IBM World Trade **Data Processing**

69-101

PROGRAM ANNOUNCEMENT

1285/1287/1288 OPTICAL READERS SUPPORTED BY OS/360

The support of the 1285/1287/1288 Optical Readers widens the input capabilities of OS/360. With this support, you have the advantage of new media ... machine and hand-printed documents serving as direct input to OS/360.

Availability will be September 30, 1970.

Support consists of several macro-instructions, including CCW generating macros, which can be used in an Assembler Language program to describe and retrieve an optical reader data set.

Features

- Can read journal tapes (rolls produced by cash registers and adding machines) and cut form documents (sales checks, merchandise orders, utility bills, etc.).
- The support can input fixed, variable or undefined records for journal tapes and fixed or undefined records for documents.
- Error correction macros allow the user to take advantage of device facilities for correcting unreadable data.
- The user can perform such functions as marking erroneous journal tape line, reading header information from the 1285 or 1287 keyboard, and incrementing or ejecting and stacker selecting documents.

Performance

When using this access method the performance is affected by several factors. Among these are the characteristics of the tapes or documents, the structure of the channel program, the Operating System environment in which the task will be operating, and the characteristics of the user program. These characteristics are such that each application will determine, to some extent, the performance of these devices. The supporting programming publication contains guidelines on performance projections.

System Configuration

The main storage and system requirements for a user's program are a function of a particular application.

Under OS/360, a program using this optical reader support will be able to run in PCP, MFT, or MVT environments with a 1285/1287/1288 Optical Reader attached to the System/360 Model 30, 40 or 50. Refer to the supporting programming publication for an estimate of the storage requirements when using this support.

Programming Publication

IBM System/360 Operating System: Planning for the IBM 1285/1287/1288 Optical Reader Data Management Macros and Services, C21-5004.

John Fahey
Director of DP Marketing

Note to World Trade Readers

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FOR IBM INTERNAL USE ONLY

Release Date: September 16, 1969

Distribution: All Areas

IBM World Trade Data Processing

69-102

PROGRAM ANNOUNCEMENT

BINARY SYNCHRONOUS COMMUNICATION COMPATIBILITY SUPPORT EXPANSION PROVIDES ADDITIONAL CAPABILITIES FOR OS/DOS BTAM, OS/RJE

• OS/DOS BTAM

The DOS/360 BTAM and OS/360 BTAM support for Binary Synchronous Communication (BSC) stations is being expanded to provide ... [1] an improved identification (ID) capability and ... [2] to support changes which enhance the reliability and compatibility characteristics of BSC new terminal support.

The following features are now supported for all BSC devices:

Identification (ID) - Used in switched networks and allows the calling station to transmit its ID in the initial transmission (ID ENQ).

Leading Graphics - a sequence of one to seven characters which may proceed text response sequences.

WACK (Wait Before Transmit Positive Acknowledgement) - replaces WABT. WACK in response to text means that the receiving station is temporarily unable to continue to receive.

RVI (Reverse Interrupt) - used by the receiving station to interrupt the transmitting station between blocks.

ITB (Intermediate Block Check) - allows a block of transmission data to be divided into two or more sub blocks for checking purposes.

Double Addressing - used on multipoint lines to provide greater reliability when contacting the BSC stations.

EOT/NAK Format Check - implemented by all BSC stations to reduce the probability of a transmission line error turning a data or control character into an EOT or NAK character.

New Terminal Support - 2770, 2972-8 (DOS only), 2715, 1800. See P69-76, 93, 94 and 95 for details and availability.

Availability

The BTAM improvements will be available as Type I on:

DOS/360 BTAM	September 30, 1969
OS/360 BTAM	October 31, 1969
DOS/360 BTAM ID Expansion	June 30, 1970
OS/360 BTAM ID Expansion	September 30, 1970

The BOS/BPS BSC macros which support these improvements will be available October 15, 1969.

These improvements in the OS and DOS BTAM BSC programs are accompanied by modifications to the BSC programs for BOS, BPS, 1130, and S/360 Model 20 and by machine changes to the 2701, 2703, S/360 Model 25 ICA, S/360 Model 20 BSCA, and 2780.

See the inside pages for more information.

• OS/360 RJE

Changes are being made to the Binary Synchronous Communication (BSC) stations and to the programming support for these stations. These changes are being made to enhance the reliability and compatibility characteristics of the BSC stations. See the previous paragraph OS/DOS BTAM.

The OS/360 Remote Job Entry (RJE) program will continue to support the intermix of Remote Job Entry Work Stations as announced by P69-7.

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Supersedes*: P69-95
Release Date: September 16, 1969
Distribution: All Areas

* A change in text is indicated by a vertical line.

Identification (ID) - The ID capability will be offered on all BSC stations. On some stations it will be available as a special feature. This capability will be used only in switched networks and allows the calling station to transmit its ID in the initial transmission (ID ENQ). The called station can include its ID in the initial response. (ID ACK O or ID NAK). When the ID capability is used the initial communication on a switched network provides a level of security as well as circuit assurance.

Leading Graphics - This is a sequence of one to seven characters which may preceed text response sequences. Leading graphics may preceed ACK O, ACK 1 and NAK when operating in text mode. All BSC stations can receive responses which contain leading graphics.

WACK (Wait Before Transmit Positive Acknowledgement) - This control character sequence replaces WABT which was previously used by some stations. WACK in response to text means that the receiving station is temporarily unable to continue to receive but the last message was received correctly. WACK can be received by all BSC stations.

RVI (Reverse Interrupt) - This control character sequence can be used by the receiving station to interrupt the transmitting station when a series of messages (e.g., a card deck) is being transmitted. RVI tells the transmitting station that the last message was received correctly and that the transmission should be terminated. The transmitting station will transmit any "volatile" data (buffered data which may be lost as a result of termination) and then terminate the transmission. All BSC stations can receive RVI.

ITB (Intermediate Block Check) - All BSC stations will operate in the ITB mode. ITB mode allows a block of data, when transmitted over a communication line, to be divided into two or more sub blocks for checking purposes. The IUS (EBCDIC) or US (USASCII) character is used to indicate the point at which a check is made. The BCC/LRC check character(s) immediately follow the IUS/US character and communication continues without line turnaround. The ETB or ETX control character sequence terminates the transmission block and the response to the transmission applies to all ITB blocks of the transmission.

Double Addressing - Double addressing is used on multipoint lines to provide greater reliability when contacting the BSC stations (polling and selection). The contacting sequence will be two to seven characters with the first character duplicated.

EOT/NAK Format Check - The format check is implemented by all BSC stations to reduce the probability of a transmission line error turning a data or control character into an EOT or NAK character. The transmitting station will immediately follow all EOT and NAK characters with a pad character containing all one bits. The station receiving the control sequence will not recognize the EOT or NAK unless the following character satisfies the format check.

These changes in the BSC stations will be supported by the DOS/360 and OS/360 BTAM compatibility and reliability improvements.

The DOS/360 and OS/360 BTAM support for the ID capability of BSC stations will be expanded to allow each BSC station to use a unique ID code, even when a common switched line termination (phone number) at the central computer is used. The user can specify a list of ID sequences which will be accepted by BTAM. Communications from a station using an ID sequence which is contained in the list will be accepted and an indication of the received ID will be passed to the user's program. The user may also elect to receive from stations which use no ID sequence.

The BTAM compatibility and reliability improvements and expanded ID capability allow the BSC stations to be more effectively intermixed on non-switched multipoint lines and switched networks. All of the restrictions listed in the chart (under Restricted Function Usage) in the BTAM BSC Intermix program announcement are removed with the exception that the USASCII code cannot be used on a multipoint line or switched termination which includes an 1130 or a S/360 using BOS/BPS.

Requirements which must be satisfied when BSC stations are used on a non-switched multipoint line or switched point-to-point network are:

- The same type of communication data set must be used.
- If any data set uses internal clocking all data sets on the line must use it.
- All stations on a non-switched line or using a common switched termination must use the same transmission code (EBCDIC or USASCII) and the same transmission speed.
- All stations must use the same number of addressing characters in the terminal list of BTAM. If the stations have different length addresses the shorter length addresses must be extended by placing leading SYN characters in the polling list.

DOS/360 BTAM and OS/360 BTAM support a System/360* (acting as the control station) and the following BSC stations (any combination) on non-switched multipoint communication lines:

- System/360 Model 20 with Binary Synchronous Communication Adapter using the BSCA IOCS Program.
- IBM 1130 with the Synchronous Communication Adapter using the Communication Subroutines. (SCAT 3)
- IBM 2780 Data Transmission Terminal.
- IBM 1800 with the Communications Adapter feature using the BSCIO routines.
- IBM 2972-8 General Banking Station (DOS only).

- IBM 2770 Data Communication System
- IBM 2715 Transmission Control Unit (not supported on S/360 Model 91)

DOS/360 BTAM and OS/360 BTAM support a System/360* (acting as the central station) and the following BSC stations on switched or non-switched point-to-point lines. These stations on a switched network can use a common line termination (phone number) at the central computer.

- System/360** with the 2701 or 2703 using DOS/360 BTAM, OS/360 BTAM, or BOS/BPS BSC macros (2701 only).
- System/360 Model 25 with the Integrated Communication attachment using DOS/360 BTAM or BOS/BPS BSC macros.
- System/360 Model 20 with the Binary Synchronous Communications Adapter using the BSCA IOCS program.
- IBM 1130 with the Synchronous Communication Adapter using the Communication subroutines. (SCAT 2)
- IBM 2780 Data Transmission Terminal.
- IBM 1800 with the Communications Adapter feature using the BSCIO routines.
- IBM 2770 Data Communication System.
- IBM 2715 Transmission Control Unit (not supported on S/360 Model 91).

*System/360 Models 25 and 30 with DOS, Models 40, 50, 65, 67 (in 65 mode), and 75 with DOS and OS, or Models 85 and 91 with OS.

**System/360 Models 25 and 30 with BOS/BPS or DOS, Models 40, 50, 65, 67 (in 65 mode) and 75 with BOS/BPS, DOS or OS, and Models 85 and 91 with OS.

Engineering Change Requirements

The following machine changes are required to support the compatibility and reliability functions of this announcement:

2701	EC 306749
2703	EC 307702
2780	EC 307777
Mod. 25 ICA	EC 128244 (Micro Program)
	EC 132850 (Hardware)
Mod. 20 BSCA:	
Sub Mod. 2 & 4	EC 391563
Sub Mod. 5	EC 13018

Publications

The following publications will be updated, concurrent with program availability, to reflect these expanded BSC functions. Availability will be announced in a future PRL.

IBM System/360 Disk Operating System
Basic Telecommunication
Access Method, C30-5001

IBM System/360 Operating System
Basic Telecommunication
Access Method, C30-2004

IBM System/360 Model 20 - Binary
Synchronous Communications
Adapter, C33-4001

IBM 1130 Synchronous Communication Adapter Subroutines, C26-3706 and a TNL, N33-8058.

The following publications will be announced in a PRL:

General Information - Binary Synchronous Communication Manual ... System/360 Operating System and Disk Operating System Planning for Improved BTAM support of Remote Binary Synchronous Stations.

(This manual will contain detailed information on the BSC compatibility changes.)

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IBM World Trade Data Processing

69-103

PROGRAM ANNOUNCEMENT

OS/360 ISAM - VARIABLE LENGTH RECORDS ASSIGNED AVAILABILITY OCTOBER 31

OS/360 Indexed Sequential Access Method Variable Length Record Feature (ISAM-VLR), previously announced without an availability date, will be available October 31, 1969 for PCP, MFT, and MVT ... as Type I.

ISAM-VLR provides the ability to create and maintain variable length data records when using the Index Sequential Access Method. It permits more economical use of storage when user records vary in length.

New data processing applications may now be feasible due to the reduced storage cost made possible by the use of this feature.

Characteristics

- Variable length data records follow the standard V-type record format.
- No physical spanning is allowed.
- All index records and keys are fixed in length.
- All macros valid for fixed length records are valid for variable length records.
- User program changes are necessary to utilize the VLR capability by the use of Assembly Language Programs.
- All data records in a given ISAM data set must be of one format, either fixed or variable.
- The Resume Load facility is not available for VLR data sets.
- The Data Set Utility, IEBISAM will support ISAM - VLR at the time of its release.
- The VLR Feature supports all configurations and devices presently supported by OS/360 ISAM.

ISAM-VLR is based upon the design and code of the Fixed Length ISAM. Where applicable, new modules corresponding to their Fixed Length counterparts will be created to provide VLR support. Certain of the present Fixed Length ISAM modules are common and will be used for processing both Fixed and Variable Length Records.

Core Storage Requirements

Core requirements for ISAM-VLR are as follows:

- Variable Length Records increases the core requirements of the access method up to 30 percent more than fixed length records.
- Fixed Length Records requires up to 2 percent more core to accommodate the changes necessary for ISAM-VLR.

Performance

Compared to fixed length ISAM, internal processing time (including I/O Supervisor time) will be as follows:

- Variable Length Records requires up to 15 percent more time than fixed length records.
- Fixed Length Records requires up to 2 percent more processing time to accommodate the changes necessary for ISAM-VLR.

The actual amount of core and processing time will be less in most cases.

Publications

The following SRLs and PLMs will be updated to include ISAM-VLR by TNLs:

. OS/360 Supervisor and Data Management Services	C28-6646
. OS/360 Supervisor and Data Management Macro Instructions	C28-6647
. OS/360 Storage Estimates	C28-6551
. OS/360 System Control Blocks	C28-6628
. OS/360 Indexed Sequential Access Methods PLM	Y28-6618
. OS/360 Utilities SRL	C28-6586
. OS/360 Utilities PLM	Y28-6614

The availability of these TNLs will be announced in a future Publication Release Letter.

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: September 16, 1969
Distribution: All Areas

P69-103

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IBM World Trade **Data Processing**

69-104

PROGRAM ANNOUNCEMENT

DOS/360 RELEASE 20 EXTENSION HAS ADDITIONAL SUPPORT

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DOS/360 Release 20 has been extended to include:

Consecutive Paper Tape IOCS support for the 2826 Model 1, the 1017 and the 1018
BTAM support of the 2826 Model 2, the 1017 and the 1018

Consecutive Paper Tape IOCS

The 2826 Control Unit Model 1 can operate up-to-two readers and two punches simultaneously. It must be attached to the Multiplexer Channel.

This new programming support is that of the 2671 Paper Tape Reader expanded to meet the 2826/1017/1018 requirements. The existing programming support for the 2671 is not affected by this extension.

Basic Telecommunications Access Method

The 2826 Control Unit Model 2 allows attaching up to eight readers and eight punches. Only one reader and one punch can operate simultaneously via the I/O multiplexer channel. One subchannel is assigned to the readers and one to the punches.

The teleprocessing functions performed by BTAM routines are extended to meet the 2826/1017/1018 requirements.

APAR

No APAR maintenance beyond that for System Release 20 is included.

Action Required

Only customers with a 2826 requiring this extended support before the next general release of DOS (on or about September 30, 1969) should order the system. Preprinted order forms will not be sent to current users of DOS. Those not ordering will not be removed from the mailing list.

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: September 16, 1969
Distribution: All Areas

P69-104

IBM World Trade Data Processing

69-105

PROGRAM ANNOUNCEMENT

MODEL 20 DPS RELEASE CONTAINS A NEW PROGRAM AND MODIFICATIONS TO CURRENT PROGRAMS

System/360 Model 20 Disk Programming System (DPS) is now available with:

- An expanded program ... Version 3 of the I/O Macro Definitions for BSC Adapter.
- An additional program ... I/O Macro Definition for Remote Job Entry (RJE) Work Station.

In addition, it includes modifications to various existing programs.

Classification ... Type I with Class A service.

The reverse side describes the new program, the expanded program, and ordering procedures.

John Fahey
Director of DP Marketing

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FOR IBM INTERNAL USE ONLY

Release Date: September 18, 1969
Distribution: All Areas

System/360 Model 20 DPS Remote Job Entry (RJE) Work Station
IOCS Macro Definitions, 360W-CQ-203

The RJE Work Station Programs permit a Model 20 equipped with a Binary Synchronous Communications Adapter to submit OS/360 jobs over communications facilities to a Central System/360 Model 40 (or larger) for execution, and to receive job output from the Central System. Job Output is available immediately upon completion of the job, or on a deferred basis, if desired. Users at work stations other than the originator's may also be designated as recipients for job output.

For performance data refer to the SRL publication IBM System/360 Model 20 Disk Programming System, Remote Job Entry Work Station, C33-4003-1 TNL N33-8066.

Minimum System Requirements

For assembly and generation of a program:

2020 Processing Unit Model BC2, BC4, or BC5 ... A card reading device (2501 Model A1 or A2, a 2520 Model A1, a 2560 Model A1 or a 2560 Model A2 with the submodel 4) ... A Card Punching Device (1442 Model 5, a 2520 Model A1, A2 or A3, a 2560 Model A1 or A2), if punching the object deck is specified ... A Printer (2203 Model A1 or A2, a 1403 Model 2, 7 or N1) if program listings or diagnostics messages are required ... a 2311 Disk Storage Drive (Model 11 or 12).

For object program execution:

2020 Processing Unit BC2, D4, or BC5 with Binary Synchronous Communication Adapter with EBCDIC and Full Transparency Text Mode ... A Card Reader ... A Line Printer ... Optional BSCA features as required by the user program.

Expanded Functions

The following hardware changes are required to support the compatibility and reliability functions:

Submodel 02 and 04:	EC 391563
Submodel 05:	EC 13018

Information about phasing from current system with BSC to updated systems using the expanded functions will be contained in the Model 20 BSC SRL C33-4001-4.

Note: Compatibility to OS and DOS Releases has to be considered.

For performance data refer to the SRL publications IBM System/360 Model 20 Disk Programming Systems, Performance Estimates C33-6003.

Reference Material ... IBM System/360 Model 20, Input/Output Control System for the Binary Synchronous Communications Adapter C33-4001-4.

Additional Program Material

Program Logic Manual: IBM System/360 Model 20, Remote Job Entry Work Station Y33-8006-0 amended by TNL Y33-8019.

Listings: Listings of the RJE Macro Definitions will be made available on microfiche.

Optional Program Material: The source statements of all DPS programs will be available in card image format on two 9-track magnetic tapes (800 or 1600 bpi density). All Macro Definitions can be obtained from the Basic pack using the MSERV program with option // SOURCE.

System/360 Model 20 DPS Binary Synchronous Communications Adapter IOCS Macro Definitions, Version 3, 360W-CQ-201

The following additional capability has been added to the Model 20 DPS BSCA Macro Definitions to make use of the switched line public network in World Trade countries:

Communications via switched public networks with another Model 20 with similar support or with a System/360 Model 25 with ICA and Model 25, 30, 40, 50, 65, 67 (working in 65 mode), 75, 85 via a 2701 equipped with SDA-Type II or a 2703 equipped with Binary Synchronous features, with DOS/OS BTAM support (on Model 25, 30 DOS only on Model 85 OS only). Submodels 2, 4 and 5 are supported.

Note: Manual Dial Support is also available in Domestic.

The following improvements have been added to IBM System/360 Model 20 BSCA IOCS of the DPS System:

Greater compatibility of BSC devices is provided by:

- BSCA IOCS receives WACK sequence (instead of WABT), the SAK sequence has been removed,
- BSCA IOCS operates exclusively in ITB mode.

Improved reliability is provided by the following functions:

- BSCA IOCS uses double addressing when operating on multipoint lines.
- EOT and NAK are delivered and acted upon as valid only after checking of PAD character.
- A recommendation to the user to duplicate the first character of ID sequence.

Reference Material ... IBM System/360 Model 20 Remote Job Entry Work Station Program C33-4003-1 and TNL N33-8066 ... IBM System/360 Operating System Remote Job Entry C30-2006-2.

BASIC PROGRAM PACKAGE

Documentation -- Basic Program Material List ... The following SRL Publications appropriate to the components ordered are shipped by PID with each initial DPS order.

SRL Publications -- System Generation and Maintenance, C33-6006-2, TNL N33-9060 ... DPS, Operating Procedures, C33-6004-3, TNL N33-9063 ... DPS, Control and Service Programs, C24-9006-4, TNL N33-9062 ... DPS and TPS Report Program Generator, C24-9001-5, Disk Programming System, Disk Utility Programs, C26-3810-3.

Form numbers that are new are underlined. If only the publications or if additional copies are required, order them from the IBM Distribution Center, Mechanicsburg -- not from PID.

Machine Readable -- Object code for the following components are available on one disk pack* or one magnetic tape**.

		V	M
Assembler	360W-AS-181	3	1
Disk-Resident Control Program	CL-171	3	0
Binary Synchronous Communication Adapter Macro Definitions	CQ-201	3	0
RJE Macro Definitions	CQ-203†	1	0
Macro Definitions	IO-192	3	1
Macro Definitions for IBM 1419	IO-193	4	1
Monitor Generation Macro Definitions	IO-200	2	1
2152 Printer-Keyboard Macro Definitions	IO-202	2	0
Report Program Generator	RG-180	3	1
Load System Disk Program	SL-172	3	1
Library Allocation Organization Program	SL-173	3	1
Physical and Logical Unit Table Service Program	SL-174	3	0
Core-Image Maintenance Program	SL-175	5	0
Macro Maintenance Program	SL-176	3	1
Library Service Programs	SL-177	4	0
Distribution Package Retrieval Program	SL-178	3	1
Linkage Editor Program	SL-179	3	1
Copy System Program	SL-205	1	0
Macro Library Service Program	SL-206	1	1
Disk Sort/Merge	SM-182	4	1
Tape Sort/Merge Program	SM-194	3	1
Initialize Disk	UT-183	3	1
Alternate Track Assignment	UT-184	3	0
Clear Disk	UT-185	3	0
Disk-to-Disk	UT-186	3	0
Disk-to-Tape	UT-187	3	0
Tape-to-Disk	UT-188	3	1
Disk-to-Card	UT-189	3	0
Card-to-Printer	UT-190	3	0
Disk-to-Printer	UT-191	3	0
Tape-to-Tape Utility Program	UT-195	3	0
Tape-to-Card Utility Program	UT-196	3	0
Card-to-Tape Utility Program	UT-197	3	0
Tape-to-Printer Utility Program	UT-198	3	0
Initialize Tape Utility Program	UT-199	3	0
Disk Dump Program	UT-204	1	0

* - The 1316 Disk Pack returned from the program library contains a running system as well as sample decks in card-image format to be punched. It is accompanied by three disk IPL cards to be used for initializing the loading of the running system, which is referred to as the DPS disk pack.

** - Users with 2415 Magnetic Tape Units attached should request the programs on tape. The tape contains the distribution package retrieval program (360W-SL-178) to be activated by one bootstrap card distributed with the tape. The retrieval program initializes the first one hundred cylinders of 1316 Disk Pack ... copies a running system as well as sample programs in card-image format on a 1316 Disk Pack ... punches the cards for initializing the loading of the DPS disk pack.

†New Program with this release.

OPTIONAL PROGRAM PACKAGE

Documentation -- Optional Program Material list and Attachment I.

Machine Readable -- Source code for all disk programming system components (360W) is contained on two (2) functional volumes.

Option 1 - 360W-CL-171 to 360W-SM-182 and is specified by using program number extension OPT1.

Option 2 - 360-UT-183 to 360W-UT-191 ... 360W-SM-194 to 360W-UT-199 ... 360W-UT-204 to 360W-SL-206 and is specified by using program number extension OPT2.

ORDERING INFORMATION

System number 360W

Note: Both basic and optional machine readable material for this system is ordered by specifying a "System Line" (columns 1-7, 15-24) and "Component Lines" (columns 8-12) of the Program Order Form. Enter a separate Component Line for each component desired. Re-specify the System Line for each different Program Number Extension.

	Program Number Extension	Distribution Medium Type	Code	User Volume Requirement
Basic	none	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
		1316	52	01
Optional	OPT1	MT 9/800	28	01
		MT 9/1600	29	01
	OPT2	MT 9/800	28	01
		MT 9/1600	29	01

CURRENT USERS:

Current users will receive a letter announcing the availability of the new release and a preprinted Program Order Form with instructions to order the new release through the branch office using the preprinted Program Order Form.

User volume requirement for a total replacement for either tape or disk is 01. The maintenance package is available on either a 1316 Disk Pack or a Distribution Tape Reel (DTR). User Volume Requirements for the maintenance package on disk is 01, and if ordered on tape, no user volume is required as a DTR will be provided. The user should specify one of the Medium Codes on the preprinted Program Order Form. The maintenance package will be available for 60 days from the date of the announcement.

For additional information, see Branch Office Manual, DP Sales Activity section.

ADDITIONAL PROGRAM MATERIAL

Program Logic Manuals

Disk Programming System (DPS)

Assembler Language	Y33-9014
Control and Service Programs	Y33-9008
I/O Control System	Y33-9007
Report Program Generator	Y33-9015
Sort/Merge	Y33-9016
Utilities Programs	Y33-9017
IBM System/360 Model 20 Disk or Tape Programming -- System for the IBM 1419	Y33-9009
Tape Sort/Merge Program	Y33-9005
Tape Utilities Program	Y33-9006
IOCS For Binary Synchronous Communication Adapter	Y33-8004

Program Listings: Available on microfiche from IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901, in the following groups:

Specify Group Code 4200 for S/360 Model 20 Disk.

FOR IBM INTERNAL USE ONLY

[redacted]

ıta Processing

09-106.

PROGRAM ANNOUNCEMENT

[redacted]

OS/360 PROVIDES IMPROVED RELIABILITY THROUGH UPDATED RELEASE 17 AND COBOL F MAINTENANCE

This announcement provides further implementation of our intent to provide component releases and centrally applied PTFs as stated in P68-170. The OS/360 LOADER (P69-98) was the first component release. COBOL F maintenance is now available as another component release.

The updating of the distribution libraries for OS/360 Release 17 with PTFs and the above mentioned components completes the first implementation of the new OS support plan.

Classification ... Type I with Class A Service.

OS/360 Release 17 Updated with PTFs, COBOL F Maintenance and the LOADER ... The distribution libraries for OS/360 Release 17 and the Special OS/360 Release 17 for MFT Checkpoint are updated with:

PTFs - Approximately 70 PTFs providing corrections for about 125 APARs.

COBOL F Maintenance - Provides corrections for 45 APARs. These are the same corrections as provided in the COBOL F maintenance package being shipped to OS/360 users of record.

LOADER - Provides improved performance in a Compile-Load-Go environment previously available as a component release.

This update enables those OS/360 users who deferred installing OS/360 Release 17 to order and install Release 17 at a higher maintenance level than currently available.

The Updated Release 17 or the Updated Special Release 17 for the users requesting MFT Checkpoint Restart may be ordered. The OS/360 LOADER and COBOL F maintenance are available separately. An updated Release 17 need not be ordered to obtain these components for users with Release 17 installed.

COBOL F Maintenance - A COBOL F maintenance package, available on a DTR, is automatically being shipped from PID to OS/360 users of record. It provides corrections for 45 APARs. This package is used to update the COBOL F compiler originally distributed with Release 17. The updated compiler may then be used and will be supported on Release 15/16, as well as Release 17.

See the reverse side for other details.

John Fahey
Director of DP Marketing

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

[1] All programs announced as available have been shipped to the appropriate WT Program Libraries. Programs and associated material may be ordered as indicated on pages 9013 through 9017, Programming Section, WT DP Sales Manual.

[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any reference made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

Release Date: September 22, 1969
Distribution: All Areas

Updated Release 17 and Special Release 17 for MFT Checkpoint/Restart

Documentation - A Memo to Users, including information on PTFs, COBOL F maintenance, and OS/360 LOADER is being sent to all users of record. Ordering instructions will be sent with the memo to users. Additional documentation is provided with the system when shipped. Availability of TNLs updating the Consolidated Document with information pertinent to the updated releases will be announced in a future PRL and sent automatically to OS/360 users of record.

EC Requirements - PTF 21220 requires EC 307475, 307447, and 307463 to support the 2740 Mod 2 under QTAM. Review PTF 21220 cover letter for feature 4640 requirements for the 2701.

Updated Release 17 and Updated Special Release 17 material lists and ordering instructions are on the following pages.

COBOL F Maintenance Release

Documentation - The documentation shipped with the COBOL F maintenance release includes:

- Instructions for applying the release
- Listings of APARs corrected and prose restrictions removed
- A list of modules changed

Microfiche - The COBOL F program listing is available on microfiche and may be ordered as OS/360 COBOL F, group code 1045. Orders should be addressed to IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901.

Optional Material - Symbolic listings have not been provided for this component release. They will be updated with the next release of OS/360.

BASIC PROGRAM PACKAGE – Available from PID.

The following SRL publications and documentation appropriate to the components ordered will be shipped by PID with each initial order. Machine readable material is distributed as indicated below.

Documentation -- Program Material List

ALGOL Programmer's Guide TNLs N33-8000, N33-8002, N33-8012 N33-8013	C33-4000-0
Assembler E Programmer's Guide	C28-6595-1
Assembler F Programmer's Guide	C26-3756-3
COBOL E Programmer's Guide TNL N28-0249	C28-6380-3
Concepts and Facilities TNL N28-2387	C28-6535-4
Job Control Language TNL N28-2375	C28-6539-8
Operator's Guide TNL N28-2372	C28-6540-8
System Programmer's Guide TNL N28-2380	C28-6550-5
Storage Estimates TNL N28-2381, N28-2403①, N28-2404②	C28-6551-7
System Generation TNLs N28-2381, 2390*, N28-2405①, N28-2406②	C28-6554-5
System Control Blocks	C28-6628-3
Messages and Completion Codes TNL N28-2373	C28-6631-6
Programmer's Guide to Debugging	C28-6670-1
Advanced Check Point Restart	C28-6708-1*
COBOL E Programmer's Guide TNL N28-0247	C24-5029-3
Basic Telecommunications Access Method TNL N30-2528*	C30-2004-2
QTAM Message Control Programs	C30-2005-2
QTAM Message Control Processing Program	C30-2003-3
On-Line Test Executive Program	C28-6650-1
Supervisor and Data Management Services TNL N26-0595	C28-6646-2
Supervisor and Data Management Macro-Instructions TNLs N26-0596, 0597	C28-6647-3
Linkage Editor TNL N28-2382	C28-6538-6
FORTRAN E Programmer's Guide TNLs N28-0578, 0580, 0586	C28-6603-2
FORTRAN G and H Programmer's Guide TNL N28-0573*	C28-6817
Graphic Programming Services for 2250 Display Unit TNL N27-1289, N27-1301	C27-6909-4
Graphic Programming Services for 2260 Sub-Programs	C27-6912-6
1130 System Introduction	C26-3709-4
FORTRAN Library Sub-Programs TNL N28-0588	C28-6596-4
PL/I F Comp Subroutines TNL N33-6004	C28-6590-1
1130 Programmer's and Operator's Guide	C26-3717-4
1130 Subroutine Library TNLs N33-8022, 8014, 8046	C26-5929-4
Graphic Programming Services for FORTRAN IV	C27-6932-3
Data Transmission for FORTRAN	C27-6937-1
PL/I F Programmer's Guide TNLs N33-8010, 8012	C28-6594-4
TESTRAN Note: SRL C28-6648-0 plus TNLs N28-2249, 2270, 2303 and 2324 may be used in lieu of the SRL C28-6648-1.	C28-6648-1
Remote Job Entry TNL N30-2572	C30-2006-2
User's Guide for Job Control From the 2250 Display Unit TNL N27-1303	C27-6933-1
SGJP User's Guide	C27-6938-1
Sort/Merge	C28-6543-5
Maintenance	C27-6918-1
Utility Programs TNL N28-2385*	C28-6586-9
Consolidated Document TNL Y28-2397*	Y28-6681-1
Operating System Loader TNL N28-2402	C28-6713 *

* Denotes changes for Basic Material List that were created since Release 17.

If only the form numbered manuals or additional manuals are required, order them from the IBM Distribution Center, Mechanicsburg -- not PID.

① TNLs for Updated Release 17.

② TNLs for Updated Special Release 17 for MFT Checkpoint/Restart.

Machine Readable: The updated release and updated special release for MFT users of OS/360 are distributed as follows:

For the 2311 User - on two 2400 foot reels of magnetic tape, either 9-track (800 bpi), or two 7-track magnetic tapes (800 cpi Data Conversion Feature required), or one 9-track magnetic tape (1600 bpi), or four 1316 Disk Packs.

For the 2314 User - two 2400 foot reels of magnetic tape, either 9-track (800 bpi), or two 7-track magnetic tapes (800 cpi Data Conversion Feature required), or one 9-track magnetic tape (1600 bpi).

Note: To order the updated Release 17 the Program Number Extension 2311 or 2314 should be used. To order the updated special Release 17 for MFT C/R the Program Number Extension 2311CR or 2314CR should be used.

A branch office unable to arrange for tape-to-2316 Disk Pack conversion should contact the regional manager of Programming Systems Marketing for assistance.

Program components may be selected from the following list. Each component for which program documentation and maintenance material is required must appear on the Program Order Form.

Starter System for 2311 Residence	360S-CI-514
Starter System for 2314 Residence	-CI-534
Primary Control Program/MFT	-CI-505
Primary Data Management	-DM-508
OS/360 Utilities	-UT-506
Independent Utilities	-UT-507
Assembler E	-AS-036
Assembler F	-AS-037
Linkage Editor E	-ED-510
TESTRAN	-PT-516
Basic Direct Access Method (BDAM)	-DM-509
Basic Telecommunications Access Method (BTAM)	-CQ-513
Queued Telecommunications Access Method (QTAM)	-CQ-519
Graphic Programming Services	-IO-523
Indexed Sequential Access Methods (BISAM, QISAM)	-IO-526
Sort/Merge	-SM-023
FORTRAN E	-FO-092
FORTRAN G	-FO-520
FORTRAN H	-FO-500
FORTRAN Library	-LM-501
COBOL E	-CO-503
COBOL E Library	-LM-504
COBOL F	-CB-524
COBOL F Library	-LM-525
PL/I F	-NL-511
PL/I Subroutine Library	-LM-512
ALGOL	-AL-531
ALGOL Library	-LM-532
SER0, SER1, and EREP for Models 40, 50, 65, and 75	-DN-527
Report Program Generator	-RG-038
Satellite Graphic Job Processor	-RC-543
1130/360 Data Transmission	-LM-542
On-Line Test Executive Program	-DN-533
Graphic Subroutine Program	-LM-537
Graphic Job Processor	-RC-541
Linkage Editor F	-ED-521
Recovery Management Mod/65	-DN-539
Remote Job Entry	-RC-536
Loader	-LD-547
MVT	-CI-535*

*Not available on the special release.

360S-LD-547 is new with this release; all other components remain the same as in Release 17.

Ordering Instructions

For new users the branch office must have the Program Order Form (120-1957-0). Current users of OS/360 will receive a preprinted Program Order Form and a letter announcing availability of the updated Release 17 instructing them to order the updated release through the branch office using this form. Complete ordering instructions are provided in the letter to users.

The preprinted order form must contain the program number for each OS/360 component (if being ordered for the first time) for which program documentation and maintenance material is required.

Special Note for 2314 Direct Access Storage Facility Users

Tapes will be in the dump/restore format. A 2314 user having two or more 2311 Disk Drives but not tape may order the 2311-resident system using the 1316 Disk Pack as the distribution medium. System configurations which do not include either 2311s or tape must make local arrangements for a system with both 2314 and Tape to perform the tape-to-2316 Disk Pack restore operation.

Ordering Information: System Number 360S

Note: Basic machine readable material for this system is ordered by specifying a "System Line" (Columns 1-7, 15-24) and "Component Lines" (Columns 8-12) of the Program Order Form. Enter a separate Component Line for each component

desired. Respecify the System Line for each different Program Number Extension.

	Program Number Extension	Distribution Medium Type	Code	User Volume Requirement
Basic	2311 or 2311CR	MT 7DC/800	26	02
		MT 9/800	28	02
		MT 9/1600	29	01
		1316	52	04
	2314 or 2314CR	MT 7DC/800	26	02
		MT 9/800	28	02
		MT 9/1600	29	01

ADDITIONAL PROGRAM MATERIAL

Program Logic Manuals (available from the IBM Distribution Center, Mechanicsburg)

COBOL E	Y24-5009-1, TNLs Y28-6385 Y28-6393
ALGOL F Compiler	Y33-8000, TNLs Y33-8001, Y33-8003
Assembler E	Y26-3598
Assembler F	Y26-3700
Checkpoint/Restart	Y28-6672-1
RPG	Y26-3704, TNL Y21-0006
Graphic Problem Oriented Routines	Y27-7110-1
Graphic Access Method	Y27-7113-3
MFT Control Program	Y27-7128-3, TNLs Y28-2349, 2376*
Graphic Programming Services for FORTRAN	Y27-7152, TNLs Y27-7163, Y27-7177
Graphic Job Processor	Y27-7159, TNL Y27-7178
Model 65 Recovery Management	Y27-7155-1
COBOL F	Y28-6382-2
Sort/Merge	Y28-6597-3
FORTRAN E	Y28-6601-2, TNLs Y28-6383, Y28-6819, Y28-6827
Sequential Access Method	Y28-6604-1, TNLs Y26-8010, Y26-8011
Introduction to Control Program Logic	Y28-6605-4
Catalog Management	Y28-6606, TNLs Y26-8013, Y26-8020
Direct Access Device Space Management	Y28-6607-4
Input/Output Support (OPEN/CLOSE/EOV)	Y28-6609-2
Linkage Editor E	Y28-6610-2, TNLs Y28-2301, Y28-2356
Linkage Editor F	Y28-6667, TNL Y28-2357
TESTRAN	Y28-6611, TNL Y28-2371
Fixed Task Supervisor	Y28-6612-4 TNL Y28-7188
P C P Job Management	Y28-6613-3
Utilities	Y28-6614-4
Guide to Model 91	Y28-6665-0, TNL Y28-2290
Input/Output Supervisor	Y28-6616-4, TNL Y28-2363
Basic Direct Access Method	Y28-6617-3, TNL Y26-8019
Indexed Sequential Access Method	Y28-6618-2
FORTRAN G	Y28-6638-1, TNL Y28-6826
FORTRAN H	Y28-6642-3
On-Line Test Executive	Y28-6651-1
MVT Logic Summary	Y28-6658-2
MVT Supervisor	Y28-6659-3 TNL Y27-7190
MVT Job Management	Y28-6660-3 TNLs Y28-7386, 7391
Initial Program Loader and Nucleus Initialization Program	Y28-6661-1
PL/I (F)	Y28-6800-3, TNLs Y33-6002, Y33-6004
PL/I (F) Subroutine Library	Y28-6801-4
Update Analysis	Y28-7106
Basic Telecommunications Access Method	Y30-2001-2, TNLs Y30-2511, Y30-2518
QTAM	Y30-2002-2
Remote Job Entry	Y30-2005-2
System/360-1130 Date Transmission for FORTRAN	Y27-7161-0
System/360 Job Processing from a Remote 1130/22 Subsystem	Y27-7166-0

Program Listings: Microfiche for the OS/360 LOADER and COBOL F is available. Microfiche for the modules changed by the application of PTF's is not available. Complete microfiche listings will be available with the next release of OS.

Refer to P Letter P69-43 for a complete list of microfiche group codes for Release 17.

The microfiche for COBOL and LOADER are available from IBM Corporation Department, 906 Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901, in the following group codes:

Code 1072	S/360 Loader
Code 1045	S/360 COBOL - F

Optional Manterial: Symbolics for LOADER are available as the 13th volume of the symbolics, on a DTR orderable from PID. Symbolics for COBOL F and the modules changed by the PTF's are not available. A complete set of symbolics will be available with the next OS/360 release. Refer to P69-43 for a complete list of optional program packages.

[redacted]

69114

Data Processing

PROGRAM ANNOUNCEMENT

[redacted]

PALIS (TYPE II) PROGRAM MAINTENANCE RELEASE IS AVAILABLE

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

[1] All programs announced as available have been shipped to the appropriate WT Program Libraries. Programs and associated material may be ordered as indicated on pages 9013 through 9017, Programming Section, WT DP Sales Manual.

[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any reference made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

Published by DP Sales Publishing Services, WTHQ

Modification Level 2 of PALIS (Property and Liability Information System) may now be ordered. First shipments will begin the week of October 17, 1969. It provides maintenance changes for the Basic Program (360A-IF-10X), Automobile (360A-IF-11X), and Other Lines (360A-IF-13X). Also, the Automobile Program now requires a minimum of 128K core memory.

Current users will receive a pre-printed Program Order Form and a letter announcing the availability of Modification Level 2. The letter instructs them to order the new modification through the branch office using this pre-printed Program Order Form. Complete ordering instructions are provided in the letter to users.

The Service Classification is B.

Detailed information is in the new sales manual write-up on the reverse side.

John Fahey

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: September 30, 1969
Distribution: All Areas

Property and Liability Information System for System/360: Consists of programs which maintain an Automobile and Other Lines policy master file. It provides for direct access inquiry to these records.

Description: The system, consisting of three programs, will perform the following functions:

PALIS Basic Program (360A-IF-10X) - provides billing and premium collection for direct billed business ... a program to build and update user tables for automobile and homeowners rates ... a program to edit all transactions for format and range of values ... utility programs to aid the installation and modification of PALIS ... programs to load, reorganize, reconstruct and restart the policy file on the 2321 Data Cell ... status inquiry into policy file via Local 2260 or Remote 2260 and 1050 ... a run linkage program to interface between DOS/360 and PALIS insurance logic.

The Automobile Program (360A-IF-11X) - rate and write new business ... renewals ... endorsements, both premium and non-premium ... cancellations ... (reinstatements) ... claims arising ... claims payments and closing ... provides facility to recreate portions of the master record ... provides data for premium statistical reporting.

The Other Lines Program (360A-IF-13X) - maintain a complete insurance record for single and multi-location risks by processing the following new business ... renewals ... endorsements both premium and non-premium ... cancellations ... claims arising ...claims payments and closing ... provides facility to recreate portions of the master record ... provides data for statistical reporting.

Features: The system takes advantage of the powerful features of IBM System/360 ... the system functions in a Disk Operating System environment ... the flexibility of the system design allows for user defined configurations when processing loads exceed the capacity of the minimum configuration ... both the insurance logic and run linkage provide the flexibility required to make the system adaptable to most companies ... the policy master file is stored on the IBM 2321 Data Cell Drive.

Use: PALIS is designed to be the foundation of a P & L information system. As such, it creates and maintains a detailed policy enforce file. In addition, an Automobile Private Passenger policy rating and writing facility is provided. Premium, loss, and historical data are maintained by policy.

The customer must provide a program to interface user data capture and data coding procedures with the system edit. Output programs must be written to format and in some cases further process the contents of the generalized output records.

During implementation and conversion, interface programs between PALIS output and user accounting and statistical systems must be provided.

Customer Responsibilities: A thorough knowledge and understanding of the system before installation ... write conversion programs to create the master file ... write programming to format output for printing, punching and entry into other systems ... write all routines to satisfy special company policies such as underwriting criteria, loss reserving standards, accounting procedures, etc. ... write any programming required to effect user changes to record format; e. g., expand, contract routines, additional programming to handle new fields, etc., generate and expand tables for private passenger automobile according to the specifications provided; write programs and procedures to provide adequately edited input transactions to PALIS ... maintain the programs and documentation as changes to bureau requirements dictate changes in logic ... provide additional logic to format replies to inquiries beyond that supplied by PALIS.

Special Sales Information: The Property and Liability Information System substantially reduces the customer programming effort and provides a basis for uniformity and systems design throughout the industry ... the meaningful insurance-oriented documentation provided by System/360 COBOL greatly aids in the full understanding of the package ... the modular concept used to develop this program provides the means for the user to expand into a total management information system for all lines of business ... the Property and Liability Information System takes advantage of the advanced capabilities of the Disk Operating System/360.

Programming Systems: To facilitate understanding, the insurance logic program modules are written in Disk Operating System/360 COBOL. The use of System/360 COBOL allows for ease of modifications to the various programs and simplifies program maintenance. Run linkage routines have been written to form an interface between the insurance logic and Disk Operating System/360. Just as the insurance logic program modules are written in a modular fashion, the run linkage is also written in a modular fashion to allow for a wider range of system configurations. The run linkage is written in assembler language.

PALIS uses the following components of the Disk Operating System and the user must become familiar with them -- System Control and Basic IOCS ... Consecutive Tape IOCS ... Direct Access Method ... Group I, II and III Utilities ... Tape Sort/Merge ... Assembler Language ... COBOL ... DOS Supervisor (6K) ... RPG ... QTAM.

In addition, PALIS uses IBM System/360 FLOWCHART (360A-SE-22X) for printing of PALIS Flowcharts.

Minimum Machine Requirements: System/360 Model 40 G with Decimal Arithmetic (3237), Selector Channel (6980) and 1052 Attachment (7920) ... 1052 Printer Keyboard Model 7 ... 2841 Storage Control with 2321 Attachment (8079) ... 2321 Data Cell Model 1 ... 2311 Disk Storage Drive Model 1* ... Four 2400 series Magnetic Tape Units (at least three of the magnetic tape units must be 9-track) ... 2821 Control Unit with 1403 Printer Model 2 and 2540 Card Read/Punch Model 1.

The Automobile application requires 89K of core and Other Lines application requires 120K core for program, data and access method storage.

*One or two additional 2311's will be required if the user rates Homeowners in all states.

Additional System Requirements for Inquiry **: Storage Protection (7520). For 2260 Local: 2848 Display Control Model 2, Display Adapter (3356), Line Addressing (4787), 2260 Display Station Model 2, Alpha Numeric Keyboard (4765). For 2260 Remote: 2848 Display Control Model 2, Display Adapter (3356), Line Addressing (4787), 2260 Display Station Model 2, Alpha Numeric Keyboard (4765), 2701 Data Adapter Unit, IBM Terminal Adapter Type III (4656). For 1050 Remote: 1051 Control Unit Model 2, First printer Attachment (4408), IBM Line Adapter (Dependent on line-type), Keyboard Request (4770), 1052 Printer Keyboard Model 2, 2701 Data Adapter Unit, IBM Terminal Adapter Type I (4640).

For Inquiry application 26K of core is required in Foreground I for QTAM and 65K of core is required for program, data and access method storage.

** In minimum configuration, Inquiry will operate only independent of other PALIS runs.

Basic Program Material for PALIS Basic Program (360A-IF-10X):

Documentation - Application Directory ... Basic Program Description and Systems Manual (H20-0497-1)* ... Basic Operations Manual (H20-0498-1)* ... Overview Program Description Manual (H20-0501)*.

Machine Readable - Contains source code, flowcharts, formats and sample problems.

Basic Program Material for PALIS Automobile (360A-IF-11X):

Documentation - Application Directory ... PALIS Automobile Premium Processing Program Description Systems Manual (H20-0499-1) ... PALIS Automobile Claims Processing Program Description and Systems Manual (H20-0500-1).

Machine Readable - Contains source code, flowcharts and formats.

Basic Program Material for PALIS Other Lines (360A-IF-13X):

Documentation - Application Directory ... PALIS Other Lines Premium Processing Program Description and Systems Manual (H20-0503-1) ... PALIS Other Lines Claims Processing Program Description and Systems Manual (H20-0504-1).

Machine Readable - Contains source code, flowcharts and formats.

Note: If only the form numbered manuals are required, order from Mechanicsburg - not from PID.

*Do not order these form numbers from Mechanicsburg until they are announced in a PRL.

Ordering Information - Program Number 360AIF10X, PALIS Basic Program.

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Ordering Information - Program Number 360AIF11X, PALIS Automobile Program

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Ordering Information - Program Number 360AIF13X, PALIS Other Lines Program

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Additional Ordering Information is in the DP Sales Activity Section of the Branch Office Manual.

Additional Program Support Material (available from Mechanicsburg): Application Description Manual (H20-0283-2).

For additional information contact your Insurance Industry Marketing Representative.

IBM World Trade Data Processing

69-111A

PROGRAM ANNOUNCEMENT

NEW CAPABILITIES TO PL/I AVAILABLE IN TOS/360 RELEASE 13

In addition to new capabilities in PL/I, TOS/360 Release 13 is available with APAR Maintenance to existing components. The components are:

. System Control	360M-CL-405, Change Level 2-7
. IOCS	360M-IO-404, Change Level 2-7
. Sort/Merge	360M-SM-400, Change Level 2-5
. COBOL	360M-CB-402, Change Level 2-5
. RPG	360M-RG-408, Change Level 2-3
. FORTRAN	360M-FO-409, Change Level 2-2
. PL/I	360M-PL-410, Change Level 2-3
. Assembler	360M-AS-465, Change Level 2-5
. Compiler I/O Modules	360M-IO-412, Change Level 2-7

The following major new functions have been added to PL/I:

List Directed Input/Output

List-directed transmission is supported for STREAM files. The LIST option permits the user to transmit data from or to an external medium (or string) without specifying a format for the data. The data transmission is directed by the data list and the data itself.

Initial Attribute

The INITIAL attribute enabling the user to specify (in a DECLARE statement) an initial constant value to be assigned to a data item when storage is allocated to it.

Additional Built-In Functions

The built-in functions ADD, MULTIPLY, and DIVIDE are implemented. Each of these functions allows the user to control the precision of the result which is returned to the point of invocation. The generated code for the ROUND-built-in function within fixed decimal arguments has been improved.

Keyword Abbreviations

The following keyword abbreviations may be used: BIN, CHAR, DCL, DEC, DEF, ENV, EXT, INIT, PIC, PTR, PROC.

In addition PL/I usability improvements are:

- Two new debugging facilities to trace changed variables and program flows.
- Improved diagnostic capabilities of the compiler.
- New operands supported in the PROCESS card to allow for the overriding of job control options.
- Cross reference listing.

Minimum system requirements are unchanged. Basic program numbers and ordering instructions are on the reverse side.

Service Classification

Type I with Class A Programming Services.

John Fahey
Director of DP Marketing

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[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

FOR IBM INTERNAL USE ONLY

Release Date: September 29, 1969
Distribution: All Areas

BASIC PROGRAM PACKAGE

The following SRL publications and documentation appropriate to the components ordered are shipped w/ PID with each initial TOS/360 order. Machine readable material is distributed as indicated below.

Documentation - Program Material List ... Attachment I - TOS/360 Restrictions ... Attachment II - Retention of Supporting Documentation ... Attachment III to the Basic Program Material List. SRL publications, appropriate to the component ordered, will be shipped.

System/360 Disk and Tape Operating Systems - Concepts and Facilities TNL N24-5379*	C24-5030-5*
System/360 Tape Operating System - System Generation and Maintenance	C24-5015-6*
System/360 Tape Operating System - Performance Estimates	C24-5020-5*
System/360 Tape Operating System - Operating Guide TNL N24-5360	C24-5021-3
System/360 Tape Operating System - System Control and System Service Programs	C24-5034-2* Note 1
System/360 Tape Operating System - Supervisor and Input/Output Macros TNL N24-5371	C24-5035-3
System/360 Tape Operating System - Data Management Concepts	C24-3430-3
System/360 Disk and Tape Operating Systems - Assembler Specifications TNLs N26-0582, N26-0587, N26-0589*	C24-3414-5
System/360 Disk and Tape Operating Systems - Tape Sort/Merge Program Specifications	C24-3438-4*
System/360 Tape Operating Systems - Autotest Specifications TNLs N21-5054, 5074, 5080; N33-8585*	C24-3441-3
System/360 Disk and Tape Operating System - Utility Program Specifications TNLs N28-2328, 2347;* N33-8599*	C24-3465-4
System/360 Disk and Tape Operating Systems - COBOL Language Specifications TNLs N28-0245*	C24-3433-5*
System/360 Disk and Tape Operating Systems - COBOL Programmer's Guide N28-0253*	C24-5025-5*
System/360 Basic FORTRAN IV Language	C28-6629-1
System/360 Disk and Tape Operating Systems - FORTRAN IV Programmer's Guide	C24-5038-2
System/360 Disk and Tape Operating Systems - Report Program Generator Specifications TNLs N21-5095, 5096,* 5102	C26-3570-5 Note 2
System/360 Disk and Tape Operating Systems - Utility Macro Specifications	C24-5042-3*
System/360 Disk and Tape Operating Systems PL/I Programmer's Guide	C24-9005-4*
PL/I Subset Reference Manual	C28-8202-1*
System/360 Disk and Tape Operating Systems, On-Line Test Executive Program Specifications and Operating Guide	C24-5066-2

*Denotes New with this Release.

Note 1 SRL C24-5034-1 plus Technical Newsletters N24-5219, N24-5290 and N24-5348 may be used in lieu of the SRL C24-5034-2.

Note 2 SRL C26-3570-4 plus Technical Newsletters N24-5195, N21-5055, N21-5077, N21-5086, N21-5090, N21-5095, N21-5096 and N21-5102 may be used in lieu of the SRL C26-3570-5 plus Technical Newsletters N21-5095, N21-5096 and N21-5102.

Machine Readable -- Option 1 - Appropriate material delivered for 6K Supervisor and is specified by using Program Number Extension OPT 1. Option 2 - Appropriate material delivered for 8K Supervisor and is specified by using Program Number Extension OPT 2. Components are as follows:

Assembler	360M-AS-465
COBOL	CB-402
Systems Control Program	CL-405
On Line Test Executive Program	DN-418
FORTRAN IV	FO-409
Input/Output Control System	IO-404
Compiler Input/Output Modules	IO-412
Optical Character Reader	360M-IO-417
PL/I	PL-410
Autotest	PT-407
Report Program Generator	RG-408
Sort/Merge	SM-400
Supervisor, 6K	SV-413
or	or
Supervisor, 8K	SV-414
Utility Programs	UT-403
Multiprogramming support Utility Macros	UT-411

OPTIONAL PROGRAM PACKAGE

Documentation - Optional Program Material List, Attachment I - Description of Tapes.
Machine Readable -- Source modules are available on four individual distribution volumes each identified by a Program Extension Number as indicated below.

Program Number Extension	Program Component Name	Program Number
OPT 1	System Control	360M-CL-405
	IOCS	IO-404
	Assembler	AS-465
	Utilities	UT-403
	MPS Utility Macros	UT-411
OPT 2	FORTRAN IV	FO-409
	Sort/Merge	SM-400
	Report Program Generator	RG-408
	1285 Optical Character Reader	IO-417
OPT 3	COBOL	CB-402
	Autotest	PT-407
OPT 4	PL/I	PL-410
	OLTEP	DN-418

ORDERING INFORMATION

System Number 360M (Please specify each component desired).

Note: Both basic and optional machine readable material for this system is ordered by specifying a "System Line" (columns 1-7, 15-24) and "Component Lines" (columns 8-12) of the Program Order Form. Enter a separate Component Line for each component desired. Respecify the System Line for each different Program Number Extension.

	Program Number Extension	Distribution Medium Type	Code	User Volume Requirement
Basic	OPT1	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
	OPT2	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
Optional	OPT 1 thru OPT 4	MT 9/800	28	01
		MT 9/1600	29	01

ADDITIONAL PROGRAM MATERIAL

Program Logic Manuals

TOS/360 System Control	Y24-5022
TOS/360 Logical IOCS	Y24-5018
DOS/360 and TOS/360 MPS Utility Macros	Y24-5045
TOS/360 Utilities	Y24-5019
DOS/360 and TOS/360 Tape Sort/Merge	Y24-5016
DOS/360 and TOS/360 Assembler	Y26-3642
DOS/360 and TOS/360 RPG	Y26-3701
DOS/360 and TOS/360 COBOL	Y24-5025
DOS/360 and TOS/360 FORTRAN IV	Y24-5032
DOS/360 and TOS/360 PL/I	Y33-9011
TOS/360 System Control (TNL)	Y24-5060
DOS/360 and TOS/360 Tape Sort/Merge (TNL)	Y24-5036

Program Listings: The TOS/360 listings are available on microfiche from the IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901. Specify Group Code 2020 when ordering. The listings are equivalent to the output listings produced by assembling the symbolic modules

Current Users: Current users will receive a pre-printed Program Order Form and a letter announcing the availability of Release 13 instructing them to order the new Release through the branch office using this pre-printed Program Order Form. Complete ordering instructions are provided in the letter to users. User Volume Requirements for either the total replacement or the maintenance package is 1. The maintenance package will be available for 60 days from the date of announcement.

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IBM World Trade Data Processing

69-112

PROGRAM ANNOUNCEMENT

SYSTEM/360 MODEL 20 CARD PROGRAMMING SUPPORT CONTAINS NEW PROGRAM AND VERSIONS

Remote Job Entry (RJE) Work Station Program, 360T-CQ-113, is now available as a component to System/360 Model 20 Card Programming Support.

Also available in the new CPS are:

Version 2 of Input/Output Control System for the Binary Synchronous Communications Adapter (BSCA IOCS), 360T-CQ-111

and

Version 2 of Basic Assembler (Card) 8K, 360T-AS-110.

RJE Work Station

The program permits a Model 20 equipped with a Binary Synchronous Communications Adapter to submit OS/360 jobs over communications facilities to a central System/360* for execution, and to receive job output from the Central System. Job Output is available immediately upon completion of the job, or on a deferred basis, if desired. Users at work stations other than the originator's may also be designated as recipients for job output.

BSCA IOCS

The new version of the program is a result of the incorporation of specification changes.

The following capabilities provide greater compatibility of BSC terminals:

- BSCA IOCS will receive WACK sequence (instead of WABT);
- The SAK sequence has been removed;
- BSCA IOCS will operate in ITB mode exclusively.

Improved reliability is provided by the following functions:

- BSCA IOCS uses double addressing when operating on multipoint line;
- EOT and NAK are delivered and acted upon as valid only after checking of PAD character;
- A recommendation to the user to duplicate the first character of ID sequences.

Engineering Change Requirements

Submodels 2 and 4:	EC No. 391563
Submodel 5:	EC No. 13018

Information about phasing from current systems with BSC to updated systems using the expanded functions will be issued in SRL C30-1005.

Basic Assembler 8K

The program has been adapted to the modifications introduced to BSCA IOCS resulting from the specifications changes. One change due to APAR activity has been incorporated.

Classification ... Type I -- Programming Service Classification of A.

See the reverse side for ordering information and the basic program packages.

John Fahey
Director of DP Marketing

*Model 40, 50, 65, 67 (65 mode), 75, 85, 195

FOR IBM INTERNAL USE ONLY

Release Date: September 30, 1969
Distribution: All Areas

Current users will receive a pre-printed Program Order Form and a letter announcing the availability of the two new Versions -- instructing them to order the new Versions through the branch office using this pre-printed Program Order Form. Complete ordering instructions are provided in the letters to users.

Basic Program Package: 360T-CQ-113

Documentation -- Basic Program Material List, Attachment I, IBM System/360 Model 20 Remote Job Entry Work Station Program (C33-4003-1).

Machine Readable -- Program Deck (Generator and Library).

Optional Program Package:

Documentation -- Optional Program Material List, Attachment I, Attachment II, Attachment III.

Machine Readable -- Source Code.

Ordering Information: Program Number 360TCQ113.

	Prg. Nbr. Ext.	Distribution Medium Type	Code	User Volume Requirement
Basic	None	DTR*	00	None
Optional	None	MT 9/800	28	01
		MT 9/1600	29	01

Basic Program Package: 360T-CQ-111

Documentation -- Basic Program Material List, Attachment I, IBM System/360 Model 20 Input/Output Control System for the Binary Synchronous Communications Adapter (C33-4001-4), IBM System/360 Model 20 Input/Output Control System for the Binary Synchronous Communications Adapter Operating Procedures (C33-4002-1).

Machine Readable -- Object code (Generator and Library) and two sample problems.

Optional Program Package:

Documentation -- Optional Program Material List, Attachment I, Attachment II, Attachment III.

Machine Readable -- Source Code.

Ordering Information: Program Number 360TCQ111.

	Prg. Nbr. Ext.	Distribution Medium Type	Code	User Volume Requirement
Basic	None	DTR*	00	None
Optional	None	MT 9/800	28	01
		MT 9/1600	29	01

Basic Program Package: 360T-AS-110

Documentation -- Basic Program Material List, Attachment I, IBM System/360 Model 20 Card Programming Support Basic Assembler Language (C26-3602), IBM System/360 Model 20 Card Programming Support Basic Assembler (Card Versions) - Operating Procedures (C26-3802).

Machine Readable -- Object code and sample problem.

Optional Program Package:

Documentation -- Optional Program Material List, Attachment I, Attachment II, Attachment III.

Machine Readable -- Source Code.

Ordering Information: Program Number 360TAS110.

	Prg. Nbr. Ext.	Distribution Medium Type	Code	User Volume Requirement
Basic	None	DTR*	00	None
Optional	None	MT 9/800	28	01
		MT 9/1600	29	01

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IBM World Trade Data Processing

69-113

PROGRAM ANNOUNCEMENT

DOS/360 RELEASE 21 BOOSTS CAPABILITIES, EXTENSIONS, RELIABILITY

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Published by DP Sales Publishing Services, WTHQ

System Release 21 of DOS/360 is now available. It contains:

- *A new USA Standard COBOL compiler offering expanded language capabilities and IBM extensions to DOS COBOL users with at least 64K bytes of main storage.*
- *A language conversion program to aid in the conversion of DOS/360 COBOL D (360N-CB-452) source programs to DOS/360 USA Standard COBOL source programs.*
- *Increased system reliability and availability through new Outboard Recording and Statistical Data Recording extensions to System Control and Basic IOCS, BTAM, and QTAM.*
- *Machine Check Recording and Recovery extensions to System Control and Basic IOCS for System/360 Models 30, 40, and 50.*
- *Improved Binary Synchronous Communications support under BTAM.*
- *Additional device support under BTAM.*
- *Improvements in the DOS/360 FORTRAN IV (360N-FO-479) compiler.*
- *Support for the 1288 Page Reader under Optical Character Reader IOCS.*

Classification - Type I with Programming Service Classification of "A", except Autotest which will become Class "C" January 1, 1970.

See the following pages for details of the above.

John Fahey

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: September 30, 1969
Distribution: All Areas

USA Standard COBOL, 360N-CB-482

The DOS USA Standard COBOL compiler complies with the approved USA Standard COBOL language (x3.23 1968 COBOL) and incorporates IBM extensions. The USA Standard COBOL language is the result of a standardization effort of the United States of America Standards Institute using CODASYL COBOL, Edition 1965, as a base. The language complies with the first draft ISO recommendation for COBOL.

The USA Standard COBOL compiler under DOS supports the highest level of the eight processing modules defined in the standard. They are:

2NUC	1,2	NUCLEUS
3TBL	1,3	TABLE HANDLING
2SEQ	1,2	SEQUENTIAL ACCESS
2RAC	0,2	RANDOM ACCESS
2SRT	0,2	SORT
2RPW	0,2	REPORT WRITER
2SEG	0,2	SEGMENTATION
2LIB	0,2	LIBRARY

The Nucleus, Table Handling, and Library functions are partially supported by DOS COBOL (360N-CB-452), but have been expanded in this compiler to conform to the standard. Some examples of the additional features are:

- The CORRESPONDING option of the MOVE, ADD, and SUBTRACT verbs
- Implied subjects and relations
- WRITE ... BEFORE ADVANCING

The Sort, Report Writer, and Segmentation modules represent a totally new capability for the user of COBOL under DOS/360.

Sort

The Sort feature permits the COBOL programmer to request execution of a sorting operation within his program. Records may be summarized, inserted, deleted, shortened, or otherwise altered during the initial and final phases of the sort.

Segmentation

Large problem programs can be split up into segments and those segments which are overlayable can be so designated. This allows for more efficient use of core storage at object time.

Report Writer

The Report Writer feature permits the program to use COBOL language statements to specify the format of a written report.

In addition to the features defined in the language standard, the following IBM extensions are provided in this compiler:

- Indexed Sequential Access Method
- Cross Reference Listing
- Condensed Listing Option
- Data/Procedure Map Separation
- Both SYSLNK and SYSPCH output
- Special Registers for Time-of-Day, Date, I/O error codes, and SORT feature flexibility
- Internal and External Floating Point Items
- Internal Decimal Items
- Linkage Section of the DATA DIVISION TRANSFORM statement
- Debugging Language including DEBUG, TRACE, ON, and EXHIBIT

The USA Standard COBOL compiler under DOS requires a partition size of at least 55,296 bytes of main storage. Extensive Report Writer utilization may require the allocation of additional main storage.

In addition to the features required for the operation of the Disk Operating System, the following features are required for the USA Standard COBOL compiler:

- The Commercial Instruction Set
- The Floating Point Feature (if Floating Point literals or calculations are to be used)
- Four utility work files on 2400-Series Magnetic Tape units, 2311 Disk Storage Drives, or a 2314 Direct Access Storage Facility. At least one of these work files must be on a 2311 or 2314 direct access storage device.

All devices supported by DOS COBOL (360N-CB-452) are supported by the USA Standard COBOL compiler.

Restrictions

The BLOCK CONTAINS clause for the specific case where logical record size is greater than physical record size for randomly accessed data sets is not supported in this release.

Data files created by USA Standard COBOL programs using the CLOSE UNIT statement cannot be processed by other DOS components. The end-of-volume marker generated by USA Standard COBOL will be treated as an end-of-file by other DOS components.

Files created using CLOSE UNIT are restricted to one extent per volume.

When using the BASIS option, the word 'BASIS' must begin in Column 1.

Multiple replacements are not handled under the replacing option of the COPY verb. Only the first in a series of multiple replacements is processed.

COBOL to USA Standard COBOL Language Conversion, 360N-CV-489

The Language Conversion Processor (LCP) converts DOS COBOL D source programs into USA Standard COBOL source programs suitable for compilation by the USA Standard COBOL compiler under DOS. This LCP operates as a problem program under DOS.

The differences between the USA Standard COBOL language and the System/360 COBOL language are largely syntactical and the conversion process is primarily concerned with changing the format of selected COBOL statements. Because this process is mainly a routine clerical task, the LCP is provided to ease the conversion effort, reduce conversion costs, and minimize user involvement in the conversion.

Input

The input to the LCP must be a DOS/360 COBOL D source program which adheres to the COBOL D specification and compiles and executes correctly under DOS COBOL D.

Output

A listing is produced which identifies all changes made to the original source program and flags statements requiring verification or manual conversion.

A converted source program may optionally be produced as output.

The amount of conversion is relative to the extent of use of COBOL D elements that differ in specification from the corresponding USA Standard COBOL elements. The LCP handles a majority of the items that must be considered when converting; of the remainder, those items which require manual conversion are flagged with a warning message, the rest (which represent minor differences in processing in USA Standard COBOL rather than syntactical language differences) are unchanged.

The LCP requires a minimum partition size of 18K* bytes of main storage. In addition to the requirements of the Disk Operating System, the Commercial Instruction Set is required for the execution of the Language Conversion Processor.

*Previously announced as 14K in P68-145

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

The following improvements have been made to the System Control and Basic IOCS component:

Device Not Assigned Message

The "Device Not Assigned" message has been changed to supply the logical unit number if the address is available at termination.

Error Recording and Recovery Extensions

Outboard Recording, Statistical Data Recording, and Machine Check Recording and Recovery functions are now available as additional supervisor options.

Statistical Data Recorder (SDR) statistics are kept on temporary errors and Outboard Recorder (OBR) statistics are kept on permanent errors.

The Outboard Recorder maintains pertinent data when an unrecoverable I/O error occurs. The data are stored in a recorder file on the logical unit SYSREC. The information contained in the OBR record includes channel unit address, device type, date and time of day, job name, CSW, logical unit, and the first and failing CCW's.

The Statistical Data Recorder records the cummulative error status of an I/O device. The information contained in the SDR record includes the channel unit address and device type and characteristics. Each SDR record also contains 16 two-byte counters, each representing an error condition to be counted for the device.

If the Machine Check Recording and Recovery option (MCRR) is specified at system generation, MCRR records pertinent data after a machine check or a channel inboard error (channel control check, interface control check, or channel data check) has occurred. MCRR analyzes this data and cancels the affected partition or partitions. No attempt is made to retry on any error involving this function.

The MCRR function is CPU dependent and specified definitions of what constitutes channel failures or device failures are different for each model. MCRR is only available for the System/360 Models 30, 40, and 50.

OBR, SDR, and MCRR records can be displayed by invoking the Environment Record Editing and Printing (EREP) program. The EREP program can be linkage edited to run in any partition.

Support for this new function is also included in the teleprocessing components. See the BTAM and QTAM sections of this letter for descriptions of this teleprocessing support for OBR and SDR records.

Basic Telecommunications Access Method, 360N-CQ-469

RESETPL Macro

This instruction is now optionally core resident or

transient.

Device Support

This release of BTAM contains support for the 2972-8 General Banking System (using multi-point line control only) and Start/Stop support for the 2760 when attached to a 2740 (with the checking feature or the dial and checking features).

Binary Synchronous Communications

BTAM support for Binary Synchronous Communications has been expanded to provide a greater degree of terminal compatibility and additional reliability features.

Greater terminal compatibility is provided by the following functions:

- All BSC terminals can have Identification (ID) capability*
- In addition to the Line Control sequences which have been previously supported by all BSC terminals, Leading Graphics, WACK, and RVI control sequences can be received by all BSC terminals. The capability to transmit these sequences is dependent on the operating characteristics of the terminals.
- All BSC terminals operate in ITB mode.

Improved reliability is provided by the following facilities:

- All BSC Terminals except the 1130 and 2780 use double addressing to control multi-point lines.
- The first character of all ID sequences is duplicated.
- All BSC terminals will generate and check for a pad character following EOT and NAK.

These BSC improvements apply to the following supported devices:

System/360** with a 2701 or 2703,
System/360 Model 25 with the Integrated Communications Attachment,
System/360 Model 20 with the Binary Synchronous Communications Adapter using the BSCA IOCS program,
1130 with the Synchronous Communication Adapter using the Communication Subroutines,
2780 Transmission Terminal,
2792-8 General Banking Station.

* This is a special feature on some terminals

**Models 25, 30, 40, 50, 65, 67 (in 65 mode), and 75

Error Recording Improvements

BTAM has been extended to compile error statistics via the Outboard Recorder (OBR) and the Statistical Data Recorder (SDR). SDR statistics are kept on temporary errors and OBR statistics on permanent errors. SDR statistics are kept in core until a threshold of 255 transmissions and/or 15 errors of any one type is reached, when they will be written on a disk file. OBR/SDR statistics are available for all BTAM supported devices except the 2826/1017/1018 paper tape devices.

2740 Model 2 Support

DOS BTAM support for the 2740 Model 2 has been changed to correspond to Engineering Change 307475. This E. C. provides for the 2740 Model 2 to give a 2-character response to addressing. This support replaces the previous 2740 Model 2 support which utilized the interval timer.

Queued Telecommunications Access Method, 360N-CQ-470

Error Recording Improvements

QTAM has been expanded to include error recording facilities via the Outboard Recorder (OBR) and the Statistical Data Recorder (SDR). SDR statistics are kept on temporary errors and OBR statistics on permanent errors. SDR statistics are kept in core until a threshold of 255 transmissions and/or 15 errors of any one type is reached or until CANCEL or CLOSEMC is issued, at which time they are written out to a disk file. QTAM OBR/SDR is not supported for audio devices.

2740 Model 2 Support

DOS QTAM support for the 2740 Model 2 has been changed to correspond to Engineering Change 307475. The E.C. provides for the 2740 Model 2 to give a 2-character response to addressing. This support replaces the previous 2740 Model 2 support which utilized the interval timer.

The QTAM RELEASM facility has been improved to eliminate the need for priming after a release.

QTAM programs must be reassembled for Release 21 because of changes occurring in the QTAM component.

FORTRAN IV, 360N-FO-479

The following improvements have been made in the FORTRAN IV compiler:

Traceback Information

Traceback now supplies more information for debugging. It now displays Register 14 (which indicates the point of return to the calling program,), Register 15 (which indicates the point of return from the called program), and Register 0 and 1 (the linkage parameter registers).

Statement MAP

If the LIST option is specified and LISTX is not the user will receive the short list feature. The compiler will then print the location, statement number, and label (if any) of all executable statements. Three statements to a line.

END Card Identification

The object deck END card will now contain the date, routine name, and the time of the start of compilation.

Printing of STOP Messages

The STOP n message will be typed on the console only when "n" is non-blank. No message is printed if no STOP command is contained in the problem.

Null Argument List

Register 1 will be zeroed if there are no arguments within a CALL argument list.

Compatibility Note

If a specification statement follows an executable statement, the specification statement is flagged with the warning message, "ILF009I ORDER". Users should note that all specification statements must precede executive statements to conform to FORTRAN language rules.

Literals in Data and Type Statements

The handling of literals in DATA and TYPE statements has been modified to spill data between array statements.

Optical Character Reader IOCS, 360N-IO-478

Optical Character Reader IOCS now supports the 1288 page reader. The 1288 page reader is defined to the system and to optical reader IOCS as a 1287D.

Maintenance

In addition to the new features described above, DOS/360 Release 21 contains the following components at the level indicated.

		Modification Level
Supervisor - 6K - 2311	360N-SV-474	3-5
Supervisor - 8K - 2314	SV-486	3-5
System Control & Basic IOCS	CL-453	3-5
Direct Access Method	IO-454	3-4
Consecutive Disk IOCS	IO-455	3-5
Consecutive Tape IOCS	IO-456	3-5
ISFMS	IO-457	3-5
Consecutive Paper Tape IOCS	IO-458	3-3
Compiler I/O Modules	IO-476	3-5
Magnetic Character Reader IOCS	IO-477	3-5
Optical Character Reader IOCS	IO-478	3-4
BTAM	CQ-469	3-5
QTAM	CQ-470	3-5
Autotest	PT-459	3-2
PL/I	PL-464	3-5
Assembler	AS-465	3-4
Assembler F	AS-466	3-5
COBOL	CB-452	3-5
COBOL DASD Macros	CB-468	3-1
USA Standard COBOL	CB-482	3-0*
Language Conversion Program	CV-489	3-0*
Basic FORTRAN IV	FO-451	3-5
FORTRAN IV	FO-479	3-1
FORTRAN IV Library Sub-program	LM-480	3-1
Report Program Generator	RG-460	3-5
On Line Test Executive Program	DN-481	3-4
Group 1 Utilities-Unit Record/Disk	UT-461	3-5
Group 2 Utilities-Tape	UT-462	3-5
Group 3 Utilities - Data Cell	UT-463	3-4
MPS Utility Macros	UT-471	3-4
Vocabulary File Utility Program	UT-472	3-0
Tape Sort/Merge	SM-400	3-4
Disk Sort/Merge	SM-450	3-5
Tape/Disk Sort/Merge	SM-483	3-2
Model 30 Emulator	EU-484	3-2
Model 40 Emulator	EU-485	3-1

* Indicates new component with this release. All components have changed except 360N-CB-468, DN-481 and UT-472.

Basic Program Material

See page 6

Optional Program Material, Ordering Information and Additional Program Material

See page 7.

OPTIONAL PROGRAM MATERIAL

Documentation -- Appropriate material delivered

Machine Readable -- Source code delivered on thirteen separate volumes and specified by Program Number Extensions as indicated below. Distribution may be requested on 1316 Disk Packs, or on magnetic tapes (2400') 9-track or 7-track (Data Conversion feature required). A separate 1316 Disk Pack or magnetic tape (2400') is required for each Program Number Extension indicated on the IBM Program Order Form (120-1957).

Program Number Extension	Program Component Name	Program Number
VOL1	System Control	360N-CL-453
VOL2	Assembler	AS-465
	Assembler F	AS-466
VOL3	Group 1 Utilities (Unit Record and Disk)	UT-461
	Group 2 Utilities (Magnetic Tape)	UT-462
	Group 3 Utilities (Data Cell)	UT-463
	MPS Utilities Macros	UT-471
VOL4	COBOL	CB-452
	USA Standard COBOL	CB-482
	Language Conversion Program	CV-489
VOL5	Tape and Disk Sort/Merge	SM-483
VOL6	Autotest	PT-459
	Report Program Generator (RPG)	RG-460
VOL7	BTAM	CQ-469
	Vocabulary File Utility	UT-472
	QTAM	CQ-470
VOL8	Basic PL/I	PL-464
VOL9	Basic IOCS	CL-453
	Optical Character Readers IOCS	IO-478
	Magnetic Character Reader IOCS	IO-477
VOL10	On-Line Test Executive	DN-481
	Tape Sort/Merge	SM-400
	Disk Sort/Merge	SM-450
VOL11	Basic FORTRAN IV	FO-451
	FORTRAN IV	FO-479
	FORTRAN IV Subroutines	LM-480
VOL12	PL/I (continuation VOL8)	PL-464
VOL13	USA Standard COBOL (continuation of VOL4)	CB-482

Each tape may also be restored to a 2316 Disk Pack on a 2314 Disk Drive. When using a 2316 Disk Pack, the user should designate the device as a 2311 for all operations involving the restoring and using of the Disk Pack. However, it should be initialized as a 2316.

The above distribution volumes do not contain source statements which are available in source format with the basic machine readable material for DOS/360. Therefore, there is no optional program material for the following DOS/360 components: Consecutive Disk IOCS, 360N-IO-455; Consecutive Tape IOCS, 360N-IO-456; Direct Access Method, 360N-IO-454; ISFMS, 360N-IO-457; Consecutive Paper Tape IOCS, 360N-IO-458; COBOL DASD Macros, 360N-CB-468; Model 30 Emulator 360N-EU-484; Model 40 Emulator 360N-EU-485.

Source statements for the Supervisor - 2311 (6K), 360N-SV-474, 2314 (8K) 360N-SV-486, and the Compiler Input/Output Macros 360N-IO-476, are not provided. See System/360 Disk Operating System, System Generation and Maintenance, C24-5033-6, for information on these modules.

ORDERING INFORMATION: System Number 360N

Current users will receive a pre-printed Program Order Form and a letter announcing the availability of Release 21. The letter instructs them to order the Release 21 through the branch office using the pre-printed order form. Complete ordering instructions are provided in the letter to users.

Users who do not order Release 21 will be removed from the user record address file. Maintenance will be reinstated when Release 21 is ordered.

Note: Both basic and optional machine readable material for this system is ordered by specifying a "System Line" (columns 1-7, 15-24) and "Component Lines" (columns 8-12) of the Program Order Form. Enter a separate Component Line for each component desired. Respecify the System Line for each different Program Number Extension.

	Program Number Extension	Distribution Medium Type	Code	User Volume Requirement
Basic	2311	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
		1316	52	02
	2314	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
Optional	* VOL1 thru VOL13	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
		1316	52	01

* For each program number extension (VOL1 - VOL13) that is specified, a separate reel of magnetic tape of 1316 Disk Pack is required.

ADDITIONAL PROGRAM MATERIAL

Program Logic Manuals

DOS/360

System Control Introduction	Y24-5017-7
Librarian Maintenance and Service	Y24-5079-1, TNL Y24-5136
Linkage Editor	Y24-5080-1
Supervisor and Transients	Y24-5084-3
IPL and Job Control	Y24-5086-1
Logical IOCS Introduction	Y24-5020-4, TNLs Y24-5121, Y24-5137
Unit Record, Mag. Tape, and Compiler Files	Y24-5087-2
Sequential and Direct Access Files	Y24-5088-2, TNL Y24-5119
ISFMS	Y24-5089-2
BTAM	Y30-5001-3, TNL Y30-5531
QTAM	Y30-5002-3, TNL Y30-5529, Y30-5537
Utilities	Y24-5023, TNL Y21-0002
Disk Sort/Merge	Y24-5021, TNL Y28-2291
Autotest	Y24-5027
Tape/Disk Sort/Merge	Y28-6645-1
FORTRAN IV	Y28-6394, TNL Y28-6399

DOS/360 and TOS/360

OLTEP	Y24-5056-1, TNLs Y24-5090, Y24-5106
MPS Utilities	Y24-5045-2
Tape/Disk Sort/Merge	Y28-6645-1
Assembler	Y26-3642-1, TNLs Y26-8006, Y26-8007, Y26-8015
Assembler F	Y26-3716, TNL Y33-8018
RPG	Y26-3701-1, TNL Y21-0009
COBOL	Y24-5025-2, TNLs Y28-6390, Y28-6389, Y28-6396
FORTRAN IV	Y24-5032
Subroutine Library	Y33-9013, TNLs Y33-9027, Y33-9018, Y33-9032, Y33-9031
PL/I Volume 1	Y33-9010-2, TNL Y33-9046
PL/I Volume 2	Y33-9011-1
PL/I Volume 3	Y33-9012-1, TNL Y33-9051
IBM System/360 DOS 1401/1440/1460 Emulator Program Compatibility Support 30	Y27-7164, TNL Y27-7185
IBM System/360 DOS 1401/1440/1460 Emulator Program Compatibility Support 40	Y27-7165
IBM System/360 DOS: USA Standard COBOL Program Logic Manual	Y28-6392-0
IBM System/360 Conversion Aids: COBOL-to-USA	Y28-6397

Program Listings: The DOS/360 assembly listings and/or Macro (Source Statement Library) SSERV listings are available on Microfiche from IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901. Specify Group Code 2030 for the assembly listings or Group Code 2032 for the Macro SSERV listings. The assembly listings are equivalent to the output listings produced by assembling the symbolic modules as required for each of the DOS/360 Components. The Macro SSERV listings are equivalent to a SSERV display on a printer of the Macros of the Components where applicable.

BASIC PROGRAM MATERIAL (Available from PID)

Documentation -- Program material list -- Attachment I - to the basic program material list -- Attachment II - Special instructions -- Attachment III - PTF information. The following SRL publications appropriate to the components ordered are shipped with each initial DOS/360 order:

System/360 Disk Operating System --

Operating Guide	C24-5022-7
Concepts and Facilities	C24-5030-6
Timing Estimates TNLs N24-5383, 5393	C24-5032-8
Systems Generation and Maintenance	C24-5033-8
Data Management Concepts TNLs N24-5381, 5392	C24-3427-4
System Control and System Service Programs TNLs N24-5385, 5387	C24-5036-4
Supervisor and Input/Output Macros	C24-5037-7
Basic Telecommunications Access Method	C30-5001-6
Utility Macros Specifications	C24-5042-4
Vocabulary File Program for the 7772 Audio Response Unit	C27-6924-2
Utility Programs Specifications	C24-3465-5
Tape Sort/Merge Program Specifications	C24-3438-4
Sort/Merge Program Specifications	C24-3444-4
COBOL DASD Macros (Note - C24-5039 and TNLs N24-5142, 5181 may be used in lieu of C24-5039-1)	C24-5039-1
Assembler Specifications	C24-3414-6
COBOL Programmer's Guide TNL N28-0253	C24-5025-5
COBOL Language Specifications TNL N28-0245	C24-3433-5
S/360 DOS - USA Standard COBOL Language	C28-6394-1
S/360 DOS USA Standard COBOL Programmer's Guide	C28-6398
S/360 Conversion Aids - COBOL to USA Standard COBOL Language, Conversion Programs	C28-6400
FORTRAN IV Programmer's Guide	C24-5038-3
FORTRAN IV Language	C28-6629-2
Report Program Generator TNLs N21-5095, 5096, 5102, 5105 (Note - SRL C26-3570-4 plus TNLs N21-5095, 5055, 5077, 5086, 5090, 5096, and N24-5195, N21-5102 may be used in lieu of the SRL C26-3570-5 plus TNLs N21-5095, 5096, 5102, and 5105.	C26-3570-5
Autotest Specifications	C24-5062-1
QTAM Message Control Program TNLs N30-5522, 5527, 5535	C30-5004-2
QTAM Processing Program Services TNLs N30-5523, 5528, 5534	C30-5003-3
Basic PL/I Reference Manual N33-9066	C28-8202-1
PL/I Programmer's Guide N33-9067	C24-9005-4
PL/I DASD Macros TNL N24-5301	C24-5059
On-Line Test Executive Program Specs and Operating Guide	C24-5066-2
S/360 Disk Operating System - FORTRAN IV Programmer's Guide	C28-6397-1
S/360 FORTRAN IV Language N28-0251	C28-6515-7
S/360 FORTRAN IV Library Sub-programs N28-0588	C28-6596-4
S/360 Disk Operating System - Tape and Disk Sort/Merge Program N28-2388	C28-6676-1
S/360 Disk Operating System - 1401/1440/1460 Emulator Programs for System/360 Models 30 and 40 TNL N27-1318	C27-6940-2

Form numbers which have changed since previous release are underlined.

If only the publications or if additional copies of the publications are required, order them from the IBM Distribution Center, Mechanicsburg -- not from PID.

Machine Readable -- Appropriate material is distributed for the 2311 Resident Systems by specifying program number extension 2311, or 2314 Resident Systems by specifying program number extension 2314. Components are:

Assembler	360N-AS-465
Assembler F	AS-466
COBOL	CB-452
COBOL DASD Macros	CB-468
USA Standard COBOL	CB-482*
System Control and Basic IOCS	CL-453
Basic Telecommunications Access	CQ-469
Queued Telecommunications Access Method	CQ-470
Language Conversion Program	CV-489*
Model 30 Emulator	EU-484
Basic FORTRAN IV	FO-451
FORTRAN IV	FO-479
Direct Access Method	IO-454
Consecutive Disk IOCS	IO-455
Consecutive Tape IOCS	IO-456
Indexed Sequential File Management	IO-457
Consecutive Paper Tape IOCS	IO-458
Compiler I/O Modules	IO-476
MICR IOCS	IO-477
Optical Character Reader IOCS	IO-478
FORTRAN IV Library Subprogram	LM-480
On-line Test Executive	DN-481
PL/I	PL-464
Autotest	PL-459
Report Program Generator	RG-460
Tape Sort/Merge	SM-400
Disk Sort/Merge	SM-450
Tape/Disk Sort/Merge	SM-483
Supervisor - 2311 (6K)	SV-474
Supervisor - 2314 (8K)	SV-486
Group 1 Utilities	UT-461
Group 2 Utilities	UT-462
Group 3 Utilities	UT-463
MPS Utility Macros	UT-471
Vocabulary File Utility for 7772	UT-472
Model 40 Emulator	EU-485

*New with this release

The reels of magnetic tape are in 1316 Disk Pack restore form.

The DOS/360 data are preceded by an initialize 2311 Utility Program and a Restore Tape-to-Disk program.

The 2311 resident DOS system is distributed on two 1316 Disk Packs, one 9-track reel of (2400') magnetic tape, or one 7-track reel of (2400') magnetic tape (Data Conversion feature required) with a 6K Supervisor (360N-SV-474). These tapes are in a format suitable for restoration to two 1316 Disk Packs.

The 2314 resident DOS system is distributed as a complete system (except Autotest) on one 9-track reel of (2400') magnetic tape, or one 7-track reel of (2400') magnetic tape (Data Conversion feature required) with an 8K Supervisor (360N-SV-486). (2314 Residence is not available on disk) These tapes are in a format suitable for restoration to a 2316 Disk Pack.

The System Control and Basic IOCS component (360N-CL-453) and one of the two Supervisor components

1. 2311 6K 360N-SV-474
2. 2314 8K 360N-SV-486

are required when ordering the S/360 Disk Operation System on the IBM Program Order Form (120-1957).

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ta Processing

6q114

PROGRAM ANNOUNCEMENT

[redacted]

PALIS (TYPE II) PROGRAM MAINTENANCE RELEASE IS AVAILABLE

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

[1] All programs announced as available have been shipped to the appropriate WT Program Libraries. Programs and associated material may be ordered as indicated on pages 9013 through 9017, Programming Section, WT DP Sales Manual.

[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any reference made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

Published by DP Sales Publishing Services, WTHQ

Modification Level 2 of PALIS (Property and Liability Information System) may now be ordered. First shipments will begin the week of October 17, 1969. It provides maintenance changes for the Basic Program (360A-IF-10X), Automobile (360A-IF-11X), and Other Lines (360A-IF-13X). Also, the Automobile Program now requires a minimum of 128K core memory.

Current users will receive a pre-printed Program Order Form and a letter announcing the availability of Modification Level 2. The letter instructs them to order the new modification through the branch office using this pre-printed Program Order Form. Complete ordering instructions are provided in the letter to users.

The Service Classification is B.

Detailed information is in the new sales manual write-up on the reverse side.

John Fahey

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: September 30, 1969
Distribution: All Areas

Property and Liability Information System for System/360: Consists of programs which maintain an Automobile and Other Lines policy master file. It provides for direct access inquiry to these records.

Description: The system, consisting of three programs, will perform the following functions:

PALIS Basic Program (360A-IF-10X) - provides billing and premium collection for direct billed business ... a program to build and update user tables for automobile and homeowners rates ... a program to edit all transactions for format and range of values ... utility programs to aid the installation and modification of PALIS ... programs to load, reorganize, reconstruct and restart the policy file on the 2321 Data Cell ... status inquiry into policy file via Local 2260 or Remote 2260 and 1050 ... a run linkage program to interface between DOS/360 and PALIS insurance logic.

The Automobile Program (360A-IF-11X) - rate and write new business ... renewals ... endorsements, both premium and non-premium ... cancellations ... (reinstatements) ... claims arising ... claims payments and closing ... provides facility to recreate portions of the master record ... provides data for premium statistical reporting.

The Other Lines Program (360A-IF-13X) - maintain a complete insurance record for single and multi-location risks by processing the following new business ... renewals ... endorsements both premium and non-premium ... cancellations ... claims arising ...claims payments and closing ... provides facility to recreate portions of the master record ... provides data for statistical reporting.

Features: The system takes advantage of the powerful features of IBM System/360 ... the system functions in a Disk Operating System environment ... the flexibility of the system design allows for user defined configurations when processing loads exceed the capacity of the minimum configuration ... both the insurance logic and run linkage provide the flexibility required to make the system adaptable to most companies ... the policy master file is stored on the IBM 2321 Data Cell Drive.

Use: PALIS is designed to be the foundation of a P & L information system. As such, it creates and maintains a detailed policy enforce file. In addition, an Automobile Private Passenger policy rating and writing facility is provided. Premium, loss, and historical data are maintained by policy.

The customer must provide a program to interface user data capture and data coding procedures with the system edit. Output programs must be written to format and in some cases further process the contents of the generalized output records.

During implementation and conversion, interface programs between PALIS output and user accounting and statistical systems must be provided.

Customer Responsibilities: A thorough knowledge and understanding of the system before installation ... write conversion programs to create the master file ... write programming to format output for printing, punching and entry into other systems ... write all routines to satisfy special company policies such as underwriting criteria, loss reserving standards, accounting procedures, etc. ... write any programming required to effect user changes to record format; e. g., expand, contract routines, additional programming to handle new fields, etc., generate and expand tables for private passenger automobile according to the specifications provided; write programs and procedures to provide adequately edited input transactions to PALIS ... maintain the programs and documentation as changes to bureau requirements dictate changes in logic ... provide additional logic to format replies to inquiries beyond that supplied by PALIS.

Special Sales Information: The Property and Liability Information System substantially reduces the customer programming effort and provides a basis for uniformity and systems design throughout the industry ... the meaningful insurance-oriented documentation provided by System/360 COBOL greatly aids in the full understanding of the package ... the modular concept used to develop this program provides the means for the user to expand into a total management information system for all lines of business ... the Property and Liability Information System takes advantage of the advanced capabilities of the Disk Operating System/360.

Programming Systems: To facilitate understanding, the insurance logic program modules are written in Disk Operating System/360 COBOL. The use of System/360 COBOL allows for ease of modifications to the various programs and simplifies program maintenance. Run linkage routines have been written to form an interface between the insurance logic and Disk Operating System/360. Just as the insurance logic program modules are written in a modular fashion, the run linkage is also written in a modular fashion to allow for a wider range of system configurations. The run linkage is written in assembler language.

PALIS uses the following components of the Disk Operating System and the user must become familiar with them -- System Control and Basic IOCS ... Consecutive Tape IOCS ... Direct Access Method ... Group I, II and III Utilities ... Tape Sort/Merge ... Assembler Language ... COBOL ... DOS Supervisor (6K) ... RPG ... QTAM.

In addition, PALIS uses IBM System/360 FLOWCHART (360A-SE-22X) for printing of PALIS Flowcharts.

Minimum Machine Requirements: System/360 Model 40 G with Decimal Arithmetic (3237), Selector Channel (6980) and 1052 Attachment (7920) ... 1052 Printer Keyboard Model 7 ... 2841 Storage Control with 2321 Attachment (8079) ... 2321 Data Cell Model 1 ... 2311 Disk Storage Drive Model 1* ... Four 2400 series Magnetic Tape Units (at least three of the magnetic tape units must be 9-track) ... 2821 Control Unit with 1403 Printer Model 2 and 2540 Card Read/Punch Model 1.

The Automobile application requires 89K of core and Other Lines application requires 120K core for program, data and access method storage.

*One or two additional 2311's will be required if the user rates Homeowners in all states.

Additional System Requirements for Inquiry **: Storage Protection (7520). For 2260 Local: 2848 Display Control Model 2, Display Adapter (3356), Line Addressing (4787), 2260 Display Station Model 2, Alpha Numeric Keyboard (4765). For 2260 Remote: 2848 Display Control Model 2, Display Adapter (3356), Line Addressing (4787), 2260 Display Station Model 2, Alpha Numeric Keyboard (4765), 2701 Data Adapter Unit, IBM Terminal Adapter Type III (4656). For 1050 Remote: 1051 Control Unit Model 2, First printer Attachment (4408), IBM Line Adapter (Dependent on line-type), Keyboard Request (4770), 1052 Printer Keyboard Model 2, 2701 Data Adapter Unit, IBM Terminal Adapter Type I (4640).

For Inquiry application 26K of core is required in Foreground I for QTAM and 65K of core is required for program, data and access method storage.

** In minimum configuration, Inquiry will operate only independent of other PALIS runs.

Basic Program Material for PALIS Basic Program (360A-IF-10X):

Documentation - Application Directory ... Basic Program Description and Systems Manual (H20-0497-1)* ... Basic Operations Manual (H20-0498-1)* ... Overview Program Description Manual (H20-0501)*.

Machine Readable - Contains source code, flowcharts, formats and sample problems.

Basic Program Material for PALIS Automobile (360A-IF-11X):

Documentation - Application Directory ... PALIS Automobile Premium Processing Program Description Systems Manual (H20-0499-1) ... PALIS Automobile Claims Processing Program Description and Systems Manual (H20-0500-1).

Machine Readable - Contains source code, flowcharts and formats.

Basic Program Material for PALIS Other Lines (360A-IF-13X):

Documentation - Application Directory ... PALIS Other Lines Premium Processing Program Description and Systems Manual (H20-0503-1) ... PALIS Other Lines Claims Processing Program Description and Systems Manual (H20-0504-1).

Machine Readable - Contains source code, flowcharts and formats.

Note: If only the form numbered manuals are required, order from Mechanicsburg - not from PID.

*Do not order these form numbers from Mechanicsburg until they are announced in a PRL.

Ordering Information - Program Number 360AIF10X, PALIS Basic Program.

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Ordering Information - Program Number 360AIF11X, PALIS Automobile Program

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Ordering Information - Program Number 360AIF13X, PALIS Other Lines Program

	Program Number Extension	Distribution Medium Type	Track/Density	Code	User Volume Requirements
Basic	None	MT	7DC/800	26	01
		MT	9/800	28	01
		MT	9/1600	29	01
Optional		None			None

Additional Ordering Information is in the DP Sales Activity Section of the Branch Office Manual.

Additional Program Support Material (available from Mechanicsburg): Application Description Manual (H20-0283-2).

For additional information contact your Insurance Industry Marketing Representative.

IBM World Trade Data Processing

PROGRAM ANNOUNCEMENT

COBOL TO USA STANDARD COBOL* LCP FOR OS/360 AVAILABLE

The COBOL to USA Standard COBOL Language Conversion Program (LCP), 360C-CV-713, is now available. It operates under OS/360 (Release 15/16 or later) and converts OS/360 COBOL E and F source programs to OS/360 USA Standard COBOL programs.

Input

The input to the LCP must be a COBOL E or F source program which --

- adheres to the appropriate specifications
- compiles and executes correctly using the current compiler.

Output

The output from the LCP is a source listing and, at the user's option, a new translated source deck.

The listing identifies all changes made to the original source program and flags those statements which must be verified or manually converted.

The LCP functions on System/360 Model 30, 40, 50, 65, 67 (in 65 mode), 85, 91, or 195. It requires a minimum of 26K bytes of main storage. *(P68-145 previously stated that the minimum storage requirement was 17K or 25K if Report Writer input is used.)*

Configuration ... In addition to the features required for OS/360, the following features must be available:

Commercial Instruction Set (Model 91, the decimal simulator)
Input Data Set (source program)
Output Data Set (corrected source program-optional)
Listing Data Set
Three Utility Data Sets

One Utility Data Set must be a disk; the others may be tape or disk.

Classification ... Type I program with Programming Service Classification of A.

SEE REVERSE SIDE FOR "NOTE TO WORLD TRADE READERS".

Basic Program Package

Documentation - Program Material List, Publication C28-6400-0 IBM System/360 Conversion Aids with TNL N28-0262.

Machine Readable - Object code

Optional Program Package

Documentation - Program Material List, LCP Creation Procedure.

Machine Readable - Source modules and sample control cards

Ordering Information: Program Number 360CCV713

	Prog No. Ext.	Distribution Medium Type	Code	User Volume Requirement
Basic	none	DTR 7DC/800	26	none
		DTR 9/800	28	none
		DTR 9/1600	29	none
Optional	none	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01

Additional Program Material

Program Logic Manual † -- Y28-6397

Program Listing -- Available on microfiche from IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901. When ordering, specify Group Code 9000.

John Fahey
Director of DP Marketing

*On October 6, 1969, the United States of America Standards Institute, Inc. changed its name to American National Standards Institute, Inc. Documentation references to the Standard COBOL will be revised to reflect this name change.

†Available from Mechanicsburg.

Published by DP Sales Publishing Services, WTHQ

FOR IBM INTERNAL USE ONLY

Release Date: October 20, 1969
Distribution: All Areas

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

[1] All programs announced as available have been shipped to the appropriate WT Program Libraries. Programs and associated material may be ordered as indicated on pages 9013 through 9017, Programming Section, WT DP Sales Manual.

[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any references made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

[redacted]

09-118

Data Processing

PROGRAM ANNOUNCEMENT

SYSTEM/360 MODEL 20 TAPE PROGRAMMING SYSTEM (TPS) ENHANCED BY NEW VERSIONS

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

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[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

Published by DP Sales Publishing Services, WTHQ

The new Model 20 TPS, now available, is a result of the specification changes to the Input/Output Control System for Binary Synchronous Communications Adapter ... modification to the Basic Assembler (8K) ... and the implementation of APAR corrections.

BSCA IOCS

The following capabilities provide greater compatibility of BSC terminals:

- BSCA IOCS will receive WACK sequence (instead of WABT);
- The SAK sequence has been removed;
- BSCA IOCS will operate in ITB mode exclusively.

Improved reliability is provided by the following functions:

- BSCA IOCS uses double addressing when operating on multipoint line;
- EOT and NAK are delivered and acted upon as valid only after checking of PAD character;
- A recommendation to the user to duplicate the first character of ID sequences.

Engineering Change Requirements

Submodels 2 and 4:	EC No. 391563
Submodel 5:	EC No. 13018

Information about phasing from current systems with BSC to updated systems using the expanded functions will be issued in SRL C30-1005.

Basic Assembler 8K

The program has been adapted to the modifications introduced to IOCS BSCA resulting from the specifications changes.

Classification

Type I programs with Programming Service Classification of A.

See the reverse side for ordering information and program material.

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: October 20, 1969
Distribution: All Areas

This Model 20 TPS which replaces the existing TPS now consists of the following programs at the level indicated:

		Version - Modification
Basic Assembler (Tape) 4K	360U-AS-130	2/2
TPS Tape-to-Tape Utility Program	360U-UT-131	3/1
TPS Tape-to-Card Utility Program	360U-UT-132	3/0
TPS Card-to-Tape Utility Program	360U-UT-133	3/1
TPS Tape-to-Printer Utility Program	360U-UT-134	3/1
TPS Initialize-Tape Utility Program	360U-UT-135	2/2
TPS Load System Tape Program	360U-SL-142	3/0
TPS Copy System Tape Program	360U-SL-143	3/0
TPS Directory Service Program	360U-SL-144	3/0
TPS Core-Image Maintenance Program	360U-SL-145	3/0
TPS Macro Maintenance Program	360U-SL-146	3/0
TPS Linkage Editor Program	360U-SL-147	3/0
TPS Report Program Generator	360U-RG-148	3/1
TPS Assembler Program	360U-AS-149	3/1
TPS Sort/Merge Program	360U-SM-150	3/1
TPS Input/Output and Basic Monitor Macro Definitions	360U-IO-151	4/1
TPS Input/Output Macro Definitions for the IBM 1419/1259 Magnetic Character readers	360U-IO-152	4/0
Basic Assembler (Tape) 8K	360U-AS-153	2/0
TPS Input/Output Macro Definitions for the Binary Synchronous Communications Adapter	360U-CQ-154	2/0
TPS Core-Image Service Program	360U-SL-155	1/0
TPS Macro Service Program	360U-SL-156	1/0
TPS Card-Resident Control Programs	360U-CL-157	1/1
TPS Initial Program Loader for Tape-Resident System	360U-CL-158	1/0
TPS Tape-Resident Control Programs	360U-CL-159	1/1
Remote Job Entry Work Station Program	360U-CQ-160	1/0

Basic Program Material

Documentation -- Program Material List ... Attachment I -- Operating Procedures C24-9009-3 and TNL N33-8600 ... Performance Estimates C24-9010-3 and TNL N33-8603 ... Basic Assembler Language C26-3602-5 ... Basic Assembler/Tape Procedures C24-9011-1 and TNL N33-8553 ... Utility Programs C26-3808-3 and TNLs N33-8559, N33-8588 ... Control and Service Programs C24-9000-4 ... Report Program Generator C24-9001-5 ... Assembler Language C24-9002-4 and TNL N33-9059 ... Tape Sort/Merge Program C26-3804-2 and TNLs N33-8535, N33-8558, N33-8561 ... IOCS C24-9003-4 ... IOCS for 1419/1259 C33-6001-3 and TNL N33-9043 ... IOCS for Binary Synchronous Communications Adapter C33-4001-4 ... Remote Job Entry Work Station C33-4003-1 and TNL N33-8066.

Form numbers which have changed since previous releases are underlined.

Machine Readable -- Object code for all Tape Programming Systems Components (360U) available on one (1) functional volume. The bootstrap card has not been changed.

Optional Program Material

Documentation -- Optional Program Material List ... Attachment I.

Machine Readable -- Source code for all Tape Programming Systems Components (360U) except Remote Job Entry is available on one (1) functional volume.

Ordering Information: System Number 360U

Note: Both basic and optional machine readable material for this system is ordered by specifying a "System Line" (columns 1-7, 15-24) and "Component Lines" (columns 8-12) of the Program Order Form. Enter a separate Component Line for each component desired.

	Prg. Nbr. Ext.	Distribution Medium Type	Code	User Volume Requirement
BASIC	none	MT 7DC/800	26	01
		MT 9/800	28	01
		MT 9/1600	29	01
OPTIONAL				
	none	MT 9/800	28	01
		MT 9/1600	29	01

When reordering the package, current users will receive only the revised SRL publications and Technical Newsletters; not a complete replacement of the basic publications.

No maintenance tape will be supplied for this release.

There is no change in the distribution concept.

For additional ordering information see Branch Office Manual, DP Sales Activity section.

If only the form numbered manuals are required, order them from Mechanicsburg -- not PID.

IBM World Trade Data Processing

69-119

PROGRAM ANNOUNCEMENT

OS/360 ENHANCED BY RELEASE 18

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

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[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

Published by DP Sales Publishing Services, WTHQ

OS/360 Release 18 can now be ordered. Shipments will begin the week of November 3.

Release 18, a significant step in the continuing enhancement of OS/360, provides your customers with many important improvements.

Highlights

Extensions in functional capability and expanded device support.
Over 55 incremental improvements in addition to those items previously announced for October 31 availability.
Corrections for over 1300 APARs including permanent corrections for approximately 300 PTFs and elimination of 39 Prose restrictions.

Other key items are:

System Management Facilities for MVT
USA Standard COBOL*
ISAM - Variable Length Record Support
Model 85 Support
Multiple Console Support
ABTERM/ABEND - Damage Assessment Routine
Device Support for over 248 Devices
Revised FORTRAN Library Math Functions

Future plans for Release 18 include:

A component Release
An updated Release 18

See the inside pages for:

Description of Components
Incremental Improvements
Component Releases and Updated Systems
Release Independent Components
PTF and Emergency Bypass Support
System Generation Planning
Announcement Documentation
Programming Systems Memorandum
64K SYSGEN
Prose Entries
Release 17 Publications Availability
Program Material and ordering instructions.

John Fahey
Director of DP Marketing

*On October 6, 1969, the United States of America Standards Institute, Inc. changed its name to American National Standards Institute, Inc. Documentation references to the Standard COBOL will be revised to reflect this name change.

FOR IBM INTERNAL USE ONLY

Release Date: October 31, 1969
Distribution: All Areas

The items originally scheduled for October 31 included in Release 18 are:

System Management Facilities (SMF)(P69-62).... Option available to MVT users ... gathers basic system information and statistics about each jobs use of the CPU, core storage and I/O devices. Graphic Job Processing (originally planned for the second release of SMF June 30, 1970) is supported in this initial release of SMF.

USA Standard COBOL (P68-145 and P69-88) ... A new COBOL compiler supporting the USA Standard COBOL is an integrated component of Release 18. This new compiler retains COBOL F's advanced features and includes new features of the USA Standard COBOL. Note restrictions detailed in P68-145. COBOL F will continue to be distributed and have normal maintainance for two years.

ISAM - Variable Length Records (VLR) (P69-97) ... The Indexed Sequential Access Method provides the ability to create and maintain Variable Length Records. In addition, the data set utility IEBISAM will handle Variable Length Records.

Model 85 Support (P68-44) ... Now available under MVT or MFT. The Model 85 has new features which require programming system support extensions. These extensions, which are in addition to the MVT and MFT capabilities already available, include:

CRT Operator Console Support
Extended precision floating point
extensions to Assembler F
Recovery Management Support

Multiple Console Support (MCS) (P69-30) ... An option provided under MFT, MVT and M65 MP. It supports a Multiple Console configuration which provides message routine to functional areas and increases systems availability through alternate consoles and console switching.

Model 65 Multiprocessing 2K Storage Reconfiguration (P69-14) ... Provides high system availability by permitting deallocation of dynamic storage from an interrupted job.

BTAM Support for the 2760 Optical Unit (P69-52) and the 2741 Communication Terminal (P69-23) is provided.

Model 65 MP Graphics and Assymetric Support Now Available (P69-39) . .

1. Graphic Programming Services
2. Graphic Programming Services for FORTRAN
3. Graphic Job Processor
4. FORTRAN Subroutines for Data Transmission between a S/360 M65 MP and an 1130
5. Job Control from an 1130 to a 2250 using the Satellite Graphic Job Processor.
6. Assymetric Support for the 1443, 2150, 2250, 2260, 2701, 2702, 2703, 2840, 2848.

Model 65 MP K Size Memory (269-25) ... Allows for up to 4 additional 2365-13 core storage units to be attached to the Model 65 Multiprocessor.

Incremental Improvements ... The following is a list of incremental improvements made in Release 18. Complete descriptions can be found in the Memo to Users section of the Consolidated Document (Y28-6681) and the Release 18 Guide (C28-6718).

Control Program

ABTERM/ABEND - A damage assessment routine will process those conditions that previously led to a wait-state.

Resident Reentrant Link Library Modules Option in MFT - Provides an option for making the OS/360 LOADER and user written reentrant link library modules resident in main storage for MFT users.

Dedicated Workfiles in an MVT Environment - Allow for preallocation of workfiles as specified in cataloged procedures for initiators.

Reduction of Device Mask and Name Tables - Saves core.

Step Dispatching Priority - Allows the user to specify dispatching priorities for each step or selected steps of a job.

Retained Volume Improvement - Provides more effective user control.

2870 Selector Subchannel Separation - Device allocation has been modified to treat selector subchannels on a 2870 channel as separate paths for data. Also, alternate selector subchannels may be specified.

Start Command Symbolic Parameters - Can be substituted for parameters in cataloged procedures.

MSGLEVEL Improvement - Provides better control of message printouts.

Universal Channel Error Support - Provides one set of device dependent error recovery procedures which contain full channel error support for CPU models 65, 67 (in 65 mode), 75, 85, and 91.

Identify Action Messages - Flags messages which require immediate action by the operator.

MOD 65 Recovery Management Support - Extended to include the multiple console support option.

Data Management, IOS and Increased Device Capabilities

Expanded Device Support - Increases to 768 the number of I/O devices that can be supported. The total number of devices and the maximum number of any one specific I/O device that is supported are a function of the total mix of I/O devices attached to the system and the particular Control Program option used. It also supports a second 2870 multiplexer channel on the System/360 Models 65, 67 (in 65 mode), 75, 85, 91, and 195. Refer to the SYSGEN SRL C28-6554 for details.

IOS Ordered Seeked Queueing - Minimizes arm movement for seeks by use of an improved queueing technique.

DOS to OS VTOC Conversion - Enables the use of standard OS/360 options for DASD allocation on volumes which have DOS data sets. This does not convert or permit reading of DOS data under OS, but enables packs initialized as DOS Packs to be used with OS.

User Totaling Facility for Sequential Access Methods - Provides the user with the ability to maintain a control total as he creates a data set for use during EOV and user trailer label processing. This facility is also available in the IEBGENER and IEBUPDTE utilities.

User Labels for Direct Access Devices are now supported.

MOUNT/DISMOUNT Message - Additional information provided.

Rewrite Volume Label - To correct density, create or destroy labels and eliminate certain ABENDS.

BTAM - Manual dial/answer WTC modems are supported. Also, the reliability and compatibility of BTAM binary synchronous communication support has been enhanced.

2420 Model 5 tape unit is now supported.

Verify DASD Volume Serial - When there is a possibility that a volume was incorrectly mounted.

BPAM missing directory space diagnostic - Terminate processing at OPEN time rather than after the data set has been created.

RJE

RJE Improvement Package - Provides increased throughput on the 2780 and CPU work stations operating on medium speed lines, reduces the amount of core storage needed for the RJE region or partition, improves the maintainability of the RJE system, and supports WTC switched and leased modems.

SYSGEN

I/O Device SYSGEN - Allows the user to add devices to an existing system without requiring a complete operating system generation.

Multiple Address Generation - Allows the user to specify a group of devices with consecutive addresses on one I/O DEVICE card.

User Job Card for Stage Two of SYSGEN - May be specified during Stage I.

Serviceability and Reliability

System Environment Recording (SER) - Routines for the Model 40 - 192K and the Model 50 - 384K storage sizes are provided.

OLTEP - Modified to allow the running of tape gap test on a tape drive attached to the hi-speed multiplexer channel 0.

Utilities

IEHLIST-LISTVTOC FORMAT option expanded.

IEHPROGM - Extended to scratch temporary MVT data sets.

Data Set Generator - Expanded to create and access records of an indexed sequential data set and to select fields from multiple input data sets to be used in creating an output record.

Control Card Scan - Provides improved diagnostics.

Graphics

GSP in Core Data Conversion Routines - Provides the FORTRAN programmer with the ability to dynamically change data formats.

GSP Performance - Improved coding eliminates loading of more than one copy of a GSP routine having an alternate entry point.

Graphic Programming Services - A new resident SVC has been utilized to provide improved response time when using the Graphics console.

GJP SYSOUT Data Set Display - Provides flexible routine enabling the user to decide if he wants hard copy of data sets created by GJP foreground jobs after viewing the data sets.

Compiler and Language Support

Revised FORTRAN Library Math Functions - The FORTRAN Library has been updated to take advantage of the improved floating point hardware, and certain algorithms have also been revised. The improved Floating Point EC (IFPEC) is a prerequisite to Release 18 FORTRAN.

FORTRAN VRE Support - Has been brought up to the standards for the spanned record type and will thus be compatible with data management creation and processing of such records. Previously created FORTRAN data sets are still usable within FORTRAN.

Assembler F OS/DOS Parm Field Option - Causes Assembler F to perform as DOS Assembler F. It will flag Q-CONS, DXDs, and CXEs and will not sort the RLD entries.

COBOL E NO SPIE Option - Enables user assembly language program interrupt analysis routine.

RPG Externally conditioned indicator option provided.

RPG Indexed Sequential Load/ADD allows creation of, and additions to, indexed sequential data sets.

Linkage Editor E - Expanded diagnostic messages for synchronous errors.

Compilers Statistics - Provide summary information about each source program compiled.

Component Releases and Updated Systems ... Subsequent to the availability of Release 18, IBM plans to provide a component release of PL/I F Version 5 to be made available on or before March 16, 1970. Any additional component releases will be announced as they become available.

An updated Release 18, similar to the updated Release 17, will be made available in 3 to 4 months. This updated release will contain PTFs and previously available release independent components.

Those users not requiring the new function or maintenance in Release 18 are strongly urged to defer ordering and installing Release 18 until the updated release is available.

Release Independent Components ... Many components such as compilers, sorts and utilities are release independent and may be used with and will be supported on the prior release. Release 18 components that will be supported on Release 17 include:

ALGOL	PL/I F
COBOL	USAS COBOL
FORTRAN E, G, & H	RPG
Assembler E and F	Linkage Editor E and F
LOADER	SORT/MERGE
OS/360 Utilities	Independent Utilities
TESTRAN	

Information on how these components are to be used and restrictions that apply are listed in the "Memo to Users" section of the consolidated document.

This will enable the Release 17 user to obtain the maintenance in these components, thus, providing him with an improved system until he decides to install Release 18 or the updated Release 18.

PTF and Emergency Bypass Support (Sales Manual GI 65.6) ... Field Engineering will diagnose problems on any OS/360 release regardless of level. They will apply PTFs or attempt to develop emergency bypasses on a given release of OS/360 for nine months following the availability of the next release of OS/360. PTF and Bypass Support for OS/360 Release 15/16 will be provided through December 24, 1969 and for Release 17 through July 31, 1970.

System Generation Planning ... Field Engineering representatives should meet with the customer prior to system generation to review known restrictions, PTFs and EC requirements. Appropriate PTFs should be installed before attempting customer operations. Information sources for this review include the announcement documentation, RETAIN, Installation Newsletters and the Release 18 Program System Memorandum (220-2004).

The FE Technical organization should be informed of any programming situation that prevents an OS/360 installation from advancing to Release 18.

Announcement Documentation ... The documentation listed below is sent with the PID order form to current OS/360 users of record. It is provided to enable the user to decide if he wishes to order Release 18 and, if so, to enable him to prepare for installing the release prior to receiving it from PID.

OS/360 Release 18 Guide (C28-6718) ... A new publication describing new and changed system features and requirements in Release 18. This SRL replaces the operational considerations section in the Memo to Users.

New and changed features
New and changed system parameters (JCL)
Planning for System Generation

OS/360 Release 18 Consolidated Document (Y28-6681) ... A consolidation of information pertaining to Release 18.

Memo to Users - A description of new features
Program Material and Publications List
List of APARs, Prose items, and PTFs resolved
Hardware E C Change Levels
Release 18 Ordering Instructions
List of modules changed, added or deleted

OS/360 System Programmers' Guide (C28-6550)

OS/360 Storage Estimates (C28-6551)

OS/360 System Generation (C28-6554) ... Copies of the above documentation are available to IBM locations through DAPS.

Programming Systems Memorandum ... Effective November 1, 1969 PSMs will be distributed to Branch Office Libraries as outlined in the distribution procedures. Additional quantities will also be available under normal ordering procedures. Effective December 1, customers will receive PSMs through SRL/SS and IBM personnel will use DAPS. The OS/360 PSMs Form 220-2004 will contain the same information currently available to the customer engineer in their Early Warning System Microfiche. This includes a program symptom index, descriptions of APARs, a list of available PTFs, Release 18 EC Requirements, plus other information pertinent to OS/360. The PSMs will be updated frequently, thus, providing current release status to both IBMers and customers.

64K SYSGEN ... A primary and secondary nucleus is provided with the starter system. The primary nucleus operates in 128K or larger storage. The secondary nucleus enables the user having 64K and three 2311 drives or a 2314 to perform a SYSGEN. Details are provided in the System Generation SRL (C28-6554).

Prose Entries ... Corrections have been made to 39 of the restrictions documented in the Release 17 System Prose. Starting with Release 18, all system restrictions (Prose Items) are converted to APARs. Separate system Prose is no longer provided.

Release 17 Publications Availability ... Publication Support for Release 17 will be provided until Release 19. Those accounts requiring additional copies of Release 17 publications may order them through the use of temporary numbers. Detailed ordering procedures are provided in the Accumulated Index of Publications, N20-0360. The ordering procedure for Release 18 publications is the same as for prior releases.

Reference Publications ... IBM System/360 Operating System, C27-6939-5 ... IBM S/360 Operating System Assembler Language, C28-6514-6 ... IBM S/360 Operating System Tape Label, TNL N26-0594 to C28-6680-1 ... IBM S/360 Operating System Report Program Generator Language, TNL N21-5101 to C24-3337-3 ... IBM S/360 Operating System: Job Control Language Charts, TNL N28-2399 to C28-6632-5.

Basic Program Material

See page 6

Optional Program Material, Ordering Information and Additional Program Material

See pages 7 and 8

BASIC PROGRAM MATERIAL - Available from PID.

The following SRL publications appropriate to the components ordered are shipped by PID with each initial order. Machine readable material is distributed as indicated below.

ALGOL Programmer's Guide	* C33-4000-1
Assembler E Programmer's Guide	* C28-6595-2
Assembler F Programmer's Guide	* C26-3756-4
COBOL F Programmer's Guide	C28-6380-3
Concepts and Facilities TNL N28-0250**	* C28-6535-5
Job Control Language	* C28-6539-9
Operator's Guide TNL N28-2413**	* C28-6540-9
System Programmer's Guide	① * C28-6550-6
Storage Estimates	① * C28-6551-8
System Generation TNL N28-2410** ①	① * C28-6554-6
System Control Blocks	* C28-6628-4
Messages and Completion Codes TNL N28-2418**	* C28-6631-7
Programmer's Guide to Debugging	* C28-6670-2
Advanced Check Point Restart	* C28-6708-2
COBOL E Programmer's Guide TNL N28-0248**	C24-5029-3
Basic Telecommunications Access Method	* C30-2004-3
QTAM Message Control Programs TNL N30-2526**	C30-2005-2
QTAM Message Control Processing Program TNL N30-2532**	C30-2003-3
On-Line Test Executive Program	* C28-6650-2
Supervisor and Data Management Services TNL N28-0800**	C28-6646-2
Supervisor and Data Management Macro-Instructions TNLs N28-0596, 0801**	C28-6647-3
Linkage Editor and Loader	* C28-6538-7
FORTRAN E Programmer's Guide	* C28-6603-3
FORTRAN G and H Programmer's Guide	* C28-6817-1
Graphic Programming Services for 2250 Display Unit	* C27-6909-5
Graphic Programming Services for 2260 Sub-Programs	* C27-6912-7
1130 System Introduction	C26-3709-4
FORTRAN Library Sub-Programs	** C28-6818-0
PL/1 F Comp Subroutines TNL N33-8004	C28-6590-1
1130 Programmer's and Operator's Guide TNLs N33-8057**	C26-3717-4
1130 Subroutine Library TNLs N33-8022, 8014, 8046, 8056**	C26-5929-4
Graphic Programming Services for FORTRAN IV TNL N27-1313**	C27-6932-3
Data Transmission for FORTRAN TNL N27-1316**	C27-6937-1
PL/1 F Programmer's Guide TNLs N33-8010, 8013**	C28-6594-4
TESTRAN Note - SRL C28-6648-0 plus TNLs N28-2249, 2270, 2303 and 2324 may be used in lieu of the SRL C28-6648-1	C28-6648-1
Remote Job Entry TNL N30-2522, 2530** 2521**	C30-2006-2
User's Guide for Job Control From the 2250 Display Unit	* C27-6933-2
SGJP User's Guide TNL N27-1315**	C27-6938-1
Sort/Merge TNL N33-8064**	C28-6543-5
Maintenance	* C27-6918-2
Utility Programs	* C28-6586-10
Consolidated Document	① * Y28-6681-2
Release 18 Guide	① ** C28-6718-0
USAS COBOL Programmer's Guide TNL N28-0264**	C28-6399-0

* Change from prior release.
** New with this release.
① Provided with announcement material to OS/360 users of record.

If only the form numbered manuals or additional manuals are required, order them from the IBM Distribution Center, Mechanicsburg -- not PID.

Machine Readable: The complete OS/360 is distributed as follows:

For the 2311 User - on two 2400 foot reels of magnetic tape, either 9-track (800 bpi), or two 7-track magnetic tapes (800 cpi Data Conversion Feature required), or one 9-track magnetic tape (1600 bpi), or four 1316 Disk Packs.

For the 2314 User - two 2400 foot reels of magnetic tape, either 9-track (800 bpi), or two 7-track magnetic tapes (800 cpi Data Conversion Feature required), or one 9-track magnetic tape (1600 bpi).

Program components may be selected from the following list. Each component for which program documentation and maintenance material is required must appear on the Program Order Form.

Component Name	Program Number
Primary Control Program (PCP and MFT).	360S-CI-505
Starter System (2311 SYSRES)	CI-514
Starter System (2314 SYSRES)	CI-534
MVT	CI-535
ALGOL	AL-531
Assembler E	*AS-036
Assembler F	AS-037
COBOL F	CB-524
USA Standard COBOL	**CB-545
COBOL E	CO-503
Basic Telecommunications Access Method (BTAM)	CQ-513
Queued Telecommunications Access Method (QTAM)	CQ-519
Primary Data Management	DM-508
Basic Direct Access Method (BDAM)	DM-509
SER 0, SER 1, EREP Mod/40, 50, 65 and 75	DN-527
On Line Test Executive Program (OLTEP)	DN-533
Recovery Management Mod/65	DN-539
Linkage Editor E	ED-510
Linkage Editor F	ED-521
FORTRAN IV E	FO-092
FORTRAN IV H	FO-500
FORTRAN IV G	FO-520
Graphic Programming Services	IO-523
Indexed Sequential Access Method (ISAM)	IO-526
Loader	LD-547
FORTRAN Library	LM-501
COBOL E Library	*LM-504
PL/1 F Subroutine Library	LM-512
COBOL F Library	*LM-525
ALGOL Library	LM-532
Graphic Subroutine Program	LM-537
1130/360 Data Transmission	LM-542
USA Standard COBOL Library	**LM-546
PL/1 F	NL-511
TESTRAN	PT-516
Remote Job Entry (RJE)	RC-536
Graphic Job Processor	RC-541
Satellite Graphic Job Processor (SGJP)	RC-543
Report Program Generator (RPG)	RG-038
Sort/Merge	SM-023
OS/360 Utilities	UT-506
Independent Utilities	UT-507

* Denotes no change with this release.
** Denotes new with this release.

Ordering Instructions

For new users the branch office must have the Program Order Form (120-1957-0). Current users of OS/360 will receive a preprinted Program Order Form and a letter announcing availability of the Release 18 instructing them to order the updated release through the branch office using this form. Complete ordering instructions are provided in the letter to users.

The preprinted order form must contain the program number of each OS/360 component (if being ordered for the first time) that requires program documentation and maintenance material.

Special Note for 2314 Direct Access Storage Facility Users

Tapes will be in the dump/restore format. A 2314 user having two or more 2311 Disk Drives but not tape may order the 2311-resident system using the 1316 Disk Pack as the distribution medium. System configurations which do not include either 2311s or tape must make local arrangements for a system with both 2314 and Tape to perform the tape-to-2316 Disk Pack restore operation.

OPTIONAL PROGRAM MATERIAL

The Optional program material is distributed with a condensed Symbolic Library. It is available from PID on 9-track magnetic tape (800 or 1600 bpi) or 7-track magnetic tape (800 cpi, Data Conversion Feature required). Magnetic tape is the only distribution media.

The requester may forward or order magnetic tapes following the current ordering procedures in the Branch Office Manual, DP Sales Activity section. The external tape label must show the distribution volume number as well as the information required under the current procedures.

Alphabetic suffix denotes separation of a single component into separate files. When

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ordering the component the alphabetic suffix should not be used. See GI 14.2 for complete information before ordering additional program support material.

Program Number Extension	Program Component Name	Program Number
VOL1	PL/I F	360S-NL-511A
		360S-NL-511B
VOL2	PL/I F	360S-NL-511C
		360S-NL-511D
VOL3	PL/I F	360S-NL-511E
		360S-NL-511F
	PL/I F Subroutine Library	360S-LM-512A
		360S-LM-512B
VOL4	1130/360 Data Transmission	360S-LM-542
	FORTRAN E	360S-FO-092
	FORTRAN G	360S-FO-520
	FORTRAN H	360S-FO-500
	FORTRAN Library	360S-LM-501
VOL5	**USAS II COBOL	360S-CB-545A
		360S-CB-545B
	**USAS II COBLIB	360S-LM-546
VOL6	COBOL E	360S-CO-503
	COBOL F	360S-CB-524A
		360S-CB-524B
	*COBOL F Library	360S-CB-525
	*COBOL E Library	360S-LM-504
	ALGOL	360S-AL-531
	ALGOL Library	360S-LM-532
VOL7	SORT/MERGE	360S-SM-023A
		360S-SM-023B
		360S-SM-023C
VOL8	*Assembler E	360S-AS-036
	Assembler F	360S-AS-037
	Linkage Editor E	360S-ED-510
	Linkage Editor F	360S-ED-521
	LOADER	360S-LD-547
VOL9	TESTRAN	360S-PT-516
	Basic Telecommunication Access Method	360S-CQ-513
	Queued Telecommunication Access Method	360S-CQ-519
	Basic Direct Access Method	360S-DM-509
	Indexed Sequential Access Method	360S-IO-526
	Graphic Program Services	360S-IO-523
	Graphic Subroutine Program	360S-LM-537
VOL10	Primary Data Management	360S-DM-508A
		360S-DM-508B
	DNSERX	360S-DN-527
	On-Line Text Executive Program	360S-DN-533
	Recovery Management-Model 65	360S-DN-539
VOL11	Primary Control Program	360S-CI-505A
		360S-CI-505B
		360S-CI-505C
VOL12	MVT	360S-CI-535
		MACRO
	OS/360 Utilities	360S-UT-506A
		360S-UT-505B
VOL13	Independent Utilities	360S-UT-507
	Remote Job Entry	360S-RC-536
	Graphic Job Processor	360S-RC-541
	SGJP	360S-RC-543
	Report Program Generator	360S-RG-038

Alphabetic suffix denotes separation of a single component into separate files.

* Denotes no change with this release.
** Denotes new with this release.

ORDERING INFORMATION: System Number 360S

Note: Basic machine readable material for this system is ordered by specifying a "System Line" (Columns 1-7, 15-24) and "Component Lines" (Columns 8-12) of the Program Order Form. Enter a separate Component Line for each component desired. Respecify the System Line for each different Program Number Extension.

Current users who do not order Release 18 will remain on the address file.

	Program Number Extension	Distribution Type	Medium Code	User Volume Requirement
Basic	2311	MT	7DC/800 26	02
		MT	9/800 28	02
		MT	9/1600 29	01
		1316	52	04
	2314	MT	7DC/800 26	02
		MT	9/800 28	02
		MT	9/1600 29	01
Optional †	VOL1	MT	7DC/800 26	01
	thru	MT	9/800 28	01
	VOL13	MT	9/1600 29	01

† For each program number extension (VOL1 to VOL13) that is specified, a separate reel of magnetic tape is required.

ADDITIONAL PROGRAM MATERIAL

Program Logic Manuals (available from the IBM Distribution Center, Mechanicsburg)

COBOL E	Y24-5009-1, TNLs Y28-6385, Y28-6393, 6398
ALGOL F Compiler	Y33-8000, TNLs Y33-8001, Y33-8003
Assembler E	Y26-3598
Assembler F	Y26-3700
RPG	Y26-3704, TNLs Y21-0006, Y21-0011
Graphic Problem Oriented Routines	Y27-7110-1
Graphic Access Method	Y27-7113-4
MFT Control Program	Y27-7128-4
Graphic Programming Services for FORTRAN	Y27-7152-1
Graphic Job Processor	Y27-7159, TNLs Y27-7128, Y27-7180
System/360-1130 Date Transmission for FORTRAN	Y27-7161-0, TNL Y27-7194
System/360 Job Processing for a Remote 1130/22 Subsystem	Y27-7166-0, TNL Y27-7192
Machine Check Handler	Y27-7184
Model 65 Recovery Management	Y27-7155-2
COBOL F	Y28-6382-2
Sort/Merge	Y28-6597-3
FORTRAN E	Y28-6601-2, TNLs Y28-6383, 6819, 6827, 6828
Sequential Access Method	Y28-6604-2
Introduction to Control Program Logic	Y28-6605-4 TNL Y28-2392
Catalog Management	Y28-6606-1
Direct Access Device Space Management	Y28-6607-5
Input/Output Support (OPEN/CLOSE/EOV)	Y28-6609-3
Linkage Editor E	Y28-6610-2, TNLs Y28-2301, 2356, 6400
Linkage Editor F	Y28-6667, TNLs Y28-2357, 6401
TESTRAN	Y28-6611, TNL Y28-2371
Fixed Task Supervisor	Y28-6612-4, TNL Y27-7189
P C P Job Management	Y28-6613-4
Utilities	Y28-6614-5
Input/Output Supervisor	Y28-6616-5
Basic Direct Access Method	Y28-6617-3, TNL Y26-8019
Indexed Sequential Access Method	Y28-6618-3
FORTRAN G	Y28-6638-1, TNLs Y28-6826, 6829
FORTRAN H	Y28-6642-3, TNL Y28-6830
On-Line Test Executive	Y28-6651-2
MVT Logic Summary	Y28-6658-3
MVT Supervisor	Y28-6659-4
MVT Job Management	Y28-6660-4
Initial Program Loader and Nucleus Initialization Program	Y28-6661-2
PL/I (F)	Y28-6800-3, TNLs Y33-6002, 6004, 6005
PL/I (F) Subroutine Library	Y28-6801-4, TNL Y33-6006
Update Analysis	Y28-7106
Basic Telecommunications Access Method	Y30-2001-2, TNLs Y30-2511, 2518, 2525
QTAM	Y30-2002-2, TNL Y30-2527
Remote Job Entry	Y30-2005-2, TNL Y30-2523
OS/360 Release 17	Y28-6681-2
Master Index	Y28-6717
ALGOL to PL/I LCP	Y33-7006
COBOL to PL/I LCP	Y33-7007
FORTRAN to PL/I LCP	Y33-7000
USA Standard COBOL	Y28-6395
Loader	Y28-6714, TNL Y28-2401

Program Listings: Operating System/360 program listings are available on microfiche from IBM Corporation, Department 906, Highway 52 and Northwest 37th Street, Rochester, Minnesota 55901, in the following groups:

Program Listing	Group Code
S/360 OS Primary Control Program	1010
Primary Data Management	1010
Basic Direct Access Method	1010
Indexed Sequential Access Method	1010
OS/360 Utilities	1010
Independent Utilities	1010
BTAM	1016
QTAM	1017
MVT	1012
On-Line Test Executive Program	1010
Remote Job Entry	1015
ALGOL Compiler and Library	1025
Assembler E	1030
Assembler F	1035
COBOL E	1040
USAS COBOL	1042
COBOL E Library	1048
COBOL F and Library	1045
FORTRAN E	1050
FORTRAN G	1052
FORTRAN H	1055
FORTRAN Library	1058
PL/I F	1060
PL/I Library	1068
Linkage Editor E	1070
Link Editor Loader	1072
Linkage Editor F	1075
SER0, SER1 and EREP for Models 40, 50, 65 & 75	1076
Recovery Management	1077
Sort/Merge	1080
TESTRAN	1085
Graphic Programming Services	1090
Graphic Job Processor	1090
Graphic Subroutine Program	1090
SGJP	1092
RPG	1095
OS 1130/360 Data Transmission	1094

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DOS/360 GAINS NEW CAPABILITIES AND FLEXIBILITY

Four new features will be added to the Disk Operating System/360 as part of IBM's continuing objective of enhancing DOS.

They are:

- **Standard Foreground Assignment**
- **Device Release Capability**
- **CATALR Statement to SYSPCH**
- **Tape Error Statistics by Volume**

The first three give the DOS/360 user increased multiprogramming flexibility and ease of operation. The fourth enables the customer to pinpoint the tape reels causing performance degradation. Together, they represent new tools to increase system utilization and improve thruput.

Availability -- June 30, 1970.

Here are the improvements in more detail.

Standard Foreground Assignments

The ASSGN supervisor generation Macro is being expanded to permit standard device assignments for all three partitions. This extends to the foreground partitions the capability formerly restricted to the background.

Device Release Capability

The new RELEASE Macro, available to assembler language users, is being added to DOS to allow for device release at object time. When a programmer logical unit is no longer needed by the program this Macro can be used to free the device.

CATALR Statement to SYSPCH

Job Control will be modified to accept a CATALR statement, thus high level language users gain the ability to compile and catalog to the relocatable library within the same job. Because of the necessity for resequencing the output of the RPG compiler, it is excluded from this facility. To use this feature, a magnetic tape or 2311 disk extent must be available to serve as intermediate storage.

In addition, the tape error statistics available from DOS have been refined.

Tape Error Statistics By Volume

Two functions, for deriving information about read and write errors for tape volumes, to be added to DOS are: Error Statistics by Tape Volume (ESTV) and Error Volume Analysis (EVA). ESTV collects error statistics which may be placed on a direct access device or written on SYSLOG. EVA notifies the system operator if a user-defined threshold of temporary read or write errors has been exceeded. By using these new capabilities, tape volumes requiring remedial action can be more readily identified.

Publications -- SRL publications will be available at release time.

Classification -- Type I with Programming Service Classification of A.

John Fahey
Director of DP Marketing

SEE REVERSE SIDE FOR "NOTE TO WORLD TRADE READERS".

Published by DP Sales Publishing Services, WTHQ

FOR IBM INTERNAL USE ONLY

Release Date: October 31, 1969
Distribution: All Areas

Note to World Trade Readers

This letter is a reprint of an IBM Programming Announcement and was mailed concurrently to USA and WT offices. The following changes, when appropriate, should be applied to the text for WT use.

[1] All programs announced as available have been shipped to the appropriate WT Program Libraries. Programs and associated material may be ordered as indicated on pages 9013 through 9017, Programming Section, WT DP Sales Manual.

[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

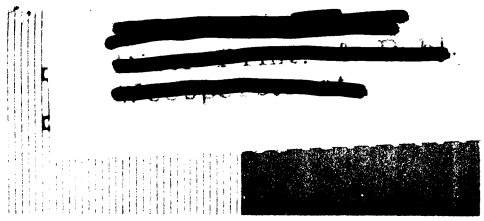
[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any references made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.



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69-123

PROGRAM ANNOUNCEMENT

OS/360 DATA SET COPY UTILITY GAINS ADDED CAPABILITIES

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[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

Published by DP Sales Publishing Services, WTHQ

The new version of the OS/360 Data Set Copy Utility creates new partitioned data sets (PDSs) or merges existing PDSs into one. It can be used for selectively creating system or application libraries and maintaining existing PDSs. In addition to its new functions and improved performance, the new version retains control card and functional compatibility.

Capabilities

- Copy more than one PDS per operation
- Rename selected members of a PDS
- Select or exclude members from one or more input PDSs
- Replace identically named members
- Compress a PDS in place
- Perform a two-way merge of n PDSs
- List, by input PDS, names of members copied onto an output PDS

New functions not available via the existing version of IEBCOPY or IEHMOVE Utilities

- List the number of unused directory blocks
- List the number of unused tracks in the PDS

Storage Requirements ... IEBCOPY runs under control of all versions of OS/360, with a minimum 28K partition or region plus buffers.

Performance ... Can yield a performance increase of 6 to 1 over the existing IEBCOPY and IEHMOVE as well as the copy phase of Stage II of SYSGEN. Performance improvements depend on CPU model, available core, PDS size, options used, and device characteristics.

Availability ... September 30, 1970 as Type I program with Programming Service Classification of A.

Reference Publications ... Utilities SRL, C28-6586 ... Utilities PLM, Y28-6614 ... OS/360 Storage Estimates, C28-6551 ... OS/360 Messages and Codes, C28-6631.

John Fahey

John Fahey
Director of DP Marketing

FOR IBM INTERNAL USE ONLY

Release Date: November 17, 1969
Distribution: **All Areas**

IBM World Trade Data Processing

69-123A

Program Announcement

IBM SYSTEM/360 MODEL 44 PROGRAMMING SYSTEM DISK RESIDENT ALGOL COMPILER

The Model 44 ALGOL Compiler, which was announced in P69-28A, will not be available as a Type II Program.

Branch Offices can order it from the European Program Library for their customers as a Type III Program beginning January 1, 1970.

Please advise all customers affected by this change.

John Fahey
Director of DP Marketing

Reference: Program Announcement P69-28A

Release Date: November 17, 1969

Distribution: All Areas Except Canada

69-124

IBM World Trade Data Processing

PROGRAM ANNOUNCEMENT

OS/360 SYSTEM MANAGEMENT FACILITIES SUPPORT EXPANDED

The System Management Facilities (SMF) Extensions are an option of the announced SMF support (P69-62) applicable to MFT, MVT and MP65. The extended support gathers, formats, and records basic data set, volume and direct access space information. An installation may make use of this information as a basis for more effective control of data sets, volumes and DASD space.

Availability -- June 30, 1970.

Highlights -- When SMF Extensions are selected at Initial Program Load time the functions available are:

Collection of data set related information -
- Frequency of use
- Amount of direct access space used
- A record of change in status as a result of scratch and rename functions

Collection of volume related information -
- Frequency of use
- Amount of unallocated space
- A record of tape volume usage

SYSOUT Control
An optional parameter has been added to the DD JCL statement to allow the user to limit the number of logical records written to SYSOUT data sets. A user exit is provided to give the installation control when this limit is exceeded.

Performance -- There is no impact on the system due to SMF Extensions if this option is not chosen at System Generation time.

The performance impact on the system due to SMF Extensions when functioning can be less than 3%. The amount of this impact is dependent upon the following:

- SMF buffer size
- SMF data set device used
- SMF data set allocation size
- SMF Extensions selected
- Number of jobs run per day
- Execution time of the new installation exit routine
- Resident or transient modules
- User data set activity
- Volume dismounting activity

Typical Data Set Library

Storage Requirements -- Approximately 200 bytes of additional storage are required in resident nucleus routines. Additional code is added to I/O support and DADSM modules. If I/O support and DADSM functions are transient, there is no additional core requirement. If these functions are resident, a maximum of 3,000 additional bytes of storage is required.

In addition, problem program core storage space is required. GETMAINs are used to obtain core to build SMF records. For tape and single volume DASD records, the GETMAIN is no greater than 320 bytes. For multi-volume DASD records, the size of the GETMAIN depends upon the number of volumes. Each additional volume requires 25 more bytes.

Publications

The Planning for System Management Facilities SRL (C28-6712) will be updated to provide planning information for SMF Extensions.

Classification -- Type I with Programming Service Classification of A.

John Fahey
Director of DP Marketing

Published by DP Sales Publishing Services, WTHQ

SEE REVERSE SIDE FOR "NOTE TO WORLD TRADE READERS".

FOR IBM INTERNAL USE ONLY

Release Date: November 20, 1969
Distribution: All Areas

Note to World Trade Readers

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[2] Advance copies of the form numbered publications mentioned in the above either have been shipped (with additional copies available from the IBM Distribution Center, Mechanicsburg, Pennsylvania) or will be shipped when available. In the case of the latter, availability will be announced in the Weekly DP Marketing Publications Release Letter.

[3] When a new version of a program is announced, current users must order it; they will not receive it automatically nor will they necessarily receive a prepunched request card in their Area.

[4] Programming distribution media may be different in this area based on local conditions although DTR, disk packs, etc., may be indicated.

[5] All references made to the Program Information Department (PID) should be understood to mean the appropriate WT Program Library.

[6] Any references made to DPD Departments (or regions) as sources of information or for manuals, etc., should be understood to mean the comparable WT Department (or corresponding organizational level).

[7] Communications facilities or services may be required which are not offered in all WT countries. In case of any doubt as to the availability of suitable communications facilities, the country Teleprocessing Coordinator should be consulted.

[8] References made to Engineering Change requirements should be verified with the local CE office. Although E/C requirements are identical for WT and IBM, availability and shipping dates will differ. NO PRODUCTION COMMITMENTS FOR PROGRAMS WITH E/C LEVEL REQUIREMENTS SHOULD BE MADE TO CUSTOMERS PRIOR TO VERIFICATION WITH LOCAL CE MANAGER OF EC AVAILABILITY.

[9] World Trade now identifies certain current programs with a programming Service Classification of A, B, or C. Programming services to WT customers remain unchanged for programs classified A or B and for programs available only in World Trade. After January 1, 1970, Programming services for programs classified C will not include centralized Authorized Program Analysis Report (APAR) programming service or automatic distribution of corrections.

DEVICE INDEPENDENT DISPLAY OPERATOR CONSOLE SUPPORT

Device Independent Display Operator Console Support (DIDOCS) is an option of OS/360 MFT and MVT that will provide uniform display operator console support. When using DIDOCS, Multiple Console Support (MCS) must be included in the system. MCS will provide the hard copy log required when using a display console. This log can be on a console with a printing device, or can be written in the system log data set.

DIDOCS is consistent with the currently announced Model 85 Operator Console Support and will take advantage of device dependent features of each display (such as the use of the light pen on the 2250 for message deletion). Devices to be supported include the:

- Model 91 Display Console (under MVT only).
- 2250 Model 1 and 3 with Light Pen (optional), Alphameric Keyboard, Character Generator and 4,096 and 8,192 byte buffer.
- Model 85 Operator Console Feature 5450.
- 2260 Model 1 connected to a 2848-Model 3 (Direct S/360 Channel Attachment only) with Alphameric Keyboard and Line Addressing.

This new 2250 support (DIDOCS) offers the following advantages over the current 2250 support:

- Human factors improvements have been added.
- Automatic message deletion is supported.
- Special indicators are used to focus attention on message status.
- Action messages will require special action to be deleted, therefore, these messages will normally remain displayed until the required action is taken.

The current 2250 support (with and without MCS) will be withdrawn when DIDOCS is released. This means that MCS will be mandatory for use of 2250 console support. The Display Command List and Display Unit Status commands which are unique to the current 2250 support will no longer be available.

Support of the 2260 as an operator console provides small display consoles that may be placed as needed in the machine room. Using MCS, the appropriate messages may be routed to each of these consoles. In addition, all the hard copy type consoles announced under MCS are also supported. This provides greater flexibility for each customer to configure his installation to meet his needs.

DIDOCS will be available September 30, 1970, as Type I with Class A Programming Service Classification.

Resident main storage requirements will vary depending on the number of CRT devices used as consoles and the type of devices used. With DIDOCS, 200 bytes will be required for use by all CRT consoles plus the following main storage requirements necessary for each device in the total configuration.

2250 or Model 91 Display Console	5K requirement
Model 85 Operator Console	4K requirement
2260 Display Console	2K requirement

The Multiple Console Support storage requirements must be added to these figures to determine the total amount of main storage required.

John Fahey
Director of DP Marketing

Note to World Trade Readers

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IBM World Trade Data Processing

Letter No. 69-246
June 11, 1969

Miscellaneous Announcement

BRANCH OFFICE
RPQ REFERENCE LIST

Occasionally, non-standard machine functions or special features are required to satisfy customer system design requirements. When this is the case, a Request for Price Quotation (RPQ) is used to request a price for a custom-engineered feature, modification, or special product that can handle the application. A Branch Office RPQ Reference List (Form No. Z19-0007) consisting of the most commonly supplied RPQ's is now available. This publication has been distributed, through DAPS, to your Literature Coordinators and additional copies are available from the IBM Distribution Center, Mechanicsburg, Pa.

This list is designed for use at the Branch Office level. To order a listed RPQ, it is only necessary to submit a DP Machine Order (DPMO) or Miscellaneous Equipment Specification (MES) as you would for a standard machine or feature order. No RPQ form is necessary. See WTC Instruction Manual, Section 2-10, Machine (M) pages.

Revisions will be made on a quarterly basis and addendums issued as required between quarterly issues.

John Fahey
Director of DP Marketing

Attachments [2]: RPQ 1 and RPQ 5

Distribution: All Areas