is the patch number.

The recompilation of this MCPII requires the MCPII recompilation files, which must be loaded from the Mark 10.0 PATCH1001 library tape to the user disk labelled "PATCH100". The control file labelled CONTROL/MCPII.RCMP is used with the SYSTEM/LDCONTROL program as in steps 3 and 4. The recompilation files on the "PATCH1001" tape are to be used for any MCPII recompiling required for future MCPII patches.

Use the procedure in attachment A to load the new SDL Intepreter, GISMO, MCPII, MCPII/MICRO.MCP, SYSTEM/COPY, SYSTEM/INIT, and SYSTEM/ODT files to the system disk from the enclosed media.

The patch decks for certain recompiled programs are not included on the tape as separate files. The patches are, however, part of the updated source file. The object and source files are re-released as follows:

Object Program Name	Source File-id
GISMO	SOURCE/GISMO
GISMO/DEBUG	SOURCE/GISMO
GISMO/SA	SOURCE/GISMO
MCPII/MICRO.MCP	SOURCE/MCPIIMICRO
SDL/INTERP1M	SOURCE/INTERFACE
	SOURCE/NDL_CODE
	SOURCE/SDLIN
SDL/INTERP1S	SOURCE/INTERFACE
·	SOURCE/NDL_CODE
	SOURCE/SDLIN
SDL/INTERP1U	SOURCE/INTERFACE
	SOURCE/NDL_CODE
	SOURCE/SDL IN
SYSTEM/INIT	SOURCE/SYSINIT

Field Communication Forms regarding this patch release should be sent to the Technical Information Organization in the Santa Barbara Programming Center at the following address:

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PROCEDURE TO INSTALL THE NEW OPERATING SYSTEM

The following is a suggested procedure for loading the new system files. For more information on the Name Table, refer to the B1800/B1700 System Software Operation Guide, volume 2, form 1108966, pages 5-3 through 5-6.

 Determine the names of the GISMO, MCPII, MCPII/MICRO.MCP, SDL interpreter, SYSTEM/COPY, SYSTEM/INIT, and SYSTEM/ODT files currently running on the system, by using the WW keyboard command as follows:

> WW G/=; WW M/=; WW MM/=; WW I/=; WW CPY; WW N/=; WW O/=;

The Name Table entries of concern are the G, M, MM, I1, I2, CPY, N, and ODT entries. In the following steps, it is assumed that the files in these entries have the names GISMO, MCPII, MCPII/MICRO.MCP, SDL/INTERP1S, SDL/INTERP1M, SYSTEM/COPY, SYSTEM/INIT, and SYSTEM/ODT, respectively. If the names are not the same, the different name may be substituted in the examples (such as substituting GISMO/DEBUG for GISMO).

2. Use the COPY command to make a copy of the current files, GISMO, MCPII, MCPII/MICRO.MCP, SDL/INTERP1S, SDL/INTERP1M, SYSTEM/INIT, and SYSTEM/ODT, to files named OLD/GISMO, OLD/MCPII, OLD/MICRO.MCP, OLD/SDLINT1S, OLD/SDLINT1M, OLD/SYSINIT, OLD/SYSODT, respectively, as follows:

> COPY GISMO AS OLD/GISMO, MCPII AS OLD/MCPII, MCPII/MICRO.MCP AS OLD/MICRO.MCP, SDL/INTERP1S AS OLD/SDLINT1S, SDL/INTERP1M AS OLD/SDLINT1M, SYSTEM/INIT AS OLD/SYSINIT, SYSTEM/ODT AS OLD/SYSODT, FROM DISK TO DISK;

3. Use the CM keyboard command to place the names of the current files, GISMO, MCPII, MCPII/MICRO.MCP, SYSTEM/INIT, and SYSTEM/ODT (The SDL interpreter is handled in steps 4 and 5) into the experimental entries of the Name Table (as a precautionary measure) and the names of the copied files, OLD/GISMO, OLD/MCPII, OLD/MICRO.MCP, OLD/SYSINIT, and OLD/SYSODT, into the standard entries of the Name Table, as follows: CM GX GISMO; CM MX MCPII; CM MMX MCPII/MICRO.MCP; CM NX SYSTEM/INIT; CM ODX SYSTEM/ODT; CM G OLD/GISMO; CM M OLD/MCPII; CM MM OLD/MCIRO.MCP; CM N OLD/SYSINIT; CM ODT OLD/SYSODT;

4. Use the CM keyboard command to place the name of the appropriate SDL interpreter into the experimental interpreter entry in the Name Table. On B 1710 and B 1830 systems, it is the SDL/INTERP1S interpreter, and on other B 1000 systems it is the SDL/INTERP1M interpreter. Also, place the name of the copied interpreters, OLD/SDLINTIS and OLD/SDLINTIM, into the standard entries of the name table, as follows:

> CM IX SDL/INTERP1S; (on B 1710 and B 1830 systems) CM I1 OLD/SDLINT1S; CM I2 OLD/SDLINT1M; or CM IX SDL/INTERP1M; (on the other B 1000 systems) CM I1 OLD/SDLINT1S; CM I2 OLD/SDLINT1M;

5. Modify the copied SYSTEM/ODT file and the SYSTEM/COPY file, to use the appropriate copied SDL interpreter. On B 1710 and B 1830 systems, it is the OLD/SDLINT1S interpreter, and on other B 1000 systems it is the SDL/INTERP1M interpreter, as follows:

> MODIFY OLD/SYSODT INTERPRETER OLD/SDLINT1S; (on B 1710 and MODIFY SYSTEM/COPY INTERPRETER OLD/SDLINT1S; B 1830 systems) or MODIFY OLD/SYSODT INTERPRETER OLD/SDLINT1M; (on the other MODIFY SYSTEM/COPY INNTERPRETER OLD/SDLINT1M; B 1000 systems)

- 6. Perform a CLEAR/START operation. The currently running GISMO, MCPII, MCPII/MICRO.MCP, SDL interpreter, SYSTEM/INIT, and SYSTEM/ODT files are now OLD/GISMO, OLD/MCPII, OLD/MICRO.MCP, OLD/SDLINT1S or OLD/SDLINT1M, OLD/SYSINIT, and OLD/SYSODT, respectively.
- 7. Remove the now unused files, GISMO, MCPII, MCPII/MICRO.MCP, SDL/INTERP1M, SDL/INTERP1S, SYSTEM/INIT, and SYSTEM/ODT from the system disk, as follows:

CM GX PURGE; CM IX PURGE; CM MX PURGE; CM MMX PURGE; CM NX PURGE; CM ODX PURGE; REMOVE GISMO; REMOVE GISMO; REMOVE SDL/INTERP1S; REMOVE SDL/INTERP1M; REMOVE MCPII; REMOVE MCPII; REMOVE MCPII; REMOVE SYSTEM/INIT; REMOVE SYSTEM/ODT;

Note that after removal of the SDL/INTERP1S and SDL/INTERP1M files, system programs (such as DMPALL) and compilers should not be run, except for OLD/SYSODT and SYSTEM/COPY, until the new SDL interpreters are copied.

8. Use the following COPY AND COMPARE command to copy the new files, GISMO, MCPII, MCPII/MICRO.MCP, SDL/INTERPIS, SDL/INTERPIM, SYSTEM/INIT, and SYSTEM/ODT to the SYSTEM disk from either the disk or tape media provided, as follows:

COPY AND COMPARE GISMO, MCPII, MCPII/MICRO.MCP, SDL/INTERP1S, SDL/INTERP1M, SYSTEM/INIT, SYSTEM/ODT FROM <media> TO DISK;

9. Use the CM keyboard command to place the names of the current GISMO, MCPII, MCPII/MICRO.MCP, SYSTEM/INIT, SYSTEM/ODT files into the experimental entries of the Name Table (as a precautionary measure) and the names of the new files, GISMO, MCPII, MCPII/MICRO.MCP, SYSTEM/INIT, and SYSTEM/ODT, into the standard entries of the Name Table, as follows:

> CM GX OLD/GISMO; CM MX OLD/MCPII; CM MMX OLD/MICRO.MCP; CM NX OLD/SYSINIT; CM ODX OLD/SYSODT; CM G GISMO; CM M MCPII; CM MM MCPII/MICRO.MCP; CM N SYSTEM/INIT; CM ODT SYSTEM/ODT;

10. Use the CM keyboard command to place the name of the appropriate SDL interpreter into the experimental interpreter entry in the Name Table. On B 1710 and B 1830 systems, it is the OLD/SDLINTIS interpreter, and on other B 1000 systems it is the OLD/SDLINTIM interpreter. Also

place the name of the new interpreters, SDL/INTERP1S and SDL/INTERP1M, into the standard entries of the name table, as follows:

CM IX OLD/SDLINTIS; (on B 1710 or B 1830 systems) CM I1 SDL/INTERP1S; CM I2 SDL/INTERP1M; or CM IX OLD/SDLINTIM; (on the other B 1000 systems) CM I1 SDL/INTERP1S; CM I2 SDL/INTERP1M;

11. Use the following COPY AND COMPARE command to copy the new SYSTEM/COPY file as NEW/SYSCOPY, as follows:

COPY AND COMPARE SYSTEM/COPY AS NEW/SYSCOPY FORM <media> TO DISK;

12. Use the CM keyboard command to purge the SYSTEM/COPY file from the Name Table. Then use the change MCP command to change SYSTEM/COPY to OLD/SYSCOPY, and NEW/SYSCOPY to SYSTEM/COPY. Then, use the CM keyboard command to place the new SYSTEM/COPY into the CPY Name Table entry, as follows:

> CM CPY PURGE; CHANGE SYSTEM/COPY TO OLD/SYSCOPY; CHANGE NEW/SYSCOPY TO SYSTEM/COPY; CM CPY SYSTEM/COPY;

- 13. Perform a CLEAR/START operation.
- 14. The now unused files, OLD/GISMO, OLD/MCPII, OLD/MICRO.MCP, OLD/SDLINT1S, OLD/SDLINT1M, OLD/SYSCOPY, OLD/SYSINIT, and OLD/SYSODT, can now be removed from the SYSTEM disk, as follows:

CM GX PURGE; CM IX PURGE; CM MX PURGE; CM MX PURGE; CM MX PURGE; CM ODX PURGE; REMOVE OLD/GISMO; REMOVE OLD/SDLINT1S; REMOVE OLD/SDLINT1M; REMOVE OLD/MICRO.MCP; REMOVE OLD/MICRO.MCP; REMOVE OLD/SYSCOPY; REMOVE OLD/SYSINIT; REMOVE OLD/SYSODT; 15. If the system normally has files in the experimental Name Table entries (such as MICRO.MCP/DEBUG in the MMX entry, or GISMO/DEBUG in the GX entry), the files can be copied to the system disk and entered in the appropriate place of the Name Table with the CM keyboard command. BNA/NSM Patch #3 (Compile Date 12-15-81)

This patch corrects the INVALID SUBSTRING program abort when the MAXBDLCSTATIONS attribute is declared greater than 16 in the initialization file. The BNA/NSM program now restricts the MAXBDLCSTATIONS attribute to be less than or equal to 16. This maximum is a B1000 restriction.

BNA/NSM Patch #4 (Compile Date 12-15-81)

This patch fixes the "waiting in receive" problem when one of the following commands is entered at initialization time:

- 1. NW LOCALIDENTITY = #<identity-number>:
- 2. NW ADD STATION <station-name> (<attributes>);
- 3. NW MAXNODEADDRESS = <number>; Where <number> is less than <identity-number>.
- NW ADD CONNECTION INCOMING WITH #<number> BY <station-name>;
 An error message occurs here.

BNA/NSM Patch #5 (Compile Date 12-15-81)

With this patch, the BNA/NSM program no longer attempts to add an undefined station during the initialization process.

BNA/SIZEFILE Re-release (Date 12-16-81)

The re-release of the BNA/SIZEFILE is required for patch #1 to the BNA/NSM program.

CANDE Patch #3 (Compile Date 12-22-81)

This patch corrects the ATTEMPTED OPEN OF OPEN FILE -"<file-name>" program abort when a user with a non-priviledged usercode attempts to create a file with a two-level name using the ":FILE" option of the FIND command. The CANDE program aborts on the second consecutive attempt to enter the FIND command.

The CANDE/REL.INFO patch file changes the version level of the CANDE program from 14 to 15.

COBOL Patch #2 (Compile Date 12-16-81)

This patch completes the correction of the problem partially corrected by COBOL patch #1.

COBOL Patch #3 (Compile Date 12-16-81)

This patch fixes the ATTEMPTED TO OPEN <file-name> WITH BLANK OR ZERO MFID program abort that occurred with the COBOL compiler when the letter L was specified in column 7 and the remainder of the card-image record was blank.

COBOL Patch #4 (Compile Date 12-16-81)

This patch fixes the decimal alignment problem that occurred when two numbers, A and B, are added together, with A and B having unequal scale factors. This problem only occurred in the Mark 10.0 release of the COBOL compiler dated 8-14-81.

COBOL74 Patch #3 (Compile Date 12-07-81)

This patch completes the correction of the problem partially corrected by COBOL74 patch #2.

COBOL74 Patch #4 (Compile Date 12-07-81)

With this patch, the COBOL74 compiler generates correct code for the START statement.

COBOL74 Patch #5 (Compile Date 12-07-81)

This patch fixes the erroneous compile-time error "USING/GIVING FILE RECORD NOT = SD RECORD SIZE" that was generated when a TAG-KEY SORT was specified.

COBOL74 Patch #6 (Compile Date 12-07-81)

With this patch, the COBOL74 compiler conforms more closely to the COBOL Compiler Validation System (CCVS) tests.

COBOL74 Patch #7 (Compile Date 12-07-81)

With this patch, the INSPECT statement now works correctly when one of the operands specifies relative indexing.

COBOL74 Patch #8 (Compile Date 12-07-81)

With this patch, the COBOL74 compiler conforms more closely to the COBOL Compiler Validation System (CCVS) tests regarding the comma (,) and semicolon (;) characters ending a PICTURE string.

COBOL74 Patch #9 (Compile Date 12-07-81)

With this patch, the COBOL74 compiler conforms more closely to the COBOL Compiler Validation System (CCVS) test regarding the DEBUG-ITEM size for a Communication Description (CD).

COLDSTART/DISK Patch #3 (Compile Date 12-04-81)

With this patch, the COLDSTART/DISK program now accepts input from a teletype ODT.

DISKMAP/UTILTIY Patch #1 (Compile Date 11-06-81)

This patch corrects three problems:

 Printer backup files, created by the DISKMAP/UTILITY program on a unit being mapped, caused erroneous missing disk area messages.

NOTE

The mapping of units in use by other jobs can flag missing disk areas which are in the process of being allocated and not actually missing.

- 2. Attempting to map a disk containing a corrupted disk file header caused the DISKMAP/UTILITY program to get an INVALID SUBSTRING program abort.
- 3. Setting SWITCH 6 greater than 0 to allow mapping of an inuse user disk caused the DISKMAP/UTILITY program to get a UNIT NOT ASSIGNED program abort.

This patch also results in less paper being used to print a map listing.

DMPALL Patch #1 (Compile Date 9-22-81)

This patch corrects the problem that occurred when the DMPALL program sent output to a line printer using a B1249 printer control (printer control 7). The first page of the output went to the line printer but subsequent pages went to another line printer or to backup disk or tape.

DMS/AUDITANALY Patch #2 (Compile Date 9-23-81)

This patch corrects the problem where the DMS/AUDITANALY program was unable to analyze more than one DMSII audit file at a time. Also, it is now possible to analyze and verify audit files across audit file boundaries.

DMS/BUILDINO Patch #1 (Compile Date 10-30-81)

This patch corrects a NAME VALUE stack overflow problem in the DMS/INQUIRY program. This problem occurred when the DMS/BUILDINQ program incorrectly calculated the MAX-RECORD-SIZE variable. This variable is used to calulate the size of the dynamic array elements used by the DMS/INQUIRY program.

DMS/DASDL Patch #3 (Compile Date 12-03-81)

This patch corrects the following two problems:

- The EVALUATION/PROGRAM POINTER STACK OVERFLOW program abort encountered when compiling a DMS/DASDL source with many embedded group items within a remap data set.
- 2. The INVALID SUBSCRIPT program abort encountered while adding a new structure to an existing data base. This problem occurs when the new structure created the 65th unique version. This patch now allows up to 255 unique versions.

DMS/INQUIRY Patch #3 (Compile Date 12-16-81)

This patch corrects the following two problems:

- The INTERNAL FATAL ERROR problem encountered when an array name was used as a sort key and was not followed by enough subscripts.
- The function problem, for example SUM(ITEM) VIA SETL, when an explicit access path retrieved the wrong records and therefore the wrong answer was returned. This occurred when the data base contained a large number of data items orstructures.

DMS/INQUIRY Patch #4 (Compile Date 12-16-81)

With this patch, the DMS/INQUIRY program considers a data set to be referenced if 1) the user enters a valid SELECT of SELECT/DISPLAY statement for which it is explicitly the object data set; for example, a simple SELECT DSA now causes duplicate identifiers to appear in DSA to be qualified without asking the user, or 2) the user answers the explicit qualification question asked by the DMS/INQUIRY program ("WHICH DATASET..."). Previously, a data set was only considered recently referenced if it was the object of a VIRTUAL statement or if it was implicitly the object of a SELECTION statement.

DMS/REORG.WRIT Patch #4 (Compile Date 9-23-81)

This patch corrects the INVALID SUBSCRIPT program abort during the file removal phase. This problem was introduced in patch #1 for the Mark 10.0 DMS/REORG.WRIT program in an attempt to fix the problem which caused the message DELETED DATA BASE FILE ?/?/? NOT REMOVED, NOT ON DISK to be displayed. Both problems are now fixed.

DUMP/ANALYZER Patch #2 (Compile Date 11-05-81)

This patchs corrects the looping problem while attempting to analyze data at the same the level as a previous OCCURS declaration in a COBOL74 Data Division. For example:

03 N OCCURS 5 TIMES PIC X. 03 M PIC XX.

DUMP/ANALYZER Patch #3 (Compile Date 11-05-81)

With this patch the printing of COBOL74 array elements is now suppressed when the value of SWITCH 0 is greater than or equal to 2.

FOREIGN/TAPECOPY Patch #1 (Compile Date 9-22-81)

This patch fixes the looping problem which occurred when entering the specification for the input format through ACCEPT messages.

This patch also adds two error messages for 7-track tape: 1) EXACT COPY NOT ALLOWED FOR 7 TRACK TAPE and 2) PARITY CHANGE AND RETRY ON 7 TRACK TAPE. GISMO, GISMO/DEBUG, and GISMO/SA Re-release (Compile Date 1-26-87)

This re-release of GISMO contains the following:

- 1. The I/O error recovery algorithms are improved.
- 2. With this re-release, stand-alone (cassette) utility programs, that are run on B1830 or B1710 systems with a single-line control, now work correctly.

*** NOTE ***

In order to take advantage of this correction to GISMO/SA, new copies of the stand-alone cassettes (with the exception of the CLEAR/START cassette) must be created.

- 3. The handling of 7-track tapes has been corrected. Please note that this version of GISMO does not read 7-track tapes written with Mark 10.0 System Software prior to this Patch Release 1 or written with Mark 9.1 System Software prior to Patch Release 3. To preserve the data on those 7-track tapes, copy the data to disk or 9-track tape before using this GISMO; then copy the data back to 7-track tape with this GISMO. This GISMO does read tapes written with Mark 9.1 System Software which includes Patch Release 3.
- 4. A clear-start operation can now be performed on a B-1714 system. The SYSTEM/INIT re-release, which is included with this Patch Release for the Mark 10.0 System Software, is also required to enable the clear-start operation.
- The resolution of the timer, that is used to keep track of the processor time allocated to the MCPII, has been improved.
- 6. The system looping problem has been corrected when attempting to use a Reader/Sorter device.
- The system looping probem has been corrected when an exception on a SEEK operation occurred for a B 9484-55 (206) disk.
- 8. The INVALID SUBSCRIPT program abort in the network controller has been corrected for systems with heavy data communication usage.
- 9. A program accessing a Reader/Sorter device can now recover after a double document exception.

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10. The standalone utility programs can now recognize the teletype ODT on B 1710 computer systems.

MCPII Patch #20 (Compile Date 12-15-81)

This patch provides an enhancement which facilitates recovering an ISAM data file by permitting it to be processed as a relative file for recovery purposes.

MCPII Patch #21 (Compile Date 12-15-81)

This patch eliminates a problem where a file containing a set or subset remained locked until a clear-start operation is performed. The problem arose when DMSII allocated the structure record and disk file header for a set or subset but was then unable to allocate the object or parent structure. If the DMSII program was discontinued at that point, the structure and disk file header was not released from memory.

MCPII Patch #22 (Compile Date 12-15-81)

This patch eliminates various problems that arose when the IPC DICTIONARY ADDRESS field in a program's RUN STRUCTURE NUCLEUS was not updated properly when the program was reinstated before an inter program communication (IPC) CALL operation was performed.

MCPII Patch #23 (Compile Date 12-15-81)

This patch eliminates a system loop that occurred when an additional write to an ISAM file was performed after the user program was notified that no more disk areas were available.

MCPII Patch #24 (Compile Date 12-15-81)

The patch eliminates a problem of losing audit entries. The problem occurred when DMSII was unable to find disk space for the first area of a continuation audit file.

MCPII Patch #25 (Compile Date 12-15-81)

This patch eliminates a problem with punch stacker selection that occurred when punch output was directed to backup tape.

MCPII Patch #26 (Compile Date 12-15-81)

This patch corrects problems that arose when the OU input message was used to direct a print file to backup tape. When the OU input message was first entered, the MCP would respond with the output message NEEDS PE TAPE. Then, when the OU input message was re-entered, the print file was written to tape but not labeled as a backup file.

MCPII Patch #27 (Compile Date 12-15-81)

This patch eliminates a L = 00000110, T = 01243570 halt.

MCPII Patch #28 (Compile Date 12-15-81)

This patch eliminates 3 problems that occurred when the key in a manual subset entry did not match the key in the object data record:

- Reorganization of the manual subset failed to discard these entries.
- 2. The temporary lock on the object data record was not released until the end of the operation.
- 3. The object data was transferred to the user work area.

MCPII Patch #29 (Compile Date 12-15-81)

This patch eliminates various problems that occurred after an OF input message was entered in response to a "FILE NOT PRESENT" message.

MCPII Patch #30 (Compile Date 12-15-81)

This patch provides an enhancement which allows file equation to change the PACK.ID attribute of the global file of an index-sequential file.

MCPII Patch #31 (Compile Date 12-15-81)

This patch eliminates an L = 0000011C, T = 0084501C halt that occurred when a COBOL74 program tried to create an index-sequential file with an AREALENGTH attribute such that the blocks per area of the data file or any of the index files was equal to 1.

MCPII Patch #32 (Compile Date 12-15-81)

In some circumstances (in particular adding keys sequentially to a set where higher keys already existed) DMSII was creating large numbers of tables in index sequential sets with abnormally low populations. This resulted in poor disk utilization, unexpected "limiterrors", and degraded performance. With this patch, DMSII checks the "prior table" in this case. If it contains less than "splitfactor" entries, then entries are moved to the "prior table" so that the two tables are balanced.

MCPI1 PATCH #33 (Compile Date 12-15-81)

This patch eliminates a INVALID KEY ON REMOTE FILE error message that occurred after doing a PASS command from the SMCS program to a RPG program.

MCPII Patch #34 (Compile Date 12-15-81)

This patch eliminates a L = @000009@ halt that occurred when the first two operations performed on a DMSII data base were "begin-transaction no-audit" followed by "end-transaction no-audit sync".

MCPII Patch #35 (Compile Date 12-15-81)

This patch implements a new disk access communicate for use by future programs.

MCPII Patch #36 (Compile Date 12-15-81)

This patch disallows an OPEN operation on an ISAM file which had been open for updates at the time a clear/start operation was performed. If such an OPEN operation is attempted, the MCP generates the program abort message: ISAM FILE ... WAS OPEN FOR UPDATES DURING CLEAR/START AND MUST BE RELOADED.

MCPII Patch #37 (Compile Date 12-15-81)

This patch eliminates an L = 00000550 halt that was caused by queue memory links that were corrupted during de-allocation.

MCPII Patch #38 (Compile Date 12-15-81)

This patch eliminates various problems that arose after the second reel of a multi-reel tape file was needed during a multi-file search operation.

MCPII Patch #39 (Compile Date 12-15-81)

With this patch, the time it takes to copy files from one disk to another has been shortened.

MCPII Patch #40 (Compile Date 12-15-81)

With this patch, programs are no longer permitted to open a file that another program had previously opened with the LOCK file attribute.

MCPII Patch #41 (Compile Date 12-15-81)

This patch insures that irrecoverable user I/O errors on B 9499-6 (207) disk get entered into the system maintenance file SYSTEM/ELOG.

MCPII/MICRO.MCP and MICRO.MCP/DEBUG Re-release (Compile Date 11-09-81)

This re-release of the MCPII/MICRO.MCP and MICRO.MCP/DEBUG corrects the following problems:

- 1. A program was unable to sequentially read more than 24 records per block of a relative file which had a blocking factor greater than 24.
- COBOL74 programs were allowed duplicate records in an ISAM file when duplicate records should not have been allowed.

Also with this re-release, the search procedure that scans for present records in a relative file has been optimized.

NDL/ADDRESS Re-release (Date 12-16-81)

The re-release of the NDL/ADDRESS is required for the new NDL/MACRO file.

NDL/DUMP Patch #1 (Compile Date 12-15-81)

This patch corrects a problem introduced with NDL/MACRO Patch #3 to correctly analyze dumpfiles of large data communication networks.

NDL/MACRO Patch #3 (Compile Date 12-15-81)

This patch corrects the following problems:

- A network with a large number of station/file combinations that cause the internal tables in the network controller to overflow.
- 2. A limitation of 10 stations associated with a remote file by station name. With this patch, the limit is increased to 299.
- Attempts by the network controller to attach an invalid station which caused various network controller program halts.
- 4. INVALID SUBSTRING program abort when buffersizes larger than 4095 bytes is specified in the TERMINAL section for the network controller.
- 5. The network controller program abort on a dual processor system where the network controller wrote a message into a queue which had been partially closed.
- 6. Network controller looping problems with more than 256 stations declared.
- INVALID SUBSCRIPT program abort when a REMOTE FILE INFORMATION request message (type 29 NDL message) was made to the network controller and the network contained more than 256 stations.

This patch also implements the new RESTART command to the network controller. The RESTART command issues an unconditional STOP operation (CANCEL) on the line specified and causes the network controller to enter the LINE CONTROL with a value of 1 for LINE(CONTROL KEY). A value of 1 for LINE(CONTROL KEY) indicates a system reconfiguration is to be performed. This command can be used to restart a hung data communications line without having to discontinue the network controller.

The syntax of the command follows:

RESTART LINE <port>:<channel>:<unit>

Semantics:

port

The <port> field is the port number of the line as specifed in the NDL source.

channel

The <channel> field is the channerl number of the line as specified in the NDL source.

unit

The <unit> field is the adapter number of the line as specified in the NDL source.

NDL/MACRO Patch #4 (Compile Date 12-15-81)

This patch corrects the @OD0031@ systems halts.

QWIKLOG Patch #1 (Compile Date 12-16-81)

With this patch, the QWIKLOG program now correctly recognizes the dummy clear-start records when the time and date are reset.

RJE Patch #1 (Compile Date 11-05-81)

This patch corrects RJE program hang when a a print or punch file is received from the host system. This was caused by the RJE program sending a 3-digit "02" buffersize message instead of a 4-digit message.

RJE3780 Patch #1 (Compile Date 12-04-81)

This patch corrects the loss of printer and punch output files. This problem was due to a change in the complex-wait mechanism in the operating system (MCPII).

RPG Patch #2 (Compile Date 12-04-81)

This patch corrects the following two problems:

 Applicable to COBOL74 ISAM files, when a primary or secondary (the letter P or S in column 16 of the File Description Specifications) file was declared INPUT (the letter I in column 15 of the File Description Specifications) with ADD (the letter A in column 66 in the File Description Specifications), after a record was added the work area was not refreshed with the last record that was read. The work area is now refreshed after a new record has been added. This was only a Mark 10.0 problem.

- 2. Applicable only for the following conditons:
 - a. A data set is declared as update secondary (the letters US in columns 15-16 of the File Description Specifications).
 - b. The data base is audited.
 - c. Matching records are not used (columns 61-61 are left blank in the Input Specifications).

RPG programs failed to relock the update secondary record during the RPG cycle that it was processed. This caused a NOT LOCK exception on a STORE operation at detail-output time for that record. With this patch, a implicit LOCK operation is now performed by the RPG program on the current record in the appropriate point in the RPG cycle.

RPG Patch #3 (Compile Date 12-04-81)

This patch corrects the following eight problems:

 Specifying the number zero (0) in the SKIP BEFORE (columns 19-20) or SKIP AFTER (column 21-22) in the Output-Format Specifications. The following syntax error is now generated by the RPG compiler.

INVALID SPACE/SKIP ENTRY

- 2. The OPTIONAL IS INVALID FOR BNA LOGICAL I/O FOR FILE "<file name>" program abort for RPG programs with the HOSTNAME Attribute Specification specified.
- 3. The incorrect syntax error message, INVALID FACTOR, when the FIELD LENGTH field (columns 49-51 of the Calculation Specification) for a BITON, BITOF, or TESTB operation code has a value greater than one (1).
- 4. The incorrectly generated code problem where the DEBUG operation code is used for printer files with a value of 119 or less in the RECORD LENGTH field (columns 24-27 of the File Description Specification).
- 5. The control-level indicator problem when a control-level indicator (L1-L9) is specified in the RECORD IDENTIFYING INDICATOR field of the Input Specifications. This control-level indicator was not set on when the LR indicator was set on in the last round of total-time calculations and output.

- The incorrect code generation problem when very a large RPG program required more than 1023 disk segments for the code file.
- The incorrect code generation problem when the UPDATE special word is specified in the FIELD NAME field (columns 53-58) of the Input Specifications.
- 8. The incorrect code generation problem when the letters "OR" are mispelled the AND/OR field (columns 14-16) of the Input Specifications. With this patch, the following syntax error is generated.

INVALID AN - OR ENTRY

SDL/INTERP1M, SDL/INTERP1S, and SDL/INTERP1U Re-release (Compile Date 12-08-81)

This patch eliminates @OD0031@ halts that occur on busy data communication systems. It is to be used in conjunction with NDL/MACRO Patch #4.

SMCS Patch #2 (Compile Date 10-30-81)

This patch corrects the denial of an OPEN request for a program that was zip executed by another program and the other program was spawned by the SMCS program. The SMCS program is considered the parent job of the first program if the second program (which was spawned by SMCS) goes to end of job before the first program opens its remote file. The network controller forwards the OPEN request to the parent job unless all the stations in the station list belong to a different Message Control System (MCS) program. The SMCS program now handles this case where it receives an OPEN request from a program which the SMCS program did not spawn, but is still considered to be the parent job. There are two noticeable changes from the previous method that remote file open requests were handled. These are:

1. The SMCS program now uses the station list in an OPEN request for a program that was initiated at a station as a result of an MCPII control string (?EX <program>) being entered if all the stations in the station list are <u>not</u> controlled by the SMCS program. If any of the stations in the station list are controlled by the SMCS program or if there is no station list, the initiating station is approved in the OPEN request. This feature now allows users to direct output to another terminal without the need to make their program an MCS program or to have two remote files in the program provided that the terminal to which the output is directed is not controlled by the SMCS program. An example of a use for this feature is in listing output on a remote printer.

2. If a program, that was spawned by the SMCS program, zip executes a second program which opens a remote file, the SMCS program is considered to be the parent job for the second program if the first program has gone to end of job before the second program opens its remote file. The network controller forwards the OPEN request to the parent job unless all of the stations in the station list are controlled by a different MCS program. The SMCS program now handles such an OPEN request from a second program that is zip executed by a program spawned by the SMCS program. When the SMCS program receives an OPEN request, the following steps are taken:

a. If there is a station list in the OPEN request and all the stations in the station list are not controlled by the SMCS program, the SMCS program uses the station list in approving the OPEN request.

If any of the stations in the station list are b. controlled by the SMCS program or there is no station list in the OPEN request for the second program, a check is made to determine how the first program was spawned by the SMCS program. If the first program was spawned as a result of a SIGN ON, PASS, INITIATE command or the AUTO-START option being specified in the SMCS/JOBS file, the OPEN request for the second program is denied. If the first program was spawned as a result of an MCPII control instruction being entered, the SMCS program attempts to approve the OPEN request for the Logical Station Number (LSN) which initiated the first program. If that LSN cannot be approved in the OPEN request for the second program, the OPEN request is denied.

SORT/UTILITY Patch #1 (Compile Date 12-06-81)

This patch corrects the INVALID SUBSTRING program abort with the SORT/UTILITY compiler when compiling a sort program.

SYSTEM/COPY Patch #2 (Compile Date 11-06-81)

This patch corrects the following two problems:

- 1. The COPY AND COMPARE operation of relative files reported comparison errors when none existed.
- 2. The response to the STATUS command during a COMPARE operation was approximately 16,000,000 records compared, no matter what the size of the file.

SYSTEM/INIT Re-release (Compile Date 08-14-81)

A clear-start operation could not be performed on a B-1714 system. The GISMO re-release, which is included with this patch release for the Mark 10.0 System Software, is also required to enable the clear-start operation.

SYSTEM/LOGOUT Patch #1 (Compile Date 12-16-81)

With this patch, the SYSTEM/LOGOUT program now correctly recognizes the dummy clear-start records when the time and date are reset.

SYSTEM/ODT Patch #6 (Compile Date 9-22-81)

This patch makes changes necessary for the use with certain experimental Operator Display Terminals (ODT).