May 31, 1972

Memorandum to: System/370 Users of IBM Disk Operating System

Subject: DOS Version 4 (Release 27)

Version 4 (Release 27) of the Disk Operating System consists of the following components:

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* changed with this release
** new with this release
*** will become Classification C effective July 15, 1972

The following publications are supplied with this release package. Additional copies are available through the IBM Distribution Center, Mechanicsburg.

- GC33-5007-0  DOS Version 4
- GC33-5008-0  DOS Version 4 Systems Generation
- GC33-5009-0  DOS Version 4 Messages

Program Information Department  IV376B
Memorandum to Users of IBM Disk Operating System
System Release 27

Index
The following sections contain information on

1. Extensions and new support
2. APARs incorporated
3. Publications changes
4. Phases, modules and macros changed
5. DOS Residence
6. Program Temporary Fixes
7. Program restrictions
8. APAR submission

Section 1: Extensions and/or new support

3330 Direct Access Storage Facility

The Disk Operating System has been extended to provide system support for the 3330 Direct Access Storage Facility. This support is equivalent to the currently existing DOS 2314 functions, except for DLAB, VOL and XTENT statements. Block multiplex mode, track overflow and rotational position sensing are not provided.

Supervisor, Linkage Editor, Librarian, Job Control, IPL, and System Generation have all been modified to provide support as SYSRES and as a secondary storage device. This includes error recovery procedures.

System Utility programs which initialize, clear, copy, and restore disk have been developed to support the 3330.

Data Management has been modified to support the 3330. Appropriate DTF changes must be made to include this support. User programs will require recompilation and linkage editing.

Changes to user programs are necessary when these
- are dependent on device or channel timings
- are dependent on special device characteristics, such as cylinder or track references
- process I/O errors
- implement functions unavailable on the 3330, such as scan disk or track overflow.

The minimum supervisor including this support is 14K bytes.

Assembler D (14K) provides device support, and use of the 3330 as intermediate work space.

QTAM has been modified to provide 3330 device support.

The 3330 can be used by the S/370 integrated Emulators to simulate 1301, 1302, 1311, 2303 or 1405 disk input/output devices.
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3410/3411 and 3420 Magnetic Tape Subsystems

Supervisor, Job Control, IPL, and System Generation have been modified to support the 3410/3411 and 3420 Magnetic Tape Subsystems. The support is similar in function to the existing 2400 series support. In addition, support is provided for the data security erase command, and error detection and correction capabilities associated with these tapes.

Problem programs written for 2400 tapes using DTFMT or DTFDI can be executed on 3410/3420 tapes without change. Note: DTFPR and DTFCD should never be used to access magnetic tape. They use CCWs which cause skipping/spacing and stacker selection on unit record devices, but have no meaning to magnetic tape. Design of the 3411/3803 Tape Control Units provides for discrete decoding of CCWs with command reject of invalid CCWs. To allow alternate assignments of unit record files to tape at job execution device independent IOCS (DTFDI) should be used. Checkpoint/Restart will also function using 3410/3420.

A system generation will be required to use these tape units. Changes to user programs will be required when these are dependent on device or channel timings.

The System Utility programs Copy Disk or Data Cell to Tape, Restore Tape to Disk or Data Cell, and Initialize Tape, as well as the S/370 integrated Emulators and Assembler D (14K) support the 3410/3420. The 3400 series tape drives may be used for working storage by language translators only (3 required), except RPG and Assembler F which cannot use 3400 tapes as workfiles unless they have been SYSGENED as 2400 tapes.

3505 Card Reader and 3525 Card Punch

Support is provided in the Sequential Access Method which includes the ability to read either punched holes or optical marks (penciled or preprinted data) for the 3505, and punched holes for the 3525. It also provides the ability to ignore reading of selected columns of a card (Read Column Eliminate). Programming support includes error recovery procedures.

The basic read only and punch only functions are identical to the SAM support for existing card devices such as the 2540. Therefore, current 2540, 2501 and 2520 programs using LIOCS can be run on the 3505 and 3525 without change. For current 1442 and combined file programs, the device type numbers must be changed and the program recompiled.

Combined file programs using the 1442-N1 and the 2520-B1 must be changed to define separate input and output files. Combined file programs using the 2540 with Punch Feed Read should be changed to utilize SAM support.
The 3505, and the 3525 with the Card Read feature, will be supported as a SYSIN device (SYSRDR and SYSIPT). The 3525 will be supported as a SYSPCH device. Optical Mark Read and Read Column Eliminate is not supported as SYSIN.

The S/370 integrated Emulators support the 3505 and 3525.

All the standard functions and optional features of the 3505 and 3525 are supported at the DTF macro level. Programming support for Card Print and Card Read on the 3525 provides the ability to use the features in any combination of read, punch, and print operations.

The basic read and punch functions of the 3505 and 3525 will be supported by the higher level languages if the source program uses existing card reader and card punch device numbers/names. Stacker selection will be supported by those languages that currently support this function.

Programming support for existing functions requires no more main storage in the user's area than the current GET/PUT level support of SAM. Programming support of new features requires additional main storage of approximately 500 bytes.

The System Utility programs Copy Disk to Card and Restore Card to Disk also support the 3505 and 3525.

**Time of Day Clock**

The support for the Time-of-Day Clock, a standard feature on all S/370 CPUs, is a SYSGEN option. It provides a more accurate time of day indication and has a longer period than offered by the currently available Interval Timer support. The TOD parameter has to be specified during SYSGEN in order to get time stamps on SYSLST and SYSLOG, and to have GETIME support. TOD support provides an automatic update of the date fields in the Communication Region. Zone corrections can be done, at IPL time, to supply local values. Through the GETIME macro the time of day can be obtained in microseconds and/or based on either Greenwich Mean Time or local time.

Job Accounting, a SYSGEN option, does not use the TOD support. The Interval Timer is still used for time information in Job Accounting.

Time of Day Clock support will slightly increase processing time of IPL and Job Control programs due to handling of the more complicated clock values.
Recovery Management Support for IBM System/370 Model 135
consists of Machine Check Analysis and Recording (MCAR) and
Channel Check Handler (CCH).

MCAR responds to machine check interrupts, and interfaces to the
rest of the supervisor to perform functions which maximize
reliability, availability, and serviceability. Pertinent error
information will be externally recorded on the
Environmental Recording Data Set using the RMSR recording
mechanism. A minimum of ten tracks is required for this recorder
file. This accumulated error information may be displayed and/or
summarized by the Environmental Recording and Editing Program
(EREP).

MCAR functions such as error correction and selective job termina-
tion will allow system continuation in the event of some formerly non-recoverable failures. When a permanent storage failure occurs in a problem program area, MCAR attempts to remove the cause of partition damage by either validating storage or perform Storage Protect Feature (SPF) key repair. If either SPF Key Repair or Storage Validation was attempted and failed, then Dynamic Re-Allocation of the Partition (DRAP) is scheduled.

CCH intercepts channel error conditions in an attempt to either
repair the damage or decrease the impact of the error on the
system. CCH will use the Extended Channel Status Word to assess
system damage. New CCH error recovery procedures are provided
for all CCH supported devices.

MCAR/CCH is primarily a stand-by section of the Control Program. As such, it has little effect on throughput during normal sys-
tem operation. In case of machine check interrupts or channel
detected errors, it gains control of the system and attempts
system continuation from the error condition.

Assembler D (14K), 370N-AS-465

The Assembler has been extended to allow the 3330 Direct Access
Storage Facility and the 3410/3411 and 3420 Magnetic Tape
Subsystems to be used for workfiles and/or SYSIN, SYSLNK,
SYSLST or SYSPCH.

The following restriction exists:
The extent for each workfile allocated to a 3330 must not span
over more than 256 cylinders.
Recovery Management Support Recorder

RMSR is automatically included during system generation, and primarily involves the recording of pertinent hardware information on the Environmental Recording Data Set, known as the SYSREC file. The information produced and recorded by RMSR will facilitate rapid diagnosis and repair by the Customer Engineer and thus provide greater system reliability, serviceability, and availability.

RMSR is the replacement for the following functions, which will no longer be available.
- OBR/SDR
- MCAR/CCH Recorders
- TEBV, EVA

In addition to the functions described above, RMSR provides
- TPER Recording (Non-Standard Environment Recordings)
- IPL cause recording
- ROD functions (Recording of End-of-Day statistics)
- Customer Engineer control over recording modes

RMSR required the extension of
- PTA which is now 1K
- each Error Queue Entry which has been increased by 18 bytes to include 24 sense bytes
- each PUB entry which has an associated PUB2 entry that is variable in length and device dependent

Environmental Recording and Editing Program (EREP), 370N-UT-492

EREP is a DOS system utility program that runs as a problem program and that processes the RMSR output recorded on the Environmental Recording Data Set.

Operator selectable EREP options are provided so that the data on the System Recorder file and/or history RDE tape may be treated in various manners, such as
- editing/printing the entire SYSREC file
- selectively retrieving data from either the SYSREC file or the history/RDE tape for edit/print purpose
- controlling print format of tape oriented data when retrieving from either SYSREC or the history/RDE tape
- summarizing the data on the SYSREC file
- managing an SYSREC tape, an RDE tape, and a TES history tape
- summarizing or editing/printing the tape volume oriented data on the SYSREC file or the history/RDE tape.
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The Reliability Data Extractor (RDE) Summary program summarizes system error data for the user of RDE. Analysis of the summarized hardware errors by the CE will facilitate rapid diagnosis and repair of system/subsystem errors.

EREP is self-relocating and will operate in any 14K byte partition. EREP will take advantage of additional available core storage to improve its performance.

System Utility Programs, 370N-UT-491

A new program providing system utility support is made available with this release of DOS.

Support of the 3330 Direct Access Storage Facility, similar to 2314 support as it currently exists - Clear Disk, Assign Alternate Track Disk, Copy Disk to Card, Copy Disk to Disk, Copy Disk to Tape, Initialize Disk, Restore Card to Disk, Restore Tape to Disk, VTOC Display.

Support of the 3410/3411 and 3420 Magnetic Tape Subsystems with Copy Disk or Data Cell to Tape, Restore Tape to Disk or Data Cell, and Initialize Tape.

Support of the 3505 Card Reader and 3525 Card Punch, functionally equivalent to currently available support of 2501 and 2540 - Copy Disk to Card, and Restore Card to Disk.

Special features, such as Read Column Eliminate, Optical Mark Read, and printing on cards are not supported by the System Utility programs.

S/370 Emulators, 370N-EU-490

The 1401/1440/1460 Emulator for Models 145 and 155 has been extended to allow the execution of 1401/1440/1460 programs on a Model 135 equipped with the 1400 compatibility feature. Support is also provided for 1401 G programs.

User exit - The user can provide his own routines to support any 1401/1440/1460 and 1410/7010 operation code or any I/O operation.

Console user exit - Messages issued by the emulator program and/or the 1401/1440/1460 or 1410/7010 program can be passed to a user routine instead of being printed on the console. By returning the answer to the emulator or the 1401/1440/1460 or 1410/7010 program, the operator can be bypassed completely.

New devices - The 1401/1440/1460 and 1410/7010 Emulators support the following new devices through Data Management: 3330 Direct Access Storage Facility, 3410/3411 and 3420 Magnetic Tape Subsystems, 3505 Card Reader and 3525 Card Punch.
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QTAM, 370N-CQ-470

QTAM has been extended to provide support for the 3330 Direct Access Storage Facility. Appropriate DTF changes must be made to include this support. User programs will require recompilation and linkage editing to use the 3330.

Note: QTAM is not supported by either CBR/SDR or RMSR. The OBR/SDR parameter in the TERMTBL macro has been removed. Those users of QTAM who used the OBR/SDR option must remove that keyword from their macro and reassemble with the Release 27 level.

3735 Terminal Support, 370N-CQ-493

The 3735 Programmable Buffered Terminal support consists of new macros which can be used to generate the Form Descriptor (FD) programs for the terminal. A Form Descriptor Utility program is also provided which can be used to prepare the FD programs for transmission to the terminal.

The FD macros allow the programmer to describe the location and characteristics of each data field of a pre-printed form. A series of macro statements will describe a complete form. The assembly output, when loaded into the 3735 can control the terminal's operations as the described pre-printed form is being typed.

The FD Utility program will block the output of the FD macros into FD Unpacked Blocks that are properly formatted for transmission to the 3735 terminal. The user's telecommunication program can transmit these blocks to the terminal.

On-Line Test Executive Program, 370N-DN-481

OLTEP provides the following additional support.

RMSR - allows accessing of the active SYSREC file and an OS compatible EREP history tape.
New devices - printing of up to 24 bytes of sense data and recognition of a 3330 Customer Engineer volume.
Multi-card input - allows any number of test run definition cards to be input to OLTEP.
Control Unit Test - checks ownership of devices when a test section needs exclusive use of a control unit for control unit testing.
SOSP - execution of the Stand Alone Support Processor program under control of OLTEP.
Trace and Return Code Handling - tracing the test section requests for OLTEP function and handling of those return codes that the test section cannot handle.
2596 Card Read Punch

The 2596 Card Read Punch provides a means of 96 column card data interchange between System/3 and System/370. The 2596 is a fully buffered, channel connected card unit which reads (500 cpm), punches (120 cpm), and interprets 96 column cards under control of a System/370. It consists of two 2000-card capacity input hoppers: one for read feed, one for the punch feed. The four 600-card capacity stackers are assigned the functions of (1) normal read stacking, (2) selective read stacking, (3) normal punch stacking and (4) selective punch stacking. Interpretive printing of the data punched into the card is available as an optional feature. Interpreting will take place during the same pass as punching with no loss of card punching speed (120 cpm). Printing consists of three lines of 32 characters each. The 2596 cannot read and punch (or read and punch/print) the same card on a single pass.

2596 support is part of logical IOCS via OPEN, CLOSE, GET, PUT, DTFCD, CDMOD and CNTRL macros. The 2596 is supported only as an auxiliary input/output device to assembler language programs. Combined file support and SYSRDR, SYSIPT and SYSPCH support are not provided.

BTAM, 370N-CQ-469

BTAM has been extended to include the following support.

RMSR - By specifying ERLLOGIC=E and RMSR=YES in the user's BTMOD, RMSR logic will be generated to keep transmission and error counts and when necessary to write RMSR records. The table for keeping RMSR counts is generated by the RMSRTAE macro instruction. RMSR replaces OBR/SDR, existing applications with the OBR/SDR operand specified in the BTMOD macro will generate RMSR logic and the SDRTAE macro will generate an RMSR table. Changing from OBR/SDR to RMSR requires reassembly of BTMOD and relinking of the application programs.

BTAM 3270 support provides the primary functions of channel program generation, line interrupt handling, start I/O function, attention handling (local), ERP procedures and error posting and counting for the local and remote 3270 Information Display Systems.

The new 2715 function includes support for the 2798 Guidance Display Unit, an interactive terminal on the 2790 loop, 2791 Area Station Inquiry, self module checking 10 and 11 on the 2791 Area Station and data entry units, and second digit checking on data entry units.
Section 2: APARS incorporated

The following APARs were fixed in Release 26, but not listed in the Memo to Users for that Release. The APARs fixed in Release 27 are described on pages 13 through 50.

360N-CL-453, System Control and Basic IOCS

DS14686 $$$RAST01
04E6 wait state after program check in $$$RAST01 with a supervisor with AP=NO and if the machine check occurs in supervisor state, i.e. a PIK of 60.

DS14571 $$A$IPL2
04E6 wait due to fixed point divide check in Job Accounting routine of Supervisor.

DS14758 MCRAS, SGTCHS
The log-out pending situation which is a common occurrence on S/370, is treated as a hardware failure.

DS14778 IPLDISK
$IPLRT2 sets IOEL pointer to wrong value X'264'. RAS transients move data from X'2C0'.

DS14782 FOPT
Default value for RETAIN is incorrect.

DS15405 IJBLBG
Condense function of MAINT does not print the status report at EOJ.

DS15468 $$$BEOJ4
Msg 0P86I Force dequeue on xxx added to $$$BEOJ4.

DS15302 Program check interruption if running a FORTRAN compiled program that uses end file statement.

DS15434 Release 25 Supervisor with IDRA=YES results in soft wait while attempting to restart a program in foreground using a Data Cell.

DS15881 CONFG, FOPT
The keywords PORT (CONFG macro) and RETAIN (FOPT macro) are not valid when assembling release 25 supervisor.

360N-IC-454, Direct Access Method

DS15898 DTFDA
DTFDA with SEPASMB=YES and RECFORM=VARUNB is giving duplicate names; CSECT label and FILENAME.C are equal.
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360N-IO-478. Optical Character Reader IOCS

DS13740 ORMCD
Documents may be lost (ejected into a valid pocket without being read), if control CCWS (i.e. eject and stacker select) is included in the read CCW chain.

360N-CQ-469. BTAM

DS14921 $SANERR4. Statement numbers X4690546 and 547 are missing in Core Image Library.

360N-CQ-470. QTAM

DS13720 IJLQOB puts zeroes in the OBR/SDR records, because it only checks the first two bytes of the device access area.

360N-DN-481. OLTEP

DS15255 IJZAD036, IJZAD098
I/O starts and terminates without OLTEP getting control which results in time-out.
The CCE from the previous timed-out event is reused.
The supervisor now has the same block queued twice. If channel is busy, the CCB is put in queue; if interrupt comes in, it belongs to previous operation and must be discarded by OLTEP.
3420 OLTS cannot handle queue alone in CSW. CSW will be discarded for tape OLTS. Condition Code 1 on SIO is sometimes handled as interrupt. OLTEP does not handle all cases the same as the supervisor.

DS15258 IJZAD039. Testing with FE option selected causes program check if the response after first error communication interval is R 01,'///'.

DS15266 IJZAD070 is not turning the bit on allowing messages over 70 characters to be printed.

DS15267 IJZAD032. Routine not followed by a comma in test field of test run definition entry is ignored.

DS15268 IJZAD063. No asterisk on received CSW message when there should be one.

DS15271 IJZAD098. Time factor for retrying sense was too small and when sense failed wrong data was posted in TECB.

360N-CB-482. ANS COBOL

DS12780 ILACBL20. Compiler program checks, job is canceled while processing lvl 88 statement with value clause.
DS13017 When a DTFCD file contains optional in the select clause, end of file processing is executed after the first read.

DS13420 When the COBOL program is segmented, the root phase generates an extra ESD card which phase name is the name of the phase with highest level.

DS13919 The first address in the 'DTFADR CELLS' is incorrect which causes a program check at execution time.

DS13953 Invalid 'GN' generated for compound IF statement when compiled in 64K.

DS14252 At Checkpoint/Restart of COBOL program using SORT feature, msg 7904A (I/O error) on SYS004 occurs when SORT-WK1 is assigned to tape.

DS14298 Msg IIA6005I-D 'Compiler error, compilation will not be complete' not documented.

DS14487 An invalid msg IIA4006 is issued when compiling a long compute statement. If the statement is divided into two small statements, no message will be issued.

DS14834 CATALR cards for phases in segmented program are not generated during compilation.

DS15323 ILACBL21
When FCOBOL21 allocates buffer space for a 32767 byte record of a tape file, addresses within the COBOL object module are erroneously generated with extremely high invalid values.

DS15539 Compiler msg IIA2054I-C is issued for a report writer column clause, when the item would include the last print position specified in the output file.

360N-PL-464, PL/I

DS14363 IJXG15, IJXG30
If a PL/I program contains static initial variables with a displacement greater than 32K between the individual variables, wrong TXT cards are generated.
If the character string is longer than 32K, wrong initialization may be done for static initial variables.

360N-SM-483, Modular Sort/Merge

DS12899 ILHSRTMG. Sort opens SYSLST even if no printing is done.

The following pages summarize the programming maintenance included in Release 27.
MESSAGE IJQ017 'DATA ITEM TOO LARGE' IS GIVEN FOR NEGATIVE FIXED POINT CONSTANTS HAVING THE MINIMUM VALUE ALLOWED, DUE TO THE LENGTH SPECIFIED.

PROGRAM CHECK OCCURS DURING MACRO EDITING, IF THE MACRO IN SOURCE STATEMENT LIBRARY CONTAINS AN EOF RECORD. THE PROBLEM IS CORE SIZE DEPENDENT.

A VARIABLE SYMBOL IN THE END STATEMENT OPERAND FIELD IS IGNORED (NEITHER FLAGGED NOR CORRECTLY GENERATED). A CHANGE HAS BEEN MADE TO ALLOW VARIABLE SYMBOLS IN THIS CONTEXT.

THE END STATEMENT IS NOT PRINTED ON SYSLIST WHEN AN UNDECLARED VARIABLE SYMBOL IS USED IN THE OPERAND FIELD OF THE STATEMENT.
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* DS14964 360NAS466 MODULE - IJYF3

IJY067 is given if EXPR.1 of substring greater than length of char. EXPR. This should not be given. Instead a null string will be generated.

* DS14965 360NAS466 MODULE - IJYF3

Incorrect expansion of inner macro and outer macro when outer macro has more than 124 parameters.

* DS14982 360NAS466 MODULE - IJYF7D

A V-type address constant in a DC statement with a duplication factor of zero causes an ESD-table entry to be created.

* DS14276 360NCB452 MODULE - IJSCBL07

A program loop occurs when the last FD file description clause is not terminated by a period and/or a 01 level number does not follow the FD entry in the file section.

* DS14432 360NCB452 MODULE - IJSCBL15 IJSCBL16

Compiler does not flag missing period at the end of a paragraph with message IJS0651.

* DS15334 360NCB452 MODULE - IJSCBL07 IJSCBL15 IJSCBL16

Bad code with missing diagnostic is generated when a quote is punched in col. 72 and is the beginning of a non-numeric literal.

* DS15510 360NCB452 MODULE - IJSCBL07

Different diagnostics will be generated when the same clauses associated with a file description entry appear in a different order.
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* DS13751 360NCB482 MODULE - ILACBL50

IF THE SENDING IFIELD IS ALPHANUMERIC AND THE RECEIVING FIELD IS
EXTERNAL DECIMAL EDITED ITEM WITH NO INTEGER
POSITIONS IN A MOVE STATEMENT, THE SENDING FIELD IS NOT
REFERENCED IN THE X-RF TABLE.

* DS13755 360NCB482 MODULE - **NONE**

MISSPELLED PROCEDURE DIVISION CAUSES A PROGRAM CHECK IN
ILACBL60.

* DS14267 360NCB482 MODULE - ILACBL51

A GROUP ITEM WITH A VALUE CLAUSE FOLLOWED BY A 88 ITEM
CAUSES COMPILER TO LOOP IN ILACBL22. PROGRAM MAY
COMPLETE COMPILATION BUT RESULTS FROM OBJECT MODULE
UNDETERMINABLE.

* DS14297 360NCB482 MODULE - ILACBL21

MSG C1121 DATA CHECK MSG IS ISSUED BY COBOL
WHEN THE ERROR WAS ACTUALLY WRONG
LENGTH RECORD ON A DTFSDF FILE.

* DS14300 360NCB482 MODULE - FCOBOL50 FCOBOL70

A COBOL SOURCE STATEMENT CONTAINED A SUBSCRIPT
(-3), WHICH IS NOT VALID. NO DIAGNOSTIC WAS ISSUED, AND
INSTRUCTIONS WERE GENERATED FOR THE STATEMENT. THE
STATEMENT FAILED IN EXECUTION.

* DS14453 360NCB482 MODULE - ILACBL40

AN 'IF' STATEMENT WITH A SEARCH STATEMENT IN
ITS ELSE CLAUSE GENERATES INCORRECT GN REFERENCES
AND A DUPLICATE GN DEFINITION.

* DS14461 360NCB482 MODULE - ILACBL21

DOS ANS COBOL COMPILER FAILED TO DETECT A
RECORD KEY WHICH IS DEFINED (IN ERROR)
IN A PREVIOUS FD

* DS14465 360NCB482 MODULE - ILACBL11

WHEN A $ APPEARS WITHIN A NOTE STATEMENT
IT IS FLAGGED AS AN ILLEGAL CHARACTER.

* DS14470 360NCB482 MODULE - **NONE**

PROGRAM CHECK IN ILACBL20 WHEN AN INVALID ENTRY
IS AMDE IN THE REMARKS SECTION.

* DS14488 360NCB482 MODULE - ILBDSEM0

IN AN INDEPENDENT SEGMENT,
A 'GOTO' WHICH IS ALTERED A 'GO TO DEPENDING ON'
ARE CODED. IN SEQUENCE OF OPERATION THE 'GO TO' IS
ALTERED AND THE VN CELL HAS THE NEW PN
ADDRESS TO BRANCH TO WHEN RETURNING FROM ILBSEM0.
BEFORE SEARCHING THE 'GO TO' A PARAGRAPH WHICH
AHS A 'GO TO DEPENDING CN' IS EXECUTED.
THIS CAUSES THE VN CELL TO BE INITIALIZED AND
THE 'GO TO' RESULTS TO ORIGIANAL PN TUS CAUSING LOOP.

* DS14499 360NCB482 MODULE - ILACBL22

WHEN A COBOL PROGRAM USING THE REPORT WRITER
FEATURE, CONTAINS A LINKAGE SECTION BUT DOES NOT CONTAIN
A WORKING STORAGE SECTION, THE COMPILER ASSIGN
AN INCORRECT BASE LOCATOR FOR THE REPORT SECTION,
CAUSING DATA TO BE MOVED INCORRECTLY AT OBJECT TIME.

* DS14810 360NCB482 MODULE - ILACBL22

COMPILER TERMINATES WITH MSG. NO MORE AVAILABLE
OR MATCHING EXTENTS, WHILE PHASE 22 IS PROCESSING A GROUP
ITEM WITH VALUE ZEROES AND TH GROUP IS LARGER
THAN 256 BYTES.
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* DS14813 360NCB482 MODULE - ILBDAEO
R14 IS DESTROYED BEFORE DECLARATIVE SECTION IS ENTERED BECAUSE THE OPERAND OF EXECUTE INSTRUCTION IN ILBDAEO IS L R14, DATA-NAME (OF GIVING OPTION) THUS, UPON ENTERING THE DECL. SECTION R14 POINTS TO DATA-NAME AND DOES NOT CONTAIN THE RETURN ADDRESS.

* DS14817 360NCB482 MODULE - ILACBL12
ANS COBOL COMPILER PROGRAM CHECKS (DATA EXCEPTION) IN ILACBL50 WHEN PAGE LIMIT IN REPORT SECTION IS AN INTEGER OF 4 DIGITS OR MORE.

* DS14843 360NCB482 MODULE - A.ACCESS MACRO
A 66 LEVEL DATA ITEM WAS BEING FLAGGED WITH MESSAGE #ILA2018I-E EVEN THOUGH THE OBJECT OF THE RENAMES WAS PROPER AND WITHIN THE CORRECT LOGICAL RECORD.

* DS14854 360NCB482 MODULE - ILACBL40
A DIVIDE STATEMENT WITH REMAINDER OPTIONS FOLLOWED BY COMPUTE WILL CAUSE THE COMPILER TO LOOP IN PHASE 4 OR ISSUE ILA4088 D-LEVEL MESSAGE.

* DS14866 360NCB482 MODULE - ILACBL51
DECLARATIVE USE AFTER STANDARD ERROR GIVING DATA-NAME GENERATES AN UNCONDITIONAL BRANCH AROUND BASE REGISTER INITIALIZATION FOR DATA NAME. PROGRAM CHECK OCCURS WHEN DATA POINTED TO IS OF WRONG FORMAT.

* DS14867 360NCB482 MODULE - ILACB151
GENERATED CODE FOR AN OPEN STATEMENT IS INCORRECT WHEN THERE ARE OVERFLOW CELLS AND A BRANCH ON FIXED DISPLACEMENT OFF REG 15. THE BRANCH IS TAKEN INTO THE MIDDLE OF A MVC INSTRUCTION. THIS ERROR APPLIES TO A DTFMT FILE WITH NONSTANDARD LABELS.
• DS15301 360NCB482 MODULE - ILACBL20

PROGRAM CHECK OCCURS IN FCOBOL20 WHEN THE UPPER LIMIT IN A VALUE THRU CLAUSE FOR AN 88 ENTRY, OCCUPIES A SEPARATE SOURCE CARD AND THAT CARD IS MISPLACED IN THE SOURCE DECK.

• DS15306 360NCB482 MODULE - ILACBL21

REF >INVALID KEY DISPLAY 'LITERAL'> IS CODED AND AN INVALID KEY CONDITION OCCURS ON SEQUENTIAL DISK MESSAGE OF73I CANCELS THE JOB.

• DS15317 360NCB482 MODULE - ILACBL20

PROGRAM CHECK OCCURRED WHILE FCOBOL20 PROCESSED THE VALUE CLAUSE OF AN 88 CONDITIONAL NAME.

• DS15329 360NCB482 MODULE - ILACBL22

ADDRESSING PARAMETERS FOR A LINKAGE SECTION REDEFINES SUBJECT. WERE INCORRECT WHEN THE OBJECT OF THE REDEFINES EA A LENGTH GREATER THAN 4096 BYTES. THIS CAUSED UNPREDICTABLE RESULTS AT EXECUTION TIME.

OTHER PROBLEMS OCCURRING AS A RESULT, ARE AN UNPREDICTABLE INCREASE IN THE AMOUNT OF OBJECT MODULE TGT STORAGE FOR ALL CELLS, AND POSSIBLE SEVERE COMPILATION TIME DEGRADATION, FOR PROGRAM WITH LARGE LINKAGE SECTIONS.

• DS15509 360NCB482 MODULE - ILACBL51

PROGRAM CHECK IN ILACBL60 WHILE PROCESSING INPUT TEXT FROM PH51 FOR WRITE STATEMENT OF A DTFSD FILE.

• DS15521 360NCB482 MODULE - ILACBL50

INCORRECT DISPLACEMENT GENERATED IN THE MOVE OF COM-REQ TO USER'S DATA AREA.

• DS15522 360NCB482 MODULE - ILACBL22

A GROUP ITEM WITH A FIGURATIVE CONSTANT VALUE CLAUSE, CAUSED THE COMPILER TO PROGRAM CHECK IN FCOBOL60, WHEN THE LENGTH OF THE GROUP WAS LARGER THAN 255 BYTES.

• DS15527 360NCB482 MODULE - ILACBL40

DOS ANS COBOL COMPILER DOES NOT PICK UP SUBSCRIPTS IN A SET STATEMENT.

• DS15540 360NCB482 MODULE - ILACBL51

PROGRAM CHECK AT EXECUTION TIME. WHEN DOING THE WRITE WITH POSITIONING OPTION ON A DTFSD FILE.

• DS15554 360NCB482 MODULE - ILACBL22 ILACBL70

WHEN THE OBJECT OF A REDEFINES STATEMENT CONTAINED AN OCCURS CLAUSE, ALL SUCCEEDING DATA ITEMS REQUIRING INITIALIZATION WERE INITIALIZED AT THE WRONG LOCATION IN THE GENERATED OBJECT MODULE.

• DS15577 360NCB482 MODULE - ILACBL51

INCORRECT SUBROUTINE NAME GENERATED FOR TRANSFORM VERB WHEN IDENTIFIER-3 IS VARIABLE LENGTH. ILBDVTR0 SHOULD BE ILBDUTR0

• DS15596 360NCB482 MODULE - ILACBL11

THE ANS COMPILER LOOPS WHEN TRYING TO PROCESS AN EJECT CARD WHICH WAS INSERTED USING THE BASIS FUNCTION. THE PROGRAM WORKS WHEN RUN ON REL 25. BUT FAILS WITH PTF 482-0005.

• DS15665 360NCB482 MODULE - ILACBL21

A COBOL PROGRAM WHICH REFERENCES A SEQUENTIAL DISK FILE, INADVERTENTLY ISSUES A WRITE WITHOUT OPENING THE FILE. WHEN THIS OCCURS CYLINDER 0 TRACK 0 OF THE DISK PRESENTLY ASSIGNED TO THE LOGICAL UNIT IN THE DTF TABLE IS DESTROYED.

• DS15906 360NCB482 MODULE - ILACBL10

WHEN A SECOND ID DIVISION CARD IS ERRONEOUSLY INSERTED IN THE SOURCE PROGRAM BY AN INSERT CARD USING BASIS, THE COMPILER LOOP INSTEAD OF ISSUING A DIAGNOSTIC MESSAGE.
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* DS15908 360NCB482 MODULE - ILACBL70

MESSAGE # ILA21471-W IS ERRONEOUSLY APPENDED WITH THE TEXT OF THE NEXT MESSAGE IN PHASE 70.

* DS15923 360NCB482 MODULE - ILACBL20 ILACBL22

PROGRAM CHECK OCCURRED DURING OPERATION OF PHASE COBOL22 WHILE PROCESSING AN 88 ITEM WITH THE VALUE THRU OPTION AND THE 88 WAS DIRECTLY UNDER A GROUP ITEM.

* DS15930 360NCB482 MODULE - ILACBL40

WHEN A DEBUG PACKET IS USED IN A SEGMENTED PROGRAM THE GENERATED CODE FOR THE DEBUG IS NOT PLACED IN THE ROOT SEGMENT. THIS CAUSES A PROGRAM CHECK DURING EXECUTION.

* DS15955 360NCB482 MODULE - ILACBL20

WHEN SPECIFYING THE COMBINATION 'A' AND 'X' EXCLUSIVELY IN THE PICTURE CLAUSE, DIAGNOSTIC MESSAGE ILA2039I IS ISSUED BY THE COMPILER STATING THAT THE PICTURE CONFIGURATION IS ILLEGAL.

* DS15972 360NCB482 MODULE - ILACBL51

WHEN THE ERROR ROUTINE IS ENTERED, REGISTER 4 WHICH CONTAINS THE DTF ADDRESS, IS SAVED IN AN AREA IDENTIFIED AS SA2=4. THIS IS THE SAME LOCATION AS SORT SAVE AREA XSA=1. THE DTF ADDRESS OVERLAYS A SORT RETURN ADDRESS. WHEN AN ATTEMPT IS MADE TO RETURN CONTROL TO SORT, THE DTF ADDRESS IS BRANCHED TO AND AN OPERATION EXCEPTION OCCURS.

* DS15990 360NCB482 MODULE - ILACBL20

WHEN USING THE FIGURATIVE CONSTANT 'ZERO' IN THE VALUE CLAUSE FOR A NUMERIC EDITED ITEM WITH PICTURE B2(4)9, THE COMPILER ISSUES MESSAGE ILA2130, WHICH STATES THAT THE ITEM CANNOT HAVE A VALUE CLAUSE.

* DS16456 360NCB482 MODULE - **NONE**

GENERATED CODE FOR AN INDEX COMPARISON DOES NOT CONSIDER THE POSSIBILITY THAT THE VALUE IN THE INDEX IS NEGATIVE.

* DS16463 360NCB482 MODULE - ILACBL10

A PROGRAM CHECKS OCCURS IN ILACBL10 WHEN A SOURCE PROGRAM CONTAINS A MULTIPLE FILE TAPE CLAUSE AND SEVERAL SOURCE CODING ERRORS

* DS16513 360NCB482 MODULE - **NONE**

SOURCE PROGRAM, USING LABEL DECLARATIVES WITHOUT >DISPLAY UPON SYSLST OR SYSPCH>, ERRONEOUSLY AUTOLINKS MODULE ILBOSY0, WHICH HAS THREE UNRESOLVED EXTERNAL REFERENCES, CAUSING A PROGRAM CHECK DURING EXECUTION.

* DS16718 360NCB482 MODULE - **NONE**

1. CATALR CARD PRODUCED BY THE COMPILER AND CATALR CARD ADDED BY THE PROGRAMMER CAUSE MSG 3M555I.
2. NO END CARD GENERATED AFTER SORT PHASE-NAME AND INCLUDE CARDS.
3. IF THE PROGRAM-ID IS 8 CHARACTERS LONG & ENDS WITH TWO ZEROS THE CATALR AND PHASE CARDS FOR SORT ARE THE SAME AS FOR THE MAIN PHASE.
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• DS14192 360NCL453 MODULE - SGTCHS
THE TAPE ERP TRANSIENT $$ANERAP
CALCULATES SYS000 FOR THE BACKGROUND
PARTITION TO AN ABSOLUTE LUB DISPLACEMENT
OF X'0B'. X'0B' IS ALSO USED FOR THE SYSCLB
LUB.

• DS14210 360NCL453 MODULE - DTFSD
CANNOT ASSEMBLE STFSR USING 10K ASSEMBLER.
(GLOBAL TABLE SPACE EXCEEDED).

• DS14318 360NCL453 MODULE - BOSDC1
THE FORMAT 1 LABEL IN VTOC OF A SD INPUT FILE
HAVING SYSREC AS ITS LOGICAL UNIT IS REMOVED DURING
CLOSE OF THE FILE.

• DS14323 360NCL453 MODULE - DIMOD
CONTROL CHAR FOR PUNCH IS NOT MOVED INTO THE
PUNCH CCW.

• DS14336 360NCL453 MODULE - $$BOIS06 $$BOIS07 $$BOIS09
NO EOF IS WRITTEN IN THE INDEPENDANT OVERFLOW
AREA WHEN FILE IS BEING CREATED.

• DS14340 360NCL453 MODULE - $$BODAUI
DURING OPEN OF DA INPUT FILE, $$BODAUI
PHASE PASSES FULL EXTENT TO THE USER'S XTNTXIT
ROUTINE WHEREAS THE JIB CONTAINS THE SUB EXTENT
DURING OPEN OF DA INPUT FILE, $$BODAUI
PHASE PASSES FULL EXTENT TO THE USER'S XTNTXIT
ROUTINE WHEREAS THE JIB CONTAINS THE SUB EXTENT
SPECIFIED BY DLBL, EXTENT STATEMENTS.

• DS14520 360NCL453 MODULE - $$BODAUI1
IF THE FIRST EXTENT IN THE FORMAT 1 LABEL
IS NOT A 01 TYPE, $$BODAUI1 PHASE DOES NOT
PASS THAT EXTENT TO THE USER'S XTNTXIT ROUTINE.

• DS14521 360NCL453 MODULE - $LNKEDT IJBLE1
WHEN CATALOGING TO CIL, MSG 2197I IS RECEIVED.
PROBLEM APPEARS TO BE $LNKEDT INCLUDES THE LABEL INFO
CYL WHEN CHECKING TO SEE IF THERE IS ENOUGH ROOM IN
THE CTL. THEN WHEN IT TRIES TO USE THIS AREA, IT READS
AN EOF RECORD. IF THE AREA IN THE CIL IS TOO SMALL,
THEN MSG 2193I IS RECEIVED.

• DS14522 360NCL453 MODULE - CPMOD
IN MODULE IJJCPI3 REGISTER FOUR IS NOT SAVED.

• DS14536 360NCL453 MODULE - IJBLSERV
LSERV CHECKS BYTE 0 OF THE LABEL INFORMATION
CYLINDER RECORD FOR EXTENT CARD OMITTED. THIS
BYTE IS USED TO INDICATE NUMBER OF EXTENTS
FOR DA OR IS FILES.

• DS14539 360NCL453 MODULE - IJBSL3
DISCREPANCY IN THE DEFINITION OF DELETED ENTRY
BETWEEN RSERV AND COR G7. COPYR BLANKS FIRST BYTE
OF THE NAME ENTRY WHILE RSERV (PUNCH) CHECKS FOR 2 LEADING
BLANKS.

• DS14540 360NCL453 MODULE - $$BOMT05
DEGRATED LIOC PERFORMANCE BECAUSE
$$BOMT05 ALLOWS I/O RECOVERY FOR 7 TRACK
DRIVE.

• DS14550 360NCL453 MODULE - SGDFCH
WHEN BG IS RUNNING AND REQUEST IS MADE TO
START P1, BG COMREG + 36 IS UPDATED WITH END
ADDRESS OF $$BATTNH LOADED INTO P1.

• DS14552 360NCL453 MODULE - $$BRSTR2
$$BRSTR2 PROGRAM CHECKS WHEN RESPOSITIONING
PHYSICAL TAPE FILES. PROBLEM IS CAUSED BY USING A
NON EXISTING DTF ADDRESS.
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* DS14554 360NCL453 MODULE - $JOBCTLK
  A RSTRT COMMAND TO SYS000 RESULTS IN MSG. OR001 RSTRT UNIT INVALID.

* DS14562 360NCL453 MODULE - $JOBCTLF
  IF DVCDN IS GIVEN TWICE TO THE SAME TAPE, DVCUP WILL NOT RESTORE IT TO AVAILABLE STATUS.

* DS14563 360NCL453 MODULE - LSERV
  LSERV PRINTS INCORRECT INFORMATION IF HTE LABEL CYLINDER DOES NOT CONTAIN A VALID RECORD OR AN EOF RECORD BUT FOR EXAMPLE ONLY X'00' OR BLANKS FOR EXAMPLE AFTER A REALLOCATE.

* DS14564 360NCL453 MODULE - IJBLBL
  REALLOCATION ON A 2314 MAY RESULT IN AN IMPROPER MEMBER OF RECORDS/TRACK ON THE LAST TEN CIL TRACKS ALLOCATED. DURING LINKEDT USING ACTION CLEAR MESSAGE 21941 WILL OCCUR.

* DS14566 360NCL453 MODULE - SGTCHS SGUNCK
  WHEN A UNIT CHECK OCCURS ON A MODE SET CCW IN THE SUPVR AND COMMAND CHAIN RETRY IS SPECIFIED, THE SUPVR WILL STORE THE ADDRESS OF THE MODE SET CCW INTO THE USER CCB. THIS WILL RESULT IN A CHANNEL PROGRAM LOOP ON THE NEXT EXCP.

* DS14569 360NCL453 MODULE - SGTCH5
  TP LINES CAN BE LOST IF A 2702 RETURNS FROM 510 WITH CSW STORED, WITH STAT.MOD,BUSY, AND CUE.

* DS14572 360NCL453 MODULE - IJBLBG
  DURING CONDENSE SYSTEM WILL LOOP IF EOF RECORD HAS WIPED OUT REMAINING RECORDS ON TRACK, PRINTING >NO RECORD FOUND > MESSAGE.

* DS14576 360NCL453 MODULE - SGTCHS
  IF QTAM IS ACTIVE, THE VECTOR TABLE ADDRESS MAY BE IN R2 WHEN THE ROUTINE NOSO IS ENTERED. R2 IS USED IN THIS ROUTINE, BUT IS NOT CLEARED OUT.

* DS14584 360NCL453 MODULE - IJBDMPGN
  THE HEADING INFORMATION UNDER LOGICAL UNIT BLOCK TABLE FOR PUB PTR IS INCORRECTLY TITLED PUB PTR.

* DS14587 360NCL453 MODULE - SGTCHS
  IN REL. 25 CODE WAS ADDED IN SVC 0 FOR VALID CCW, THIS CODE IS ALSO USED FOR SVC 25/27, FOR WHICH A VALID CCW ADDRESS IS NOT REQUIRED, WHICH CAN RESULT IN MSG 0771.

* DS14589 360NCL453 MODULE - DUMPGEN
  SYSTEM DEGRADATION OCCURS WHEN USING THE DUMP PRODUCED BY DUMPGEN WHEN THE DUMP IS TRYING TO TRANSLATE SPECIAL CHARACTERS WHICH ARE NOT ON THE CHAIN/TRAIN BEING USED.

* DS14600 360NCL453 MODULE - $JOBCTLK
  BAD ENTRIES IN PARSTD AREA. THIS WAS CAUSED BY COMMENT IN COLUMN 72 OF THE DLBL CARD. JOBCTLK DID NOT CHECK IF THE NEXT CARD WAS A CONTINUATION STMT, SO THE EXTENT CARD WAS USED AS CONTINUATION, AND EXTENT INFO WAS MISSING NOW.

* DS14610 360NCL453 MODULE - SGDSK SUPRVSR
  CU TAG LINE. ALU CHECK AND MISSING ADDRESS MARKER ARE NOT COUNTED BY SDR.
  CU TAG LINE. ALU CHECK AND MISSING ADDRESS MARKER ARE NOT COUNTED BY SDR.

* DS14624 360NCL453 MODULE - $JOBCTLJ
  WHEN MAKING AN ALLOCATION OF A FOREGROUND PARTITION WHICH IS ACTIVE SO THAT THE SIZE OF THE PARTITION WILL INCREASE DOWNWARDS, NO ERROR MSG IS ISSUED, THIS CAUSES WRONG JOB DURATION TIME.
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- DS14628 360NCL453 MODULE - IJBLBD
  IF IN A DELETE STMT ALL IS SPECIFIED AS
  A SECOND OPERAND AS A RESULT OF AN INCORRECT
  PUNCH- E.G. DELET XXXX, ALL
  IN WHICH ',' SHOULD BE '-' THEN ALL WILL BE
  ASSUMED AS AN OPERAND, AND THE ENTIRE LIBRARY
  WILL BE DELETED.

- DS14629 360NCL453 MODULE - IPLDISK
  IF ALTERNATE CONSOLE IS INCLUDED IN THE
  SYSTEM BUT NOT ASSIGNED, A SET DATE FROM
  CARD READER CAUSES WRONG PUB POINTER IN
  SYSUSE. SYSUSE IS POINTING TO ALT. CONSOLE, WHICH
  IS NOT ASSIGNED, INSTEAD OF THE ASSIGNED ONE.

- DS14631 360NCL453 MODULE - SGTCHS
  IF SRSEP=YES, EVERY CCW IS CHECKED FOR
  A VALID DATA ADDRESS. IF THE CCW IS A CONTROL CCW, THIS CAN
  CAUSE CANCELLATION OF THE JOB DUE TO INVALID ADDRESS.

- DS14645 360NCL453 MODULE - $JOBCTLN
  5 BYTES OF THE USER SAVE AREA ARE
  CLEARED IF THE USER HAS NOT SPECIFIED SIO-
  SUPPORT DURING SYSTEM GENERATION.

- DS14646 360NCL453 MODULE - SGTCHS $GUNCK
  INCOMPLETE IMPLEMENTATION OF FIX FOR DS14060.
  UNEXPECTED UNIT-CHECK LOCKS 2319 IN BUSY
  STATE BECAUSE A SENSE SIO IS ONLY DONE IF
  SRSEP=YES OR PTO=YES.

- DS14671 360NCL453 MODULE - DIMOD
  A DIMOD WITH 2 I/O AREAS FOR AN INPUT FILE
  CHECKS THE CCB FOR UNIT EXCEPTION CONDITION AT A
  WRONG TIME, THIS RESULTS IN Resetting THE FIRST
  PAGE SWITCH TOO SOON, CAUSING READING TEST
  1* OR 16.

- DS14680 360NCL453 MODULE - $JOBCTLG
  IF LBLTYP NSD(06) SPECIFIED $MAINEOJ IS
  CANCELLED DUE TO INVALID ADDRESS REASON.
  $MAINEOJ IS LOADED AT END OF LABEL
  AREA, AND $MAINEOJ DOES NOT FIT IN
  IOR-LABEL AREA LENGTH.

- DS14681 360NCL453 MODULE - FOPT $MICR
  A PROGRAM CHECK IN A USER STARKER SELECT
  ROUTINE OF A MICR PROGRAM IS NOT RECOGNIZED.

- DS14692 360NCL453 MODULE - $BOVDMP $BOWDMP
  MODULES $BOVDMP AND $BOWDMP ARE PRINTING
  THE VTOC WITH 132 CHARACTERS. THIS RESULTS IN
  MISSING OUTPUT WHEN USING A 1403 PRINTER
  WITH ONLY 120 PRINT POSITIONS.

- DS14693 360NCL453 MODULE - $GDFCH
  LOAD FOR A PHASE NAME OF BLANKS WILL
  RESULT IN A WAIT STATE FOR A SYSTEM WITH
  IDRA=YES.

- DS14708 360NCL453 MODULE - $BE0J3
  IF TWO BTAM SUBTASKS ARE RUNNING IN THE SAME
  PARTITION, AND ONE TASK CANCELS, THE OTHER
  TASK WILL BE PUT IN A PERMANENT WAIT STATE.

- DS14715 360NCL453 MODULE - SGTCHS
  036E - WAIT WHEN DOING A SIO TO A TAPE IF
  THE CCB+8 BYTE HAS BITS 4 THRU 7 ON.

- DS14718 360NCL453 MODULE - $JOBCTLA $JOBCTLJ
  IF SYSIPT IS NOT ASSIGNED AND JOB CTL
  READS An "INCLUDE"-STATEMENT, THE MESSAGE
  '1C10A PLEASE ASSIGN SYSIPT' IS WRITTEN ON
  SYSLOG. AFTER ASSIGNING SYSIPT THE
  CARDS FOLLOWING AN INCLUDE CARD (ESD AND TXT
  CARDS) ARE LOGGED AND FLAGGED AS INVALID STATE-
  MENTS.
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* DS14729 360NCL453 MODULE - $$BDRSTR

DASD VERIFICATION MESSAGE OR16 A IS NOT
ISSUED FOR DASD UNIT ON RESTART. THE ERROR
CONDITION OCCURS ONLY WHEN TAKING CHECKPOINT
ON DISK PLUS TAPE REPOSITION TABLE OMITTED.

* DS14733 360NCL453 MODULE - $$BDUMPB

SYSTEM DEGRADATION DUE TO THE NUMBER OF SPECIAL
CHARACTERS WHICH THE DUMP IS TRYING TO
TRANSLATE.

* DS14744 360NCL453 MODULE - $$BERRTN

AFTER $$BERRTN FETCHED THE DISK
MESSAGE WRITER $$BOMSG1, WHENEVER THE WORK
FILE EXTENT HAS BEEN EXCEEDED, WAIT STATE
MAY OCCUR.

* DS14747 360NCL453 MODULE - IPLDISK

IN THE YEAR FIELD OF THE SET
COMMAND, ALPHANUMERIC CHARACTERS
ARE ACCEPTED IF THE FIRST CHARACTER
IS LESS THAN 9. (7C IS ACCEPTED.)

* DS14751 360NCL453 MODULE - $$BSETL

$$BSETL CALCULATES THE END OF THE
I/O AREA ONE BYTE TOO HIGH. IF THE END
OF THE I/O AREA COINCIDES WITH THE END
OF THE PARTITION, THE PROGRAM
WILL CANCEL WITH THE MESSAGE 0508I.

* DS14753 360NCL453 MODULE - $$BOSD01

OPEN SD WORKFILE CANCELS
WITH MESSAGE 0P70I IF NO EXTENT
INFORMATION IS PRESENT.

* DS14761 360NCL453 MODULE - $$JOBCTLN

IF $$JOBACCT IS CANCELLED IN ON PARTITION
AND ANOTHER PARTITION TRIES TO CALL $$JOBACCT THE
SYSTEM IS PUT IN THE WAIT STATE, WHEREAS A
PHASE NOT FOUND MESSAGE SHOULD BE PRINTED.

* DS14763 360NCL453 MODULE - SGUNCK SGDFCH

IF SYSCLB IS ON A DIFFERENT DRIVE
AS SYSCRL AND SYSCLB IS NOT READ, FETCH
WILL GO INTO A HARDWAIT, INSTEAD OF ISSUING
MESSAGE INT REQ SYSCLB.

* DS14764 360NCL453 MODULE - MCRAS

USERS OF 370/145 WHO DO NOT
INCORPORATE DOS TIME ACCOUNTING
FACILITIES BUT WHO MAY USE THE CLASS
C TIME MACROS AS IN PRIOR RELEASES,
WILL HAVE ADDRESSABILITY ERROR IN
THEIR SUPVR. LISTING IN THE MCRAS GENERATION

* DS14768 360NCL453 MODULE - SGSVC

LOOP OCCURS IN THE SUPVR. SELECTING
THE QUIESCE TASK WITH IDRA BUSY.

* DS14769 360NCL453 MODULE - IJBSL4

IF PHASE SSERV IS MADE SELF-
RELOCATING AND PRIVATE SSL IS ASSIGNED
IN A FOREGROUND, MESSAGE 3M431
WILL BE PRINTED.
PRIVATE SSL EXISTS.

* DS14775 360NCL453 MODULE - $$JOBCTLN $$JOBCTLG

THE FIRST BYTE OF THE START
AND STOP TIMES IN THE PARTITION
ACCOUNTABLE CONTAINED INVALID
DATA.
(A ZONE OF 'F' INSTEAD OF '0'

* DS14776 360NCL453 MODULE - $$BONVOL

SLOW PERFORMANCE WHEN USING
2415 TAPE DRIVE DUE TOREWIND OPERATION
BY TAPE OPEN PHASES.
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* DS14780 360NCL453 MODULE - $JOBCTLA

THE HIGH CORE ADDRESS IN THE JOB ACCOUNTING TABLE CONTAINS ZERO'S FOR LINK EDIT RUNS AND CATALOGUE RUNS. THE HIGH CORE ADDRESS IN THE COMMUNICATION REGION IS COPIED TO THE JOB ACCOUNTING TABLE BY $BEOJ4. FOR LINK EDIT RUNS THE HIGH CORE ADDRESS IN THE COMREG CONTAINS ZERO'S, HIGH CORE ADDRESS IN J.A. TABLE CONTAINS ZERO'S. FOR CATALOGUE JOBS: AFTER THE HIGH CORE ADDRESS IN THE J.A. TABLE HAS BEEN SET, JOB CONTROL clears THE ADDRESS IN THE COMREG AND fetches $MAINEOJ AT THE END OF WHICH $BEOJ4 SETS THE HIGH CORE ADDRESS FOR THE 2ND TIME. HOWEVER, THIS TIME THE COMREG CONTAINS ZERO'S.

* DS14781 360NCL453 MODULE - IJBLBX

DOING AN ALLOC FOR A NEW SYSRES WITH A DIRECTORY, ALLOCATION OF FOUR DIGITS, MESSAGE 'INVALID OPERAND' OCCURS ON SYSLST.

* DS14783 360NCL453 MODULE - IPLDISK

ADDING TAPE DURING IPL WAS IMPOSSIBLE, MESSAGE 'O114I-CANNOT ADD TEB OR TEBV-INSUFFICIENT TABLE SPACE' IS WRITTEN ON CONSOLE LOG. ENVIRONMENT: SUPERVISOR GENERATED WITHOUT TEB'S, BUT WITH TEBV'S AND A NUMBER OF TAPES STANDARD ASSIGNED, THAT IS AT LEAST EQUAL TO THE NUMBER OF TEBV'S DIVIDED BY 3.

* DS14784 360NCL453 MODULE - FOPT

PROGRAM CHECK IN MCRR ROUTINE DUE TO CODE OVERWRITTEN. THE MCRR CODE IS BEING CHANGED BY THE JA ROUTINE AT LABEL "JAXPP". THE VALUE OF ACCTRAID IS 00, WHICH RESULTS IN A DISPLACEMENT OF 00 INFO THE ACCT-TABLES. THE USER SAVE AREA IS THEN LOADED INTO REG. 8.

* DS14788 360NCL453 MODULE - $SANERAI

BAD WRITE OPERATON OF EOR CHARACTER OF ALL RECORDS AFTER AN INTERVENTION REQUIRED CONDITION.

* DS14789 360NCL453 MODULE - $SANERRV

SYSTEM LOOP WITH MESSAGE 0P10I IF INTERVENTION REQUIRED ON 2540 PUNCH DURING ERROR RECOVERY OF EQUIPMENT CHECK, BECAUSE EQUIPMENT CHECK DOES NOT CAUSE UNIT CHECK AT INITIAL SELECTION.

* DS14790 360NCL453 MODULE - IJBL4

MESSAGE 3M43I IS ISSUED INCORRECTLY IN CASE A PRIVATE SOURCE STATEMENT LIBRARY DOES NOT EXIST. THE WORD 'PRIVATE' WAS NOT INCLUDED.

* DS14791 360NCL453 MODULE - IJBLBS

IF THE OPERAND OF A COPY (S,R,C) STMT AFTER A NEWVOL STMT IS TOO LONG MESSAGE 3M33I WILL BE PRINTED INSTEAD OF MESSAGE 3M21I.

* DS14792 360NCL453 MODULE - $SBERRTN

SYSTEM LOOP WITH MESSAGE 0P10I EQUIPMENT CHECK IF PERMANENT ERROR ON 2540 PUNCH BECAUSE THERE IS NOT RETRY COUNTER.

* DS14796 360NCL453 MODULE - $SA$IPLI IPLDISK

DURING IPL THE REQUEST KEY IS HIT A 2ND TIME. THE INTERRUPT IS HANDLED AND THE ATTENTION ROUTINE IS FETCHED. ($BATNA) THIS TRANSIENT ROUTINE TRIES TO WRITE A MESSAGE, BUT THE ASSIGNMENT ARE NOT YET MADE, IPL IS NOT FINISHED!
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* DS14800 360NCL453 MODULE - IJBSL3
MESSAGE '3M43I' DID NOT INCLUDE THE
WORD 'PRIVATE' IN CASE THE PRIVATE
RL DOES NOT EXIST.

* DS15051 360NCL453 MODULE - IJBSL4
AFTER PUNCHING A BOOK FROM SSL SSERV EJECTS
TO A NEW PAGE.

* DS15053 360NCL453 MODULE - SGSVC
ASSEMBLY OF A MIN SUPVR. WITH 26K
SEND ADDRESS CAUSES ADDRESSIBILITY
ERRORS.

* DS15063 360NCL453 MODULE - IJBLE1
$LINKEDT PROGRAM DID NOT RETRY ON
AN NRP CONDITION.
MESSAGE 21941 WILL BE PRINTED.

* DS15066 360NCL453 MODULE - SGCHS SGUNK
A WAIT OCCURS WHEN HANDLING A TAPE ERROR
ON CHANNEL 2 AND DOS ERROR RESTART ATTEMPTED
FROM CHANNEL 1.
$SANERRR ISSED A ISR AND A TIE
ON CHANNEL 2, THEN RETURNED TO DOS ERROR
RESTART, WHICH ISSUED A SIO ON CHANNEL 1.
THIS BRINGS THE SYSTEM TO A WAIT STATE.

* DS15078 360NCL453 MODULE - IJBBC1
JOB CONTROL ONLY WRITES 9 RECORDS
PER TRACK ON SYSLNK FILE, REGARDLESS
OF WHETHER THE DEVICE IS A 2311 OR OTHERWISE
AS A RESULT, THERE IS WASTO OF DISK SPACE
IS SYSLNK IS ASSIGNED TO 2314 DEVICE.
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* DS15121 360NCL453 MODULE - CLOSER

IF THE FIRST OPERAND OF A CLOSER MACRO IS REGISTER NOTATION AND
THE SECOND OPERAND IS A FILENAME, THE CODING GENERATED IS WRONG.
CALCULATION OF THE RELOCATION FACTOR IN REG 1, NEEDED FOR FILENAME
OPERANDS, IS NOT GENERATED.

* DS15132 360NCL453 MODULE - IJBLBG

AN INVALID OPERAND IN A CONDS STMT.
WAS FLAGGED TWICE IN CASE THE OPRAND
CONSISTS MORE THAN TWO CHARACTERS
(FOR INSTANCE: CONDS ALL)

* DS15134 360NCL453 MODULE - SGUNCK

LOOP IN SUPERVISOR ERROR SIO DUE TO
GETTING CONTROL UNIT BUSY IN RESPONSE TO SENSE
FOR 2260.

* DS15135 360NCL453 MODULE - $BDUMPB IJBMPB

WHEN SYSLST IS ASSIGNED TO A 3420 TAPE AND
A JOB ABENDS WITH A DUMP THE DUMP IS
TERMINATED WITH A COMMAND REJECT MESSAGE.
TO WRITE THE COMREG ADDRESS TO A TAPE THE
PHASE $BDUMPB ISSUES A X'11' COMMAND WHICH
WILL BE INVALID FOR A 3420 TAPE (REMARK: FOR
A 2400 TAPE THE X'11' COMMAND WILL BE ACCEPTED
AS A WRITE COMMAND).

* DS15138 360NCL453 MODULE - $JOBCTLG

BEFORE JOB CONTROL FETCHES $MAINEOJ(EJP)
TO PRINT THE STATUS REPORT, IT SKIPS A PAGE,
AS $MAINEOJ START WITH SKIPPING ONE PAGE. THIS
RESULTS IN AN EMPTY PAGE.

* DS15139 360NCL453 MODULE - SG SVC

IF TIMER INTERRUPT OCCURS WHILE LTA IS
BUSY WITH A TRANSIENT FOR THE SAME PARTITION
THAT HAS THE TIMER FUNCTION, THE TIMER
INTERRUPT IS STACKED AND THE ATTENTION ROUTINE
IS FLAGGED READY TO RUN. WHEN TASK SELECTION
SELECTS NEXT ROUTINE, IT SELECTS ATTENTION.
The PARTITION THAT HAS LTA BUSY WILL NEVER
BE DISPATCHED, THUS NEVER FREEING
UP LTA, THEREBY ENDING UP IN A NEVER
ENDING LOOP.

* DS15142 360NCL453 MODULE - SGTCHS

WITH OLTEM = YES, AN INTERFACE CONTROL CHECK
CAN RESULT IN UNDETERMINED ERRORS IN THE I/O INTERRUPT
ROUTINE BECAUSE NO TEST FOR CHANNEL CHECK IS MADE BEFORE
USING THE UNIT ADDRESS IN THE IP OLD PSW, WHICH CAN
BE INVALID.

* DS15153 360NCL453 MODULE - SGDFCH

WHEN A SVC 3 IS ISSUED BY THE
SUPERVISOR OR FROM THE PTA WITH
IDRA GENERATED THE SUPERVISOR
PIB FLAG CAN BECOME X'89'. IF
WHILE THE SUPERVISOR PIB IS X'89' AND
THE SUPERVISOR IS INTERRUPTED, THE
SUPERVISOR CANNOT BE SELECTED AT
TASK SELECTION UNLESS THE SYSTEM
GOES TO ALL BOUND AT WHICH TIME
THE SUPERVISOR PIB FLAG IS
CHANGED TO X'85'.

* DS15170 360NCL453 MODULE - $BOPEN $BOPIGN

WHEN A FILE IS ASSGN/IGN OPEN TO THE
FILE IS NOT PERFORMED.
CONSEQUENTLY, THE ICREG OF THE TAPE OUTPUT
FILES IS NOT INITIALIZED RESULTING IN
PROGRAM CHECK IN THE PROBLEM PROGRAM WHEN
IOREG IS USED.

* DS15178 360NCL453 MODULE - IJBLBG

USER SUSPECTED THAT THE CONDENCE FUNCTION
OF THE MAINT PROGRAM CLEARED ONE TRACK EXTRA.
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• DS15184 360NCL453 MODULE - $$BCMT01

SUP AND I/O MACROS SRL IMPLIES THAT WITH EOF ADDR SPECIFIED IN DTFMT USER ROUTINE SHOULD HAVE CONTROL OVER WHETHER TAPE WILL BE CLOSED AT EOF. CLOSE HOWEVER IS INITIATING REWIND/UNLOAD BEFORE PASSING CONTROL TO EOFADDR.

• DS15186 360NCL453 MODULE - IJBSL1

THE MAINT PROGRAM TO CONDENSE THE CIL FOLLOWED BY DSERV IN ONE JOB, RESULTED IN A LOOP IN THE DSERV PROGRAM. LOOP PRINTED MESSAGES 3M35I.

• DS15192 360NCL453 MODULE - SGLNCK

INCORRECT ERROR CODE IN LOW CORE IF AN ERROR OCCURS DURING FETCH OF A $ PHASE WITH A SUPERVISOR WITH IDRA AND MCRR AND / OR ERRLOG.

• DS15193 360NCL453 MODULE - SGCHS

IF A BATCH NUMBER UPDATE COMMAND IS ISSUED TO THE SECONDARY CONTROL UNIT OF A DUAL ADDRESS 1419 AND THE BATCH NUMBER SWITCH IS OFF ON THE 1419, MSG 0F34D IS NOT ISSUED.

• DS15195 360NCL453 MODULE - $$BODSPW

SYSTEM ENTERS A LOOP IN $$BODSPW WHEN UTILIZING DSPLYV WHICH CONSISTS OF INDEX SEQUENTIAL FORMATS WITH MORE THAN 3 EXTENTS. THE LOOP IS ENTERED AFTER PRINTING THE FORMAT 1 LABEL INFORMATION. THIS WILL BE PRINTED OVER AND OVER AGAIN.

• DS15197 360NCL453 MODULE - $$JOBCTLK

THE $$SERV PROGRAM CANCEL DUE TO AN ATTEMPT TO SEEK HEAD 10 ON A 2311. IF ONLY 8 TRACKS OF THE LABEL CYLINDER ARE USED, THE EOF RECORD IS WRITTEN ON TRACK 9. IF 9 TRACKS ARE USED NO EOF RECORD IS WRITTEN AND LSRV ATTEMPTS TO CONTINUE ON TRACK 10.
AS A RESULT OF PROCESSING THE STATEMENT // OPTION SYSPARM=A PART OF THE SUPERVISOR FOLLOWING THE SYSPARM FIELD IS DESTROYED AND THE SYSTEM GOES INTO A HARDWAIT. $JOBCTLG EXECUTES A MOVE INSTRUCTION WITH AN INCORRECT VALUE IN THE REGISTER USED FOR CALCULATION OF THE LENGTH TO BE MOVED.

IF THE OPERAND OF A COPYC, COPYR OR COPYS, AFTER A MERGE RES,PRV, IS , ..., THE CORZG PROGRAM ENDED WITH PROGRAM CHECK.

A PROGRAM CHECK MAY OCCUR WHEN EXECUTING THE LINKAGE EDITOR PROGRAM IN A FOREGROUND PARTITION LARGER THAN 14K.

$BOMT03 DOES NOT PROCESS CORRECTLY RETENTION PERIOD IN TLBL-CARD. DEC 31 IS SEEN AS JAN 00 OF NEXT YEAR AND THEIR IS NO PROVISION FOR LEAP YEARS.

INCORRECT OUTPUT ON MCRR RECORD BECAUSE BASE REGISTER 11 IS NOT CORRECTLY LOADED IN THE MCRR ROUTINE.

LOOP IN $BEQJ4 BECAUSE THE RASFLAGS INDICATED THAT THE RAS WAS STILL ACTIVE.

IF IN A L.E. JOB STREAM ACTION NOMAT STATEMENT PRECEEDED ACTION F1 STATEMENT, THE LINKAGE EDITOR MAP WAS STILL PRINTED.
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• DS15491 360NCL453 MODULE - SGSVC

WHEN THE ATTENTION ROUTINE IS CALLED AND THE IDRA IS BUSY, THE ATTENTION PIB IS SET TO X'89' (WAITING FOR IDRA). IF A TIMER INTERRUPT OCCURS AT THIS TIME AND A FETCH IS IN PROGRESS IN THE PARTITION OWNING THE TIMER, A X'07' IS OR'ED TO THE ATTENTION PIB TO STACK THE INTERRUPT CAUSING A X'8E'. FROM THEN ON THE ATTENTION PIB CANNOT BE TASK SELECTED.

• DS15493 360NCL453 MODULE - $BEOJ4

IN SOME CIRCUMSTANCES IT IS POSSIBLE THAT $BEOJ4 IS ENTERED IN DISABLED STATE, SOME NO INTERRUPT CAN COME IN DURING THE $BEOJ4 QUISIO LOOP, THIS RESULT IN FORCE ON DEQUE MSG, AND SYSTEM IS PUT IN WAITSTATE IF IS WAS SYSLOG.

• DS15652 360NCL453 MODULE - $BATTNJ

THE PROGRAMMER SYSTEM UNIT SYS000 IS NOT LISTED WHEN A LISTIO IS REQUESTED IN SPI MODE. ALSO 5 LINES ARE SPACED BETWEEN SYSTEM GROUP AND PROGRAMMER GROUP OF UNITS.

• DS15657 360NCL453 MODULE - $BOCPT3

WHEN FORTRAN (360N-FO-451) WAS RUN WITH A PREVIOUSLY LABELED TAPE PROGRAM CANCELLED. WHEN RUN WITH A CLEAN SCRATCH TAPE, PROGRAM RAN O.K.

• DS15661 360NCL453 MODULE - NONE

IF A PHASE IN CIL HAS A LENGTH OF OVER 99,999 BYTES, CSERV DID NOT PRINT THE HIGH ORDER DIGIT OF THE LENGTH.

• DS15669 360NCL453 MODULE - $JOBCTLJ

IF SYSPCK IS A TAPE UNIT THE OP CODE IN THE CCW SHOULD BE CHANGED TO X'01', WHICH IS NOT DONE DUE TO AN INCORRECT TEST FOR DEVICE TYPE. AS A R

• DS15671 360NCL453 MODULE - $JOBCTLG

SELF RELOCATING PROGRAMS WERE LOADED AT THE WRONG ADDRESS. IF MPS=NO AND FP=YES 32 BYTES WERE ADDED TO THE LOAD ADDRESS WHEREAS NO FLOATING POINT SAVE AREA IS NEEDED. IN THE DSERV PROGRAM THE RESULT OF THIS IS, THAT WHEN TD AND OR CD IS DISPLAYED, THE FIRST TWO ENTRIES AND THE SEVENTEENTH ENTRY CONTAIN INVALID DATA.

• DS15689 360NCL453 MODULE - $BODSMW


• DS15699 360NCL453 MODULE - $BCHKPD

AFTER A CHECKPOINT FILE (DTFPH WITH MOUNTED=ALL) IS OPENED THE MSG OC051 CHKPT FILE NOT OPEN-CHKPT IGNORED OCCURS, INSTEAD OF THE MSG: OC051 DTFPH FILE DEFINED MOUNTED = ALL -CHKPT IGNORED.

• DS15700 360NCL453 MODULE - $BRMGS1

AFTER A CHKPT FILE (DTFPH WITH DVCTYPE OPERAND OMITTED, DEFAULT TAPE) MSG OC051 CHKPT DTFPH FILE NOT OPEN - CHKPT IGNORED OCCURS. ON ISSUING A CHKPT MACRO WITH THE LAST OPERAND PRESENT (IMPLIED CHECKPOINT FILE IS A DISK FILE), OC051 CHKPT UNIT SYSXXX NOT A DISK - CHKPT IGNORED WAS EXPECTED.

• DS15702 360NCL453 MODULE - IPLDISK

INCORRECT MOD-VERSION LEVEL. C'3A' SHOULD BE X'030A'.

• DS15703 360NCL453 MODULE - IPLDISK

THE MACRO IPLDISK CONTAINS TWO BRANCH INSTRUCTIONS. THE 2ND BRANCH INSTRUCTION IS DEAD CODE.
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• **DS15744 360NCL453 MODULE - $\$BCHKPT $\$BCHKP2 $\$Bmsgs1**  

  IF TAPE CHKPT FILE REACHES END OF VOLUME MESSAGE  
  OC091 INSUFFICIENT SPACE ON CHKPT FILE-  
  CHKPT IGNORED IS NOT ISSUED. IN ADDITION REG 0  
  IF TAPE CHKPT FILE REACHES END OF VOLUME MESSAGE  
  OC091 INSUFFICIENT SPACE ON CHKPT FILE-  
  CHKPT IGNORED IS NOT ISSUED. IN ADDITION REG 0  
  IS NOT SET TO ZERO (INDICATES CHKPT IGNORED).  

• **DS15811 360NCL453 MODULE - SGTCHS**  

  LOOP OCCURS IN SUPVR. IO INTERRUPT  
  ROUTINE AND START IO ROUTINE. SUPVR.  
  IS TRYING TO START A SWITCHABLE 3420 TAPE  
  DRIVE ON FIRST CHANNEL ONE, THEN CHANNEL  
  TWO. THE DEVICE IS BUSY TO BOTH CHANNELS  
  ON THE START IO. BECAUSE THE DEVICE IS  
  BUSY, IT IS CAUSED TO PRESENT A DEVICE  
  END INTERRUPT TO EACH CHANNEL. THIS  
  DEVICE END INTERRUPT ALLOWS THE SUPVR. TO  
  AGAIN ATTEMPT TO START THE DEVICE, AGAIN  
  FINDING THE DEVICE BUSY AND CONTINUING THE  
  LOOP.  

• **DS15827 360NCL453 MODULE - $\$ANERRY $\$ANERRZ $\$ANERRO $\$ANERR**  

  WHEN A PARTITION IS CANCELLED AND  
  ERP IS ACTIVE FOR LTA, INITIATED TO THE  
  LTA CAN BE OVERLAYED BY ONE OF THE  
  TERMINATOR TRANSIENTS.  

• **DS15830 360NCL453 MODULE - SGTCON**  

  RUNNING MPS SYSTEM ON MOD 145  
  WITH 3215-CONSOLE TYPEWRITER,  
  MAKES IT DIFFICULT TO ANSWER  
  MESSAGE BECAUSE THE PREFIX IS  
  NOT VISIBLE.  

• **DS15837 360NCL453 MODULE - $\$BCLOS2**  

  DTFD1 FOR SYSPCH CAN GIVE BAD  
  OUTPUT IF THE FILE IS REOPENED IN  
  THE SAME JOB AND 2 IO AREAS ARE USED.  

• **DS15839 360NCL453 MODULE - NONE**  

  WAIT STATES IN VARIOUS WAYS  
  AND OR PROGRAM CHECK.  
  SYMPTOMS: BAD CHANG, BAD FCPT,  
  MANY TIMES A 'X'FF' IS STORED SOMEWHERE  
  IN THE PUB TABLE.  

• **DS15867 360NCL453 MODULE - CPMOD**  

  MODULE IJJCPCDA2 VERSION 3-10  
  IS CATALOGUED UNDER THE WRONG NAME  
  IJJCPCDA2 DUE TO A MISSPELLING  
  IN THE PUNCH STATEMENTS OPERANDS OF  
  CPMOD.  

• **DS15883 360NCL453 MODULE - MCRAS**  

  SYSTEM ENTERS WAIT AS RESULT OF ALL BOUND  
  BEING CANCELLED FOR A CHANNEL CHECK ON MICR DEVICE.  

• **DS16002 360NCL453 MODULE - IJBLBL**  

  AFTER APPLYING PTF 360-453-0-0040  
  MESSAGE 3M641 OCCURRED WHEN RE-  
  ALLOCATING CIL WITHOUT CHANGING THE  
  NUMBER OF CYLINDERS AND TRACK.  

• **DS16014 360NCL453 MODULE - A.FOFT A.STRCH A.STRCHS A.STRDCCH**  

  A.STRVC A.COMNEX A.SEND IJBFPAID  
  $\$BPDAID PDAIDFTP PDAIDFTT PDAIDFTW  
  PDAIDGTP PDAIDGTT PDAIDGTW PDAIDITP  
  PDAIDITT PDAIDITTW PDAIDQTT PDAIDQTW  
  PDAIDTP PDAIDTTP PDAIDTWT IJBDMPBS  
  IJBDMPBT IJBDMPFS IJBDMPDT IJBDMPFS  

  SINCE CEIDS HAVE BEEN WITHDRAWN,  
  REFERENCES TO CE SHOULD BE CHANGED  
  TO PD. THE CE OPTION IN FA FOPT SHOULD  
  BE CHANGED TO PD AND SHOULD DEFAULT TO A  
  MINIMUM AREA OF 800 BYTES.
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• DS16048 360NCL453 MODULE - $$BRSTR2
  INVALID HALT WITH MESSAGE 09131
  OCCURS AT EXEC TIME OF ASS. PROGRAM
  WHEN USING RESTART STATEMENT.
  THE ERROR OCCURS AFTER REPOSITIONING
  ALL TAPE FILES OCCURS WITH R25 AND R24.

• DS16059 360NCL453 MODULE - SGTCHS
  THE ASSEMBLER WORKFILES ARE ON
  SYSRES. AN IO ERROR IS QUEUED FOR A WORKFILE
  A SVC0 IS ISSUED FROM BG WHILE
  FETCH IS SVC7 BOUND, AND CAUSES BYPASS
  OF THE SWAP INTO PUBSAVE
  SUBSEQUENT IO REQUEST FROM FETCH IS QUEUED
  TO THE REQUEST IN ERROR.
  NO IO IS STARTED AND THE SYSTEM
  HANGS WAITING.

• DS16090 360NCL453 MODULE - **NONE**
  CHECKPOINT RESTART TRANSIENT $$BRSTR2
  AS SUPPLIED IN PTF 453-0-0059 HAS A DEFECT
  IN CODING. THE LOGIC GOES TO TOO HIGH AN
  ADDRESS AND AS A RESULT CODING IN THE DSECT
  PART IS DESTROYED.

• DS16569 360NCL453 MODULE - $JOBCTLA
  IN FOREGROUND PARTITIONS THE MESSAGE 1C10A-
  PLEASE ASSIGN SYSRDR, IS ISSUED BEFORE A JOB
  IS STARTED.

• DS16610 360NCL453 MODULE - **NONE**
  LOOP IN $$BOUR01 DUE TO ADDED
  BRANCH INSTR. IN REL 26.
  THIS INSTRUCTION MAKES IT IMPOSSIBLE
  TO OPTIMIZ PAPER TAPE FILES (IF USED WITH TWO
  IO AREAS IN THE DTF).

• DS16647 360NCL453 MODULE - DELETECL
  PDAIDQT, PDAIDQTW, PDAIDTP AND
  PDAIDTDP ARE NOT INCLUDED IN
  BOOK 3. DELETECL
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• DS14164 360NCQ469 MODULE - BTMOD

While using 2260 locals with a shared 2848 (i.e., between two partitions) and a HiO is issued by the supervisor, any other operation currently on the 2848 will also be halted. The HiO was issued after an attention came in from a 2260 local and the CCB need to be dequeed.

• DS14233 360NCQ469 MODULE - BTMOD

Unallowable letter shift character sent by BTAM WTTA Read TE macro on the Telex network. Read TE macro generates the number of mark characters specified in Mondly parameter, preceeded by one ltrs. When Mondly equals 0 for Telex, the leading letter is sent alone but the CPU identification includes another letter.

• DS14430 360NCQ469 MODULE - BTMOD

When a UE is received on a write command for a TWX33/35, BTAM retries the write with the following results: 2701 - UE received on every write resulting in BTAM write error message

2702/03 - UE condition clears after 1st write, retry is successful.

• DS14430 360NCQ469 MODULE - BTMOD

Wait condition occurs after an intervention required on a write command. BTAM is retrying the failing write CCW, when all HE should do is post an I/O error and write an error message. Same is true for intervention on a prepare and a poll command.

• DS14770 360NCQ469 MODULE - $$ANERAA $$ANERP3 SEND

This is a twofold problem: (1) bad records are being written in the obr section of Sysrec. The data that is being written is part of an LCB and in some cases, no OBR record is written when it should have been. (2) a lost line occurs when running 2260L's with OBR/SDR with BTAM. The DECB address is not zeroed out and as a result the user gets a busy return code.

• DS14901 360NCQ469 MODULE - BTMOD

ONLTST failing every other time. Error message showing UE on the write TO operation at the master CPU-360/25. Appears that previous ONLTST macro did not complete correctly.

• DS14904 360NCQ469 MODULE - $$BCTC01

Close generates a write DLE, Enq for BSC lines in his CCW list. If BSC line is unusable (e.g. shut off or hung up), the write DLE, Enq will fail, causing an unnecessary delay in disabling the line.

• DS14909 360NCQ469 MODULE - $$ANERAA

$$ANERAA is using wrong base register to address the DTFBT. Instructions at X'3C', X'44', X'4A' and X'56' should use register 6 instead of register 10.

• DS14913 360NCQ469 MODULE - $$BCTC01

The user attempted to close a 2780 switched line which had an enable on it. The user then dropped into the wait state.

• DS14914 360NCQ469 MODULE - IJLCT1 IJLCT1

Module IJLCT1, which translates EBCDIC code to Baudot code, translates EBCDIC X'2F' & X'7D' incorrectly. Also, IJLCT1, which translates from Baudot to EBCDIC code, translates Baudot X'34' and X'3A' incorrectly.

• DS14922 360NCQ469 MODULE - BTMOD

When >BSCS> = >NO> AND >SWITCH> = >NEWID> ARE Specified in the BTMOD MACRO, Three INVALID ENTRY POINTS are generated.

• DS14923 360NCQ469 MODULE - BTMOD

Local 2260 interrupt handler checks wrong CCW when processing a write erase interrupt. Result is that user is never informed that an error occurred.
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- DS14924 360NCQ469 MODULE - BTMOD
  THE NUMBER OF INTERVENTION REQUIRED ERRORS ARE NOT KEPT FOR A 2260 LOCAL (NEITHER LERB NOR SDR)

- DS14925 360NCQ469 MODULE - BTMOD
  RUNNING ON 2260 REMOTES, BTAM DROPS INTO WAIT STATE AFTER A DATA CHECK ERROR. SOMETIMES ERROR MESSAGE GETS PRINTED BEFORE WAIT STATE, SOMETIMES NOT.

- DS14928 360NCQ469 MODULE - DTFBT
  THE DTFBT MACRO WILL GENERATE AN INVALID MODEL CCW ADDRESS WHEN THE FOLLOWING OPERANDS ARE CODED: SWITCH=YES, CONFIG=MPT AND DEVICE=2780.

- DS14930 360NCQ469 MODULE - BTMOD
  TWO BTAM APPENDAGES IJLBTIEH AND IJLBTDIA SET THE MASTER WAIT BIT AND POST COMPLETION IN THE DECB TOO SOON. ON CALLS TO THE BTAM MESSAGE WRITER, THIS MAY CAUSE BAD MESSAGES DUE TO VITAL CONTROL BLOCKS BEING RE-USED TOO SOON.

- DS14932 360NCQ469 MODULE - BTMOD
  IN BTMOD ROUTINE, IJLBTIEH, A 'CLC' TEST IS MADE FOR 'DECB' ADDRESS VALIDITY AND IF ZEROES, AN UNCONDITIONAL BRANCH IS TAKEN TO "RETURN TO SUPERVISOR". HOWEVER, BTMOD MAKES SOME FURTHER CHECKS INSTEAD OF IMMEDIATELY RETURNING TO THE SUPERVISOR.

- DS14934 360NCQ469 MODULE - $$ANERP6 $$ANERP3 BTMOD
  BTMOD, $$ANERP6 AND $$ANERP3 ASSUME THAT A COMREG EXTENSION ADDRESS EXISTS FOR EVERY COMMUNICATION REGION.

- DS14938 360NCQ469 MODULE - BTMOD
  IN BTMOD'S ROUTINE LABELED 'IJLCTUPT', REGISTER 'A' IS LOADED TO POINT TO THE 'LERB'. AT THE END OF THE ROUTINE, WHEN YOU RETURN TO THE CALLER, IT IS EXPECTED THAT REGISTER 'A' WILL BE PROVIDING ADDRESSABILITY FOR THE 'BCB' DSECT.

- DS14950 360NCQ469 MODULE - BTMOD $$BRESPL
  WHILE RUNNING WITH 2260 LOCAL DEVICES WITH DOS/BTAM IT IS POSSIBLE TO LOSE INPUT DATA WHEN AN APPLICATION PROGRAM ISSUES THE RESETPL MACRO INSTRUCTION.
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*  
DS14161  360NCQ470  MODULE -  IJLQCK  

A LINE MAY BE STOPPED AFTER A RESTART THAT WAS NOT STOPPED AT CHECKPOINT TIME.
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* DS15260 360NDN481 MODULE - IJZAD098
  UNIT CHECK APPEARS IN CSW FROM FAILING SENSE WHEN IT SHOULD NOT.

* DS15261 360NDN481 MODULE - IJZAD000
  ABEND IN MODULE IJZAD000. LH INSTRUCTION MISSING. CAUSES INVALID ADDRESS TO BE CALCULATED.

* DS15262 360NDN481 MODULE - IJZADO44
  ENTIRE CSW POSTED IN DIO WHEN CONDITION CODE 1 WITH STATUS STORED OCCURS. ONLY 2 BYTES OF STATUS SHOULD BE POSTED.

* DS15263 360NDN481 MODULE - IJZADO24
  OLT LAB DID NOT GENERATE HIS DATA SET AS DEFINED FOR THE FUNCTION.

* DS15265 360NDN481 MODULE - IJZADO64
  BAD BRANCH INSTRUCTION CAUSES ERRONEOUS SENSE DAT TO BE PRINTED WHEN NO SENSE DATA IS POSTED IN THE TECB.

* DS15270 360NDN481 MODULE - IJZADO44
  DIO FAILS TO POST LAST EVENT AND LAST SENSE IN TECB.

* DS15272 360NDN481 MODULE - IJZADO65
  INCORRECT ERROR PRINT OUT OCCURS WHEN "NO CONVERT" IS REQUESTED ON A DPRINT.

* DS15273 360NDN481 MODULE - IJZAD000
  NCP OPTION IS WORKING PROPERLY. IT ONLY SUPPRESSES START AND TERMINATE MESSAGES. OLT WRITER SUGGESTS THAT 1403 OLTS NOT BE RUN WHEN SAME PRINTER ASSIGNED TO SYSLSIT. DUMP SHOWED ANOTHER PROBLEM - PROGRAM CHECK WHEN NCP OPTION CHANGED IN MIDDLE OF OLT FOLLOWED BY /// ENTERED AT NEXT COMMUNICATION INTERVAL.

* DS15274 360NDN481 MODULE - IJZAD098
  SENSE DATA NOT POSTED BECAUSE SUPPRESS DATA TRANSFER FLAG ON IN CCW.

* DS15275 360NDN481 MODULE - IJZADO36
  WAITIO RESETS WRONG BITS IN THE DEVICE ENTRY TABLE WHEN WAIT=DE IS CODED.

* DS15278 360NDN481 MODULE - IJZADOA0
  THE DATE IS NOT IN THE FORM - MM/DD/YY AS SPECIFIED BY AR-145.

* DS15279 360NDN481 MODULE - IJZADO00
  OLTEP FAILS TO STORE AN NDR ENTRY PROPERLY INTO THE SCT.

* DS15280 360NDN481 MODULE - IJZAD098
  SYSTEM ERP'S ARE ENTERED WHEN A SIO CONDITION CODE 3 OCCURS.

* DS15281 360NDN481 MODULE - UJZADA37 UJZACEOM
  PROGRAM CHECK WHEN RUNNING THE 1442D/OLTS. THIS IS DUE TO TWO WAY MESSAGE WITH RETURN LENGTH OF ZERO.

* DS15285 360NDN481 MODULE - IJZADOLT (FIXED IN REL.26)
  OLTEP OVERLAYS RANDOM SECTIONS OF STORAGE. THIS IS DUE TO REG. 13 PICKING UP MISLEADING INFORMATION DURING OLTEP INITIALIZATION.
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* DS14654 360NEU490 MODULE - IIQIU2
DURING THE FIRST OPERATION TO THE PRINTER, WHEN PROGRAM
DOES NOT HAVE A SKIP TO CHANNEL 1, THE EMULATOR DOES AN
AUTOMATIC EJECT.

* DS14659 360NEU490 MODULE - EMEND
EMEND SETS UP THE VALUES SPECIFIED AT GENERATION TIME
WITHOUT ADDING THE 370 ADDRESS OF 1400 CORE.

* DS14660 360NEU490 MODULE - IIQMC
ZERO SUPPRESS IS TURNED ON CAUSING BLANKS UNTIL NEXT NON
ZERO DIGIT, IN IIQMC, IN CASE OF COMMA BEFORE ZERO

* DS14668 360NEU490 MODULE - IIQUR
WHEN A 1400 PROGRAM IS FETCHED FROM CIL AND DOES NOT
USE DATA CARDS THE 1400 LAST CARD CONDITION IS NOT PASSED
TO THE 1400 PROGRAM

* DS15003 360NEU490 MODULE - IIRMI
MESSAGE INVALID ADDRESS AFTER CHECK POINT TAKEN IN 1410
SORT.

* DS15004 360NEU490 MODULE - IIQIU IIQUR EMEND
UNRESOLVED ADDRESSES OF LOGIC MODULES (CDMOD) AT LINK-
EDIT TIME, EMULATING 1442 ON A 1442 OR 2520

* DS15005 360NEU490 MODULE - IIQIU EMEND IIQUR
EMULATING A 1442 ON A 1442 WITH PFR=YES ONLY 1ST CARD
IS GIVEN TO 1400 PROGRAM REPEATEDLY

EXECUTING PUNCH ONLY (PUNCH AND FEED) USING A 1440
EMULATOR WITH READER TODEV=1442 PUNCH TODEV=1442 AND
PFR=YES RESULTS IN PUNCHING IN COL 81-82 OF THE FIRST
PUNCHED CARD

* DS15007 360NEU490 MODULE - IIQIU IIROI
WHEN CCTL CTRL CARD GIVEN 1ST PAGE LINE POSITIONS ARE
ONE LINE BELOW, LINE POSITIONS CORRECT
ONLY FROM SECOND PAGE. CHANGING CCTL INFORMATION DURING
1400 JOB EXECUTION GIVE ALSO SAME PROBLEM FOR 1ST PAGE

* DS15008 360NEU490 MODULE - IIQIU EMEND IIQUR
EMULATING A 1440 WITH READER TODEV=1442 PUNCH TODEV=1442
AND PFR=YES THE LAST PUNCH AND STOP INSTRUCTION IS NOT
EXECUTED.

* DS15009 360NEU490 MODULE - IIQIU IIQUR EMEND
EMULATING 1440 WITH READER TODEV=1442, PUNCH TODEV=1442
AND PFR=YES A DISK UPDATE PROGRAM FAILS BECAUSE THE
BEGINNING OF EACH UPDATED 1400 TRACK IMAGE WAS CLEARED
(230 BYTES)

* DS15022 360NEU490 MODULE - IIQCS
LAST DIGIT OF DISK PARAMETER FIELD IN A //1400 CONTROL
CARD IS NOT PROCESSED

* DS15023 360NEU490 MODULE - IIQUR
EMULATION OF 1402 PUNCH FEED READ OPERATION RESULTS IN
PROGRAM CHECK, ATTEMPTING TO PROCESS PUNCH SELECT STACKER
CODE PREVIOUSLY SAVED AT STACKER SELECT EMULATION TIME.
Memorandum to Users of IBM Disk Operating System
System Release 27

* DS15024 360NEU490 MODULE - IIRIU

USING PUNCH DEVICE INDEPENDANCE MIO FAILS IN IIRUR
BECAUSE REGISTER 12 POINTING TO THE S/370 BUFFER HAS ITS
HIGH ORDER BYTE ON.

* DS15025 360NEU490 MODULE - A.IIQIU IQOA

1401 READER SELECT STACKER EMULATION ON A 2540.
1401 READER SELECT STACKER EMULATION ON A 2540.
IF 2540 CARD PATH IS RUN OUT AFTER A 1400 HALT, TO GIVE
NEW CARDS TO 1400 PROGRAM, THE FIRST 1400 READ WILL
CAUSE A COMMAND REJECT ON THE 2540 AND THE EMULATOR JOB
IS CANCELLED.

* DS15028 360NEU490 MODULE - IIQCS

EOJ I ADDRESS OPTION IN //1400
CARD INCORRECTLY PROCESSED. MSG
EN021D ISSUED INSTEAD OF EN023D.
EOJ CONDITION IS NOT CORRECTLY
DETECTED.

* DS15029 360NEU490 MODULE - IIQDK A.IIQDS

1400 PROGRAM ISSUES FOLLOWING DISK OPERATION
SEQUENCE:
1) READ FULL TRACK, 2) SCAN DISK, 3) WRITE FULL TRACK
WHEN A WRITE OPERATION IS PENDING, EMULATING THE SCAN
DISK OPERATION, THIS WRITE IS PERFORMED IN SECTOR MODE
INSTEAD OF TRACK MODE. THIS OCCURS ONLY WHEN EMULATING
DISKS IN CS FORMAT.

* DS15030 360NEU490 MODULE - IIQCS

DEFAULT OPTION OF THE D PARAMETER IN A //1400
CONTROL CARD INCORRECTLY PROCESSED.

* DS15041 360NEU490 MODULE - IIQCS

DEFAULT OPTION OF THE C PARAMETER IN A //1400 CONTROL
CARD IS INCORRECTLY HANDLED.

* DS15042 360NEU490 MODULE - IIRIU IIRIU

FIX FOR APAR 14323 ON DIMOD USED BY EMULATOR FOR PUNCH
DEVICE INDEPENDENCE GIVES MESSAGE OP731

* DS15044 360NEU490 MODULE - A.IIQIU

EMULATION OF 1402 SELECT STACKER (INPUT) ON A 2540.
LAST DATA CARD (FOLLOWING // LC) IS PUT IN N/R
POCKET INSTEAD OF THE POCKET IT IS SUPPOSED TO
GO IN.

* DS15045 360NEU490 MODULE - A.EMRDR

ASSEMBLY ERROR OCCURS WHEN ASSEMBLING EMULATOR
WITH READDRS=YES IN EMUSP MACRO AND TODEV=2501
OR TCDEV=DEVIND IN EMRDR MACRO.

* DS15047 360NEU490 MODULE - A.IIQCR

MESSAGE EN045D 'INVALID I/O INSTRUCTION'
ISSUED WHEN EMULATING A 1405

* DS15048 360NEU490 MODULE - IIQMC

ERRORNEOUSLY ZERO SUPPRESS ON THE BODY OF EDITED FIELD

* DS15049 360NEU490 MODULE - IIQCS

WHEN USING CS CONTROL CARD AND // DVOL THE VOLUME
SERIAL NUMBER WAS NOT EXTRACTED CORRECTLY AND MESSAGE
EN050D WAS ISSUED

* DS15050 360NEU490 MODULE - Q.IIQDS IIQDK

TRYING TO READ A PACK INITIALIZED UNDER CS/30 OR
CS/40 IN LOAD MODE RESULTS IN ACTIVATING THE 1400 DISK
ERROR CONDITION ASSOCIATED WITH 1400 PARITY ERROR
INDICATOR FOR DISK

* DS15376 360NEU490 MODULE - IIQDK

SOME 1400 DISK LABEL PROCESSING USE FOLLOWING
TECHNIQUE:
SEEK TO CYL 99 OF 1311 THEN READ LABEL AREA OF DISK USING
A SECTOR ADDR RELATIVE TO 1311 CYLINDER ZERO. EMULATOR
FAILS READING USING SUCH A TECHNIQUE
Memorandum to Users of IBM Disk Operating System
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• DS15377 360NEU490 MODULE - IIQNT RNT

EOT NOT RECOGNIZED ON OUTPUT TAPE # 4 INSTEAD
TAPE # 5 IS REWOUND AND UNLOADED

• DS15378 360NEU490 MODULE - IIQCS

WHEN USING // CCTL CONTROL CARD EU490 EXPECTED AN
APOSTROPHES IN COLUMN 10 AND THE MESSAGE EM0931 EMULATOR
CONTROL STATEMENT ERROR, WAS ISSUED.

• DS15379 360NEU490 MODULE - A.IIQIU $$BIIOQS

WHEN 1400 READER WAS ASSIGNED TO A MAGNETIC TAPE
 DEVICE INDEPENDENCE) TAPE VOLUME SWITCHING WAS NOT
CORRECTLY PROVIDED AND 1400 LAST CARD INDICATOR WAS
PASSED AT THE END OF FIRST INPUT REEL.

• DS15383 360NEU490 MODULE - IIQCF

WHEN PRECATALOGING 1440 OBJECT DECKS USING THE
SYSTEM 370 EMULATOR MESSAGE EN046D IS ISSUED INVALIDLY.
THAT IS CAUSED BY A WRONG TEST AT STATEMENT 24900045 IN
IIQCF WHICH TEST FOR A READ AND BRANCH INSTEAD OF A 1440
READ.

• DS15384 360NEU490 MODULE - IIQCF

IF AAR IS INVALID AFTER ISSUING THE MESSAGE EN046D,
EMULATOR BRANCHED TO EOJ AND ATTEMPTED TO PUNCH A BLANK
CARD SEPARATOR. AT THE PUNCH WAS NOT OPENED A COMMAND
REJECT OCCURRED.

• DS15389 360NEU490 MODULE - IIQMC

ZERO SUPPRESS DID NOT RUN WHEN USING ONLY COMMA ON B
FIELD MASK OF MCE

• DS15391 360NEU490 MODULE - IIQOI IIROI

ASTERISK ENTERED BY MISTAKE AFTER 'LENGTH='
CAUSED A PROGRAM CHECK

• DS15394 360NEU490 MODULE - IIQCS

READING // CCTL CONTROL CARDS: IF CHANNEL 1 SPECIFIED
IS NOT AN LINE 4, FURTHER PRINTING FOR THE FIRST PAGE
IS INCORRECT DUE TO A WRONG LINE POSITIONING.

• DS15397 360NEU490 MODULE - IIQCS

WHEN SYSLST IS ASSIGNED TO A DISK DEVICE JOB IS CANCELLED
WITH MSG OP0761 WHILE EMULATOR IS TRYING TO PUT CS
CONTROL CARDS IMAGE ON SYSLST.

• DS15399 360NEU490 MODULE - A.IIQIU A.EMPT

DEVICE INDEPENDENCE FOR 1400 PRINTER EMULATION:
WHEN SYSLST IS ASSIGNED TO A TAPE 121 BYTES RECORDS ARE
WRITTEN INSTEAD OF 133 BYTES RECORDS.
CS/30-CS/40 WRITES 121 BYTES RECORDS ONLY IF SYSLST
ASSIGNED TO A DISK DEVICE.

• DS15777 360NEU490 MODULE - IIQCS

USING CS/30 COMPATIBILITY FOR CONTROL CARDS FIRST
PAGE ALIGNMENT IS OFF
APAR FIX DS15394 WAS APPLIED BUT SEEMED TO BE ERRONEOUS

• DS15778 360NEU490 MODULE - A.IIQUR

AFTER A 1401 PRINT INSTRUCTION, IF 1401 LOCATION 333
CONTAINS A GROUP-MARK-WORD-MARK, BAR AFTER PRINT
INSTRUCTION CONTAINS 334 INSTEAD OF 333. IF A CLEAR
STORAGE OP WITH NC OPERANDS Follows THE PRINT OP,
STORAGE LOCATION 334 IS CLEARED.

• DS15782 360NEU490 MODULE - IIQIU

1402 STACKER SELECT EMULATION ON A 2540 WITH PTR=YES

• DS15790 360NEU490 MODULE - IIQCS

EVEN WHEN USING A //CCTL2 AFTER A //CCTL1 CONTROL CARD
BUT FETCHING THE 1400 PROGRAM THE //FETCH CARD WAS WRONGLY
ANALYZED BY THE IIQCS RCUTINE AND MSG EN066D WAS ISSUED
AND THE JOB CANCELLED.
Memorandum to Users of IBM Disk Operating System
System Release 27

* DS15797 360NEU490 MODULE - $$BIIRSD

NO CHECKING OF UNIT CHANGE

* DS15800 360NEU490 MODULE - IQCS

PRINTER SPACES 1 EXTRA LINE EACH REVOLUTION OF CARRIAGE TAPE WHEN //CCTL1 AND //CCTL2 ARE USED. THESE CARDS ARE SET UP TO HANDLE 5 FORMS. AFTER THE FIRST FIVE FORMS ARE SUCCESSFULLY PRINTED THE SIXTH FORM IS PRINTER ONE LINE LOWER.

* DS16309 360NEU490 MODULE - IQUR

APPLYING PTF011 TO IQUR AND USING ALL SPECIAL FEATURES (STACKER SELECT, COLUMN BINARY, PFR, PUNCH AND SKIP, COL 51) ADDRESSABILITY ERRORS OCCUR IN EMULATOR ASSEMBLY.

* DS16310 360NEU490 MODULE - $$BIIQBD

DISK SHARED BUFFER DOES NOT ACTIVE
Memorandum to Users of IBM Disk Operating System

System Release 27

* DS14459 360NF0479 MODULE - ILFPAR

A DATA CARD FOLLOWING THE END CARD BUT PRECEDING END-OF-FILE CARD CAUSES COMPILER TO PROGRAM CHECK.

* DS14873 360NF0479 MODULE - ILFPAR

A PROGRAM CHECK OCCURS DURING COMPILATION WHEN THE SUBSCRIPT OF AN ARRAY VARIABLE IN A DATA INITIALIZATION STATEMENT IS A FIXED DECIMAL NUMBER.

* DS15506 360NF0479 MODULE - ILFPAR ILFALL

A FORTRAN PROGRAM UNIT INCLUDES A FORMAT STATEMENT WITH A LABEL IDENTICAL TO THAT OF AN EARLIER EXECUTABLE STATEMENT. THE COMPILER PARSE PHASE CORRECTLY DIAGNOSES THIS ERROR WITH MESSAGE ILF006I DUPLICATE LABEL. SOURCE IS OTHERWISE CORRECT. COMPILATION TERMINATES DURING GENERATION PHASE WITH COMPILER STATUS MESSAGE ILF042I PROGRAM CHECK.

* DS15587 360NF0479 MODULE - ILFGEN

IN A BLOCK DATA SUBPROGRAM COMPILATION, THE OBJECT DECK END CARD DOES NOT CONTAIN THE DATE, ROUTINE NAME AND TIME OF DAY WHEN THE COMPILATION BEGAN.

* DS15600 360NF0479 MODULE - ILFPAR

IF, UNDER BCD OPTION, A CALL STATEMENT CONTAINS A LITERAL CONSTANT DELIMITED AT ITS END BY AN EBCDIC APPOSTROPHE WHICH IMMEDIATELY PRECEDES A BCD CLOSING PARENTHESES, MESSAGE ILF011I SYNTAX ERRONEOUSLY OCCURS.

* DS15934 360NF0479 MODULE - ILFPAR

WHEN THE NAME OF A FUNCTION SUBPROGRAM APPEARS AS A SCALATE VARIABLE WITHIN THE SUBPROGRAM, COMPILATION OF THE SUBPROGRAM PRODUCES INCORRECT OUTPUT ON THE WORK ROLL.
Memorandum to Users of IBM Disk Operating System
System Release 27

* DS14738 360NIO454 MODULE - DAMOD

DATA CHECK RESULTS IN MESSAGE 0P12I
VERIFY CHECK AND ALSO C3122 END OF VOLUME.

* DS15177 360NIO454 MODULE - DAMOD

IF IN THE MACRO DAMOD AN
INVALID RECORD ENTRY IS SPECIFIED,
FIXUNB IS ASSUMED, BUT NO WARNING MESSAGE
IS GIVEN.
Memorandum to Users of IBM Disk Operating System
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• DS14188 360NIO455 MODULE - DTFSD

FOR DTFSD IO AREA 1 WAS NOT SPECIFIED
AND NOT SET TO * (ASTERIKS).
MNOTE WAS GIVEN - IO AREA 1 NOT SPECIFIED,
SET TO *

• DS14709 360NIO455 MODULE - SDMODW

THE MODULE IJGWZZZZ THAT PROCESSES SD
WORK FILE WITH UNDEFINED RECORD DOES NOT
READ THE FIRST RECORD OF THE TRACK CORRECTLY
EXCEPT THE VERY FIRST RECORD OF THE FILE.

• DS15445 360NIO455 MODULE - SDMODW

EVEN WHEN A COUNT OF AN EOF RECORD IS
READ BY SDMODW THE DATA LENGTH FIELD OF THE
COUNT IS STORED IN THE CCW. THIS CAUSES
A CHANNEL PROGRAM CHECK.

• DS15866 360NIO455 MODULE - DTFSD

DTFSD WITH RECFORM=FIXBLK AND BLOCKSIZE IS
NOT A MULTIPLE OF RECSIZE, A BLOCK MAY BE WRITTEN
WHICH IS LARGER THAN THE SPECIFIED BLKSIZE.

• DS15875 360NIO455 MODULE - SDMODFI SDMODFU

WHEN PROCESSING A SEQUENTIAL DISK
INPUT OR UPDATE FILE WITH TRUNCS
=YES SPECIFIED IN THE DTF, THE
FIRST RECORD ON A NEW CYLINDER MAY BE LOST
INTERMITTENTLY.
THIS PROBLEM OCCURS ON MODEL 145 WITH
THE INTEGRATED FILE ADAPTER (IFA).

• DS16556 360NIO455 MODULE - SDMODW

WHEN ISSUING POINTR ON A SEQUENTIAL
DISK WORKFILE THE FOLLOWING READ MAY USE
AN INCORRECT LENGTH THAT RESULTS
IN LOST DATA.
Memorandum to Users of IBM Disk Operating System System Release 27

• DS14601 360NI0456 MODULE - MTMOD

PROGRAM CHECK OCCURS AFTER OPENING OF THE 2ND VOLUME OF A SPAN BLOCKED FILE.

• DS15107 360NI0456 MODULE - MTMOD

WHEN WRITING VARIABLE LENGTH UNBLOCKED RECORDS PHYSICAL RECORDS LESS THAN 18 BYTES ARE WRITTEN BECAUSE MTMOD DOES NOT CHECK FOR MINIMUM LENGTH (FOR VARIABLE).

• DS15159 360NI0456 MODULE - MTMOD

IF HARDWARE MALFUNCTION OCCURS DURING WRITING TAPE AND RESIDUAL COUNT IS POSTED TO CCB, MTMOD TRIES TO BRANCH TO THE ADDRESS SPECIFIED IN DTF BYTES 88-91 (WLR ROUTINE FOR INPUT, BUT LABEL INFORMATION FOR OUTPUT) RESULTING IN A PROGRAM CHECK.

• DS15481 360NI0456 MODULE - MTMOD

PROGRAM CHECK IN MTMOD (WORKFILE) IJFWENZU WHEN USING A POINTW MACRO, WITH ADDRESS SUPPLIED BY THE USER NOT ON WORD BOUNDARY.

• DS15695 360NI0456 MODULE - MTMOD

PROGRAM CANCELS ATTEMPTING TO BYPASS CHECKPOINT RECORDS ON A 7-TRACK TAPE IN TRANSLATE MODE, BECAUSE MTMOD TRIES TO READ BACKWORD THE CHECKPOINT RECORD INSTEAD OF BACKSPACE RECORD (THE CHECKPOINT STORAGE DATA RECORDS ARE WRITTEN IN CONVERSION MODE.


* DS16601 360H10457 MODULE - ISMOD9

WHEN LOADING A DATA CELL, FILENAME 
.C IS POSTED WITH X'20',
BECAUSE IJHKLPDR IS BEING COMPARED WITH 
IJHKPDU, THE LATTER CONTAINING 
THE BIN NUMBER AND THE FORMER NOT.
DS14730 360NI0458 MODULE - PTMOD

IF THE USER PASSES A RECORD LENGTH LONGER THAN THE BLOCKSIZE SPECIFIED IN HIS DTFPT FOR UNDEFINED RECORDS, PTMOD WILL ATTEMPT TO TRANSLATE USING THE PASSED RECORD LENGTH. THE TRANSLATION MAY DESTROY OTHER INFORMATION IN CORE.
Memorandum to Users of IBM Disk Operating System
System Release 27

* DS13741 360NI0478 MODULE - ORMOD

PROGRAM CHECKS MAY OCCUR AFTER THE OCR DEVICE
RECOVERS FROM A DOCUMENT JAM. THIS IS CAUSED
BY REG 14 NOT BEING RESTORED BY ORMOD.

* DS13742 360NI0478 MODULE - $$BOOR01

IF A BLKSIZE OF 1 IS SPECIFIED FOR HEADER INFORMATION
THE OPEN MODULE WILL CLEAR ADDITIONAL BYTES
RESULTING IN LOSS OF CODE.

* DS13743 360NI0478 MODULE - ORMOD

AFTER NORMAL RECOVERY FROM A 1287 OR 1288 TRANSPORT
CHECK (REMOVING THE JAMMED DOCUMENT AND
PRESSING NPRT, LOAD, AND START), ERROR RECOVERY
TIME IS INCREASED BECAUSE THE ERP TRANSIENT
IS CALLED IN FOR EVERY ERROR.

* DS13744 360NI0478 MODULE - ORMOD

IF THE BLKFAC PARAMETER EXCEEDS THE LENGTH OF ALL
RECORDS ON A JOURNAL TAPE AND THE 1288 END-OF-FILE
KEY IS Pressed AFTER THE TAPE WAS READ, THE ENTIRE
BLOCK WILL NOT BE PROCESSED AND THE EOF ROUTINE
WILL BE ENTERED.
Memorandum to Users of IBM Disk Operating System
System Release 27

* DS14296 360NLM480 MODULE - ILFDIOCS ILFDEBUG

When the I/O list of a DA READ statement is composed of one non-subscripted variable and an array, bad data is placed in array starting with 65th word.

* DS14830 360NLM480 MODULE - ILFFIOCS

FORTRAN (F) causes system files assigned to tape to be repositioned. Therefore, when SYSIN or SYSRDR is assigned to tape, the tape may be rewound after the first end-of-file is read.
Memorandum to Users of IBM Disk Operating System System Release 27

• DS15212 360NPL464 MODULE - IJXG25 IJXG31

AN EXTERNAL STRUCTURE DECLARED IN A PROGRAM CONTROL SECTION LONGER THAN THE 64K CAUSES GENERATION OF A CSECT OF INCORRECT LENGTH.

• DS15216 360NPL464 MODULE - IJXD03 IJXD10

WRONG CODE MAY BE GENERATED FOR THE SUBSCRIPT EVALUATION IN A COMPLICATE ARITHMETIC STATEMENT DUE TO WRONG SUBSCRIPT OPTIMISATION.

• DS15218 360NPL464 MODULE - IJXG00

IF THE CODE FOR THE INLINE CONVERSION FROM DECIMAL FIXED TO FIXED NUMERIC PICTURE IS NEAR THE END OF AN 12K SEGMENT OF AN PROGRAM BLOCK AND THE CODE DOES NOT FIT INTO THIS SEGMENT, SPECIAL HANDLING IS DONE, WHICH CAUSES, THAT ALL LABELS WHICH FOLLOW THIS CODING HAVE WRONG OFFSETS AND SO ALL BRANCHES TO THESE LABELS ARE INCORRECT.

• DS15233 360NPL464 MODULE - IJXC31 IJXC32

IF A CHARACTER-STRING VARIABLE IS INITIALIZED WITH A BIT-STRING CONSTANT A PROGCK DURING COMPILATION MAY OCCUR.

• DS15234 360NPL464 MODULE - **NONE**

IF PROGRAMMER LOGICAL UNIT IS ASSIGNED TO IGN, JOB TERMINATES WITH MSG: 5L001 65.

• DS15242 360NPL464 MODULE - **NONE**

IN A PL/1 PROGRAM USING RANDOM RETRIEVE, THE ERROR BYTE IS ZEROED OUT ON A NO RECORD FOUND CONDITION BEFORE THE USER CAN EXAMINE IT.

• DS16201 360NPL464 MODULE - IJXF75

USING A STRUCTURE AS ARGUMENT OF EXHIBIT CHANGED FUNCTION THE COMPILER MAY GENERATE A WRONG LENGTH OF STATIC STORAGE. IF ANOTHER PROGRAM IS LINK­EDITED BEYOND THE STATIC STORAGE THE PROGRAM MAY BE OVERLAYED DURING OBJECT TIME.
Memorandum to Users of IBM Disk Operating System System Release 27

• DS13948 360NSM450 MODULE - IJOSM103

INCORRECT OUTPUT WHEN USING MULTIEXTENT INPUT FILE(S).

• DS14206 360NSM450 MODULE - IJOSM008

MSG 7D361 ISSUED INCORRECTLY
• DS14224 360NSM483 MODULE - ILHSAGH ILHSAPH ILHSRGH
  ILHSRGD ILHSAGD

UNPREDICTABLE ERROR WHEN RUNNING SORT OR MERGE ONLY UNDER
OS-DOS EMULATOR. POSSIBLE SYMPTOMS: PROG. CHECK, CHANNEL
PROG. CHECK, MSG 7907 OUT OF SEQ.

• DS14957 360NSM483 MODULE - ILHSRCF

IN A CALCAREA RUN - TRACKS FOR BEST PERFORMANCE WAS
EXCESSIVE.

• DS14960 360NSM483 MODULE - ILHSRSN

WHEN VOLUME PARAMETER IN INPFIL STATEMENT IS INCORRECT A
PROG. CHECK OCCURS DURING EXECUTION.

• DS14976 360NSM483 MODULE - ILHSRPE ILHSAPH ILHSAPF
  ILHSAPG

IF MULTIVOLUME DISK OUTPUT THE OUTPUT IS WRITTEN ON SYS001
EVEN IF EXTENT CARDS SPECIFY ANOTHER SYMBOLIC UNIT.

• DS14990 360NSM483 MODULE - ILHSRGA ILHSRGB ILHSRGH

MSG 7904A NOT ISSUED IF UNRECOVERABLE I/O ERROR OCCURED ON
SORT INPUT.
Memorandum to Users of IBM Disk Operating System
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• DS15091 360NUT461 MODULE - IJWAD3
A NEW HA+RO WILL BE WRITTEN ON THE TRACK WHERE THE ARM OF DISK UNIT ASSIGNED TO SYS000 IS POINTING TO BY ACCIDENT. IF SYSRES AND SYS000, THIS MEANS THAT A NEW HA+RO WILL BE WRITTEN ON THE TRACK WHERE PHASE ATADY RESIDES IN THE CE LIBRARY.

• DS15406 360NUT461 MODULE - IJWAD5
AT END OF ALTERN. TRACK ASSIGN WITHOUT UPDATE RECORDS MESSG: '8250I END OF ALT. TRK. AND UPDATE INSTEAD OF '8240I END OF ALT. TRK. ASSGN' APPEARS.

• DS15664 360NUT461 MODULE - IJWDD4 IJWDP4 IJWDC4
RANDOM BLOCKS ARE LOST ON INPUT UNDER CERTAIN CIRCUMSTANCES UNDER CERTAIN CIRCUMSTANCES LIKE: MODEL 145 CPU, IFA AND HEAVY IO OR MPS ACTIVITY.

• DS15692 360NUT461 MODULE - IJWLW1
STATUS-BYTE IN FORMAT-2 LABEL WAS NOT PRINTED CORRECTLY IN LISTVTOC PRINTOUT. BIT 2 OF THIS BYTE NEVER APPEARED IN THE PRINTOUT OF THE LISTVTOC PROGRAM

• DS15816 360NUT461 MODULE - IJWDP4
MESSAGE NO MORE EXTENTS ALL BYPASSED (43601) APPEARS WHEN COPYING AN DA OR ISAM FILE FROM DISK TO PRINTED USING DKFR.

• DS15817 360NUT461 MODULE - IJWDD4
MESSAGE NO MORE EXTENTS ALL BYPASSED (43601) WILL BE ISSUED WHEN COPYING A DA OR IS FILE USING DISK TO DISK UTILITY.

• DS15818 360NUT461 MODULE - IJWDC4
MESSAGE NO MORE EXTENTS, ALL BOUND (43601) IS ISSUED WHEN COPYING A DA OR IS FILE USING DISK TO CARD UTILITY.

• DS14617 360NUT462 MODULE - IJWK2
USER HEADER EOF AND USER TRAILER EOF-RECORDS ARE NOT CORRECTLY PROCESSED SO THAT PROGRAM SEES NO DIFF. BETWEEN USER EOF RECORDS (HD OR TR) AND NORMAL END OF FILE RECORDS IF KEYLENGTH IS 4.

• DS15676 360NUT462 MODULE - IJWDT4
RANDOM BLOCKS ARE LOST ON INPUT UNDER CERTAIN CIRCUMSTANCES LIKE: MODEL 145 CPU, IFA, AND HEAVY IO OR MPS ACTIVITY.

• DS15730 360NUT462 MODULE - IJWIT
CODE-PARAMETER IS NOT CHECKED IN INITIALIZE TAPE-PROGRAM. NO MSG. IS ISSUED IF THIS PARAMETER IS NOT OR INCORRECTLY SPECIFIED.

• DS15819 360NUT462 MODULE - IJWDT4
MSG NO MORE EXTENTS ALL BYPASSED (43601) IS ISSUED WHEN COPYING A DA OR IS FILE USING DISK TO TAPE UTILITY.

• DS15885 360NUT462 MODULE - IJWIT
UTILITY MODIFIER CARD IS NOT CHECKED CORRECT. ONLY ONE BLANK IS ALLOWED AFTER // INTT.
The corrections to the following APARs, committed for Release 27, have not been incorporated, but are available as a PTF concurrent with this release.

<table>
<thead>
<tr>
<th>COBOL D</th>
<th>14824</th>
<th>14846</th>
<th>14858</th>
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Section 3: Publication Changes

The following publication changes which have not been incorporated in Technical Newsletters should be brought to your attention.

DOS System Control and Service, GC24-5036-7

Page 51

Add the following under the 'Note':
"There may be a difference of one second between the job duration as printed at EOJ and the time calculated by deducting the job start time from the job end time; this is due to the fact that fractions of seconds are truncated."

Page 53

Add the following after the last paragraph of section 'Using Accumulated Record Output Data':
"When $JOBACCT is called into main storage, no skipping to a new page on the printer is performed."

Page 55

Add the following second reason why there is a difference between start and stop times in the 'Note':
"All processing performed between the end-of-job of one job and the execution of the second job step in the following job is charged to the first job step of that second job. The user phase is called again when the next EXEC statement or a /& statement is read. Thus the time required to initiate a job or job step is charged completely to the previous job step. (Initiation time for the first job step is charged to the control program.) When the system is in the wait state after IPL or in between two jobs, the time used is charged to the All Bound time of the first step of the next job; the start time of that job is set after the JCB statement has been read."

Page 56

Add the following to the note in Figure 12, DOS Cancel Codes:
"If a job has to be canceled or is terminated in reply to a Job Control message, the cancel code in the Job Accounting table is zero (Job Control keeps control and continues processing)."

Page 64

Change the last line of the TEMP description to read:
"TEMP is not valid for SYSCLB."
Add the following after the last paragraph of the CANCEL description:
"The CANCEL command should not be given while processing the first statement after IPL. The job can be canceled when the message RECORDER FILE xx% FULL has been issued.

Change the first full paragraph on this page to read:
"For output fields, the current date is used as the creation data and DOS VERSION 4 is used as the system code."

Add the following to the description of Field 3 of the MAP command:
"For a partition with an allocation of OK this field will contain blanks if the MAP command is processed by the attention routine."

Replace the last paragraph of the TLBL description to read:
"Additional fields of the standard tape file label are filled with default options for output files, with DOS VER 4 used as the system code."

Add the following to the Note:
"When a private library is assigned during a condense function, the directories of the private and the system libraries are displayed on SYSLST when the */ statement is processed."

Change the description of PRV to read:
"Private relocatable library on SYSRLB and/or private source statement library on SYSSSLB and/or private core image library on SYSCLB."

Add the following note to the description of TRACE PARTITION=:
"Only SVCs 0 and 31 are recorded per partition for the QTAM trace."
APPENDIX D

Add to EREP Output Examples:

*EREP Output.
The failing Channel/Unit Address in the following record types has to be considered as the normalized Channel/Unit Address. This means that for I/O devices with changeable addresses, e.g. 2314 banks, the module address is given, and not the address that is indicated on the address plug. For I/O devices with fixed addresses, this is the real Channel/Unit number. For a 2314 bank with addresses 130 to 134, the Module A has the address 130, Module B address 131, etc.
The record types are:
- Counter overflow
- Volume dismount
- End of day
- SVC requested

DOS Supervisor and I/O Macros, GC24-5037-10

Page 135

Change the first full line on this page to read: "An end-of-file record is only written if a CLOSE immediately follows a WRITE SQ."

Page 138

Add at the bottom of the lefthand column:
"When a file is created using the FECVD macro and has been processed as an input file, FEOVD=YES must be specified, even if this FEOVD macro is not used for the input file."

Add at the bottom of the righthand column:
"If CLCSER is used to close a file, that file must have been opened previously."

Page 187

Change the second paragraph after the note in the righthand column to read:
"When a file is loaded, or when an ADD or ADDRTR operation is performed through the use of indexed sequential output processing, the volumes of the file to be written on are opened as output files. This means that you must make sure that you supply the same file ID in the DLBL statement for ADD or ADDRTR operations as the one supplied when the file was initially loaded. If the file ID is conflicting, the open routines will delete unexpired files through the usual procedure. If the correct field ID is specified, the Format 1 label for the expired file is updated with a new expiration date if required or with a seven days' retention period if no new expiration date has been supplied. If the file consists of more than one volume, all the volumes must be on-line and ready when the file is first opened."
Page 203

Insert before the last paragraph in the righthand column:
"The CCB in the DTF table may not be changed or destroyed while a HOLD is still in effect, because in that case the system has no way to find out on which device the track is being held."

Page 219

Add the following paragraph under 'Data Chaining':
"If you read from SYSIPT or SYSRDR using command or data chaining, the supervisor does not post EOF (/*) or EOJ (/&) in the CCB."

Page 104

Change the sentence: "Either restore the file by typing in 2 blank and pressing INTERRUPT............to read:
"Either restore the file by typing in 2 blank and pressing INTERRUPT, or bypass the file by typing in 4 blank, and pressing INTERRUPT."

Page 104, 105

Change the last sentence on this page, beginning with: "Type in any" to read:
"Type in 0 blank, or 1 blank and press INTERRUPT to terminate the job."

Page 164

Change the Action: "Reload program after 'IS' option in utility modifier card has been changed" to:
"none. Processing continues."

Page 167

The following should be changed in the ACTION column to message 4307A:
Delete "other than" in the second sentence.
Memorandum to Users of IBM Disk Operating System
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Section 4: Phases, Modules and Macros Changed

All phases, transients, modules and/or macros of the following components have changed/are new. Refer to SRL GC33-5008-0 System Generation for a complete list of phases.

System Control and Basic IOCS, 370N-CL-453
Direct Access Method, 370N-IO-454
Sequential Disk IOCS, 370N-IO-455
Magnetic Tape IOCS, 370N-IO-456
ISFMS, 370N-IO-457
Paper Tape IOCS, 370N-IO-458
Compiler I/O Modules, 370N-IO-476
MCR IOCS, 370N-IO-477
OCR IOCS, 370N-IO-478
Assembler D, 370N-AS-465
BTAM, 370N-CQ-469
QTAM, 370N-CQ-470
3735 Terminal Support, 370N-CQ-493
OLTEP, 370N-DN-481
S/370 Emulators, 370N-EU-490
System Utility Programs, 370N-UT-491
EREP, 370N-UT-492

The changed modules (relocatable library) for the remaining components are listed below.

Assembler_F, 360N-AS-466

IJYF0  IJYF7D  IJYF8P  IJYABT
IJYF3  IJYFI  IJYRTA  IJYIN

ANS_COBOL, 360N-CB-482

ILACBL00  ILACBL20  ILACBL50  ILEDSAE0
ILACBL01  ILACBL21  ILACBL51  ILEDSEM0
ILACBL10  ILACBL22  ILACBL60  ILEDSPA0
ILACBL11  ILACBL40  ILACBL70  ILEDSRT0
ILACBL12

FORTRAN_F, 360N-FO-479

ILFALL  ILFPFORT  ILFGEN  ILFPAR

FORTRAN_F_LIBRARY, 360N-LM-480

ILFDEBUG  ILFDIOCS  ILFFFIOCS

PL/I, 360N-PL-464

IJXA00  IJXC32  IJXF75  IJXG25
IJXAOOD  IJXD03  IJXG00  IJXG31
IJXC31  IJXD10
Memorandum to Users of IBM Disk Operating System  
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**Disk Sort/Merge, 360N-SM-450**

IJOSM008     IJOSM103

**Modular Sort/Merge, 360N-SM-483**

ILHSAGD     ILHSAPG     ILHSRGA     ILHSRGH
ILHSAGH     ILHSAPH     ILHSRGB     ILHSRPE
ILHSAPF     ILHSRCF     ILHSRGD     ILHSRSN

**Group 1 Utilities, 360N-UT-461**

IJWAD3     IJWDC4     IJWDP4
IJWAD5     IJWDD4     IJWLV1

**Group 2 Utilities, 360N-UT-462**

IJWDT4     IJWIT      IJWKT2

**Language Conversion Program, 360N-CV-489**

IKLD1A (updated for 3330 residence)

**COBOL D, 360N-CB-452**

IJSCBLO6 (updated for 3330 residence)
IJSCBL07     IJSCBL15     IJSCBL16
Memorandum to Users of IBM Disk Operating System

System Release 27

Section 5: DOS Residence

The Disk Operating System is available in 2311, 2314 and 3330 resident formats.

<table>
<thead>
<tr>
<th>System</th>
<th>1316</th>
<th>2316</th>
<th>9-tr</th>
<th>9-tr</th>
<th>7-tr</th>
</tr>
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<td></td>
<td>pack</td>
<td>pack</td>
<td>800</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>2311 - Volumes 1 and 2</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>2311A - Vols. 1, 2 and 3</td>
<td>3</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>2311B - Volume 3</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>2314</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>3330</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

* 2311 - for users who do not require the System/370 Emulators, RPG, Tape Sort/Merge, Disk Sort/Merge, or American National Standard COBOL.

** 2311A - for users who require the entire system.

*** 2311B - for users who require the System/370 Emulators, RPG, Tape Sort/Merge, Disk Sort/Merge, or American National Standard COBOL at some time subsequent to ordering the 2311 system.

Note Users who receive DOS on magnetic tape must restore it to disk on a System/370 Model 135, 145, or 155.

2311 Disk

VOLUME 1 consists of a DOS System Residence (SYSRES) file which contains a Core Image Library and a Relocatable Library. The contents are summarized in the following list.

Core Image Library
14K Supervisor
System Control and Basic IOCS
System Control program Transients

Relocatable Library
Assembler (14K) 370N-AS-465
System Control and Basic IOCS 370N-CL-453
BTAM 370N-CQ-469
QTAM 370N-CQ-470
3735 Terminal Support 370N-CQ-493
OLTEP 370N-DN-481
Compiler I/O Modules 370N-IO-476
System Utility Programs 370N-UT-491
EREP 370N-UT-492

(Cont'd on next page)
Relocatable Library (Cont'd)
Assembler F 360N-AS-466
COBOL D 360N-CB-452
COBOL Language Conversion Program 360N-CV-489
FORTRAN D 360N-FO-451
FORTRAN F 360N-FO-479
FORTRAN F Library Subroutines 360N-LM-480
PL/I 360N-PL-464
Modular Sort/Merge 360N-SM-483
Group 1 Utilities - Unit Record/Disk 360N-UT-461
Group 2 Utilities - Tape 360N-UT-462
Group 3 Utilities - Data Cell 360N-UT-463

VOLUME 2 consists of a DOS System Residence (SYSRES) file which contains a Core Image Library and a Source Statement Library. The contents of these are summarized in the following list.

Core Image Library
14K Supervisor
System Control and Basic IOCS
System Control program Transients
Assembler (14K)

Source Statement Library
Supervisor and Basic IOCS 370N-CL-453
BTAM 370N-CQ-469
QTAM 370N-CQ-470
3735 Terminal Support 370N-CQ-493
Direct Access Method 370N-IO-454
Sequential Disk IOCS 370N-IO-455
Magnetic Tape IOCS 370N-IO-456
ISPMS 370N-IO-457
Paper Tape IOCS 370N-IO-458
Magnetic Character Reader IOCS 370N-IO-477
Optical Character Reader IOCS 370N-IO-478
PL/I 360N-PL-464
MPS Utility Macros 360N-UT-471
Sample Programs
System Generation Job Streams

2311 Tape

One reel of (2400') magnetic tape is distributed in a format suitable for restoring to two 1316 disk packs. The tape contains:

Initialize Disk Program TM (see note 1) (TM=Tape Mark)
Tape to Disk Restore Program (see note 2)
DOS.SYSRES.FILE.VOLUME.1 TM
DOS.SYSRES.FILE.VOLUME.2 TM, TM

The two disk packs will contain the identical systems described above.
2311A Disk

VOLUMES 1 and 2 are identical to those described under 2311 Disk above.

VOLUME 3 consists of a DOS System Residence (SYSRES) file, a Private Source Statement Library (SYSSLB) file, and a Private Relocatable Library (SYSRLB) file. The contents of these libraries are summarized in the following list.

**Core Image Library (SYSRES)**
- 14K Supervisor
- System Control and Basic I/OCS
- Assembler (14K)
- System/370 Emulator Transients

**Private Source Statement Library (SYSSLB)**
- System/370 Emulators
- Sample programs

**Private Relocatable Library (SYSRLB)**
- System/370 Emulators
- American National Standard COBOL
- RPG
- Tape Sort/Merge
- Disk Sort/Merge

2311A Tape

**9-track**
One 9-track reel of (2400') magnetic tape is distributed in a format suitable for restoring to three 1316 disk packs. The tape contains:

- Initialize Disk program TM (see note 1)
- Tape to Disk Restore Program (see note 2)
- DOS.SYSSRES.FILE.VOLUME.1 TM
- DOS.SYSSRES.FILE.VOLUME.2 TM
- DOS.SYSSRES.FILE.VOLUME.3 TM
- DOS.SYSSLB.FILE.VOLUME.3 TM
- DOS.SYSSLB.FILE.VOLUME.3 TM, TM

The three disk packs will contain the identical system described for 2311 Disk VOLUME 1 and 2, and for 2311A Disk VOLUME 3 above.

**7-track**
One 7-track reel of (2400') magnetic tape is distributed in a format suitable for restoring to two 1316 disk packs. The tape contains:
Memorandum to Users of IBM Disk Operating System

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Initialize Disk Program TM (see note 1)
Tape to Disk Restore Program (see note 2)
DOS.SYSRES.FILE.VOLUME.1 TM
DOS.SYSRES.FILE.VOLUME.2 TM,TM

The two disk packs will contain the identical system described for 2311 Disk VOLUME 1 and 2 above.

A second 7-track reel of (2400') magnetic tape is distributed in a format suitable for restoring to one 1316 disk pack. The tape contains:

Initialize Disk Program TM (see note 1)
Tape to Disk Restore Program (see note 2)
DOS.SYSRES.FILE.VOLUME.3 TM
DOS.SYSSLB.FILE.VOLUME.3 TM
DOS.SYSRLB.FILE.VOLUME.3 TM,TM

This third disk pack will contain the identical system described for 2311A Disk VOLUME 3 above.

2311B Disk

VOLUME 3 is identical to the one described under 2311A Disk above.

2311B Tape

One reel of (2400') magnetic tape is distributed in a format suitable for restoring to one 1316 disk pack. The tape contains:

Initialize Disk Program TM (see note 1)
Tape to Disk Restore Program (see note 2)
DOS.SYSRES.FILE.VOLUME.3 TM
DOS.SYSSLB.FILE.VOLUME.3 TM
DOS.SYSRLB.FILE.VOLUME.3 TM,TM

The disk pack will contain the identical system described for 2311A Disk VOLUME 3.

The following statements illustrate the file names, extents, and library allocations.

// DLBL IJSYSRS,'DOS.SYSRES.FILE.VOLUME.1',99/365,SD
// EXTENT SYSRES,111111,1,1,001,1979
ALLOC CL=27(10),RL=169(10),SL=0(0)

// DLBL IJSYSRS,'DOS.SYSRES.FILE.VOLUME.2',99/365,SD
// EXTENT SYSRES,111111,1,1,001,1979
ALLOC CL=32(10),RL=0(0),SL=164(10)

// DLBL IJSYSRS,'DOS.SYSRES.FILE.VOLUME.3',99/365,SD
// EXTENT SYSRES,111111,1,1,001,339
ALLOC CL=32(10),RL=0(0),SL=0(0)
Memorandum to Users of IBM Disk Operating System

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// DLBL IJSYSSL,'DOS.SYSSLB.FILE.VOLUME.3',99/365,SD
// EXTENT SYSSLB,1111111,1,1,340,700
NEWVOL SL=70(10)

// DLBL IJSYSRL,'DOS.SYSRSLB.FILE.VOLUME.3',99/365,SD
// EXTENT SYSRSLB,1111111,1,1,1040,500
NEWVOL RL=50(10)

2311 WORKFILES (VOLUMES 1, 2 and 3)

2311 Volumes 1, 2, and 3 have the following standard labels. Volume 3 also has the standard labels described above for SYSSLB and SYSRSLB.

// DLBL IJSYS01,'SYSTEM WORK FILE NO. 1',99/365,SD
// EXTENT SYS001,1111111,8,1,10,640,4
// DLBL IJSYS02,'SYSTEM WORK FILE NO. 2',99/365,SD
// EXTENT SYS002,1111111,8,1,15,640,9
// DLBL IJSYS03,'SYSTEM WORK FILE NO. 3',99/365,SD
// EXTENT SYS003,1111111,1,1,1290,690
// DLBL IJSYSLN,'SYSTEM WORK FILE NO. 0',99/365,SD
// EXTENT SYSLNK,1111111,1,1,1290,690
// DLBL IJSYSRC,'DOS RECORDER FILE',99/365,SD
// EXTENT SYSREC,1111111,1,1,1980,10

2314 Disk

The 2316 pack consists of a DOS System Residence (SYSRES) file which contains a Core Image Library, a Relocatable Library, and a Source Statement Library. The Core Image Library contains all components listed under the 2311 VOLUME 3 Core Image Library as well as the component transients. The Relocatable and Source Statement Libraries are identical to the combined corresponding libraries of the 2311 VOLUMES 1, 2 and 3.

The 14K Supervisor is identical to the one distributed with the 2311 System.

2314 Tape

9-track
One 9-track reel of (2400') magnetic tape is distributed in a format suitable for restoring to one 2316 disk pack. The tape contains:

Initialize Disk Program TM (see note 1)
Tape to Disk Restore Program (see note 2)
DOS.SYRES.FILE TM,TM

The disk pack will contain the identical system described for 2314 Disk above.
Memorandum to Users of IBM Disk Operating System System Release 27

7-track
Two 7-track reels of (2400') magnetic tape are distributed in a format suitable for restoring to one 2316 disk pack. The tapes contain:

Initialize Disk Program TM (see note 1)
Tape-to-Disk Restore Program (see note 2)
DOS.SYSRES.FILE beginning TM,TM
DOS.SYSRES.FILE end TM,TM

The disk pack will contain the identical system described for 2314 Disk above.

The following statements illustrate the file name, extents, and library allocations.

// DLBL IJSYSRS,'DOS.SYSRES.FILE',99/365,SD
// EXTENT SYSRES,111111,1,1,001,3039
  ALLOC CL=20(10),RL=60(10),SL=70(10)

2314 WORK FILES

DOS 2314 has the following labels:

// DLBL IJSYS01,'SYSTEM WORK FILE NO. 1',99/365,SD
// EXTENT SYS001,111111,8,1,3040,300,9
// DLBL IJSYS02,'SYSTEM WORK FILE NO. 2',99/365,SD
// EXTENT SYS002,111111,8,1,3050,300,19
// DLBL IJSYS03,'SYSTEM WORK FILE NO. 3',99/365,SD
// EXTENT SYS003,111111,1,1,3640,280
// DLBL IJSYSLN,'SYSTEM WORK FILE NO. 0',99/365,SD
// EXTENT SYSLNK,111111,1,1,3640,280
// DLBL IJSYSRC,'DOS RECORDER FILE',99/365,SD
// EXTENT SYSREC,111111,1,1,3920,20

The 3330 System

The 3336 disk pack consists of a DOS System Residence (SYSRES) file which contains a Core Image Library, a Relocatable Library, and a Source Statement Library. The Core Image Library contains all the components listed under the 2311 Volume 3 Core Image Library as well as the component transients. The Relocatable and Source Statement Libraries are identical to the combined corresponding libraries of the 2311 VOLUMES 1, 2 and 3.

The 14K Supervisor is identical to the one distributed with the 2311 system. There is no disk distribution.
3330 Tape

9-track
One 9-track reel of (2400') magnetic tape is distributed in a format suitable for restoring to one 3336 disk pack. The tape contains:

Initialize Disk program TM (see note 1)
Tape to Disk Restore Program TM (see note 2)
DOS.SYSRES.FILE TM, TM

The disk pack will contain the system described above.

7-track
Two 7-track reels of (2400') magnetic tape are distributed in a format suitable for restoring to one 3336 disk pack. The tapes contain:

Initialize Disk Program TM (see note 1)
Tape to Disk Restore Program (see note 2)
DOS.SYSRES.FILE beginning TM, TM
DOS.SYSRES.FILE end TM, TM

The disk pack will contain the system described above.

The following statements illustrate the file name, extents, and library allocations.

```
// DLBL IJSYSRS,'DOS.SYSRES.FILE',99/365,SD
// EXTENT SYSRES,111111,1,1,001,2887
ALLOC Cl=20(10),RL=60(10),SL=70(10)
```

3330 WORK FILES

DOS 3330 has the following labels:

```
// DLBL IJSYS01,'SYSTEM WORK FILE NO. 1',99/365,SD
// EXTENT SYS001,111111,8,1,2888,300,9
// DLBL IJSYS02,'SYSTEM WORK FILE NO. 2',99/365,SD
// EXTENT SYS002,111111,8,1,2898,300,18
// DLBL IJSYS03,'SYSTEM WORK FILE NO. 3',99/365,SD
// EXTENT SYS003,111111,1,1,3534,361
// DLBL IJSYSLN,'SYSTEM WORK FILE NO. 4',99/365,SD
// EXTENT SYS001,111111,1,1,3895,266
// DLBL IJSYSRC,'DOS RECORDER FILE',99/365,SD
// EXTENT SYSREC,111111,1,1,4161,19
```
Tape-to-Disk Restore Figures

Users who receive the system on magnetic tape should compare the following figures with the printout of the Tape to Disk Restore Program on SYSLOG. Each file should restore the number of records indicated.

<table>
<thead>
<tr>
<th>File Name</th>
<th>Volume</th>
<th>Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>2311 DOS.SYSRES.FILE.VOLUME.1</td>
<td>1</td>
<td>14536</td>
</tr>
<tr>
<td>2311 DCS.SYSRES.FILE.VOLUME.2</td>
<td>2</td>
<td>26658</td>
</tr>
<tr>
<td>2311 DOS.SYSRES.FILE.VOLUME.3</td>
<td>3</td>
<td>741</td>
</tr>
<tr>
<td>2311 DCS.SYSSLB.FILE.VOLUME.3</td>
<td>3</td>
<td>6928</td>
</tr>
<tr>
<td>2311 DOS.SYSRLB.FILE.VOLUME.3</td>
<td>3</td>
<td>3928</td>
</tr>
<tr>
<td>2314 DCS.SYSRES.FILE</td>
<td>3</td>
<td>52176</td>
</tr>
<tr>
<td>3330 DOS.SYSRES.FILE</td>
<td>3</td>
<td>53646</td>
</tr>
</tbody>
</table>

Note 1: The Initialize Disk program is a tape loadable program. The user has the option to bypass this program if his disk pack has been initialized previously.

Note 2: The Tape to Disk Restore program is a tape loadable program. The user has the option to restore individual files from multiple file tapes.

Library Allocations

The allocations for DOS Release 27 are:

<table>
<thead>
<tr>
<th></th>
<th>2311</th>
<th>2311</th>
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<th>2314</th>
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<td>SYSTEM</td>
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</tr>
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<td>VOLUME</td>
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<td>2</td>
<td>3</td>
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<td></td>
</tr>
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<td>Core Image Library</td>
<td>27</td>
<td>32</td>
<td>32</td>
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<tr>
<td>Relocatable Library</td>
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<td>Source Library</td>
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<td>Label Cylinder</td>
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<tr>
<td>SYSRES Extent</td>
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<td>151</td>
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<td>SYSSLB Extent</td>
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<td></td>
<td></td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>SYSRLB Extent</td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
Section 6: Program Temporary Fixes

Any Program Temporary Fixes (PTFs) available will be distributed with this release of DOS.

If DOS is ordered on disk packs, the PTF file may be obtained from your local IBM representative.

Please contact your local IBM representative for additional information about the PTFs.
Section 7: Program Restriction

Job Control

The addition of devices, function and normal APAR activity has caused growth in the Job Control Language phases that severely limits the number of EXTENTS that can be handled in a minimum 10K partition.

As a result, the minimum partition size for Release 27 will be 14K. This decision is based on the need to maintain the present performance of the Job Control Language. Because of the larger memory sizes on System/370 the impact of this decision should be minimal.

A user specifying a 10K or 12K partition in Release 27 will not be diagnosed since no coding changes have been made to prevent this specification.
Section 8: APAR Submission

Your program support Customer Engineer is required to submit specific material whenever an APAR (Authorized Program Analysis Report) is necessary to solve a problem.

You are advised to retain the following material:

Linkage Editor maps and Supervisor assembly listings generated at System Generation time.
Assembly listings of programs using IOCS, showing generated statements.
Procedure and Data Division maps generated from COBOL compilations.

It would be advisable to obtain the above information on multipart paper.

Storage dumps.
SSERV display of DOSCHLV macro.
DSERV of the Core Image Library.
Source deck of the failing program and sufficient input data to allow the problem to be recreated at the APAR processing location.

A delay in solving the problem may occur if the required supporting material is not submitted with the APAR.

Any or all supporting material will be returned upon request.

Your cooperation in providing the required supporting material will enable the APAR processing location to respond to you via your Field Representative more efficiently.