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System 80 announcement *Pls copy:*

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OS/3 DRAMATICALLY IMPROVED WITH RELEASE 8.0

Twelve new program products and a long list of enhancements to existing program products will be available with OS/3 Release 8.0, which is scheduled for 3Q CY '82.

Headlining the list of Release 8.0 improvements is interactive, distributed data processing, communications, language, and conversion aid capabilities.

This release not only demonstrates Sperry Univac's commitment to the OS/3 product line and our combined OS/3 worldwide customer base of well over 3,000 systems, it also creates new opportunities for you to book additional System 80 business during the remainder of FY '82!

While many of the new Release 8.0 program products and enhancements are described in this announcement, some are covered in separate announcements. (See page 2 for references.)

RELEASE 8.0 PRICING

The OS/3 Release 8.0 enhancements to existing program products are available to System 80 customers at no extra charge. The new program products are separately priced. Refer to your price book for official type numbers, descriptions, and prices for all program products.

Release 8.0 Availability

A number of previous System 80 marketing announcements listed OS/3 Release 8.0 availability as 2Q CY '82. Because of the large number of enhancements included in Release 8.0, and in order to ensure an adequate period for qualification -- which will ensure a more stable product -- it has been rescheduled for 3Q CY '82.



NEW OS/3 RELEASE 8.0 PROGRAM PRODUCTS

<u>TYPE NO.</u>	<u>PROGRAM PRODUCT</u>	<u>SEE S/80 MARKETING ANNOUNCEMENT</u>
6254-00	Menu Generator	# 20 (1/82)
6222-01	COBOL Editor	# 20 (1/82)
6247-01	IBM 3270 Emulator	# 19 (12/81)
6255-00	DCA Termination Systems	# 13 (7/81)
6229-02	DDP File Access	# 13 (7/81)
6232-00	IMS Multi-Thread	# 20 (1/82)
6247-02	Remote Terminal Processor (RTP)	# 12 (7/81)
6248-00	German DATEX-L PDN Support	# 20 (1/82)
6248-01	German DATEX-P PDN Support	# 20 (1/82)
6248-02	French TRANSPAC PDN Support	# 20 (1/82)
6248-03	Canadian DATAPAC PDN Support	# 20 (1/82)
6148-05	Japanese DDX-P PDN Support	# 20 (1/82)

NEW OS/3 RELEASE 8.0 ENHANCEMENTS

TO EXISTING PROGRAM PRODUCTS

- LANGUAGE ENHANCEMENTS
 - COBOL multi-workstation file support
 - COBOL and RPG II workstation function key support
 - Interactive access to compiler error file
 - RPG II support for multi-key MIRAM files
 - RPG II interactive data entry
 - RPG II Editor enhancements

- IMS ENHANCEMENTS
 - IMS multi-thread interface to DMS
 - MIRAM multi-key support
 - IMS initiation of batch jobs
 - IMS statistics enhancements

- COMMUNICATIONS ENHANCEMENTS
 - 56KB SLCA support for NTR
 - Remote workstation support
 - ICAM trace
 - Interactive down-line load/up-line dump

- INTERACTIVE ENHANCEMENTS
 - Workstation log recall
 - Function key support for system commands
 - More than eight workstations per file
 - Screen format services enhancements
 - Interactive services accounting

- CONVERSION AIDS ENHANCEMENTS
 - New IBM System/34 aids
 - New BC/7 aids
 - IBM System/3 compatible sort enhancements

- OTHER ENHANCEMENTS
 - Job accounting
 - Spooling
 - Job Control
 - 7-track tape support

MENU GENERATOR

Release 8.0 will provide user "Menu" processing capabilities via a new OS/3 program product, the Menu Generator.

The Menu Generator enables the user to create a menu module which is then processed by the Menu Processor. The menu's screen is then displayed on a workstation or terminal screen until a user response is issued.

ANS '74 COBOL ENHANCEMENTS

- Multi-workstation files will be supported by ANS '74 COBOL through the ACCEPT and DISPLAY statements. A COBOL program will be able to accept input from any workstation (or a specific one), and will be able to display output to the most recently addressed workstation (or to any specific workstation).
- Workstation function keys, indicator bytes, and error status checking are supported.
- The "CALL ... USING" statement will be generated at compilation. Previously, it was generated dynamically by object program code.
- The Compilation Diagnostic Summary Listing provides VOL, LBL, LFD information. Previously, only LFD information was displayed.
- COBOL '74 will optionally write compiler diagnostics to a source library file. This file can then be referenced by the Editors' Error File Processor.

ERROR FILE PROCESSOR

The Error File Processor is a new feature of the Editor which enables a user to interactively view the error files which are optionally output by the language processors (COBOL, RPG II, and FORTRAN). He can then correct source programs without having to refer to, or use the compiler output listing.

COBOL EDITOR (COBEDT)

The COBOL Editor is a new program product that will include the following capabilities:

- COBOL source statements will be prompted for at the workstations.
- COBOL source statements will be made available to the General Editor for addition to the source file in EDT workspace.

- Procedure verb syntax will be displayed at the workstation.
- COBEDT will provide full access to the General Editor and its commands.
- Erroneous data entered via COBEDT will be blinked on the screen with accompanying diagnostic messages.

RPG II ENHANCEMENTS

- Multikey Support -- Release 8.0 will provide MIRAM multikey support for RPG II.
- Interactive Data Entry -- Data fields on the RPG II Input Format Specifications will be prompted for on the workstation screen.
- Error Log Access -- The RPG II compiler will be enhanced to write error diagnostics to a file which can be accessed by the user.
- SHUTDOWN Operation Code -- This code will be used to check whether a system shutdown has been requested. If it has, an RPG II indicator is set on.
- NEXT Operation Code -- This code will be used to force input from a particular workstation of a multiple workstation file.
- EJECT, SPACE, TITLE Directives -- These items will provide user control over the format of computer listings.
- Support of Indicators for SFS -- This enhancement will enable Screen Format Services to test RPG II indicators and act on them as defined in the screen formats.
- Workstation Function Key Support -- Indicators will be added to the RPG II compiler that will be set on when a workstation function key is depressed.
- Data Structures -- Will be supported to provide multiple definitions of internal data, subdivision of data fields, and grouping of fields.
- INFDS -- This is an IBM System/34 data structure that provides status and record information to the user.
- IBM System/34 Workstation File Description Specification Continuation -- handles multiple workstations and workstation error processing.

RPG II EDITOR ENHANCEMENTS

The RPG II Editor will be enhanced to provide the following source statement support:

- Auto Report statements
- Multikey File Description Specification statement
- Workstation File Description Specification continuation statements
- Currency sign on Control Specification statement
- Data structure statements
- EJECT, SPACE and TITLE statements
- SHUTDOWN and NEXT operation codes

EDITOR SCREEN FORMATS FOR SOURCE ENTRY

EDT will be enhanced to provide the following capabilities:

- Support will be provided for syntax checking of RPG and COBOL programs through the RPGEDT and COBEDT products which use the EDT screen format capability.
- Source program entry without syntax checking will be available directly through the EDT screen format capability.

SCREEN FORMAT SERVICES ENHANCEMENTS

- SFS will enable the user to create or modify a screen from an existing format without having to revert to the TEMPLATE MODE (first pass).
- A new module will be incorporated in SFS that will permit the user to specify that range checking be performed by the Screen Format Coordinator. Fields which fail the range check will be blinked on the screen.
- The Screen Format Generator will provide support for the following functions:
 - Display Intensity Control:
 - . Normal
 - . Alternate (low intensity/reverse video)
 - . Blink
 - . Non-display

- Protected Field:

A field which was indicated as "modifiable" may be displayed as "protected" by setting an indicator, thus preventing workstation operator modification.

- Input Constant:

The user will be able to define one input constant per format which is capable of being returned to a program even if it's not displayed on the screen.

SCREEN FORMAT GENERATOR -- BATCH INPUT SUPPORT

Screen Format Generator will be enhanced to accept IBM System/34 S and D screen descriptors as input for non-interactive screen generation. System/34 screens entered in this manner can be called by OS/3 programs via JCL stream.

IMS ENHANCEMENTS

Release 8.0 contains significant enhancements that improve the functionality and performance of IMS. These enhancements are as follows:

- Multi-thread CDM Support -- IMS Multi-thread will improve performance for IMS applications by allowing multiple transactions to be initiated and processed concurrently.
- IMS Multi-thread -- DMS Interface (CDM) -- IMS multi-thread is being enhanced to allow IMS action programs to access records in a DMS data base. Both UNIQUE and user-written action programs can access defined files that have been created from DMS data base records.
- MIRAM Multikey/Duplicate Key Support -- IMS single-thread and multi-thread versions will support multikey, duplicate key, and key change features of the MIRAM access method when operating in both the DTF and CDM environment.

This enhancement will enable the user to retrieve records from an indexed MIRAM file using any key of reference, while permitting adds or updates using the primary key of reference.

- IMS Initiation of Background Batch Jobs -- The single-thread and multi-thread versions of IMS are being enhanced to initiate background batch jobs from an IMS terminal. The command which initiates this capability is the same as the console command (RV), and includes all of the options available with that command. After the command is entered, the user is able to continue with other processing.

- IMS Statistical Reporting -- New IMS statistical functions will be provided. They include:
 - . Number of input and output messages per transaction
 - . Total number of file accesses on a transaction basis
 - . Terminal statistics for an IMS session
 - . Total number of input and output characters per terminal
 - . The largest number of input and output characters on an IMS session and the terminal on which it occurred.

Enhancements will also be provided which enable these statistics to be output to a data file and display them on the primary device; or they may be output to the data file only. A utility program will be supplied which will enable the accumulated statistics to be printed.
- Dynamic Memory Allocation for Action Programs -- This enhancement will allow users to modify the size of the initial action program of an action without having to reconfigure the application.
- Physically Delete NAMREC Records -- Permits users to physically delete passwords and data definitions for applications which defined their NAMREC file using MIRAM. It will allow better user control over the growth of the NAMREC file.
- SFS/IMS Performance Improvements --
 - . Permits the user to define the maximum number of screen formats which can remain resident in memory.
 - . Enables the reinitialization of input fields on the terminal screen without rebuilding the entire screen.
 - . Provides the ability to CONNECT (instead of OPEN) each terminal class.
- Undefined Transaction Scheduling -- This enhancement enables the IMS user to optionally configure the name of an action program which should get control in the event an undefined transaction is entered at a terminal.
- Display Status Message on Configurable Line Number -- Permits the user to specify placement of the IMS output messages. Options are:
 - . Display the IMS message on any line of the screen.
 - . When displaying, clear the screen of unprotected data only; clear the entire screen; or leave the screen as is.
- IMS KATAKANA Support -- Both single and multi-thread IMS have been enhanced to provide support for Katakana input.

- IMS - System Console/Master Terminal Support -- This enhancement enables IMS users to schedule action programs at the system console, and to switch messages between the console and other terminals.

DCA TERMINATION SYSTEM

This new program product will allow users to establish sessions and transfer data to other users on a different OS/3 system. The types of sessions supported are:

- Local CUP to remote CUP
- Local terminal to remote CUP (pass-through processing)
- Local terminal to remote terminal
- Local CUP to remote terminal (pass-through processing)

For additional information on DCA termination system and pass-through processing, see System 80 Marketing Announcement No. 13 (July 1981).

DDP FILE ACCESS

This new program product will provide remote disk file support. A remote disk file is one which is physically attached to a processor which is different from the one on which the job is running.

Remote disk file support is provided for homogeneous OS/3 systems. See System 80 Marketing Announcement No. 13 (July 1981) for further information on DDP File Access.

DDP TRANSFER FACILITY

The following enhancements to the DDP Transfer Facility program product are included in Release 8.0:

- Enhanced "STATUS" Support -- Release 8.0 DDP will provide for "STATUS" on non-library file types.
- System Generated Job Names -- This enhancement will allow the user to employ special characters in the job name in order to allow the system to generate unique job names.

More information on the DDP Transfer Facility can be found in System 80 Marketing Announcement No. 13 (July 1981).

ICAM PDN NETWORK CONTROLLER

Release 8.0 will provide a series of new program products for Public Data Network support. Included is support for interface to packet switching networks including Canadian DATAPAC, Japan's DDX-P, Germany's DATEX, and TRANSPAC in France.

ICAM SLCA SUPPORT

ICAM will be enhanced to provide support for a variety of protocols via new SLCA hardware:

- X.25 Packet Switching up to 9.6KB
- NTR at line speeds up to 56KB
- UDLC (bit-oriented) X.21 at line speeds up to 9.6KB

IBM 3270 EMULATION

This new program product will enable the System 80 to communicate interactively with IBM hosts (and other systems that support 3270 terminals). Through this facility, System 80 workstation users can access IBM host program products and applications as if they were directly connected to the IBM system. For further information on IBM 3270 Emulation, see System 80 Marketing Announcement No. 19 (December 1981).

ICAM REMOTE WORKSTATION SUPPORT

This enhancement will enable SLCA-connected UTS 20 and UTS 40 terminals to operate as a System 80 workstation when in system mode, providing all of the capabilities of the local workstation. However, screen bypass for spooling print files is not supported on the UTS 20 and UTS 40.

The remote terminal can be used as a workstation when connected to interactive services and as a terminal when connected to an ICAM CUP.

ICAM TRACE FACILITY

ICAM will include a new module which will provide user control over ICAM's event recording mechanisms. This new module will:

- Reduce the amount of main memory now dedicated to tracing
- Increase the number of events being traced
- Provide a single trace recording element for current and future applications.

INTERACTIVE DOWN-LINE LOADING TO TERMINALS

This enhancement will enable those users at UTS 400 and UTS 40 terminals to request that the central system send the UTS COBOL compiled programs to their terminal.

INTERACTIVE UP-LINE DUMP REQUESTS

Users of Interactive Services will be provided with a command that will enable a memory dump of the contents of his down-line loadable UTS 400 terminal memory (not available on UTS 40). The user specifies a file name in the command that the contents of the terminal memory is written to. The file is written on the host system disk and is printed there via a system utility program.

WSAM (WORKSTATION ACCESS METHOD)

WSAM is the Control System Component that enables locally connected workstations to interface to user programs. The WSAM software is being enhanced to remove the current restriction that limits to eight the number of locally connected workstations accessing a single file.

Release 8.0 WSAM will support the maximum number of workstations that can be locally connected to a System 80.

WORKSTATION ACTIVITY LOG RECALL

A new workstation operator command will be made available which permits the active workstation log to be recalled and reviewed at the screen. Parameters can be entered which indicate at which point in time (wall clock) the recall is to begin.

SYSTEM USE OF FUNCTION KEYS

A new command will be available that enables a workstation user to designate any available function key to issue any system command. When the assigned function key is depressed, the command will be issued as it would have been if the user had entered it in System Mode.

INTERACTIVE SERVICES SUPPORT OF ACCOUNTING STATISTICS

Release 8.0 interactive users will be provided system resource statistics for each interactive user. This function is initialized at LOGON and is updated through the session. At LOGOFF, the accounting information is written to the user's workstation log which can then be written to a file and processed. Statistics developed include:

- Session duration
- CPU time used during the session
- Number of interactive services commands issued
- Number of files accessed
- I/O counts for each device accessed

JOB ACCOUNTING

Job Accounting will be enhanced to provide the user with a description of the hardware and software configuration on which the user job was executed.

SPOOLING ENHANCEMENTS

- The workstation operator will be able to direct that the printing of SPOOL files (log and print) should take place on a workstation printer. This will be handled via a JCL specification.
- Spooled output can be made "secure" or "unsecure." Unsecure output does not require that the initiating workstation operator be logged on to receive output, while secure output requires the initiating workstation operator to be logged on at the initiating workstation.
- A local workstation operator can direct that all files created by that workstation be printed on another workstation's printer.

JOB CONTROL ENHANCEMENTS

- To support the DDP File Access capability, a new job control statement will specify that the file is remotely located.

DIAGNOSTIC INFORMATION AT JOB TERMINATION

When a user job terminates abnormally, Job Control will provide additional diagnostic information for the user in the form of the interrupt code and the lower four bytes of the Program Status Word (PSW).

TAPE DATA MANAGEMENT -- CDM

CDM data management support for magnetic tape will enable the record format in the user program work area to be independent of the format of the data stored on tape. This new feature will enable users to process tapes with different record types without having to modify the program's work area.

Support for 7-track recording is also provided in Release 8.0 Tape Data Management.

SUPERVISOR SUPPORT OF SHUTDOWN COMMAND

The SHUTDOWN command provides the console operator a method to terminate system activity in an orderly fashion. Once the command has been entered, the Spooler and Job Scheduler will no longer start any new files or jobs. Interactive Services will not start new functions and will terminate upon completion of current activity.

DUMP/RESTORE ENHANCEMENTS

- The Dump/Restore program is being enhanced to provide for handling of the file expiration date. The existence of a system date will be verified, and if none is available, a date will be requested from the user.
- Dump/Restore Restart functions are being enhanced as follows:
 - The volume mode of operation is being added to the file operation.
 - Dump/restore process can begin or restart with a particular file on a specific diskette.
- Dump/Restore is being enhanced to enable the user to process all files on a specific volume whose names begin with a particular set of characters.
- Dump/Restore will lock the disk files being processed. Input files will be locked for read only processing while output files are locked for exclusive use.
- Ease-of-use of the Dump/Restore facility has been enhanced to allow the user to execute the Dump/Restore facility from a workstation. A pre-formatted set of screens will guide the operator in defining the parameters required to provide the desired output. Each screen will have a corresponding set of HELP screens which further explain the options.

DISK COPY -- EASE-OF-USE ENHANCEMENTS

A new interactive interface will be developed which permits the execution of certain disk copy utility routines from a workstation. The workstation operator will receive guidance in defining the scope of the copy program he wishes to execute. Additionally, there will be a set of HELP screens to assist the operator with the program features.

DISK PREP -- ALTERNATE TRACK ASSIGNMENT

The disk prep program is being enhanced to support all AAT (Alternate Track Assignment) functions for 8417 and 8419 disks. This routine allows the user to assign alternate data tracks without having to prep the entire disk.

SORT3

The IBM System/3 compatible sort, SORT3, will be enhanced to provide the following capabilities:

- Sort messages will be displayed at the workstation as well as on the printer.
- The Record Specification statement is being enhanced to provide for keyword specifications of UPDATE, UMONTH, UDAY, and UYEAR.
- The overflow field length maximum size has been expanded from 16 to 256.
- Include file name in error messages.

IBM SYSTEM/34 TRANSITION AIDS

OS/3 Release 8.0 will provide a number of important IBM System/34 transition aids. See System 80 Marketing Announcement No. 17 (November 1981) for details.

BC/7 TRANSITION AIDS

A set of transition aids for BC/7 user migration are also included in OS/3 Release 8.0. See Customer Management Announcement No. 1 (October 1981) for additional information.