



Letter No. 68-201  
January 3, 1968

Product Announcement

IBM System/360 Model 25

A New Price/Performance Dimension

Introduction of the IBM System/360 Model 25 offers time-proven System/360 concepts and performance at a price range especially attractive to the small-to-intermediate computer users. The Model 25 performance approaches that of the Model 30 but at a price below the Model 30. A typical 16K 2 disk Model 25 rents for as low as \$5,150 using the native attachment of the 2540 and 1403.

Highlights

- Newly designed console for ease of operation
- Major World Trade Language Groups available at no charge
- Integrated input/output attachments with consequent reduction in price, space and overall power requirements
- High speed data flow and processing with system control and emulation handled by micro-coded routines from a reserved control storage area
- Full System/360 program compatibility
- 1401/1460 and 1440 compatibility as optional features to ensure customer growth into System/360 (except 1301 emulation)
- Same powerful System/360 instruction set
- Proven programming systems support (BPS, BOS/TOS/DOS)
- Proven applications systems support
- Decimal arithmetic as standard feature and floating point arithmetic as optional - no charge feature
- Wide range of System/360 I/O devices via standard interface and optional Multiplexer or Selector channel

New elements of Model 25 are:

Integrated Input/Output attachments -- This design concept applies to the most commonly used I/O devices. Control units and power supplies, previously separately required for connecting a console printer-keyboard, card reader/punch, printer and disk files to the CPU, are now incorporated in the CPU. "Integrated attachment" permits CPU interface with these I/O devices and provides for overlap of each unit with the processor and with each other.

Micro-coding -- System control and emulation are handled by micro-coded routines from a reserved control storage area. These routines employ control words that perform the actual data handling. This method of control requires less circuitry, contributing significantly to the Model 25's low cost, while providing a more flexible control function. To switch from the System/360 mode to the 1400 mode, the system must be reinitialized by loading the appropriate control initialization deck.

Monolithic circuitry -- This new technology has been applied to produce a high speed working storage unit which contributes to the new Model's high performance.

Prices

<u>Model</u>	<u>Rental (MAC)</u>	<u>Purchase</u>	<u>MMMC</u>
D (16,384 bytes)	\$ 1,435	\$ 70,300	\$ 195
DC (24,576 bytes)	2,010	101,300	220
E (32,768 bytes)	2,560	132,300	230
ED (49,152 bytes)	3,410	180,700	240
Integrated 2540 Attachment #4595	275	13,970	16
Integrated 1403 Attachment #4590	450	22,860	45
Integrated 2311 Attachment #4598	370	18,800	35
Multiplexer Channel #5248	150	7,620	10
Selector Channel #6960	150	7,620	10
1401/1460 and 1440 Compatibility #4450	100	5,080	6
Disk Storage Operations #4466	NC	NC	NC
1403/2 Multiple Character Set #5110	10	450	1.75
(Prerequisite Multiple Character Set Adapter #5100)	15	720	3.50
Integrated 1052 Attachment #4599	NC	NC	NC
Interval Timer #4760	58	2,200	2.75
External Interrupt #3895	21	800	.25
Direct Control #3274	110	4,200	1.25
Storage Protection #7520	168	6,400	1.50

See reverse side for Minimum Configuration, Programming, Source, Delivery, RPQs, Education Allowance, Program Testing Allowance, Conversion Rental Allowance, Publications and Promotional Support.

  
John Fahey  
Director of DP Marketing

### Sales Compensation Plan

Normal sales compensation plan provisions apply. In addition, the Model 25 will qualify as a requisite system under Schedule A. Model 25 will have an out-of-territory quota point value of 2,000 (add to Schedule C-Group 3, Type 360/25, ID 2025, Points -- 2,000).

### Minimum Configuration

Each Model 25 requires at least a CPU, a card reading device and a console. IBM's ability to service configurations not having these components may be impaired with an effect on systems availability.

### Programming

The System/360 Model 25 can utilize the proven System/360 Application and Programming systems support of the Model 30. Existing BPS/BOS/TOS/DOS, programs apply to the Model 25 within its storage capacity, channel and integrated I/O attachment capabilities.

### Source

Mainz, Germany and U. S. A.

### Delivery

First shipments of the System/360 Model 25 will start in 4th Quarter 1968. First Customer Shipments are planned for February 1969. The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate Orders and Schedules Department on a sequential basis. No commitments to customers are to be made until such dates are received in the Branch Office.

### RPQs

RPQs will be accepted at announcement with response time dependent upon complexity.

### Education Allowance

The Model 25 is eligible for a 10% allowance to institutions qualifying under the College and University or the Junior College Programs (not to Post High School or Secondary School Programs).

### Program Testing Allowance

Program testing allowances for new core size models not previously covered under "S/360 - Eligibility Time" will be:

Model DC	24,576 bytes	10 hours
Model ED	49,152 bytes	12 hours

Pre-Installation and Post Installation Testing covered under the provisions of the Program Testing Policy are applicable to the System/360 Model 25.

### Conversion Rental Allowance

Qualified Systems on rent with IBM being replaced by a S/360 Model 25 will be eligible for the "2 month - 10% of use" allowance covered under the System/360 Conversion Rental Program.

### DP Orders and Movements Codes

<u>Type</u>	<u>Model</u>	<u>Product Line</u>	<u>Product Category</u>
2025	D00	6	62
	DC0	6	62
	E00	6	62
	ED0	6	62

### Publications and Promotional Support

Advance copies of the following publications have been shipped and additional copies are available from Mechanicsburg:

System/360 Model 25 Functional Characteristics (A24-3510)... TNL N22-0286 System/360 System Summary (A22-6810)... System/360 Model 25 Configurator (A24-3511)... System/360 Input/Output Configuration (A22-6823)... System/360 Model 25 1401/1460 and 1440 Compatibility Features (A24-3512)

The following promotional material also is available:

Model 25 Brochure (520-2052-0)... Also, fifteen industry brochures; Petroleum Marketing (520-2037-0)... Utilities (520-2038-0)... Science, Engineering and Management Science (520-2039-0)... Distribution (520-2040-0)... Colleges and Universities (520-2041-0)... Financial (520-2042-0)... Federal Government (520-2043-0)... Life Insurance Companies (520-2044-0)... Property and Liability Insurance Companies (520-2045-0)... Hospitals (520-2046-0)... Manufacturing Industries (520-2047-0)... Paint Industry (520-2048-0)... Foundries (520-2049-0)... State and Local Government (520-2050-0)... Communication Industry (520-2051-0)

The following publications will be available in the near future. Consult your Weekly Publications Release Letter for actual availability.

TNL N19-0019 System/360 Installation Manual -- Physical Planning (C19-0001)... System/360 Model 25 Marketing Guide (Z20-1866)

The following promotional material also is available:

Slides and script (V20-0162)... Flip Chart Presentation (V20-6060)... Facts Folder (520-2064) and Proposal Insert (221-0478-0)



Product Announcement

IBM SYSTEM/360 MODEL 65  
MULTIPROCESSING EXPANDS COMPUTING CAPABILITY

Introduction of the System/360 Model 65 Multiprocessing System makes available an efficient new way of handling today's mounting computer workloads--the sharing of main storage multiprocessing in which the two processors execute the same or different programs simultaneously under supervision of a single control program. Making possible this multiprocessing capability on the Model 65 are three features, all of which are field installable: Shared Storage Feature # 7130 and two Multisystem Features #4951 and 4952.

Highlights of the new multiprocessing system are:

GROWTH

- . System/360 compatible through the use of OS/360 (MVT).
- . Additional processor capability provides for peakload handling allowing the system to utilize its full resources at any time to match the total workload.
- . Ability to separate multiprocessing system into two stand-alone Model 65s for special applications.

IMPROVED UTILIZATION OF RESOURCES

- . Single supervisor and single job queue . . . Any task, following a wait for I/O, or any other interruption, can be executed in either processor, regardless of which processor originally initiated the task.
- . Shared I/O and main storage . . . I/O units of the entire system (those yet unallocated) are allocatable to any job at any time. Processors, each having up to seven channels, share as much as one million bytes of main core storage, with all problem-program main storage locations available for allocation to any jobs.
- . Improved resource management and operational economics . . . These are made possible via a single multiprocessing system which, unlike two separate systems, uses single job stream logistics, simplified volume library logistics and single data bank maintenance.
- . Load balancing--The single supervisor program automatically utilizes the capabilities of both processors and all channels to maintain load balance and minimize job wait-time. Channel bottlenecks are minimized since both processors can have access to all devices via the use of two channel switches.

CRITICAL SUBSYSTEM AVAILABILITY

- . Reconfigurability of all units of the Model 65 processor, which means fewer long-duration (one to two hours) outages than with a single processor system. A configuration control panel enables units that need servicing to be dropped out of the system in a matter of minutes.
- . Error detection and correction capabilities--Programs are available which can automatically eliminate the effect of a significant number of intermittent failures that occur in either the channels and/or processors.

COMPONENTS

The Model 65 Multiprocessing System consists of two 2065 Processing units, two, three or four 2365 Model 2 Processor Storage Units, and the necessary I/O units as required by the customer. Three core sizes are available:

<u>Model</u>	<u>Bytes</u>
I	524,288
IH	786,432
J	1,048,576

The system is controlled by a single program supervisor with Type 1 support under OS/360 (MVT) (See P68-2). Maximum efficiency is gained by allowing a control and data path from each 2065 to each I/O device via a two-channel switch feature on the I/O control units.

NEW FEATURES

Feature #7130 must be installed on each 2365-2 Storage Unit. The processors which share these storage units require Feature #4951 and #4952 (one feature on each processor).

Multiprocessing features are field installable to minimize system expansion problems. (The 2803 Model 1 and 2821 two channel switches cannot be field installed as already indicated in the Sales Manual).

Distribution: All Areas

All presently announced features of the System/360 Model 65, except the 2361 Core Storage Unit (LCS), are available in a multiprocessing system to permit user growth from a simplex system. (Refer to P68-2 for programming support)

#### DEMONSTRATIONS

A Model 65 Multiprocessing System is currently operating in one of IBM's development laboratories. IBM has collected customer jobs and successfully run them on the system. It is our plan to have limited facilities available to demonstrate the system. Details will be released at a later date.

#### PROPOSALS

All customer proposals must be written and submitted for approval by Country and/or Area Systems Assurance departments prior to a firm IBM/WTC commitment to a potential customer. In the case of teleprocessing configurations, Country and/or Area Systems Assurance must obtain concurrence of WTHQ Product Marketing - Large Systems before granting approval to bid.

#### PRICES

	<u>RENTAL</u>	<u>PURCHASE</u>	<u>MMC</u>	<u>FIC</u>
Multisystem Feature (#4951)	\$2,435	\$120,800	\$145	PCR
Multisystem Feature (#4952)	2,435	120,800	145	PCR
Shared Storage Feature (#7130)	415	20,530	42	PCR

#### SALES COMPENSATION PLAN

Normal Sales Compensation Plan Provisions apply.

#### DELIVERY


The first customer shipment will be in 1Q 1969. This date includes field installed features and plant installed features.

#### RPQs

New RPQs with the multiprocessing features will be accepted after November 1, 1968. Response time depends upon complexity of the request. Delivery of approved RPQs will begin six months after first customer shipment. Existing 2065/2365 RPQs are not necessarily compatible with the multiprocessing features. An RPQ requesting compatibility/capacity check must be submitted to Special Equipment Engineering prior to quoting existing RPQs for new multiprocessing orders, or upgrading of 2065/2365 with RPQs installed, to multiprocessing systems.

#### PROMOTIONAL SUPPORT

A slide presentation and script (V20-0161) and brochure (520-2056) are being provided in support of the Model 65 Multiprocessing System. V20-0161 is available only on an initial distribution from Country Product Marketing Depts. while 520-2056 will be shipped under DAPS with additional copies obtainable from the IBM Distribution Center, Mechanicsburg. Consult the weekly Publications Release Letter for availability.

  
John Fahey  
Director of DP Marketing



Product Announcement

System/360 Model 20  
2152 Printer-Keyboard

The new IBM 2152 Printer-Keyboard gives the System/360 Model 20 more versatile input/output capabilities, particularly for the disk storage customer or prospect requiring a console inquiry device. Information requested directly from disk storage can be retrieved quickly, in printed form, with a minimum of disruption in normal processing.

As an input device, the 2152 can enter variable job parameters (calculation factors, program decision information, etc.). As an output machine, the 2152 can print exception reports during processing (re-order information, check-out bills, over-limit reports, etc.).

Machine Highlights

- Selectric I/O Typewriter with standard paper guide.
- Standard System/360 print element (88 characters) with major World Trade languages at no additional charge.
- Overlapped with other card I/O and processing operations.
- Pin feed platen (13 1/8" pin to pin) offered as standard. Friction feed platen is optional.
- 125-character line - 10 characters to the inch - 15.5 characters/sec.
- Six lines per inch vertical spacing (eight lines per inch optional).
- Standard typewriter table (48" long, 24" deep, 29" high).
- Cable length up to 25 feet.
- Paper stack is optional.

Programming

The 2152 is supported in Model 20 DPS (Disk Programming System) as an inquiry device and as a secondary printer. (Refer to P68-1.)

Prices

	<u>Rental (MAC)</u>	<u>Purchase</u>	<u>MMMC</u>
2152 Printer Keyboard	\$ 135	\$5,600	\$61.00
2152 Attachment (#8070)*	90	4,500	4.50
*2020 B2, C2, BC2, D2 with Serial No. over 20,000 is a prerequisite for the 2152.			
Forms Stand Stacker (#4450)	---	60	NC

Sales Compensation Plan

Normal selling and installing quota points apply under the terms of the DP Sales Compensation Plan.

Educational Allowance

The 2152 is eligible for the same education allowance provided for the System/360 Model 20. See DP Letter 66-270.

Test Time

No additional test time has been assigned to the 2152.

Delivery Schedule and Source of Supply

Initial customer shipments for plant and field installation are planned for October 1968 from Italy and U.S. The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate Orders and Schedules Department on a sequential basis. No commitments to customers are to be made until such dates are received in the Branch Office.

DP Orders and Movements Codes

<u>Type</u>	<u>Models</u>	<u>Product Line</u>	<u>Product Category</u>
2152	001	6	58

RPQs

The addition of an 8070 limits space for 2020 RPQs. Therefore, in any situation where co-residency is desired between a 2152 and an RPQ, another RPQ must be submitted to Special Equipment Engineering for conflict analysis. Not all RPQs will be able to coincide with the Printer-Keyboard.

RPQs will be accepted for either the 2152 attachment (#8070) or for the co-residency investigation 120 days after this announcement.

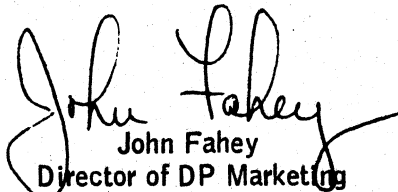
Publications

Availability of the following publications will be announced in the Weekly Publications Release Letter and additional quantities will be available from Mechanicsburg.

TNL N33-1507 updating SRL A26-5847, the IBM System/360 Model 20 Functional Characteristics.

TNL N33-1508 updating SRL A26-5896, the IBM System/360 Model 20 Installation Manual, Physical Planning.

SRL A26-3572-4, the IBM System/360 Model 20 Configurator.

  
John Fahey  
Director of DP Marketing



Product Announcement

Subject: IBM 545 Output Punch.

The IBM 545, a standardized version of a serial card punch for OEM and output use, is now available. It has a hopper, feed, punch unit, transport, read unit, stacker, and program unit similar to the IBM 29 Card Punch. The keyboard is mounted in the reading table, and rotates approximately ±12°. Wire contact relay circuitry is used, and modern cover appearance, with a lower cabinet similar to the IBM 1057, provides maximum space availability for features.

An acoustic cover over the card transport is available at no charge. Rated speed is 18 cols/sec for the printing model, 20 cols/sec for the non-printing model. When in automatic mode, the IBM 545 operates under control of the attached system and the program drum; in keypunch mode, the machine can be used as a normal card punch. An attachment cable is not included with the IBM 545; it may be procured separately by the customer, or purchased from IBM.

Models are as follows:

		Rental	Purchase
1	Output Punch - Non-Printing	\$ 95	\$4,750
2	Output Punch - Printing	115	5,750

Model changes cannot be made in the field. Complete pricing information is in the attached sales manual pages, A 48 or 64 character keyboard and code plate may be specified at no charge.

The IBM 545 will be manufactured in Greenock, Scotland. First customer delivery will be September, 1968.

RPQ's for the IBM 545 will be accepted, but no response will be made until March 1968, at which time location of engineering control and processing will be announced. RPQ's for the IBM 24/26 with output punch ability, in the backlog at that time will be honored if deliverable by August 1; all others must be either improved or cancelled. Also, starting March 1, 1968, RPQ's for output punch ability on the IBM 24/26 will not be accepted, as that function will be provided by the IBM 545 Output Punch.

The following Special Features are available on the IBM 545.

Auxiliary Drum (#1350) allows auxiliary duplication to be done in keypunch mode, or under control of the system in automatic mode.

Punch 81 Indication (#5550) allows a check punch to be made in column 81 for cards meeting a desired criteria.

Read-In Device (#6105) allows reading of a punched card at the master station into the attached system, at rated machine speed (18 or 20 cps).

Self Check Number Device - Modulus 10 (#7061). Similar to self check (10) on the IBM 29; includes generate ability.

Self Check Number Device - Modulus 11 (#7062). Similar to self check (11) on the IBM 29.

Self Check Number Generate Feature (#7063) for use on Modulus 11 device only; similar to same device on the IBM 29.

Attachments: Machines 545

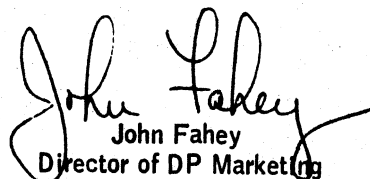
Distribution: All Areas

The following Accessories are available for the 545.

Connector and Cable Assembly (P/N 5466505). A connector and nine-foot cable assembly with 104 wires that can be plugged into the IBM 545 connector. The free end of the cable has wire ends only (no pins, clips, etc.) and the user must provide his own connection to his unit.

Additional Cable Length (P/N 5466492). Additional cable length above nine feet. Maximum additional length 26 feet, maximum total length 35 feet.

A general information manual, form #A22-6897, will be available in January 1968, and a complete OEM manual will be available in March 1968. Availability will be announced via a Publications Release Letter.

  
John Fahey  
Director of DP Marketing



The IBM logo, consisting of the letters 'IBM' in a bold, sans-serif font, is positioned on the left side of the header.

IBM World Trade Data Processing

Letter No. 68-205  
January 5, 1968

Product Announcement

SYSTEM/360 MODEL 20

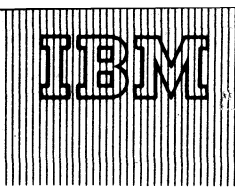
RESTRICTION REMOVED

The mutually exclusive restriction of the BSCA and the Universal Character Set Feature #8637 is no longer applicable to the Model 20 system. A Model 20 system can now contain both of these features to meet customer requirements.

A handwritten signature in cursive script, reading 'John Fahey', is written over the typed name and title.

John Fahey  
Director of DP Marketing

Distribution: All Areas



Product Announcement

System/360 Model 67

CONFIGURATION CODES

In System/360 Model 67, new codes have been established for ordering purposes. These codes appear in the attached sales manual pages. Depending upon the system configuration, the codes must be specified for each 2365 Processor Storage.

SECOND WALL SECTION ATTACHMENT FEATURE #6310

When a second wall section is required in a Model 67 configuration, ordering instructions now call for use of a Second Wall Section Attachment Feature #6310 which is necessary for each 2067 Processing Unit Model 2. This feature replaces Additional Addressing I (#1086) and Additional Addressing II (#1087) for the 2067 but at a cost equal to the price of only Additional Addressing I.

POWER-OFF CONTROL FEATURES

Emergency Power-Off Control Features #3621 and 3622 are to be added for the 2067 Models 1 and 2. These no-cost features are required for safety reasons.

ACTION REQUIRED

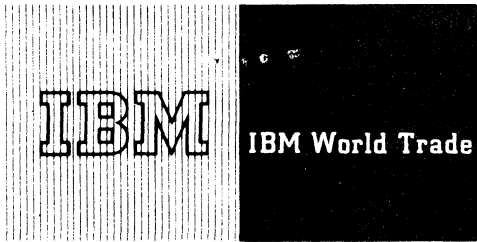
For all on-order systems, submit Alteration Notices immediately to reflect the new configuration codes, the combining of two Additional Addressing features into Feature #6310, and the Emergency Power-Off Control Features.

For installed Systems, the Emergency Power-Off Control Feature must be added.

  
John Fahey  
Director of DP Marketing

Attachments [5]: [1 thru 3] Systems 360/67.1, 360/67.3, and 360/67.5 ...  
[4 thru 5] Machines 2067 and 2365.

Distribution: All Areas



Letter No. 68-209  
January 23, 1968

Product Announcement


IBM System/360 Model IH 75

DP Letter No. 67-294 incorrectly announced the Purchase Price of the Model IH 75 as \$897,500. The correct price is \$904,000.

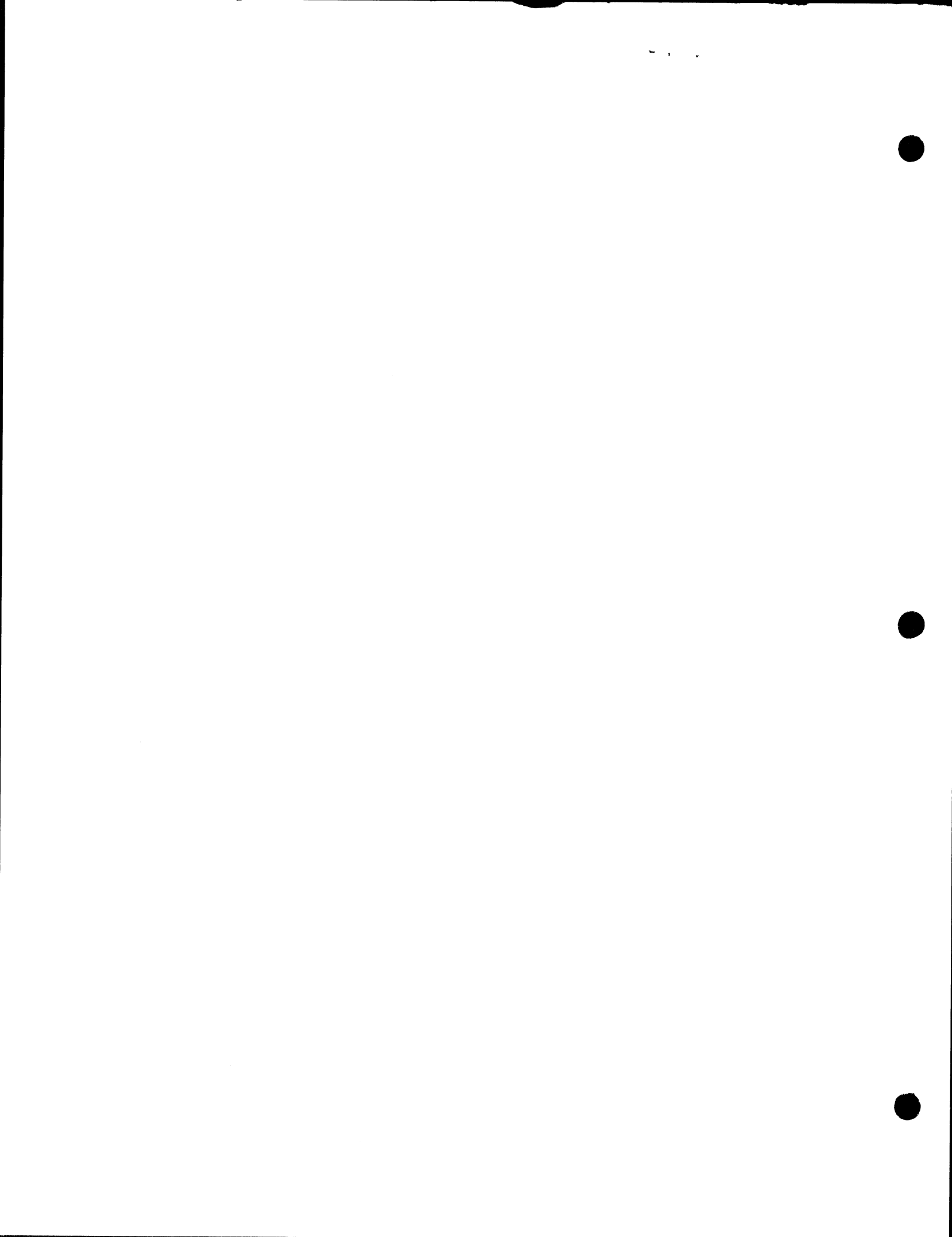
Action Required

All outstanding proposals for Model IH 75 must be updated immediately to reflect the corrected purchase price. All affected on-order Purchase Customers must be advised in writing immediately of the higher price.

The terms of the Agreement for the Purchase of IBM Machines apply as they relate to price changes.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



**IBM**

IBM World Trade Data Processing

Letter No. 68-211  
January 30, 1968**IBM 2420 MODEL 7**

**NEW MAGNETIC TAPE UNIT:** IBM announces a new transport with a new mechanical concept in the 2420 Model 7 Magnetic Tape Unit. The 2420 Model 7 provides the following capabilities for the System/360 Models 50, 65, 75, and 85:

- ... Single capstan drive
- ... 200 inch/sec tape speed - 320KB data rate/640KD data rate
- ... Automatic threading
- ... Two millisecond access - three millisecond gap time
- ... Cartridge loading (Wraparound Cartridge optional)
- ... 500 inch/sec in-column rewind
- ... Compatibility with all IBM 1600 bpi phase encoded tapes

The 2420 Model 7 is attachable to Systems/360 Models 50, 65, 75, and 85 by means of the 2803 Model 2 Tape Control equipped with the 2420 Attachment, Feature #7900. (This feature can be field installed on a 2803 Tape Control having a serial number of 30,001 (France) and above. Units with 30,001 and above serial numbers will be initially shipped in the first half of 1968.)

**DELIVERY:** First customer shipments will commence in January 1969 from the U.S. The published delivery schedule will be announced May 1, 1968. Schedule dates for orders received during this 90-day period will be assigned by the Countries on a sequential basis. No commitments to customers are to be made until confirmation of delivery dates is received in the Branch Office.

**CONCURRENT RELEASE:** Concurrent with this release, IRD is announcing the 2420 Magnetic Tape Wraparound Cartridge.

**RPQ's:** RPQ's may be submitted immediately for the 2420 Model 7. Processing will not begin until 120 days after announcement. Response will be within 90 days. No RPQ's will be shipped until six months after the first customer shipment of the basic unit.

**PROGRAMMING:** Programming support for the 2420 Model 7 will be provided under TOS, DOS,

OS/360 operating systems for System/360 Models 50, 65, 75, and 85. Further programming details and specific BPS support will be announced shortly.

See the reverse side of this letter for prices and additional details.

**7340 MODEL 3, 2802, and 2816 MODEL 2**

**WITHDRAWAL FROM PRODUCT LINE:** Along with the 2420 Model 7 release, the 7340 Model 3 Hypertape Drive, 2802 Tape Control and 2816 Model 2 Switching Unit are being withdrawn.

No new orders for these machines will be accepted after April 1, 1968. Orders presently in the backlog will be honored. Those customers who desire to convert their Hypertape equipment orders may exercise options. Provided that the Hypertape equipment is scheduled for delivery beyond six months, the customer's options are:

- a. A 2802 Tape Control order may be converted to 2803 Model 2 without a schedule slippage.
- b. An order for a 7340 Model 3 Hypertape Drive order may be converted to a 2420 Model 7 Magnetic Tape Drive and install an interim 2401 Model 6 on the same schedule as the 7340 Model 3 for the period preceding 2420 Model 7 delivery.
- c. A 2816 Model 2 Switching Unit order may be converted to a 2816 Model 1 without a schedule slippage.

Those orders for Hypertape equipment scheduled for delivery within six months may be converted as above for interim delivery six months from the date of the converted order.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas

## HIGHLIGHTS OF THE 2420 MODEL 7 MAGNETIC TAPE UNIT

**High Data Rate** - 320,000 bytes or 640,000 digits a second.

**Recording** - 1600 BPI, Phase Encoded recording of the 2420 Model 7 is compatible with the phase encoded recording of the 2400 Series and 2415, Models 4, 5, and 6.

**Tape Speed** - Tape motion is at a speed of 200 inches per second.

**Fast Start Time** - From a complete stop, tape is moved to the first byte of the next block in 2 milliseconds.

**IBG/IRG Time** - Only 3 milliseconds are required to pass the inter-block gap when the tape is moving at 200" per second.

**Automatic Threading** - Tape is automatically threaded through the tape path from the supply reel to the takeup reel loaded into the columns and positioned at load point. The entire operation from the time "load rewind" is initiated until "Tape Drive Ready" is accomplished is approximately 7 seconds.

No special attachment or leaders are required. A tape cutter is supplied with each machine for tape end trimming. When using tape reels without a cartridge, the free end of the tape must be positioned on the threader chute. Automatic threading operates without a cartridge for 10 1/2", 8 1/2", or Minireels, with the optional wraparound cartridge for 10 1/2" reels.

**Optional Tape Reel Cartridge** - A unique wraparound style cartridge for standard 10 1/2 inch tape reels is available for use on the 2420 Model 7.

Cartridge and reel are both loaded and removed in one simple operation.

Prices	Model	Rental (MAC)	Purchase	MMMM
	2420 Model 7	\$1,100	\$57,000	\$120
	Rental Plan: "A" 10%			
	Purchase Option: 40%			
	Maintenance: C			
	2420 Attachment #7900 (on 2803 Model 2)	\$ 375	\$17,650	\$ 10

No additional features required for 2816 Model 1.

DP Orders and Movement Codes:	Type	Model	Product Line	Product Category
	2420	007	7	91, 93, and 95

### Publications

The following publications are available to support this announcement. Advance copies have been shipped. Additional copies are available from Mechanicsburg.

SRLs - 2420 Model 7 Component Description Bulletin, A22-6918... Planning Guide - OS/360 Sort/Merge Timing, C28-6668.

TNLs to the following publications will be available prior to first customer shipments (the final availability dates will be published in the Publications Release Letter):

TNL - Installation Planning (C22-6820), N22-0284... Model 50 Functional Characteristics (A22-6898), N22-0277.  
SRLs - Operating Guide - 2420 Model 7 Magnetic Tape Drive... TNLs (Modifications to OS/360 Publications): Job Control Language (C28-6539)... Messages, Completion Codes, and Storage Dumps (C28-6631)... Sort/Merge PLM (Y28-6597)... Sort/Merge Timing Estimates (C28-6662)... I/O Supervisor PLM (Y28-6616)... Utilities PLM (Y28-6614)... System Generation (C28-6554).

These OS/360 publications will be modified to reflect the applicability of the 2420 Model 7. The updated documents will be available October 30, 1968.

### Modifications to DOS and TOS Publications

The TNLs will explicitly state that the generic term "2400 Series tape units" applies to the 2420 Model 7. The updated SRLs will use the generic term and will be available the first quarter of 1968.

DOS Supervisor and I/O Macros (C24-5037)... DOS Systems Control and Service (C24-5036)... TOS Supervisor and I/O Macros (C24-5035)... TOS Systems Control and Service (C24-5034)... DOS/TOS Assembler (C24-3414)... DOS/TOS Utility Macro Specifications (C24-5042).

### Modifications to Emulator Publications:

The 7080 Emulator Program for System/360 Model 65 (C27-6911)... The 709/7090/7094/7094 II Emulator Program for System/360 Model 65 (C28-6565)... The 7040/7044 Emulator Program for the System/360 Model 65 (C28-6585)... Conversion Aids, 7074 Emulator Program for System/360 Models 50 and 65 (C27-6908)... System/360 Conversion Aids: Sample Problems for System/360 Emulator Programs (C27-6929)... 7080 Emulator PLM (Y27-7112)... 7094 Emulator PLM (Y28-6566)... 7044 Emulator PLM (Y28-6599).

Minimizes handling of both reel and tape.

Automatic threading operation does not require any special reel positioning.

Rethreading after a rewind/unload can be accomplished without reel handling.

**In-column High Speed Rewind** - Tape is rewound in columns at a constant speed of 500 inches per second; i.e., the rewind time is essentially proportional to the length of tape to be rewound. (The rewind time for a 2400 foot reel is 1 minute.)

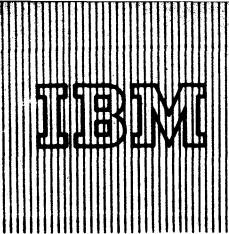
**Automatic Power Window** - An automatic power window is a standard feature on the 2420 Model 7.

**Packaging Size** - The physical dimensions of the 2420, Model 7 Tape Drive are the same as the 2401. Weight is approximately 1,000 pounds.

**2420 Model 7 Attachment Feature on the 2803 Model 2 Tape Control** - This feature must be installed for operation of the 2420 Model 7 Magnetic Tape Unit. The 2420 Model 7 can co-exist with all models of 2401/2402 Magnetic Tape Units on the 2803 Model 2, serial number 30,001 (France) and above.

**2816 Switching Unit** - Will accommodate the 2420 Model 7 Magnetic Tape Unit. The 2420 Model 7 can be intermixed with the 2401/2402, all models.

**Magnetic Tape** - Uses the new IBM Series/500 Magnetic Tape, Dynexcel, or Heavy Duty.



Letter No. 68-212  
January 30, 1968

Product Announcement

**IBM SYSTEM/360 MODEL 85  
HAS FULL UPWARD CAPABILITY**

Today, IBM announces a large scale general purpose computing system, the System/360 Model 85. This new system further expands System/360's capability in large scale computing. The Model 85 offers full upward compatibility from other System/360 models. The 2085 processing unit utilizes high speed monolithic circuits and a storage hierarchy scheme to provide improved price performance for your customers' data processing requirements.

**HIGHLIGHTS**

- . Internal Performance 3 to 5 times Model 65
- . 80 nanosecond CPU cycle
- . High Speed Monolithic Buffer Storage interacts with main storage and central processor unit and is the key to the Model 85's high performance
- . Up to 4 million bytes of main storage
- . System/360 compatible
- . Full OS/360 support
- . Extended Precision Floating Point - 112 bits of precision
- . Optional High Speed Multiply - up to 10 times Model 65
- . Optional CRT Operator Console

**FEATURES**

- . Main Storage Sizes

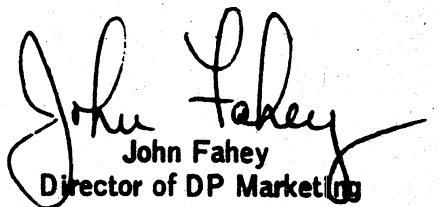
<u>Model</u>	<u>Bytes</u>
I	524,288
J	1,048,576
K	2,097,152
L	4,194,304

- . 709/7040/7044/7090/7094/7094 II Compatibility
- . Buffer Expansion  
Additional 8 or 16K to provide up to 32K bytes

**Reliability and Availability features:**

- . Error checking and correction on main storage to give automatic correction of single bit errors, detection of double bit errors.
- . Microdiagnostics are provided in processor to allow fast identification of the area of the CPU causing an error.
- . Processor checking designed to facilitate isolation of the error to a particular unit.
- . Manual switches for storage reconfiguration to eliminate a failing element (a re-IPL or additional procedures may be required).
- . Automatic retry of most instructions on detection of error is provided in the basic processor.

See reverse side for details on performance, programming support, delivery, RPQs, publications, sales compensation plan, prices, demonstrations, and systems assurance. Sales Manual pages will be issued shortly.

  
John Fahey  
Director of DP Marketing

## PERFORMANCE

The internal performance of the Model 85 for a general mix of jobs is 3 to 5 times faster than the Model 65. This high performance is achieved through the use of a memory system that includes the 80 nanosecond buffer and conventional 1 microsecond core storage. The operation of the buffer is completely transparent to all programs. The effect of this memory system is to provide an effective storage speed of 1/3 or 1/4 times that of the main storage speed.

The following factors also contribute to the performance of the Model 85.

- . 16 byte data path between CPU and storage.
- . 80 nanosecond CPU cycle.
- . One cycle execution of many instructions.
- . High degree of overlap between the Instruction Unit and the Execution Unit.

The internal performance of the emulator is approximately 2 times the 7094 II.

## PROGRAMMING SUPPORT

Major programming support for the Model 85 is OS/360. The system is planned to take full advantage of performance gains possible with Multiprogramming with a Variable Number of Tasks (MVT). The other OS/360 version such as Multiprogramming with a Fixed Number of Tasks (MFT) and the Primary Control Program (PCP) can also be used. Additional Support includes:

- . Extended Precision Floating Point will initially be supported in Assembler F of OS/360.
- . Recovery Management Program (RMP).
- . New Operator's Console Feature under OS/360.

Program Announcement Letter to be issued shortly.

## DELIVERY

First customer shipments of the Models I and J system, including the optional features, will start in the third quarter of 1969 for 60HZ and fourth quarter 1969 for 50HZ. Shipments of K and L systems (50HZ) will be in the first quarter of 1970. Delivery schedules will be confirmed 120 days after receipt of order. Plant of manufacture will be Kingston.

## RPQs

RPQs will be accepted on the Model 85 starting in May 1968, with response time dependent on the complexity of the system. Deliveries of approved RPQs will be no sooner than six months after first customer shipment.

## DEMONSTRATION CENTER

A DP system will be available for customer demonstrations during the first quarter of 1969.

## SYSTEMS ASSURANCE

The Model 85 is subject to the policy of Systems Assurance outlined on page 1 of the General Information section of the Sales Manual.

## PRICES

	M/SF	Rental (MAC)	Purchase	MMMC
2085 Processing Unit	I	\$44,000	\$2,288,000	\$3,800
	J	44,000	2,288,000	3,800
	K	44,000	2,288,000	3,800
	L	44,000	2,288,000	3,800
Buffer Expansion, First	#1431	3,000	156,000	295
Buffer Expansion, Second (#1431 is prerequisite)	#1432	3,000	156,000	295
Emergency Power-Off Control -- for 2 switches	#3621	NC	NC	NC
-- for up to 12 switches	#3622	NC	NC	NC
High Speed Multiply	#4520	2,775	144,250	250
Operator's Console	#5450	775	40,300	50
709/7040/7044/7090/7094/7094 II Compatibility	#7119	3,000	156,000	250
2365 Processor Storage				
(two used with 2085 mdl I; four with 2085 mdl J)	5	10,080	447,700	600
2385 Processor Storage -- one used with 2085 mdl K	1	60,000	3,240,000	3,000
-- one used with 2085 mdl L	2	106,000	5,670,000	4,500
Motor Generator Set (Purchase Only)				
208/220 V, 3-phase, 60 cycle				
Motor Generator Set	#9440		12,620	
Motor Starter	#9441		5,530	
440 V, 3-phase, 60 cycle				
Motor Generator Set	#9445		12,620	
Motor Starter	#9446		3,235	
380/408 V, 3-phase, 50 cycle				
Motor Generator Set	#2807		12,620	
Motor Starter	#2808		3,235	

## PUBLICATIONS

IBM System/360 System Summary (A22-6810), TNL N22-0285; IBM System/360 Principles of Operation (A22-6821), N22-0282; IBM System/360 Installation Manual - Physical Planning (C22-6820); IBM System/360 Model 85 Configurator (A22-6920); IBM System/360 Model 85 Functional Characteristics (A22-6916); IBM System/360 Model 85 Proposal Insert (221-0477); IBM System/360 Model 85 Promotional Brochure (520-2054); IBM System/360 Model 85 Facts Folder (520-2065) - have been shipped. Additional copies are available from Mechanicsburg.

IBM System/360 Input/Output Configurator (A22-6823-4); IBM System/360 Model 85 Promotional Brochure (520-2053); IBM System/360 Model 85 Desk Flipchart (V20-6061); IBM System/360 Model 85 CE Announcement Brochure (223-2928) - will be available. Consult your Weekly Publications Release Letter for actual release dates.

## PHYSICAL PLANNING

The Model 85 will be water cooled, and it will require a 400 Cycle Motor Generator Set, Purchase Only. Further information will be included in the Sales Manual pages.

## EDUCATIONAL ALLOWANCE

A 10% educational allowance applies to the 2085, 2365 Model 5 and the 2385 Models 1 and 2.

## SALES COMPENSATION PLAN

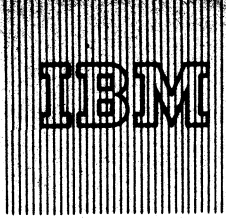
Normal provisions apply. In addition, the S/360 Model 85 is eligible for New Name Account Credit and will have an Out-of-Territory value of 25,000 points and on-schedule value of 10,000 points. (Add to Schedule C of DP Compensation Plan, Class -- A, Group -- 28, ID -- 2085 (85X), Points -- 25,000.) (Add to Schedule B, Group 18, ID -- 2085, Points 10,000, Effective Date 1-30-68, Termination Date 1-1-69.)

## I/O RESTRICTIONS

All input/output units that can be attached to a S/360 Model 75 can be attached to a S/360 Model 85, except the following:

- 1442 Card Punch Model N2
- 2520 Card Punch Models B2, B3
- 1403 Printer Model 3
- 2302 Disk Storage Models 3, 4
- 2415 Magnetic Tape Unit and Control Models 1, 2, 3, 4, 5, 6
- 2802 Hypertape Control Model 1
- 7340 Hypertape Drive Model 3





Product Announcement

2265 Display Station/2845 Display Control

To help meet expanding business needs, IBM introduces the 2265 Display Station for remote attachment to an IBM System/360 Model 30 and up. Along with the prerequisite IBM 2845 Display Control, the 2265 provides fast visual display of data stored in the computer.

The 2265/2845 provides an economical approach to the installation of a single display terminal in a remote location. It is intended to supplement the 2260 Display Station and 2848 Display Control in a remote environment and therefore is program compatible with the 2260/2848.

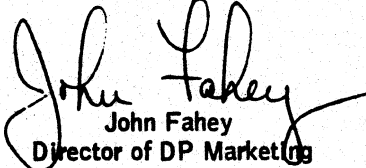
The display control circuitry for the 2265 is contained in the compact 2845 which can be placed in any convenient location. The 2265 with the 2845 display control functions as a remote terminal control communicating via a 2701 Data Adapter Unit, to a System/360 Model 30, 40, 44, 50, 65, 67, or 75. Transmission speeds of 1200 bps over common carrier leased private line telephone service is provided. The display station is similar in function to the standard 2260/2848 display system, and is fully compatible with those units.

2265 Highlights

The 2265 Display Station is a cathode ray tube unit used for displaying data either as output from a S/360 Model 30, 40, 44, 50, 65, 67, or 75, or as a result of operator keying. One 2265 can be attached to a 2845.

- Up to 960 characters formed by a "stroke generation" technique can be displayed. One of two formats may be ordered: 15 rows, 64 characters per row; or 12 rows, 80 characters per row.
- Sixty-four different symbols may be displayed -- 36 alphameric and 28 special characters (including new line symbol, parity error symbol, start symbol, cursor, and space).
- An optional keyboard feature can be cable-connected to the display control and can be located adjacent to it or as much as five feet away. Sustained pressure on the backspace and advance keys will cause continuous cursor motion. Highly flexible methods of erasing data are provided.
- Up to sixteen 2265/2845s may be attached to the same communication line.
- Program compatibility permits multidropping with the 2260/2848.
- Requires no special power or environmental considerations.
- With the appropriate special feature, an optional 1053 Model 4 may be attached to the 2845.
- United Kingdom, German, French, American English, and Swedish language groups are available.

See reverse side for Delivery Schedule, Source, Educational Allowance, Orders and Movements Codes, Support Publications, Programming Support, and Prices.

  
John Fahey  
Director of DP Marketing

Attachments: Preliminary Sales Manual Pages

Distribution: All Areas

### Communication Facilities

The 2845 operates in a half-duplex mode ... at 1200 bps/120 cps over a common carrier 4-wire leased private line telephone service ... requires a 3977 Modem Model 1 or 2 or equivalent.

### Display Formats

Either of the following formats is available --

- . 15 lines of 64 characters (9101)
- . 12 lines of 80 characters (9102)

### 2845 Special Features

**Destructive Cursor (3301).** Causes deletion of the data contained in any character position through which the cursor passes.

**1053 Adapter (7927, 7928).** Permits the attachment of a Model 4 Printer ... messages displayed on the 2265 or messages of up to 240 characters from the computer system may be printed. Maximum: 1

- 7927 if feature 9101 was specified
- 7928 if feature 9102 was specified

**Line Addressing (4801, 4802).** Permits selection of display starting location on incoming data under computer control. There are 15 unique starting locations if feature 9101 was specified, 12 if feature 9102 was specified. Starting locations coincide with the first displayable character position in each row.

- 4801 if feature 9101 was specified
- 4802 if feature 9102 was specified

### Publications Support

A Component Description Manual, "2265 Display Station - 2845 Display Control Unit," (SRL A27-2731) and a promotional brochure, "The IBM 2265 Display Station...A Desk-Top Information Center," (510-0006) will be available. Consult your weekly Publications Release Letter for availability.

### RPQs

RPQs will be accepted beginning in August. Response time will depend on complexity. No RPQs will be shipped until six months after first customer shipment of the basic units.

### Programming Support

2265/2845 will operate with same remote programming support as 2260/2848 OS BTAM, OS QTAM, DOS BTAM, DOS QTAM.

No changes or extensions to these programs are required to support the 2265/2845 to program compatibility.

### Systems Assurance

Systems Assurance approval is required for all configurations involving the 2701 Data Adapter Unit.

### Delivery

First customer shipments are scheduled for May 1969 from U.S.A.

### Educational Allowance

Educational Allowance on both products is 10%.

### Orders and Movements Codes

Type	Model	Product Line	Product Category
2265	001	6	09
2845	001	6	09

### Sales Compensation Plan

Normal DP Sales Compensation Plan Provisions apply.

### Prices

	Code	Rental (MAC)	Purchase	MMMC
2265 Model 1		\$175	\$5,600	\$40
Keyboard, A/N	4766	30	900	5
Rental Plan: B			Maintenance: B	
Purchase Option: 50%			Per Call: 1	
2845 Model 1		175	8,550	28.25
1053 Adapter	7927	75	3,375	2.25
1053 Adapter	7928	75	3,375	2.25
Line Addressing	4801	10	450	NC
Line Addressing	4802	10	450	NC
Rental Plan: B			Maintenance: C	
Purchase Option: 45%			Per Call: 1	



**2265 DISPLAY STATION**

**Purpose:** A cathode ray tube unit used for displaying data either as output from a S/360 model 30, 40, 44, 50, 65, 67 or 75 or as a result of operator keying. See "Special Features" below.

**Prerequisite:** A 2845 Control Unit.

**Maximum:** One 2265 can be attached to a 2845.

**High Lights:** Characters formed by a stroke generation technique can be presented in either of two formats, each consisting of 960 characters:

- 15 rows, 64 characters/row
- 12 rows, 80 characters/row

Format is determined by feature selection. Refer to "Specify" below.

Sixty-four different symbols may be displayed ... 36 alphameric and 28 special characters (includes new line symbol, parity error symbol, start symbol, cursor, and space).

Keyboard is cable connected to the display and can be located adjacent to it or as much as five feet away.

Sustained pressure on the backspace and advance keys will cause continuous cursor motion.

Highly flexible methods of erasing data are provided.

The unit can be located up to 50 feet from the 2845.

**Bibliography:** A24-3089

- Specify:**
- [1] Power: 115V, AC, 1-phase, 60 cycle ... AC, 1-phase, 50 cycle voltages. (See G.I. p. 15 for voltage feature No's.)
  - [2] Display Format: #9101 for 15 rows of 64 characters/row, or #9102 for 12 rows of 80 characters/row ... #9101 and #9102 can be interchanged in the field.
  - [3] If required, one of the following: United Kingdom Language (#2927). United Kingdom keyboard changes will be supplied with keyboard (#4766).

**Prerequisite:** Feature #2927 on the 2845.  
French Language (#2928). Provides French translations. French keyboard changes will be supplied with keyboard (#4766).  
**Prerequisite:** Feature #2928 on the 2845.

German Language (#2929). Provides German translations. German keyboard changes will be supplied with keyboard (#4766).  
**Prerequisite:** Feature #2929 on the 2845.

Swedish Language (#2907). Swedish keyboard changes will be supplied with keyboard (#4766).  
**Prerequisite:** Feature #2907 on the 2845.

American English (#2750). Provides American English nomenclature. American English keyboard changes will be supplied with keyboard (#4766).  
**Prerequisite:** Feature #2750 on the 2845.

Prices:	Mdl	DPMO	Rental (MAC)	Purchase	MMMC
	1	001	\$ 175	\$5,600	\$ 40

Rental Plan: B Maintenance: B  
Purchase Option: 50% Per Call: 1

**Special Features:** Keyboard, Alphameric (#4766) Permits the operator to key data for display and/or transmission.

**Prerequisite:** Feature (#4770) on the 2845.

Prices:	Feature	MAC	Purchase	MMMC	FIC
	Keyboard, Alphameric #4766	\$ 30	\$ 900	\$ 5	PCR

**2845 DISPLAY CONTROL**

**Purpose:** Control and buffer storage for the 2265 Display Station. It is used as a remote terminal control communicating via a 2701 Data Adapter Unit, to a S/360 model 30, 40, 44, 50, 65, 67 or 75.

**High Lights:** Operates with a single 2265 capable of displaying 960 characters. Formats available are 15 rows of 64 characters/row (#9101) or 12 rows of 80 characters/row (#9102).

The data transmission rate is 120 characters/second (1200 bps).

Up to sixteen may be attached to the same communication line.

Program compatibility permits multidropping with the 2848 Display Control.

Requires no special environmental considerations - Class "C" environment conditions are supported.

**1053 Printer:** With the appropriate special feature, one 1053 model 4 Printer may be attached ... see "Special Features".

**Communication Facilities:** Operates in a half-duplex mode ... at 1200 bps over a common carrier 4-wire leased private line telephone service.

Common Carrier Leased Private Line Telephone Service

1200 bps/120 cps -- a 3977 Modem Model 1 or 2, or equivalent is required ... clocking is provided by the 2845. The appropriate Data Set Adapter (#9012) must be installed ... see item [3] under "Specify."

**Prerequisite:** Transmission is over common carrier facilities to a 2701 Data Adapter Unit ... a modem is required for the 2845. See "Communication Facilities" above and Item [3] under "Specify" ... see 2701 for its prerequisites.

**Bibliography:** A24-3089

**Specify:** [1] Power: 115V, AC, 1-phase, 60 cycle ... AC, 1-phase, 50 cycle voltages. (See G.I. p. 15 for voltage feature No's.)

[2] If required, one of the following: United Kingdom Language (#2927). United Kingdom character set changes.  
**Prerequisite:** Feature #2927 on the 2265 and optional 1053 model 4.

French Language (#2928). French character set changes and language translation.  
**Prerequisite:** Feature #2928 on the 2265 and optional 1053 model 4.

German Language (#2929). German character set changes and language translation.  
**Prerequisite:** Feature #2929 on the 2265 and optional 1053 model 4.

Swedish Language (#2907). Swedish character set changes.  
**Prerequisite:** Feature #2907 on the 2265 and optional 1053 model 4.

American English (#2750). Provides American English character set and nomenclature.  
**Prerequisite:** Feature #2750 on the 2265 and optional 1053 model 4.

[3] Data Set Adapter: #9012 for 1200 bps operation.

[4] Display Format: #9101 for 15 rows of 64 characters/row, or #9102 for 12 rows of 80 characters/row ... #9101 and #9102 can be interchanged in the field.

Prices:	Mdl	DPMO	Rental (MAC)	Purchase	MMMC
	1	001	\$ 175	\$ 8,550	\$ 28.25

Rental Plan: B Maintenance: C  
Purchase Option: 45% Per Call: 1

**Special Features:** Destructive Cursor (#3301) Causes the character data contained in any character position through which the cursor passes to be deleted.

**1053 Adapter (#7927, #7928)** Permits the attachment of a 1053 model 4 Printer ... messages displayed on the 2265 or messages of up to 240 characters from the computer system may be printed. **Maximum:** 1

#7927 if feature #9101 was specified  
#7928 if feature #9102 was specified

**Line Addressing (#4801, #4802)** Permits selection of display starting location on incoming data under computer control. There are 15 unique starting locations if feature #9101 was specified, 12 if feature #9102 was specified. Starting locations coincide with the first displayable character position in each row.

#4801 if feature #9101 was specified  
#4802 if feature #9102 was specified

2845 Display Control (cont'd)

Prices:	<u>Feature</u>	<u>MAC</u>	<u>Purchase</u>	<u>MMMC</u>	<u>FIC</u>
Destructive Cursor	#3301	NC	NC	NC	NC
1053 Adapter					
with FC #9101	#7927	75	3,375	2.25	PCR
with FC #9102	#7928	75	3,375	2.25	PCR
Line Addressing					
with FC #9101	#4801	10	450	NC	PCR
with FC #9102	#4802	10	450	NC	PCR



Sales Activity

Special IBM World Trade 1620 Program for Education

Program

Selected units of the 1620 system used for educational purposes by qualifying institutions as defined below, may receive the special educational allowance specified in this letter. These machines are expected to be in excess of those each country will need to fill its other business requirements. This program is special in nature and is neither an extension of nor a step toward the broadening of the World Trade Educational Allowance Program as outlined in DP Letter 66-270 + attachment.

<u>Type Number</u>	<u>Models</u>	<u>% Allowance (Lease or Purchase)</u>
1620	1	70%
1622	1 and 2	70%
1623	1 and 2	70%
1311	3	70%
1311	2	20%
1443	1 and 2	20%
1621	1 and 2	20%

This program is effective April 1, 1968.

Orders will be filled in sequence on an "as available" basis.

On April 1, 1968, qualifying institutions which have this equipment installed on lease or on order for lease or purchase will be eligible.

No additional programming support is planned for this program.

Qualifying Institutions

Secondary Schools: To qualify, the educational institution must be identified by the local or national government as being at the secondary level. The educational institution must be a nonprofit institution, but may be private, parochial, or public. Since the type of secondary schools are not the same in all WT countries, it should be understood that secondary schools are those which prepare students for entry into the labor market or higher level training.

Vocational Schools: To qualify, the educational institution must be a nonprofit private, parochial, or public specialized institution exclusively or principally engaged in providing vocational education to full-time students preparing for entry into the labor market, or the department of a nonprofit private, parochial or public school exclusively or principally engaged in providing vocational education in no less than five different occupational fields to full-time students preparing for entry into the labor market.

To qualify for this plan, an institution must have and continue in force a program for the regular and scheduled use of the equipment for instructional purposes throughout the school year, including adequate teaching and classroom facilities convenient to the installed equipment.

Approvals and Ordering\*

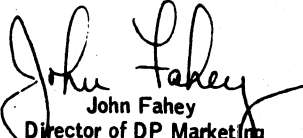
Under this plan, proposals to qualifying institutions must be approved by Area Management. Upon receipt of approval, the proposal may be presented to the customer. The proposal should state that this is a special program and that ORDERS WILL BE FILLED IN SEQUENCE AS EQUIPMENT IS AVAILABLE.

The order should then be forwarded with a copy of the Area's approval to the appropriate Orders and Schedules Department where control of this program will be maintained and scheduled shipment dates assigned. The customer should be notified of the scheduled shipping date only after written notice is received from Orders and Schedules.

Features and model changes will be provided on an "as available" basis under this plan and only when they are in excess of IBM's other business requirements. Model changes at 70% are available only on the 1622 and 1623.

RPQs cannot be ordered for these systems.

\* See back of this letter for Administrative Provisions, Science Research Associates (SRA) support, and Questions that might be asked and the answers to those questions.

  
John Fahey  
Director of DP Marketing

## Administrative Provisions

To request approval, the Country Manager must send to Area Management a cable or letter covering the following points:

1. Customer or prospect's name and standard industry code (8211).
2. Statement of qualification as a secondary or a vocational school.
3. Whether this order will qualify as a new account.
4. A statement that the institution has a program for instructional use of the equipment in keeping with the requirements outlined under the "Qualifying Institutions" section of this letter.

Suitable Educational Allowance Supplements for use in connection with this program will be provided in the near future.

Currently installed equipment which qualifies for the allowance may be placed under this plan, effective April 1, 1968, with approval of the Area Management. The qualifying institution will still have to sign the appropriate Educational Allowance Supplement, which must be submitted with a copy of the Area approval and billing alteration to country headquarters.

Equipment ordered under this plan may be financed under the installment payment plan, in those countries where this plan is available.

Rental credits under the Option to Purchase Plan announced October 1, 1965, do not apply to machines purchased under this special plan.

Installed equipment purchased under this special plan does not entitle the customer to an additional warranty. Other purchasers will receive a warranty that provides free maintenance parts and service for the first 176 hours of use or 30 days, whichever occurs first.

## Sales Compensation Plan

Normal sales plan provisions will apply.

## SRA Support Information for 1620

SRA plans to make available for sale teacher guides and student workbooks designed for secondary schools for courses in computer concepts using the 1620 system. This material is scheduled to be available September 1968\*. No product test evaluation of the course material has been conducted or is planned. Science Research Associates also plans to conduct teacher institutes before the 1968-1969 academic year.

\* Ordering instructions will be announced by Industry Marketing - Education, when the material is available.

## Questions and Answers

1. Why is this program not offered to universities and colleges?

There are two important points:

- a. Colleges, universities, and qualified medical institutions already have 1800 and S/360 equipment available under the World Trade Educational Allowance program. Secondary schools do not.
- b. Only a limited number of 1620 systems are available. This is a special program. The program is designed to encourage computer concepts training and other instructional uses in secondary schools so that the colleges and universities will begin to receive students already trained in computer basics. This will enable the colleges and universities to concentrate on teaching higher level languages and more sophisticated data processing skills.

2. At what percent could a lease 60% Educational Allowance 1620 college or university customer purchase their installed system?

Most installed leased 60% 1620 systems are of an age that would make it possible for the customer to purchase the system at approximately 30% of the new purchase price. For specific price, submit an IBM quotation inquiry to the Country Headquarters.

3. Are disk packs for the 1311 Disk Storage Units available under Educational Allowance for these special program 1620 systems?

No. New orders from secondary schools for disk packs have not received an Educational Allowance since October 1966.

4. Why are no RPQs available under this program?

RPQs have not been accepted for 1620 systems for some time.

5. What Educational Allowance applies to other units attached to a 1620 ordered under this program?

Only the units specified in this blue letter are available at 70% Educational Allowance. Units which qualified for 20% Educational Allowance under the current World Trade programs for secondary schools, but which have not been made available at 70% Educational Allowance are available at 20% Educational Allowance. Any other units attached to the 1620 will not receive Educational Allowance.

6. Is the 1620 CPU Model 2 available under this program?

No. Only selected units specified for 1620 Model 1 systems are being made available.

7. How do I get the 70% Educational Allowance for a 1620 installed on lease with a secondary school customer at a 20% allowance?

When the customer has an established instructional program as outlined in the "Qualifying Institutions" section of this letter, you should:

- a. Send the request for approval by cable or letter to Area Management as outlined in this announcement. Indicate that this is an installed 20% system.
- b. After approval is received, have the customer sign the appropriate Educational Allowance Supplement.
- c. Submit a Billing Alteration notice attaching a copy of the Area approval to Country Headquarters.



Product Announcement

IBM System/360 Model 20 Lowers Data Processing Costs With New CPU Models, I/O Units

In response to the field generated requirements for a commercial data processing system for the smaller business, IBM announces lower cost configurations of the widely accepted System/360 Model 20. Lower cost configurations are accomplished through the introduction of eight new CPU models, a new 2203 Printer model, a new model of the 2560 Multi-Function Card Machine and a new storage control feature for attaching the 2311 Model 12 Disk Storage Drive.

All of the new units cost less than comparable announced models with throughput averaging 70% of present Model 20 performance for equivalent configurations. Punched card customers and prospects achieve greater flexibility in tailoring a configuration to meet present application requirements and volumes. As applications increase or requirements change, customers can follow an easy growth path from the new models by field upgrading to the full speed Model 20.

Component Highlights

2020 CPU Models B3, C3, BC3, D3, B4, C4, BC4, D4, (submodels 3 and 4) - 3.6 microsecond memory with 4, 8, 12, or 16 K bytes of core storage ... completely program and hardware compatible with previously announced Models B1, C1, BC1, D1, B2, C2, BC2, D2, (submodels 1 and 2) for similar I/O configurations and core sizes ... Growth path is provided for the small user, without need to reprogram or redesign his jobs.

2560 Multi-Function Card Machine Model A2 -- This new model of the 2560 MFCM reads cards at 310 CPM and punches cards at 120 characters per second ... 65 fully punched cards per minute, up to 173 CPM when only the first 10 columns are punched ... Provides card input to system, collates, gang-punches, reproduces, and summary punches ... Two hoppers and four stackers provide for flexible card handling.

2203 Printer Model A2 -- Print-speed versatility through operator-replaceable type bars that provide character set desired ... Up to 300 LPM (alphameric) or 600 LPM (numeric) ... Standard 120 print positions can be expanded to 144 ... Optional dual-feed carriage for additional document flexibility ...

Rated Speeds	Type Bar	Lines Per Minute
	13-character-set	600
	39-character-set	300
	52-character-set	260
	63-character-set	230

2311 Disk Storage Drives Model 12 -- Fixed sector format for simplicity of use ... cylinder concept for fast access to large area ... 100 cylinders with 10 tracks per cylinder, 10 sectors per track, 270 bytes per sector - 2.7 million bytes per drive ... one or two Model 12s may be attached for up to 5.4 million bytes on line, with 60 ms. average access time.

2152 Printer-Keyboard -- Convenient on-line file inquiry device and secondary printer ... a Selectric type-writer for use as an input (keyboard) and output (printer) ... supported under DPS.

Sample Configurations

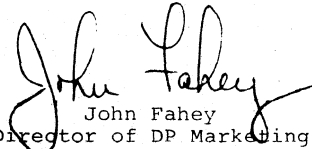
Typical Card System ... 2020 Model C3 processing unit (8K) ... 2560 Model A2 MFCM ... 2203 Model A2 Printer with 144-position print span.

Rents for \$ 1,462

Typical Disk System ... 2020 Model BC4 processing unit (12K) ... 2560 Model A2 MFCM ... 2203 Model A2 Printer with 120-position print span ... Two 2311 Model 12 Disk Storage Drives ... Balanced, powerful, and fully supported ... Big on-line capacity and millisecond speed at low cost.

Rents for \$ 2,632

For delivery, system balance and upgrading, production status, RPOs, sales compensation plan and other information, see reverse side.

  
John Fahey  
Director of DP Marketing

Attachments [4]: [1 and 2] Systems 360/20.1 and 360/20.3 ... [3 and 4] Machines 2020.1 and 2020.3

Distribution: All Areas

**DELIVERY**

First customer shipment of the new models and associated I/O devices will be in November 1968. Schedules will be confirmed 120 days after receipt of order. Existing delivery schedule applies to 2311 Model 12s.

**SYSTEM BALANCE and UPGRADING**

The 2020 Submodels 3 and 4 and the associated card I/O devices have been designed to form a balanced system: Only the A2 models of the 2560 and 2203 can be attached to 2020 Submodels 3 or 4. Conversely only the A1 models of the 2560 and 2203 can be attached to 2020 Submodels 1 or 2.

The entire system can be upgraded in the customer's office, i.e., 2020 Submodels 3 or 4 can be field-converted to Submodels 1 or 2, provided I/O units and attachments features are upgraded at the same time (2560 Model A2 to Model A1 without Card Print, 2203 A2 to A1, and Storage Control from 7496 to 7495). Stated another way, the I/O units may be field upgraded, provided the processor is upgraded at the same time, and the 2560 does not require to Card Print feature.

**SOURCE OF SUPPLY**

The WT sources of supply will be Canada, Italy and Japan.

**RPQs**

RPQs will be accepted immediately and processing will start in 120 days. Response time depends on complexity of the request. Deliveries will not commence until at least six months following first customer machine shipment.

Existing Model 20 RPQs must be resubmitted for applicability to the new models of the 2020 and associated I/O devices.

**EDUCATION**

The regular Model 20 Education Program will also cover the new models ... Executive Principles for Installation Control (C3620 13) for the executive ... Computing System Fundamentals PI (Y9897 88), S/360 Model 20 RPG Coding PI (Q3621 68), and S/360 Model 20 Installation Programming Card (S3620 55) for the DP Manager and the programmer.

The education courses stress installing and programming with emphasis upon the use of RPG and CPUs.

**PROGRAM TESTING ALLOWANCE**

System/360 eligibility times apply. See GI section of Sales Manual.

**EDUCATION ALLOWANCE**

WT Educational Allowance Program is applicable to the new models as to the previously announced models of Model 20. See DP Letter 66-270 plus attachments.

**PROGRAMMING SUPPORT**

The same proven programming support that is now being used to sell and successfully install your customers' System/360 Model 20s is available for the new models.

**RPG**

A language that has been an invaluable installation tool will provide the same benefits to your new customers. In addition to RPG, the Punched Card Utility programs for collating, merge-sorting, gang-punching and reproducing, and listing and summary-punching are available. Proven power, ready to ease your customer's installation efforts - and yours!

**PRICES**

Type	Model	Rental	Purchase	MMMC	
2020	B03	\$ 365	\$17,300	\$ 37	
	C03	465	21,600	42	
	BC3	640	29,700	48	
	D03	810	37,600	52	
	B04	405	19,200	40	
	C04	505	23,400	45	
	BC4	685	31,800	51	
	D04	850	39,500	55	
	Features:				
		*7496 Disk Storage Control (Submodel 4s only)	180	8,600	5
	*8084 Attachment (for Standard 2203)	58	2,750	5	
	*8085 Attachment (for 2203 with #5558)	58	2,750	5	
2203	A2 Printer	400	19,400	71.50	
2560	A2 MCFM	460	21,300	90	
	Attachment (#8100)	79	3,750	4.75	

**SALES COMPENSATION PLAN**

Model /360-20 D orders will receive normal selling and installing quota point credit, including applicable New Name Account Remuneration (Schedule A), 1500 On-Schedule Quota Points (Schedule B), and 1500 Out-of-Territory Quota Points (Schedule C).

On-Schedule Quota Points (Schedule B, Page 24) - Group: 1-A; Type: /360, group 20 D; Identification: 2020; Quota Points: 1500; Effective Date: 3/15/68; Termination Date: 1/1/69.

Out-of-Territory Quota Points (Schedule C, Page 27) - Class: A; Group 1-A; Type: /360, group 20 D; Identification: 2020; Quota Points: 1500; Effective Date: 3/15/68; Termination Date: 1/1/69.

**PUBLICATIONS SUPPORT**

The following publications will be available: Model 20 Functional Configurator (N33-1509); IBM System/360 Model 20 Configurator (A26-3572-5); IBM System/360 Model 20 Introduction and System Summary (A26-5889) and For Cost Conscious Management - A New Version of System/360 Model 20 (520-1554). Consult the Weekly Publications Release Letter for availability.

**ORDERS AND MOVEMENTS CODES**

Type	Models	Product Line	Product Category
2020	B03 B04	6	63
	C03 C04		
	BC3 BC4		
	D03 D04		
2203	A02	6	63
2560	A02	6	63

Note: The System Type for all models of the 360/20 is 3620.





IBM World Trade Data Processing

Letter No. 68-219  
March 22, 1968

Product Announcement

2760/2740 Enters Data in Conversational Mode Using Light Probe, Screen

The IBM 2760 Optical Image Unit adds a new dimension to source data entry in that the operator can "converse" in his own language with the computer by touching a light probe to an image display screen.

Introduction of the 2760, linked to a 2740 Communication Terminal Model 1, makes it unnecessary for the operator to have keyboard skill or any knowledge of programming language or coding. Card punching and processing also are eliminated. With this device, widespread applications are possible for those having IBM System/360 Model 25 and up.

Among these applications are patient care at hospitals, sales order entry, insurance claims processing and cost estimating in manufacturing, to name a few.

Role of the 2760

The 2760 attaches to a 2740 Model 1. (One 2760 is attachable to a 2740.) The 2760 is user-oriented in that the operator need not have any keyboard skill, just the ability to recognize illustrations (color or black and white) or words, phrases, and sentences in his everyday language. A dual purpose screen displays the data necessary to perform the job.

To communicate with the computer, the operator points the light probe at an appropriate location on either half of the screen. The right part of the screen displays data projected from a filmstrip mounted in a cartridge. The screen's left side displays an area reserved for a set of relatively permanent response points, or a response matrix, labeled by a transparent or perforated overlay. One such overlay might be that of a typewriter keyboard for use in alphabetic or numeric operations. This area also responds to the light probe. There are 120 positions, or locations, on either half of the screen.

Role of the 2740

The 2740 can be used to print hard copy transmitted from the computer or to enter information to the computer via the typewriter keyboard. The 2740 also can be used as an inquiry terminal, communicating typewriter, or standard office typewriter.

The Film Cartridge

Images are optically projected on the 2760 screen from a strip of 16 mm color or black and white film which is stored in a protective cartridge that is easily inserted or removed from the optical unit. Each filmstrip may contain up to 128 images, 124 of which can be specially tailored to a customer's applications. Film threading and feeding are under computer control. In special cases, the Manual Frame Advance allows operator control of film movement. In either case, an Image Counter keeps the computer informed of the film frame being viewed.

Other 2760 Highlights

Simplicity of Operation

With the cartridge in place, the film advances to the first frame to initiate the program. The operator views the screen for special entry instructions which may be projected along with the format for the data to be selected. Touching the light probe to the screen enters data into the computer.

Major Data Reduction

Each response to the light probe is transmitted as a pair of coordinates for a given frame. This two-character message can represent a multi-digit part number, a word, a phrase, a sentence, a product name, etc. The computer recognizes the signal as meaningful input information and verifies receipt of the message.

Automatic Coding

The operator requires no special computer or programming knowledge. Coding of transactions and items is done by the systems designer. The operator merely selects from items or operations displayed in words and/or pictures on the screen of the optical image unit. The filmstrip can be moved to any frame under program control.

Improved Accuracy

A single selection from an image displayed on the screen results in data identification, transaction classification, and entry of this information into the system. All this, of course, is in the operator's language which could be Spanish, Japanese, French, or any other desired by the customer.

New Special Feature

The 2760 Attachment Feature 8301 provides for attachment of the optical image unit. This feature can be field installed on the 2740 Model 1 having serial number 15000 and above. A prerequisite on the 2740 is Record Checking (6114).

See reverse side for additional information.

  
John Fahey  
Director of DP Marketing

Attachments [2]: Machines 2740 and 2760

Distribution: All Areas

Side 1 of 2

Programming Support

Programming Support is provided for the 2760 under DOS/360 BTAM. This support will be available to World Trade Program Libraries on October 15, 1969.

Delivery and Source of Supply

First customer shipment will commence in October 1969 from the U.S.A. The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the 19 allocating sources. No commitments to customers can be made until dates are received in the branch office.

RPQs

These will be accepted 120 days after announcement with response time dependent upon complexity. Delivery will be a minimum of 120 days after first customer shipment with actual date dependent upon RPQ complexity.

IRD Support

The film cartridge for the 2760 will be marketed by the Information Records Division. IRD will also offer a film preparation service. This service will allow customers to submit either rough sketches or camera ready copy and receive filmstrips ready to be used in the 2760. Further information will be provided by WT IRD.

Publications Support

SRL, IBM 2760 Optical Image Unit, and a TNL to the IBM 2740 Installation Planning Manual (A24-3423) and a TNL to IBM System/360 DOS/BTAM are in preparation with availability to be announced in a forthcoming Publications Release Letter. Availability of Layout Guides and Layout Sketch Pads will be announced in a Publications Release Letter in January 1969.

Prices

	<u>Rental</u>	<u>Purchase</u>	<u>MMMC</u>
2760	\$ 195	\$ 9,525	\$ 27
2760 Attachment (8301) on 2740	10	450	none

Sales Plan

Normal sales compensation plan provisions apply. Add the following Out-of-Territory Quota Points (Schedule C, Page 27). Class B, Group No. 80, Type 2760, Identification 2760, Out-of-Territory Quota Points 200, Effective Date April 1, 1968, Termination Date January 1, 1969.

Program Test Allowance

None.

Educational Allowance

A 10% educational allowance applies to the 2760 and 20% to the 2760 Attachment Feature 8301 for qualifying universities and colleges.

Orders and Movements Codes

<u>Type</u>	<u>Model</u>	<u>Product Line</u>	<u>Product Category</u>
2760	001	7	9

Two Typical Applications: 2760 Opens New Doors in Coding, Processing Data

Insurance

Processing health insurance claims is a multi-step, time-consuming task in which typically a coding clerk converts claim information to machine processable code through use of code reference books. The information required to validate the claim is then keypunched and computer processed. Handling of payments likewise requires keypunching and processing.

To handle the same claim on the 2760, the film strip, designed on the basis of questions appearing on the claim form, would take the operator through the various questions such as relationship of claimant to policy-holder, location of service rendered, and type of service performed, to name a few. The operator need only watch each image projection and make the appropriate response with his light probe.

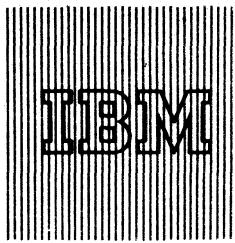
The computer can be programmed to translate the light probe signals into meaningful information as required by the customer's application.

Medical

The recording of patient data by a nurse is both time-consuming and complex with all references pertaining to medication -- dosage, route, and frequency -- normally coded before entry into a data processing system.

In entering this information via the 2760, a filmstrip containing all medication descriptions can be displayed for the nurse to select the various items that apply. Once the nurse selects the type of medication, the film will automatically advance to a frame which contains details on that type of medication. The film could contain medical symbols familiar to the medical profession. The operator need only watch each image projection and make appropriate responses with the light probe.

The 2740 can print out a detail description representing a composite of items selected. Error messages or invalid entries may be brought to the operator's attention by displaying an image directing the operator to take corrective action. An unlimited number of film cartridges may be stored for use in any location.



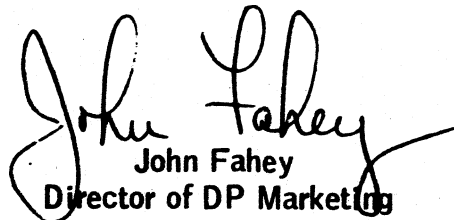
Product Announcement

WT Specifications Features for CCOP

Letter No. 68-215 withdrew all WT Specification Supplement sales manual pages pending results of a re-examination of their status.

This letter re-announces some of those features that may be specified on orders at no charge. They should only be specified if required. A list of these features is on the back of this letter and will be added to the Specify sections of the appropriate sales manual Machines pages.

All requests for other features not in the sales manual must be filled by normal RPQ procedures.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas

Available WT Only Supplement "Specify" Device Codes

Type	Model	Feature No.	Description	Type	Model	Feature No.	Description
11	001	2927	Machine Nomenclature Group for English	1052	1		If the following features are ordered on the 1051 they should be ordered on the 1052 as follows:
		2928	" " " " French		2		
		2929	" " " " German		3		
					4		
24	All	2927	Machine Nomenclature Group for English			4411	First reader attachment
26		2928	" " " " French			6384	Second reader attachment
		2929	" " " " German			4410	First punch attachment
		2745	UK order - (50/60 cycle power cord)			6383	Second punch attachment
29	All	2927	Machine Nomenclature Group for English			1287	Automatic fill character generation
		2928	" " " " French			4607	Home Correction
		2929	" " " " German			4795	Line Correction
		2745	UK order - (50/60 cycle power cord)			6381	Printer 2 attachment
		2746	Chip Agitator			5050	Master Station
59	All	2927	Machine Nomenclature Group for English			4461	1447 Attachment
		2928	" " " " French			4770	Keyboard request
		2929	" " " " German			9114	Dial Disconnect
		2745	UK order - (50/60 cycle power cord)			9705	Type Table
						4450	Forms Stand Stacker
402 AM	XA1	2905	Packaging Group to ship Computing Accounting Machine as single unit	1131	All	2745	UK order - (50/60 cycle power cord)
402 CAM				1206	1	2927	Machine Nomenclature Group for English
403 AM		2906	To ship accounting machine and calculating attachment separately. See Manual C24-1037 for dimensions and additional accounting machine length.		2	2928	" " " " French
403 CAM						2929	" " " " German
407 AM	All	2776	Dust Cover	1403	N1	2927	Machine Nomenclature Group for English
407 CAM					2	2928	" " " " French
					7	2929 [N1 only]	" " " " German
	XA1	2905	Packaging Group to ship Computing Accounting Machine as single unit	1442	5,6,7, N1, N2	2776	Dust Cover
	XA2			2020	All	2956	WT/US Character Set
	XA3	2906	To ship accounting machine and calculating attachment separately. See Manual C24-1037 for dimensions and additional accounting machine length.			2957	German Character Set
						2958	UK/Italy Character Set
						2959	Portuguese Character Set
421 AM	P14	2905	Packaging Group to ship Computing Accounting Machine as single unit			2960	Spain Character Set
421 CAM	Q14					2961	Spanish (except Spain) Character Set
	P16	2906	To ship accounting machine and calculating attachment separately. See Manual C24-1037 for dimensions and additional accounting machine length.			2962	Norway/Denmark Character Set
	Q16					2963	Sweden/Finland Character Set
	P54					2964	Belgium/France Character Set
	Q54					2965	Switzerland Character Set
	P56					2966	Netherlands Character Set
	Q56					2967	South Africa Character Set
444 AM	P	2905	Packaging Group to ship Computing Accounting Machine as single unit			2968	Japan Character Set
444 CAM	Q					2714	Control Feature Code A on 39, 52 and 63 CTBs
	S	2906	To ship accounting machine and calculating attachment separately. See Manual C24-1037 for dimensions and additional accounting machine length.			2715	Control Feature Code B on 39, 52 and 63 CTBs
						2716	Control Feature Code C on 39, 52 and 63 CTBs
447 AM	All	2776	Dust Cover			2927	Machine Nomenclature Group for English
447 CAM						2928	" " " " French
	U	2905	Packaging Group to ship Computing Accounting Machine as single unit			2929	" " " " German
	V					2927	Machine Nomenclature Group for English
	W	2906	To ship accounting machine and calculating attachment separately. See Manual C24-1037 for dimensions and additional accounting machine length.	2311	All	2928	" " " " French
	X					2929	" " " " German
	Z					2927	Machine Nomenclature Group for English
514	All	2776	Dust Cover (514 Only)			2928	" " " " French
519		2761	Attachment feature to 405			2929	" " " " German
602	All	2776	Dust Cover				
1051	All	2927	Machine Nomenclature Group for English				
		2928	" " " " French				
		2929	" " " " German				
		2745	UK order - (50/60 cycle power cord)				

Note: See Type Catalog page 36.



IBM World Trade Data Processing

Letter No. 68-222  
March 26, 1968

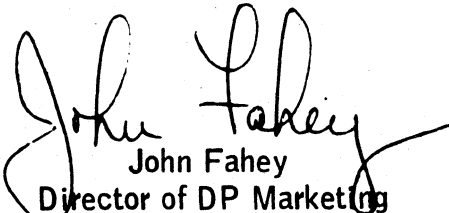
Sales Activity

Document Evaluation Centers

DP Letter No. 67-267 dated August 18, 1967, announced the establishment of an OCR Document Evaluation Center (DEC) in Sindelfingen, Germany. A 1287 Optical Reader is now installed and the Document Evaluation Center is prepared to conduct the pre-shipment qualification tests necessary for satisfactory completion of Document Evaluation for this machine in addition to the functions previously announced.

Contact your country Document Handling Coordinator for the detailed procedures of compliance. All requests for pre-shipment qualification (Document Evaluation) and those concerning the evaluation of paper, OEM printing evaluations and inspection of forms from forms printers and numeric handprinting evaluations should be directed to:

Manager, Document Evaluation Center  
IBM Deutschland  
P. O. Box 66  
Dept. 441  
Sindelfingen, Germany

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



Product Announcement

Engineering Change Improves Precision of IBM System/360 Floating Point Operations

A significant change to improve the precision of the System/360 floating point operations will be installed on systems having the floating point instruction set. The mandatory engineering change will provide an enhancement of System/360 floating point by providing three basic changes:

1. A "guard digit" for long precision floating point will be incorporated to extend the precision of results. Seven instructions are affected:

ADD NORMALIZED	COMPARE
SUBTRACT NORMALIZED	HALVE
ADD UNNORMALIZED	MULTIPLY
SUBTRACT UNNORMALIZED	

2. The short and long precision HALVE instructions will include post-normalization and a test for zero fraction, and the "guard digit" will participate in these operations. A number with a zero fraction is replaced by a true zero.
3. When an interrupt occurs because of exponent overflow or underflow conditions, the register causing the condition will contain all pertinent information available relating to the true results.

It should be noted that this engineering change does not include floating point round instructions.

Revisions to System/360 Principles of Operation A22-6821, are contained in a Technical Newsletter, N22-0282. Additional information on the change is contained in the IBM System/360 Floating Point Changes, Y22-6668. Both publications are available from the IBM Distribution Center, Mechanicsburg.

Enhancement of Precision

A significant enhancement to be realized from this change is that long precision results will have greater precision than before because the change will reduce the maximum error that can be introduced by the post-normalization which can occur during floating point operations. Therefore, it will be possible to establish a reasonable upper bound on the relative error that can be introduced in a floating point operation.

Announcement Highlights


1. A mandatory engineering change to the System/360 will provide an enhancement of precision in floating point operations.
2. Modifications called "tolerance code" will be available for all language processors affected by the change. All FORTRAN and certain PL/I programs in the customers' libraries will require the "tolerance code" before execution on systems which have the change installed.
3. Customers should be encouraged to update their program libraries on a schedule which will permit a prompt installation of the EC.
4. Systems shipped with the change must be installed with programming systems releases containing the "tolerance code." For some of the earliest shipments, it may be desirable to use a current release which can be updated with the required code.

Action Required

1. Achieve coordination between Marketing and CE at the account level to assure that one of the prerequisite programming releases is operating properly and that any required re-link-editing and/or recompiling has been accomplished prior to installing the EC.
2. Insure that systems shipped with the EC already installed will use a prerequisite programming system release (or a later release which would also contain the "tolerance code").

**NOTE:** If these programming systems restrictions are not observed, any program using floating point instructions is subject to incorrect operation on a modified system.

Subsequent pages contain details on the engineering change and related programming systems support.

  
John Fahey  
Director of DP Marketing

### Effect on Instruction Execution Times

The EC will increase the execution times of some floating point instructions. Technical Newsletters updating the individual models' Functional Characteristics manuals will have detailed times. No significant change is generally expected in a customer's throughput due to the engineering change.

### Delivery of Bills of Material

ECs are to be shipped on this schedule:

<u>Models</u>	<u>U. S. Plants</u>	<u>WT Plants</u>
30 & 40	3/15 - 6/30/68	4/15 - 7/31/68
44	3/15 - 6/30/68	N.A.
50	4/1 - 8/16/68	5/1 - 9/16/68
65 & 75	3/1 - 4/30/68	N.A.
67	9/1 - 10/1/68	N.A.

### Delivery of New Systems With EC

Systems shipped on and after these dates will have the change installed:

<u>Models</u>	<u>U. S. Plants</u>	<u>WT Plants</u>
30	3/15/68	4/15/68
40	3/1/68	4/1/68
44	3/1/68	N.A.
50	4/1/68	5/1/68
65 & 75	3/1/68	N.A.
67	6/1/68	N.A.

### Programming Systems Implementation of EC

To prepare for this change to System/360, modifications, called "tolerance code," are included in the following releases:

OS FORTRAN - E, G & H	14 (P68-7)
DOS FORTRAN & PL/I	16 (To be announced)
TOS FORTRAN & PL/I	11 (To be announced)
Model 44 FORTRAN	3 (To be announced)
BPS FORTRAN (Card & Tape)	Current (by Programming Temporary Fix)

These programming systems, which will contain the "tolerance code" to enable them to operate on either modified or unmodified systems, are prerequisites to installing the EC.

Availability of "tolerance code" for TSS/360 will be addressed in a separate communication.

### Current Releases Updatable With "Tolerance Code"

In addition to the Programming Temporary Fix† (PTF) which is available for BPS FORTRAN, there are PTFs available now for:

<u>System</u>	<u>Updatable Release</u>
DOS FORTRAN & PL/I	14 & 15
TOS FORTRAN & PL/I	10

Any plant modified system requiring the "tolerance code" before availability of the official release can be installed by using one of the updatable releases.

OS users, currently on Release 13, can utilize the OS/360 Release 14 FORTRAN processors and library with Release 13's control program by doing a processor only SYSGEN.

OS FORTRAN E and G require the FORTRAN library only. OS FORTRAN H requires both the FORTRAN H processor and library.

For procedures on ordering PTFs, contact the local CE programming systems representative.

+ The customer should be informed that the DOS, TOS and BPS PTFs are no different from any other PTF as far as testing is concerned.

### OS/360 Release 14

Space Allocation (FORTRAN Library Modules Affected By Floating Point EC)

<u>Routine</u>	<u>Total Bytes Rel. 14</u>	<u>Net Change From Rel. 13</u>
IHCADJS T	1130	+24
IHCFCOME	5692	+520*
IHCFCOMH	3816	-203* (A)
IHCFINTH	934	+934 (A)
IHCFCMODR	104	0
IHCLSCN	400	+20
IHCSSCN	284	+24

\* Includes space needed for APAR activity and SYNADAF support as well as support for floating point change.

(A) Former IHCFCOMH module has been split into two parts, net change is actually 731 bytes which includes SYNADAF, and Model 91 support.

### Effect on Type II Programs

All Type II programs using floating point are to be treated exactly as are the customers' own programs. The program updating instructions for the various Type I programming systems releases should be followed.

You will be notified through SECOM of any exceptions concerning the procedures for Type II programs. Should changes be necessary they will be issued directly to users through World Trade Program Libraries by a modification or a TNL.

### Key Factors Affecting Installation

Major factors affecting the installation date of the EC on a particular system will be the shipping date of the bill of material, date by which the customer's program library is updated to "tolerance code" level, engineering level of the system, and availability of the system for installation of this EC and any prerequisite ECs.

World Trade Customer Engineering plans to complete all floating point ECs by the end of February 1969 except for the Model 67. Model 67 installations will be coordinated on an individual basis.

The most pertinent information for each model is given in the table below so that planning can be initiated.

<u>Model</u>	<u>EC</u>	<u>Prereq. EC</u>	<u>WT CE Prereq. ECA Number</u>	<u>Estimated CE Time in Hours</u>	<u>Estimated Systems Hours*</u>
2030	128067	128064	323	1.5	1.0
2040	255291	256857	201	8.0	6.0
	255293	None			
2044	257574	257558	058	32.0	30.2
2050	258430	257671	152	10.5	9.5
	258545	257391	139		
2065 Part 1†	705313	705308	115	24.8	20.0
2065 Part 2	705340	705313**	119	11.2	9.0
2067 Part 1	705322	705323		24.8	20.0
2067 Part 2	705344	705347		11.2	9.0
2075	705848	705805	094	24.0	18.0

\* For all models, except Models 65 and 67, the EC cannot be incremented. Part 1 for the 65 and 67 can be incremented in six sections.

\*\* The prerequisite EC for Part 2 for systems having compatibility feature 7119 will be 705341.

† All S/360/65 shipped after 10/15/67 have Part 1 installed.

### Publications Support

Advance copies of the following publications have been shipped. Additional copies are available from the IBM Distribution Center, Mechanicsburg. IBM System/360 Operating System FORTRAN IV (H) Programmers Guide (C28-6602-2) and a TNL (N28-2307) ... IBM System/360 Operating System FORTRAN IV (G) Programmers Guide (C28-6639-1) and a TNL (N28-0579) ... IBM System/360 Operating System FORTRAN IV (E) Programmers Guide (C28-6603-2) ... a TNL (N28-0564) updating the IBM System/360 FORTRAN IV Library Sub-programs (C28-6596-2) ... a TNL (N28-0571) updating the IBM System/360 Model 44 Programming System Guide to System Use for FORTRAN Programmers (C28-6813-0) ... IBM System/360 Floating Point Changes (Y22-6668) -- a Sales and Systems Guide.

A forthcoming Publications Release Letter will announce the availability of TNLs updating the functional Characteristics Manuals for the Models 30, 40, 44, 50, 65, 67 & 75.

Other publications affected by this change will be announced in future Publications Release Letters.



### Program Updating

The following must be done to current programs to utilize the "tolerance code" in OS/360 Release 14:

All FORTRAN E, G, and H load modules must be re-link-edited with Release 14 prior to execution on a modified system. This is required to obtain the necessary code for the interrupt handler, sine-cosine, and modulo-demodulo routines from the FORTRAN library. In addition, the FORTRAN H user who has used AMOD and/or DMOD functions in his programs must recompile that program using the FORTRAN H in OS/360 Release 14. Additional information is contained in the Installation Newsletter 67-26.

COBOL E and F, Algol, Testran, PL/IF, and Assembler E and F load modules do not require any recompilation or re-link-editing to utilize OS/360 Release 14.

Any customer using a SPIE routine to override the processor control of exponent overflow/underflow interrupts may have to recode his override routine before the EC is installed.

### DOS/360 PTF to Releases 14 & 15 and TOS/360 PTF to Release 10

Space Allocation (FORTRAN Library Modules Affected By Floating Point EC)

<u>Routine</u>	<u>Total Bytes Affected Release</u>	<u>Net Change From Previous Release</u>
IJTACOM	(DOS) 2408 (TOS) 2264	(DOS) + 160 (TOS) + 160
IJTLEXP	480	+ 24
IJTLSCN	392	+ 24
IJTLSQT	168	+ 24
IJTSSCN	280	+ 24
IJTSSQT	192	+ 24
IJTMODR	104	0

There is no additional customer core needed for the required code in the TOS & DOS PL/I processors and libraries.

### Program Updating

The following must be done to current programs in order to utilize the change made to DOS Release 14 and 15 and TOS Release 10 by the PTFs:

All FORTRAN and PL/I object modules must be re-link-edited with the changed release prior to execution on a modified system. This is required in order to obtain the affected library routines of various processors.

Other components of DOS and TOS are not affected by the PTF containing the required code, and hence, do not need to be re-link-edited.

DOS and TOS customers using the STXIT macro to link their own interrupt handling routine for exponent overflow/underflow may have to recode their special exponent interrupt handler before the EC is installed.

### Model 44 Release 3

Space Allocation (FORTRAN Library Modules Affected By Floating Point EC)

<u>Routine</u>	<u>Total Bytes Affected Release</u>	<u>Net Change From Previous Release</u>
IBCOM	10,248	+ 560
SIN/COS	272	+ 8
DSIN/DCOS	396	+ 12

### Program Updating

To utilize the needed code for the changed hardware the user must go through the same procedure he would normally go through in going from one release to another.

### BPS FORTRAN (Card & Tape)

Space Allocation (FORTRAN Library Modules Affected By Floating Point EC)

<u>Routine</u>	<u>Total Bytes Affected Release</u>	<u>Net Change From Previous Release</u>
IBCOM	5060	+ 160
LEXP	480	+ 24
LSQRT	168	+ 24
SSQRT	192	+ 24
LSCN	392	+ 24
SSCN	280	+ 24

### Program Updating

Since a customer must recompile to utilize any new BPS the requirement is the same for this PTF.



Product Announcement

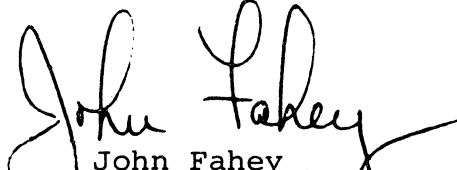
Data Set Clocking is New Option for SCA in 1130 System

The operating option of Data Set Clocking is announced for the Synchronous Communications Adapter feature on the 1130 Computing System. There is no charge for this option, and no new features are being announced.

Prior to this announcement, the 1130 used IBM Machine Clocking only and required the same mode on the unit with which it communicated. By adding the new operating option to the SCA feature, the 1130 now has the capability of communicating with networks that employ IBM Machine Clocking or Data Set Clocking.

Customer selection of the appropriate Data Set modem and a simple change by the Customer Engineer permit either Data Set Clocking mode or IBM Machine Clocking mode. The only restriction is that all data sets communicating with the 1130 system must be of the same type as those used on the 1130.

In light of this restriction and revisions to sales manual pages, all on-order 1130 systems should be reviewed to insure correct data set has been ordered.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



Product Announcement

CONTENTS

New Commercial Feature for Model 44  
Variable Precision Switch Feature for Model 44

NEW COMMERCIAL FEATURE  
MAKES MODEL 44 COMPATIBLE  
WITH OTHERS IN S/360 FAMILY

The Commercial Feature 8501 for the IBM System/360 Model 44 provides compatibility with other systems in the System/360 Family. This feature is an improved version of the Trap and Emulate RPQ (888086).

Five instructions, formerly simulated, are now provided in hardware. The execution times, in microseconds on a Model 44 with High Speed General Purpose Registers (Feature Code 4583), for these instructions are:

Branch on Index High	(BXH)	5.0
Branch on Index Low/Equal	(BXLE)	5.0
Execute	(EX)	2.75 + time of the instruction executed
Load Multiple	(LM)	2.0 + R where R=no. of registers
Store Multiple	(STM)	same as above

These instructions are incorporated in the simulation of the other instructions resulting in approximately 20% improvement in internal performance when compared with the RPQ.

The simulated instructions are:

MVC	XC	ZAP
MVN	TR	CP
MVZ	TRT	AP
CVD	ED	SP
CVB	EDMK	MP
NC	MVO	DP
CLC	PACK	
OC	UNPK	

The simulator program is shipped as part of the feature. This program and console switch are activated by the user.

Prices ... Commercial Feature 8501 may be rented for \$620 and purchased for \$19,590.

Restrictions ... Normal restrictions for compatibility with regard to time dependent programs and minimum system configuration requirements apply to the Commercial Feature.

Delivery ... First customer shipments will commence in June 1968. Approximate system hours to install this feature may be segmented into three portions (one of 10 hours, one of 17 hours and one of 35 hours) or one portion of 60 hours.

Limitations ... The Commercial Feature is available on Model 44 F, G, and H only. A maximum of one feature is permitted. Support is provided for I/O configurations available on the Model 44. The Single Disk Storage Drive (SDSD) is supported only by the Model 44 Programming System. Selector mode is available only on systems with High Speed Multiplexer Channel(s), Feature Code 4598 and 4599 and not available on systems with Direct Data Channel 3275.

RPQs ... All on-order RPQs (888086) scheduled for shipment after June 1968 will be shipped as the Commercial Feature (8501). Field bill of materials to update installed RPQs (888086) to the Commercial Feature will be available by July 1968. All Model 44s with the RPQs installed will be upgraded to the Commercial Feature (approximately 17 system hours required) and retain their present configuration.

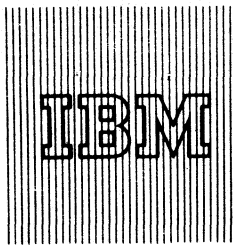
Programming Systems ... The extent of Model 44 Programming Systems support will be the capability to assemble the five instructions now included in hardware. Availability of this support will be consistent with first customer shipment.

Publications ... A TNL to the Model 44 Functional Characteristics Manual (SRL A22-6875), describing the Commercial Feature, will be available in July 1968. A forthcoming Publications Release Letter will give a more precise date.

VARIABLE PRECISION SWITCH  
FEATURE BEING ALTERED  
ON MODEL 44

The 2044 Floating Point Variable Precision feature is being altered such that only the floating multiply and divide will be affected by the switch setting. This change will be installed with the IFPEC (Improved Floating Point Engineering Change), EC 357574. Refer to WTDP Announcement Letter 68-223. This change in circuitry, along with the modification to the Model 44 Programming System in Release 3, will allow FORTRAN programs to run successfully with all settings of the Variable Precision Switch.

  
John Fahey  
Director of DP Marketing



Product Announcement

Additional Input/Output Devices for System/360 Model 67

Effective immediately, the following I/O devices, presently available on the Model 65, are released for attachment on the Model 67. These units will be supported on the Model 67 when operated as a Model 65 under Operating System/360.

2303	Drum Storage
2803	Tape Control Model 2
2804	Tape Control Models 1 and 2
2401	Magnetic Tape Unit Models 4, 5 and 6
1442	Card Read Punch Model N1 and Card Punch Model N2
1443	Printer Model N1
2501	Card Reader Model B1 and B2
2520	Card Read Punch Model B1 and Card Punch Models B2 and B3

IBM System/360 Model 65

Withdrawal of Attachment of 1231 N1, 1285, 1418 and 1428

Effective immediately, attachment of the following equipment to System/360 Model 65 is withdrawn:

1231-N1	Optical Mark Page Reader
1285	Optical Reader
1428	Alphameric Optical Reader
1418	Optical Character Reader

Future orders will no longer be accepted for these machines and their associated devices for attachment to System/360 Model 65. Orders currently in the backlog will be honored, provided the customer does not defer scheduled delivery.

  
John Fahey  
Director of DP Marketing

Attachments [9]: Machines 1230, 1282, 1418, 1428, 1442.1, 1443.1, 2301 - 2303, 2401 - 2404 and 2501 - 2520.

Supplement [9]: [1] General Information 17 ... [2] Systems 870.1 ... [3 thru 9] Machines 24 - 26, 27 - 29, 46 - 56, 357 - 358, 834/836 - 865, 2740 and 10000.1.

Distribution: All Areas



IBM World Trade Data Processing

Letter No. 67-286  
November 17, 1967

Product Announcement

IBM 1240, 1440 and 1460 Systems

Additional Specification Codes

Additional no-charge feature specification codes are now required on the 1241 Bank Processing Unit and 1441 Processing Unit whenever one of the following units or special features is to be attached to a system.

- 1403 Printer Model 2, 3, 5 or 6 -- 1440 System

1403 Attachment (#9085) must be specified on the 1441 if a 1403 Printer is to be attached.

- Card Image (#1531) -- 1240 or 1440 System

Card Image (#9035) must be specified on the 1241 or 1441 if Card Image (#1531) is to be installed on an attached 1442 Card Read Punch Model 1 or 2, or 1442 Card Reader Model 4.

Each of the above feature codes is in addition to any prerequisites presently listed in the sales manual.

Action Required -- If any of the above are on order for use with on-order systems, submit Alteration Notices specifying the appropriate code(s) on the processing unit ... if on order for installed systems, no-charge MESs must be submitted for field installation of the appropriate features on the processing unit.

IBM 2822 Paper Tape Reader Control

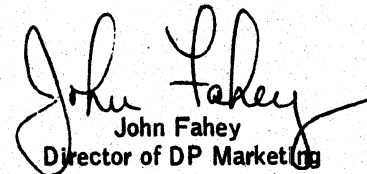
Meter Classification

Effective immediately, the metering classification of the 2822 Paper Tape Reader Control is changed from "assignable unit" to an "I/O On-line Unit." See General Information page 42 for complete details.

The time recorded by the meter on the 2671 paper tape reader also applies to the 2822. Customers who are renting the 2822 are to be advised in writing, prior to December 1, that the 2671 meter reading is to be reported for the 2822 on the Billable Time Authorization (BTA) starting January 1, 1968.

Those customers who previously reported the 2671 meter reading as applicable to the 2822 will receive a credit for any charges billed on the 2822 prior to January 1, 1968 for use in excess of 176 hours in any calendar month. If the machines were installed for a partial month, the credit will be based on use in excess of the prorated allowable hours.

All 2822 customers are to be advised of the foregoing with the additional request that they bring to IBM's attention instances where credits are due.

  
John Fahey  
Director of DP Marketing

Attachments [8]: [1 and 2] Systems 1240.1 and 1440.1 ... [3 thru 8] Machines 1241 (1 of 2), 1428, 1441, 1442.1, 1442.3 and 1444 - 1445.

Distribution: All Areas



IBM World Trade Data Processing

Letter No. 67-287  
November 22, 1967

Product Announcement

New IBM 1050 Card Input/Output Units

Two new units of the IBM 1050 Data Communications System -- a 1056 Card Reader Model 3 and a 1058 Printing Card Punch Model 2 -- can accommodate the wide range of PTTC/EBCD (Perforated Tape Transmission Code/Extended Binary Coded Decimal) codes compatible with the EBCD codes of System/360 Models 30, 40, 44, 50, 65, 67, and 75.

1056 Card Reader Model 3

The 1056 Model 3, which can read a total of 111 unique card codes, permits customers to transmit cards punched in EBCD code representation directly to System/360 via a 2701 Data Adapter Unit or 2702 or 2703 Transmission Control Unit. The reader may also be used with 1050 terminals in source recording or terminal-to-terminal transmission systems applications.

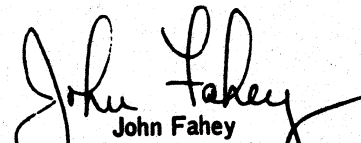
Card pack feeding (300 cards maximum) and extended card code translation hardware (both upper and lower case graphics) are standard in the new reader. Transmission speed is 14.8 characters per second.

1058 Printing Card Punch Model 2

The 1058 Model 2 which can punch a total of 85 unique card codes, permits customers to punch in EBCD code representation via 2701, 2702, or 2703. Also, the punch can be used with 1050 Terminals in source recording or terminal-to-terminal transmission systems applications. Sixty-two interpreted graphics and a "blank" code are provided. A keyboard similar to that of the 29 Card Punch is provided.

Extended card code translation hardware (for both lower and upper case graphics) is standard on this model. Punching speed is 14.8 characters per second.

See reverse side for details on delivery, programming, RPQs, publications support, and prices.

  
John Fahey  
Director of DP Marketing

Attachments [8]. [1 and 2] Systems 1050.1 and 1050.3 ... [3 thru 8] machines 1051.1, 1051.3, 1051.5, 1052, 1053, and 1054 - 1055.

Distribution: All Areas

**DELIVERY:**

First customer shipment will begin in May 1968. The delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate Orders and Schedules Department on a sequential basis. No commitments are to be made to customers until such dates are received in the branch office.

**PROGRAMMING:**

Programming support for the 1056 Model 3 and 1058 Model 2 (PTTC/EBCD Card Codes) on the 1051 Model 1 or 2 operating with a 2701, 2702, or 2703 is provided by the currently announced 1050 program support. This support consists of DOS/360 BTAM, DOS/360 QTAM, OS/360 BTAM, and OS/360 QTAM.

For System/360 Model 30 console requirements where a 1050 is equipped with CPU Attachment (#3130) and additional 1051 I/O is attached to either the 1051 Model 1 or N1, except for a 1052 Printer-Keyboard, these additional components are not program supported to operate directly with the CPU attachment switch set to "ON."

On a multi-line multiplexer/processor system, an intermix of 1050 PTTC/BCD and PTTC/EBCD Card I/O can be installed, but not on the same communication line. Detailed information concerning the User's Programming translation, which is required to accommodate PTTC/BCD Card I/O, will be provided in a forthcoming Technical Newsletter supplement to the 1050 SRL (A24-3474).

System/360 DOS 1070 Process Communication Supervisor does not support the 1056 Model 3 and 1058 Model 2.

The 1056 Model 3 and the 1058 Model 2 are not supported for console attachment by any IBM Operating System/360.

**RPQs:**

RPQs will be accepted starting 120 days after this announcement. Existing RPQs on other 1056 or 1058 models may not be applied without review by Special Engineering. Schedules will depend upon complexity of the RPQ with a minimum of 120 days after first customer shipment of standard units.

**PUBLICATIONS SUPPORT:**

Technical Newsletter availability will be released in a forthcoming Publications Release Letter.

**PRICES:**

Type	MAC	Purchase	MMMC
1056 mdl 3	\$120	\$4,125	\$ 24
1058 mdl 2	140	4,550	40

**IBM**

IBM World Trade Data Processing

Letter No. 67-288

November 22, 1967

**Product Announcements****IBM 1052/1053/2740/2741****New Printing Elements**

The following print elements are available for the 1052 Printer-Keyboard, 1053 Printer, and 2740 and 2741 Communication Terminals. Printing at 12 characters/inch spacing is provided by the new Data 2 Font.

<u>Element</u>	<u>Type Font</u>	<u>Char/Inch Spacing</u>	<u>For Machines</u>
PTTC/EBCD	Data 1 (mono case)	10	1052 mdl's 1-6, 8, 1053 mdl 1, 2740/2741
PTTC/EBCD	Data 1 (dual case)	12	1052 mdl's 1-5, 1053 mdl 1, 2740, 2741
PTTC/BCD	Data 2 (dual case)	12	1052 mdl's 1, 2, 4, 1053 mdl 1, 2740/2741

Any one of the above elements may be ordered at no charge on initial machine order. Alteration Notices may be submitted. Sixty days lead time prior to schedule date is required.

Three new standard Model 72 elements (Scribe, Elite 72, Prestige Elite 72) are now available for the 2740/2741 and may be ordered subject to the limitations on page TC 4. These elements print at 12 characters/inch spacing. They may be specified at no charge on initial machine order. Alteration Notices require sixty days lead time.

See pages TC 3 - TC 4 for feature numbers and ordering instructions.

**New Pin Feed Platens**

The 1052 Models 7 and 8 are presently equipped with a 13-1/8" (hole-to-hole) pin feed platen as standard ... maximum 125 print positions. A 12-1/2" (hole-to-hole) pin feed (#9529), maximum 119 print positions, may be specified in lieu of the standard platen at no charge on initial machine order. Alteration Notices may be submitted. Sixty days lead time prior to schedule date is required.

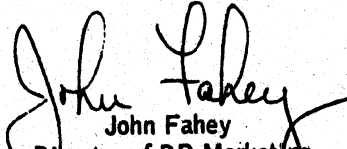
For installed 1052 Model 7 machines (serial No. 50403 (U.S.); 58-03223 (WT) and below), where EC 254151 has not been installed on the system, an option for a 12-1/2" (hole-to-hole) pin feed is also available on MES (sixty days lead time). See Item 8 under Specify on 1052 "Machines" page.

The 12-1/2" pin feed is available for plant installation in lieu of the standard friction feed platen on other 1052 models and on the 1053, 2740, and 2741.

See "Machines" page 10000.4 for feature numbers and ordering instructions.

**1052 Model 7 and 1053 Model 4**

All new orders for these units must specify voltage. Alteration Notices to change existing on-order units will be generated by the Country Orders and Schedules Department.

  
John Fahey  
Director of DP Marketing

Attachments [6]: [1 and 2] machines 1057/1058 and 10000.3 ... [3 thru 6] Type Catalog 1, 3, 5, and 7.

Distribution: All Areas



Letter No. 68-221  
March 27, 1968

Product Announcement

IBM 1030, 1050, 1092, 1093

Effective immediately, certain components of the IBM 1030 Data Collection System, IBM 1050 Data Communications System, IBM 1092 Programmed Keyboard, and IBM 1093 Programmed Keyboard are in limited new production.

Included are the following input/output components:

1051 Models 1, 2, N1 ... 1052 Models 1, 2, 3, 4, 5, 7, 8 ... 1053 Models 1, 2, 3, 4 ... 1054 Models 1, 2 ... 1055 Models 1, 2, 3 ... 1056 Model 1 only ... 1057 Models 1, 3 ... 1058 Models 1, 3 only ... 1092 Models 1, 2 ... 1093 Models 1, 2 ... 1031 Models A1 - A7 Inclusive ... 1031 Models B1 - B7 Inclusive ... 1032 Models 1, 2 ... 1033 Model 1 ... 1034 Model 1 ... 1035 Model 1.

Existing orders for new machines will be filled with new equipment on the currently assigned shipping schedules.

Limited New Production

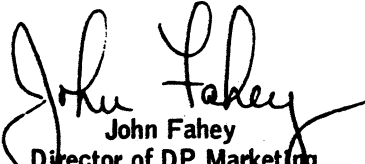
Effective immediately, the IBM 357 Input Station, 358 Input Control Unit, 360 Clock Read-Out Control, 361 Read-Out Clock, 372 Manual Entry, 373 Punch Switch, 374 Cartridge Reader, and 1001 Data Transmission Terminal are in limited new production.

Existing orders for new machines will be filled with new equipment on the currently assigned shipping schedules.

IBM 545 Output Punch

DP Letter No. 68-204 announced a new IBM 545 Output Punch. The IBM 545 does not qualify for an educational allowance under the terms of our Educational Allowance Program (DP Letter No. 66-270).

In addition, provisions of General Information page 21, "IBM Equipment in Other Manufacturers' Systems," are applicable to this unit.

  
John Fahey  
Director of DP Marketing

Attachments [24]: [1] Index 1 ... [2] General Information 19 ... [3 and 4] Systems 360/20.1 and 360/20.3 ... [5 thru 22] Machines 545, 1403.1, 1403.3, 1442, 1442.3, 2020.1, 2020.3, 2030.1, 2150-2152, 2203, 2260-2265, 2301-2303, 2311-2314, 2361, 2365, 2415, 2501-2520 and 2540 ... [23 and 24] Type Catalog 36 and 81.



Product Announcement

Dual 1052 Model 7 Capability at Reduced Cost Now Possible on System/360 Models 65 and 75

Dual input/output typewriter console capability at a reduced cost is now possible for System/360 Models 65 and 75 customers through introduction of a second 1052 Model 7 for the 2065 Processing Unit, and the ability to attach one or two 1052 Model 7s to the 2075 Processing Unit.

Console I/O functions are critical to the operation of System/360 Models 65 and 75. Systems with a single console I/O device can be rendered inoperative if the device malfunctions. The capability for attaching up to two 1052s, for use as console I/O devices, will provide alternate console support at a reduced cost.

Before this announcement, Model 65 users were limited to the attachment of one 1052 (Feature 7920) as a console I/O device. Alternate console capability was obtained through the attachment of a 2150 Console. Now a second 1052 typewriter attachment, for the 2065 Processing Unit, (Feature 7921) will permit the use of a second 1052 Model 7 typewriter as an alternate console I/O device.

The Model 75 users, until this announcement, were limited to the attachment of a 1052 via the 2150 for the console I/O functions. Now Model 75 users can attach either one or two 1052 typewriters directly to the 2075 Processing Unit to obtain either primary or primary and alternate console I/O functions.

Program Support -- Support for the 1052 as an alternate console device will be supplied under OS/360, as modified by PTF 9615 to Release 14. The option will be defined at system generation time, and its use will provide the ability to either retry the failing operation on the currently active console device or to switch to the alternate device and continue processing there. Either alternative may be selected at the option of the operator.

The correct procedure for bypassing a console malfunction will be documented in the Release 14 PROSE Library, Entry 14-028. This entry will be replaced in Release 15 by a TNL to the Operator's Guide which incorporates the procedure for bypassing a console malfunction.

The following is the substance of the material to appear in the Operator's Guide as a replacement of the current section entitled "How to Bypass a Console Malfunction":

If a console malfunction occurs, the system will ring the audible alarm and console activity will be suspended. One of two actions may be taken:

- a. Correct the malfunction and make the console not ready, then ready. Processing will continue on the same console.
- b. Depress the external interrupt key to switch to the alternate console, next, make the alternate console not ready, then ready, and initiate an OS/360 operator command (e.g., DISPLAY ACTIVE) on the alternate console. Processing will continue on the alternate console.

If there appears to be a console malfunction without an audible alarm, follow the above procedure for retrying the operation on the same console.

These procedures should be used for all console devices when the PTF 9615 has been applied to Release 14 or when operating with Release 15.

Delivery -- Model 65 - first customer shipments for field installation - immediately. First plant installed shipments - June 1968.

Model 75 - first customer shipments for field installation, Dual Typewriter - immediately; Single Typewriter - May 1968. First plant installed shipments, Dual Typewriter - June 1968 and Single Typewriter - July 1968.

The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate Orders and Schedules Department. No commitments to customers are to be made until those dates are received in the branch office.

Prices --

	Rental (MAC)	Purchase	MMMC
First Adapter on 2065 (7920)	\$ 232	\$10,545	\$ 9
Second Adapter on 2065 (7921)	235	10,875	9
First Adapter on 2075 (7920)	365	16,790	23
Second Adapter on 2075 (7921)	235	10,875	18



John Fahey  
Director of DP Marketing

Attachments [3]: [1 thru 3] Machines 1052, 2065 and 2075

Distribution: All Areas



IBM World Trade Data Processing

Letter No. 68-230  
April 16, 1968

Product Announcement

2701 Data Adapter Unit, Second Channel Enable/Disable Switch

A second enable/disable switch (6301) is available to attach to the Second Channel Interface feature (1860) on the 2701 Data Adapter Unit.

In a configuration where two CPUs are linked to a 2701 having feature 1860, the switch permits disablement of the 2701 function of one CPU without affecting the function of the other.

Action Required: Customers whose 2701s were shipped on or after December 29, 1967 have feature 6301 installed; no action is necessary. For those 2701s with feature 1860 shipped before that date, a field bill of material is available for this no-charge feature to be attached to 2701s. Order this feature via an MES form from the applicable plant.

7765 Production Discontinued, No Further Orders Accepted

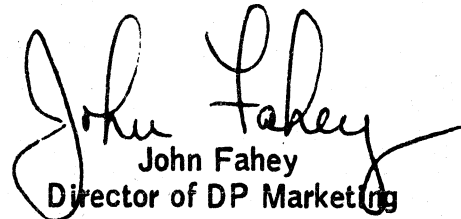
The IBM 7765 Paper Tape to Magnetic Tape Converter is being removed from the product line. Effective immediately, no further orders for the 7765 will be accepted.

Existing orders will be honored according to the schedule furnished the customer. The customer should be informed that any delay or postponement of an order in the backlog will result in cancellation of that order.

IBM 824 Models 2 and 6 No Longer in Production

Effective immediately, the 824 Typewriter Card Punch Models 2 and 6 are withdrawn from the IBM product line. Orders will no longer be accepted.

The product is currently on an "as available" basis. Orders now in the backlog will be offered a scheduled delivery date. The customer should be informed that failure to accept the scheduled delivery date, or any delay or postponement of an order in the backlog, may result in cancellation of that order.



John Fahey  
Director of DP Marketing

Attachments [11]: [1 and 2] Systems 1130.1 and 1130.3 ... [3 thru 10] Machines 826, 1053, 1131.1, 2701.1, 2701.3, 2840 - 2841, 2846 and 7741.3 ... [11] Type Catalog 3

Distribution: All Areas



Product Announcement

IBM 50 Magnetic Data Inscrber  
IBM 2495 Tape Cartridge Reader

A New Generation of Key Entry

We are announcing two new machines that open up a new generation of key entry... the IBM 50 Magnetic Data Inscrber and the IBM 2495 Tape Cartridge Reader.

The IBM 50

With this machine your customers can:

- Increase thrupt approximately 25% (estimated average) over card punches.
- Record keyed data serially onto magnetic tape by manual keyboard operation.
- Verify data that has previously been keyed.

Here's how it works:

An operator keys data on a familiar "card punch" keyboard. The data is inscribed magnetically on 16 mm. sprocketed tape. The tape contained in a protective cartridge... is 100 feet long... holds up to 23,000 characters (20 characters per inch density)... can be read automatically into a System/360 Model 25, 30, 40, or 50 (on the multiplexer channel) via the new IBM 2495 (see below). After data has been entered into the system, the cartridges are reusable.

Here are the highlights:

- Data is magnetically inscribed on the tape on 9-tracks (including parity) in the standard EBCDIC code.
- A character display shows the operator any recorded character in its graphic form.
- Variable Record Length (up to 720 characters) is standard.
- A program card mounted on a program drum can have up to 8 different formats on one card and, in conjunction with operator-keyboard, controls machine functions. The program card provides visual information to the operator by field, in synchronism with her keying, and with automatic operation.
- All automatic operations (skipping, duplicating, left zero, backspace) are at 100 char/sec speeds. Automatic left zero, field backspace, and record backspace are standard for both operator keystroke savings and ease of error correction during key entry.
- Combines quiet operation and maximum operator convenience.

The IBM 2495

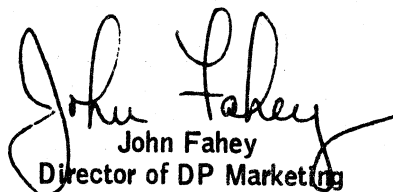
Here are the highlights:

Has a hopper that holds up to 12 cartridges and can feed, read, rewind and stock cartridges without operator intervention.

Checks parity and reads data from 16 mm. sprocketed magnetic tape cartridges into storage at 900 characters per second.

Reads tape cartridges created on the Office Products Division's MT/72 units into System/360.

Other facts you need to know are covered on the back of this letter.

  
John Fahey  
Director of DP Marketing

Attachments [2]:           Machines 50 [to be inserted in Sales Manual following page 59-63] and 2420.

Distribution:               All Areas

Rental and Purchase  
Prices

<u>Machine</u>	<u>Model</u>	<u>Rental</u>	<u>Purchase</u>	<u>MMMC</u>
IBM 50 Magnetic Data Inscrber	1	\$180	\$9,900	\$ 66
IBM 2495 Tape Cartridge Reader	1	350	19,250	155

Delivery and Plant of Manufacture

First customer shipment will be April 1969. The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate Orders and Schedules Department on a sequential basis. No commitments to customers are to be made until such dates are received in the Branch Office. IBM 2495 units will be manufactured at the Poughkeepsie Plant. The IBM 50 Magnetic Data Inscrber will be manufactured in Greenock and Poughkeepsie.

RPQs

RPQs will be accepted immediately; however, no response will be made until 180 days after announcement. The shipping schedule will depend upon complexity, and RPQ shipments will not start until 60 days after first customer shipment.

Programming Support

Programming Support will be via the MPS Utility under DOS.

Publication Support

The following Support Publications will be in this week's literature shipment. Additional copies are available from the IBM Distribution Center, Mechanicsburg. IBM 50 SRL A27-2725; IBM 2495 SRL A27-2726; Promotional Brochure 520-2055; Facts Folder 520-2063; Proposal Inserts - IBM 50;221-0488; Proposal Inserts - IBM 2495,221-0487.

Sales Compensation Plan

Normal DP Sales Compensation Plan provisions apply. Add to Schedule D Table - Out-of-Territory:

<u>Class</u>	<u>Group</u>	<u>Type</u>	<u>Identification</u>	<u>Out-of-Territory Quota Points</u>
B	2	50	50	150

Educational Allowance

Does not apply.

DP Orders and Movements Codes

<u>Type</u>	<u>Models</u>	<u>Product Category</u>	<u>Product Line</u>
0050	001	05	1
2495	001	59,62,92,93	6

**Product Announcement****IBM 1017 Paper Tape Reader, 1018 Paper Tape Punch, 2826 Paper Tape Control  
Offer Increased Capabilities**

Increased capabilities for users of paper tape punches and readers are now available to customers through the new IBM 1017 Paper Tape Reader, 1018 Paper Tape Punch and 2826 Paper Tape Control. Consider these versatile advantages:

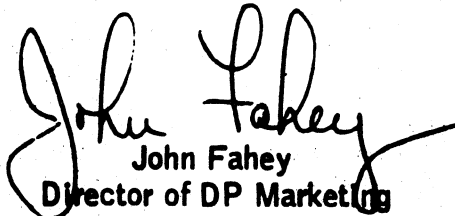
- Direct input/output eliminates off-line conversion
- Enables reading or punching 5, 6-7, and 8-track tape
- All IBM tape supplies or their equivalent may be read
- Allows punching of all IBM tape supplies or their equivalent ... paper and polyester except No. 425020
- Character checking and correction capability
- Table top packaging permits placement flexibility
- I/O Configuration flexibility
- Allotting system capability meets needs of Printing and Publishing Industry

The 2826 provides for attaching 1017s and 1018s to System/360 Models 25, 30, 40, and 50 via the multiplexer channel. Two 2826 models are available. Model 1 provides for attachment of up to two 1017s plus up to two 1018s which can operate simultaneously. Model 1 satisfies direct entry paper tape input/output for general purpose requirements. The 2826 Model 2 functions as an allotting unit and satisfies the needs for printing and publishing applications. Only one reader and one punch can operate simultaneously. I/O attached to the 2826 Model 2 may be located up to 350 feet away.

The 1017 reads chad tape and the 1018 punches chad tape at 120 cps. Both units operate with paper or laminated polyester tape 11/16", 7/8" or 1" wide. Currently announced IBM tape supplies or their equivalents can be processed except that laminated polyester tape IBM No. 425020 cannot be punched. Japanese six-channel tape can be read on the 1017 and punched on the 1018. Character checking is basic to the 1017 reader and available as a special feature on the 1018 punch.

The 1017 is available in two models. Model 1 reads strips of punched paper tape. Model 2 includes a supply reel and take-up reel and reads strips or reels of punched paper tape.

See reverse side for additional information.

  
John Fahey  
Director of DP Marketing

**Attachments [5]:** Machines 1017-1018, 2820-2821, 2821-2826, 2841 and 2848.

**Distribution:** All Areas

## RPQs

RPQs will be accepted for consideration 120 days after announcement with response time depending on complexity. Delivery will be a minimum of 120 days after first customer shipment with actual date depending on the complexity of the job.

## Publications Support

A component description SRL (A33-4500-0) describing the IBM 2826 Control Unit, the IBM 1017 Paper Tape Reader and the IBM 1018 Paper Tape Punch is available. Advance copies have been shipped. Additional copies are available from the IBM Distribution Center, Mechanicsburg.

Programming Technical Newsletters will be available approximately four weeks after announcement to up-date the following publications: IBM System/360, Disk Operating System Basic Telecommunications Access Method (C30-5001) ... IBM System/360, Disk Operating System Supervisor and Input/Output Macros (C24-5037).

Actual Availability of the Programming Technical Newsletters will be announced in a forthcoming Publications Release Letter.

## Programming Support

Programming support will be provided for the 2826 Model 1 with attached 1017s/1018s under DOS/360 as an extension of the Consecutive Paper Tape IOCS. Support for the 2826 Model 2 with attached 1017s/1018s will be provided in DOS/360 as an extension of the Basic Telecommunications Access Method (BTAM). This support will be available to WT Program Libraries July 15, 1969.

## Delivery

First customer shipments will start in September 1969 for System/360 Models 25, 30, 40, and 50.

The published Delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the allocating sources on a sequential basis. No commitments to customers are to be made until such schedule dates are received in the Branch Office.

## Source of Supply

The source will be USA for the 1017 and Montpellier, France for the 1018/2826.

## Sales Compensation Plan

The normal DP Sales Plan provisions apply.

## Educational Allowance

An educational allowance of 10% applies to the 1018 and 2826. There is no EA for the 1017.

## Orders and Movements Codes

Type	Models	Product Line	Product Category
1017	001	6	59, 62, 92, 93
	002	6	59, 62, 92, 93
1018	001	6	59, 62, 92, 93
2826	001	6	59, 62, 92, 93
	002	6	59, 62, 92, 93

## Prices

	Feature	Rental	Purchase	MMMC
1017 Model 1		\$ 50	\$ 2,400	14
1017 Model 2		75	3,675	17
	Rental Plan: B; Purchase Option: 40%; Maintenance: C; Per Call: 2			
1018 Model 1		125	5,560	40
Error Correction	#3800	25	1,225	1
Take-Up	#7801	25	1,225	6
	Rental Plan: B; Purchase Option: 35%; Maintenance: C; Per Call: 2			
2826 Model 1		285	14,825	35
2826 Model 2		680	35,375	75
Punch Adapter Line 1	#5801	100	5,100	9
Punch Adapter Line 2	#5802	85	4,350	5
Punch Checking	#5820	30	1,525	1
Reader Adapter Line 1	#6101	85	4,350	8
Reader Adapter Line 2	#6102	70	3,575	5
Punch/Reader Adapter No. 2	#5852	60	3,075	3
Punch/Reader Adapter No. 3	#5853	60	3,075	5
Punch/Reader Adapter No. 4	#5854	60	3,075	3
Punch/Reader Adapter No. 5	#5855	60	3,075	5
Punch/Reader Adapter No. 6	#5856	60	3,075	3
Punch/Reader Adapter No. 7	#5857	60	3,075	5
Punch/Reader Adapter No. 8	#5858	60	3,075	3
	Rental Plan: A (10%); Metering: Assignable; Maintenance: C; Purchase Option: 45%; Per Call: 2			

## Customer Test Time

1017 Model 1 and 2 - 2 hours; 1018 - 3 hours; 2826 Model 1 and 2 - 5 hours.

**Data Processing**

Letter No. 68-235  
May 10, 1968.

Product Announcement

Restrictions on Field Installing IBM 56 Verifier Features

Effective immediately, field installation of Alternate Program Feature #1255 or Auxiliary Verification Feature #1380 on pre-1956 IBM 56 Verifiers, having old style keyboards, will no longer be available.

Both features will continue to be available for field installation on machines with new style keyboards that are equipped with "ALT PROG" and "AUX VER" keys.

Outstanding MES orders will be honored. New orders must comply with the above limitations.

Attachment Capability Changed for IBM 2301, 2820 and 2860

Changes have been made in the attachment capability of the 2301 Drum Storage and its 2820 Storage Control and 2860 Selector Channel. A maximum of two 2820s can be attached to a 2860 Model 1; up to four to a 2860 Model 2; and up to four to a 2860 Model 3. On a 2860 Model 2 and 3, no more than two 2820s can be attached to any one channel. All combinations of 2361s, 2870s, 2860s, with 2820s controlling the maximum number of 2301s may now be attached to System/360 Model 65 and 75.

The following operating restrictions must be observed.

1. For AC, 3-phase, 50 cycle, 195V, 220V and 235V power only, the quantity of 2301 Drum Storage Units attached to a 2820 Storage Control is changed from four to three. There is no change to capability for all other 50 and 60 cycle power supplies.

2. When two 2820s are used simultaneously, they must be connected to the highest priority 2860 selector channels (channels 1 and 2).

While multiple 2820s can attach to channel 1, 2 and 3 of a 2860 Model 3, under present IBM programming support provisions must be made in the initial system design to confine simultaneous operation only to channels 1 and 2.

3. Chained data operations must be programmed to occur during gap time only.

Due to the high data rate of the 2301, data chaining cannot be accomplished between bytes within the count, key or data area. Data chaining can take place in the gaps between the count, key or data areas. Data chaining can be programmed into the gaps by making sure that the count fields in the channel command word (CCW) correspond to the actual count, key or data lengths that are being read or written.

Data can be lost and I/O errors generated if the above condition is not met.

4. The 2820/2301 will not operate into the 2361 Core Storage.

Engineering Changes have corrected overrun problems in the 2820.

  
John Fahey  
Director of DP Marketing

Attachments [30]: [1 thru 4] Systems 360/25.3, 1030.1, 1060.1 and 1070.1 ... [5 thru 30] Machines 1131.1, 1404-1405, 1230, 1282, 1287, 1403.1, 1403.3, 1412, 1418, 1428, 1442, 1443.1, 1444-1445, 1826, 1826-1827, 2065, 2401-2404, 2701.1 2702.1, 2703.1, 2703.3, 2780.1, 2802-2804, 2816, 7770 and 7772.

Distribution: All Areas



**IBM**

IBM World Trade Data Processing

Letter No. 68-236  
May 15, 1968**Product Announcement**

System/360 Model 20  
Field Installability of the IBM 1403 Printer (50 cycle)

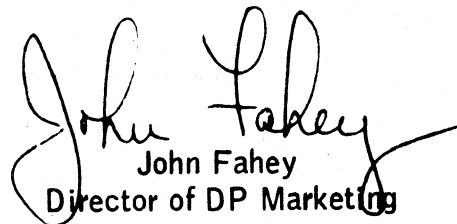
Until now, it was not possible to install the IBM 1403 Printer (50 cycle) on the System/360 Model 20, in the field. This restriction is no longer applicable. Your System/360 customer can now increase the printing capacity of his Model 20 (serial no. XX-20,000 and up) in the field by replacing the 2203 Printer with a 1403 Printer.

IBM 2203 Printer, Model A2

Price Reduction

The purchase price of the 2203 Model A2 is now \$17,500, reduced from \$19,400. The rental price remains the same.

Customers who have signed an "Agreement for Purchase of IBM Machines" are to be notified of the price reduction. Send alteration notices to the plant to update the purchase price for current orders.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



IBM World Trade Data Processing

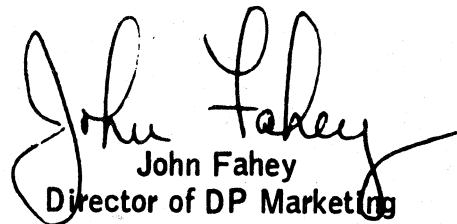
Letter No. 68-239  
May 31, 1968

Product Announcement

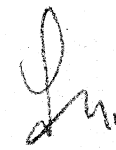
2265/2845 Can Be Attached To System/360 Model 25 and Up

DP Letter 68-213 states that the 2265 Display Station with its 2845 Display Control can be attached to System/360 Models 30 through 75 via the 2701 Data Adapter Unit. Now it's possible to attach the 2265 and 2845 via the 2701 to System/360 Models 25 through 85.

First customer shipments will begin in May 1969 as announced in DP Letter 68-213. However, the shipment schedule for units to be attached to Model 85 will be governed by the individual schedules established for the 85.

  
John Fahey  
Director of DP Marketing

Attachments [3]: Machines 1053, 2260-2265, 2841  
Distribution: All Areas



Miscellaneous Announcement

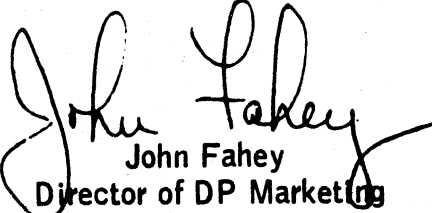
IBM 2315 Disk Cartridge  
IBM 2316 Disk Pack

Repair Service

The IBM 2315 Disk Cartridge and IBM 2316 Disk Pack are designed to provide reliable performance with normal care and handling. However, like any precision instrument they can be damaged by accident, misuse, or neglect. When damage occurs, IBM Disk Cartridge/Pack repair service is available.

For prices see Page M 2315 - 2316 in your DP Sales Manual. Complete procedures are published in the World Trade Instruction Manual, Section 2-30.

If a customer needs a replacement Disk Pack while his damaged one is being repaired, the Branch Office should order a new unit from local supply (Country Headquarters should arrange to have sufficient stock for emergency use). There are no interim 2315s available.

  
John Fahey  
Director of DP Marketing

Attachments [2]: Machines 2311-2314, 2321-2361

Distribution: All Areas



Product Announcement

IBM Confidential Until June 17, 1968

NEW FEATURES FOR SYSTEM/360 MODEL 25 ENLARGE COMPATIBILITY GROWTH POTENTIAL

Three new features to the System/360 Model 25 will together enhance compatibility with the 1400 Series and increase growth potential by facilitating conversion by Model 20 users to the Model 25. A new integrated communications attachment provides for attaching communication lines of varying speeds, affording new business opportunities in the Tele-processing area. The follow-on features and their descriptions are:

**INTEGRATED COMMUNICATIONS ATTACHMENTS**

This feature provides for the native attachment of various combinations of up to 24 low-speed and two medium-speed communication lines to the System/360 Model 25. Within these limits it provides a functional capability equivalent to 2701 and/or 2702 on the multiplexer channel but at a lower cost to the customer. As such, it makes the 360/25 an excellent Tele-processing entry vehicle.

This feature is program compatible within DOS BTAM, and within BPS/BOS as the remote work station to OS/RJE. (Present releases of DOS/QTAM can allow proposal of minimal, dedicated, or message switching configurations within the 48K limitation of the Model 25. Additional functional improvements to QTAM, in subsequent releases, will expose these proposals and installations to Model 30 replacement. A growth plan to Model 30 or Model 40 should be a component of these proposals.)

A program testing allowance of 25 hours is assigned to the Integrated Communications Attachment Feature.

**MODEL 20 MODE FEATURE**

This feature permits the operation of Model 20 object programs on the Model 25 without changing the program. It will encourage the growth of Model 20 users into the larger System/360 series of machines by facilitating conversion to the Model 25. At the same time, it will help sales of the Model 20 by emphasizing the larger degree of compatibility within the series as a whole.

The Model 20 Mode feature will operate a 2560 Multi-function Card Machine, which can be natively attached to the Model 25 by means of the Integrated 2560 Attachment feature. The Mode Feature does not perform the functions of the Communications Adapter on the Model 20, the Serial I/O Channel, nor Dual Feed Carriage. Model 20 Disk Packs have to be reformatted before they can be processed by the Model 20 Mode feature. Model 20 Disk users converting to Model 25 disk systems will need access to source and object configurations that have disk and tape. Consult country SE Managers for availability of such systems.

The internal performance on a typical instruction mix is approximately four times that of the Model 20.

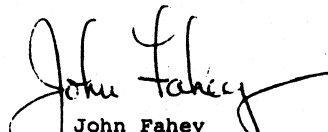
**1400 SERIES COMPATIBILITY**

This feature now includes the enhanced facility of emulation of a 1403 printer on a 1400 series machine by any channel-attached 1403 printer, as well as the natively-attached 1403, Model 2 or 7. It thus provides emulation at a maximum speed of 1100 lpm, instead of 600 lpm as at present.

**PROGRAM TEST ALLOWANCE**

Program testing allowance has been increased by five hours for 360/25 Disk Systems.

Additional details along with prices, are on the reverse side.

  
John Fahey  
Director of DP Marketing

## Sales Compensation Plan

The normal DP Sales Plan provisions apply.

## Minimum 360/25 Configuration with Program Mode

This is available as announced.

## Programming

The Program Mode Feature will support all existing 360/20 programs written in accordance with established procedures as outlined in Model 20 manuals.

## Educational Allowance

The same Educational Allowances apply as announced.

## Source of Supply and Delivery

The 1400 Series Compatibility feature will be available with first customer shipments of the Model 25. First shipments of the Model 20 Mode Feature and 2560 Attachment will begin March 1969. ICA Attachment shipments begin July 1969, from Mainz, Germany and U.S.A.

## RPQ's

RPQ's to the above will be accepted at announcement. However, it cannot be assumed that existing Model 20 RPQ's will automatically be accepted for the Model 25.

## Program Testing Allowance

Five hours have been assigned to the disk storage attachment for the 360/25. This is in addition to the existing five hours now provided for the first four 2311 drives. Existing test allowances for 2560 and card print apply.

## Publications Support

SRL - System/360 Model 25, Integrated Communications Attachment Feature A24-3526-0. SRL - System/360 Model 25 Model 20 Mode Feature A24-3524. S/360 Model 25 Preliminary Marketing Guide Z20-1866-1. Actual availability will be announced in a forthcoming Publications Release Letter.

## Prices

<u>Feature Description and Number</u>	<u>MAC</u>	<u>Purchase</u>	<u>MMMC</u>	
Integrated 2560 Attachment	#4596	\$250	\$12,700	\$15.00
A. On 2560-Al-Model 25 Adapter	#9725 N/C	---	---	---
Card Print Control	#1580	25	1,200	2.50
System/360 Model 25 Mode	#7600	100	5,080	6.00
Integrated 1403 Attachment	#4590	450	22,860	45.00
A. 1403-2	#9180	N/C	N/C	N/C
B. 1403-7	#9181	N/C	N/C	N/C
Integrated Commun. Attachment	#4580	275	13,750	16.00
Start/Stop Data Adapter Base:				
Modem	#7401	150	7,500	9.00
Telegraph	#7411	200	10,000	8.00
Start/Stop Data Adapter Ext. 1:				
Modem	#7402	120	6,000	3.00
Telegraph	#7412	150	7,500	3.00
Start/Stop Data Adapter Ext. 2:				
Modem	#7403	120	6,000	3.00
Telegraph	#7413	150	7,500	3.00
Synchronous Data Adapter:				
First	#7551	250	12,500	16.00
Second	#7552	250	12,500	16.00
ICA Sub-Feature Base	#4581	60	3,000	1.00
Dual Communications Interface	#3461	55	2,750	1.00
Synchronous Clock:				
First (for #7551)	#2858	50	2,500	2.00
Second (for #7552)	#2859	50	2,500	2.00
Transparency for #7551	#9751	N/C	N/C	
Transparency for #7552	#9752	N/C	N/C	
Station Selection )for #7551)	#9601	N/C	N/C	

**IBM****IBM World Trade Data Processing**Letter No. 68-243  
June 11, 1968

## Product Announcement

IBM Confidential Until June 17, 1968

**FIVE NEW PROCESSOR MODELS OFFER  
EXPANDED PERFORMANCE, CAPACITY  
FOR SYSTEM/360 MODEL 20**

Expanded core and on-line capacities, coupled with improved throughput capabilities, are now available through five new processor models of the IBM System/360 Model 20. Offering substantially higher internal performance and improved overlap capabilities for systems with tape, disk files and Binary Synchronous Communications Adapters, the new CPU models provide storage of up to 24K or 32K and up to four disk drives.

Model 20 customers can now easily advance in graduated steps from recently announced low-entry card and disk systems, through the intermediate-speed models, to the new models being announced today. No reprogramming or systems redesign is required unless core size or I/O Units are changed and the new models come at only a modest increase in systems rental.

Component Highlights...2020 CPU Models C5, BC5, D5, DC5, E5, (Submodels 5) offer 2 micro-second storage access to one halfword and 8K, 12K, 16K, 24K or 32K bytes of addressable processor storage. Internal performance on a typical instruction mix is approximately three times that of submodels 1 and 2. (Exact times for individual instructions will be published in the Functional Characteristics SRL, Form A26-5847.)

In addition to the I/O/Compute overlap performed by the previously announced models, the new CPU models also permit overlapping of:

Magnetic tape reading or writing with disk file reading or writing, and with other I/O and compute operations;

High-speed BSCA transmission with compute and I/O operations, including tape and disk.

All features and I/O devices available for 2020 Submodels 2 will also be available with the new CPU models. In addition, the new submodels permit attachment of up to four type 2311 Disk Storage Drives Model 11 or 12 (in any combination) -- 2.7 to 21.6 million bytes on line, with 60 or 75 ms average random access time.

System Serviceability... The 2020 Processor, Submodel 5, has been developed placing major emphasis toward improved system serviceability. The result is a unique new concept in system diagnostic aids called "System Log-Out" which provides statistical and status data relative to major components of the system.

Operating at the micro-program level, "System Log-Out" provides for automatic storage of incident count of the most prevalent types of intermittent errors, as well as the status of critical functions at the time of the incident. The storage of this data is accomplished within the CPU and does not affect core availability for customer operation.

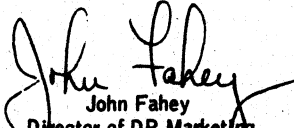
At every visit to an installation, then, the first order of business for the CE will be to quickly obtain a read out, in hard copy form, of system performance covering the interval since his last call. This mode of operation allows immediate off-line analysis and speedy, direct attention to any necessary maintenance, resulting in reduced on-line service time for diagnosis and repair.

Delivery... First customer shipment of the new models will start in May 1969 for 50 cycle machines and July 1969 for 60 cycle machines. The Sources of Supply are: Italy, Japan, Canada. The published delivery schedule will be announced in 120 days. Schedule dates for orders received within this 120 period will be assigned by the allocating locations on a sequential basis. No commitment to customers is to be made until such dates are received in the branch office.

RPQs...RPQs for the new models will be accepted immediately and processing will start in 120 days. Response time depends on complexity of the request. Deliveries will not commence until at least six months following first customer shipment.

RPQs for previously announced models of the 2020, or associated I/O devices, must be resubmitted or redesign and repricing for the new models.

Additional details, along with prices, are on the reverse side.



John Fahey  
Director of DP Marketing

Distribution: All Areas

## EDUCATION

The regular Model 20 Education Program will also cover the new models.

## PROGRAM TESTING ALLOWANCE

System/360 eligibility times apply. See GI section of Sales Manual.

## EDUCATION ALLOWANCE

WT Educational Allowance Program is applicable to the new models as to the previously announced models of Model 20. See DP Letter 66-270 plus attachments.

## PROGRAMMING SUPPORT

Programming... The proven programming support that is now being used to sell and successfully install your System/360 Model 20 customers will be extended as required to take advantage of the capabilities, speeds, and expanded overlap capabilities of the new CPU models. Details will be available in a forthcoming Program Announcement letter.

## PRICES

Type	Model	Rental	Purchase	MMMC
2020	C05	\$ 925	\$ 46,800	\$ 90
	BC5	1,190	59,500	100
	D05	1,450	74,500	105
	DC5	1,810	94,000	115
	E05	2,170	110,700	130
Disk Storage Control Feature #7497 (Sub- model 5's only)		245	11,800	5

## SALES COMPENSATION PLAN

Model/360-20-5 orders will receive normal selling and installing quota point credit, including applicable New Name Account Remuneration (Schedule A), 1500 On-Schedule Quota Points (Schedule B), and 1500 Out-of-Territory Quota Points (Schedule C).

Add to On-Schedule Quota Points (Schedule B, Page 24) - Group: 1-A;  
Type: 360, Group 20F, Identification: 2020; Quota Points: 1500;  
Effective Date: 6/17/68; Termination Date: 1/1/69.

Add to Out-of-Territory Quota Points (Schedule C, Page 27) - Class: A;  
Group: 1-A; Type 360, Group 20-5; Identification: 2020; Quota Points:  
1500; Effective Date: 6/17/68; Termination Date: 1/1/69.

## PUBLICATIONS SUPPORT

The following Promotional Material will be available: Form No. 520-2091-0 Promotional Brochure, 221-0399-2, 221-0441-2 Proposal Inserts. TNL's will also be available at a future date. Consult the weekly Publications Release Letter for availability.

## ORDERS AND MOVEMENTS CODES

Type	Models	Product Line	Product Category
2020	C05	6	64
	BC5		
	D05		
	DC5		
	E05		

Note: The System Type for all models of the 360/20 is 3620.



Product Announcement

IBM 3976 Modem Model 3 Replaces 3977 Model 1; BSC (Binary Synchronous Communications) Multipoint and PTT Modem Support (A)

A new modem plus new BSC features gives added capability to IBM's medium and high speed communications product line.

Highlights

IBM 3976 Modem, Model 3 -- a new model, complying with the International Telegraph and Telephone Consultative Committee (CCITT) recommended standards, for use on World Trade common carrier leased telephone facilities at data rates of 600 or 1200 bits per second. Includes unattended operation special feature.

IBM 3977 Modem, Model 1 is being withdrawn from new production and placed on an "as available" status. Confirmed orders now in the backlog will be honored as presently scheduled. The new IBM 3976 Modem, Model 3 will replace the modem function voided by the withdrawal of the IBM 3977 Modem, Model 1 for use with the 2740 Model 2, 1031, 1034, 1071 Model 2, 2848, 2845, 2701, 2702, 2703, System/360 Model 20, 2780, and 1131.

Binary Synchronous Communications centralized multi-point operation using:

- 2701 or 2703 as a Control Station with 2780 Data Transmission Terminals, System/360 Model 20's, or 1131's as tributary stations.
- 2701 Station Selection feature which enables a 2701 SDA-II to function as a tributary station.
- 2703 Station Selection feature which enables a Synchronous Terminal Control to function as a tributary station.
- 2780 Multi-point Line Control feature which enables the 2780 to function as a tributary station.

2701, 2703, 2780, and System/360 Model 20 features to provide BSC operation on leased common carrier facilities at the 600/1200 bps via a United Kingdom GPO model Type Datel 1 Model 5, a German PTT modem Type D 1200S (GH-2011 Model 5), a Swedish PTT modem type GH 2002B and/or GH 2002C and via the IBM 3976 Modem, Model 3.

**Note:** Presently available BSC features (when used with the new station selection and multipoint features) will allow multipoint operation with the 3976 Modem Model 3 in either "continuous carrier" or half duplex mode or with the 3977 modem in half duplex mode only. Operation with the GPO and PTT modems requires the newly announced features.

Programming Support

No new programming support is being announced at this time. The 2701 and 2703 Station Selection features, which are required if the 2701 or 2703 synchronous features function as a tributary station in a centralized multi-point system, are not program supported by any of the announced IBM programming systems.

Publications Support

A new page M 2700 of the sales manual will accompany sales page changes pertaining to this announcement and will:

- a. Summarize communications information for World Trade.
- b. List available IBM and PTT Modems and IBM Communications Products attachment features.
- c. Provide an application guide for the IBM Line Adapters.

IBM 3976 Modem, Model 3, Product Reference Library (PRL) Manual, Form Number A19-0031 and a Technical Newsletter (TNL) for the 2701 and 2703 SRL's will be available. Availability of the TNL's will be announced in a forthcoming Publications Release Letter.

Availability

3976 Modem, Model 3

This modem and the unattended operation feature will be available for first customer shipment in November, 1968. Delivery schedules will be published within 120 days. Schedule dates for orders received during this period will be assigned by the allocating sources on a sequential basis. No commitments to customers are to be made until such dates are received in the Branch Office.

3977 Modem, Model 1

Confirmed orders now in the backlog will be honored as presently scheduled. Orders for new production machines will be accepted for 90 days after the date of this announcement. After that period, orders for new machines will no longer be accepted, and all orders will be accepted on an "as available" basis only.

2701 (FC #2899, 2901, 7477, 2902) and 2703 (FC #7473)

The new features on the 2701 and 2703 will be available in December, 1968. First Customer Shipment will follow the "C" Systems line environment tests in the country in which the machines will be used, scheduled for completion by February, 1969.

2780 (FC #2896, 2897, 2898, 5020)

First customer shipments from Vimercate, Italy, of 2780's with the PTT Modem Attachment and Multi-point features will commence following "C" Systems line environment tests now scheduled to be complete in December, 1968.

2020 (FC #2903, 2904, 2905) with appropriate 2020 models

First customer shipment of the PTT Modem Attachment feature on the 2020 BSCA will commence March, 1969.

Presently available features which are being replaced with new features will continue in production until the new features are available.

RPQ Support

RPQ's on all announced items will be accepted for consideration 60 days after announcement. Response time will depend upon complexity of the RPQ.

CONTENTS	
IBM 3976 Modem Model 3; Replaces 3977 Model 1 BSC (Binary Synchronous Communications) Multipoint and PTT Modem Support... (A)	
New 2701, 2702, 2703 Telegraph Capability... (B)	
2740 Model 1, 2741 Model 1 Communication Terminals Price Change ... (C)	



Prices

<u>Description</u>	<u>Feature Number</u>	<u>MAC</u>	<u>Purchase</u>	<u>MMMC</u>
<b>2701</b>				
Synchronous Data Adapt. Type II	#2899	\$335	\$15,075	\$19.00
Dual Communications Interface	2901	21	950	1.00
Station Selection	7477	40	1,300	.50
<b>2703</b>				
Synchronous Line Set	2902	420	16,800	6.50
Station Selection	7473	50	1,550	.50
<b>2780</b>				
Specify Datel 1, Model 5	2896	NC	NC	NC
Specify GH-2002B or C	2897	NC	NC	NC
Specify D 1200S	2898	NC	NC	NC
Multipoint	5020	25	1,100	2.50
<b>2020</b>				
Specify Datel 1, Model 5	2903	NC	NC	NC
Specify D 1200S	2905	NC	NC	NC
Specify GH-2002 B or C	2904	NC	NC	NC
<b>3976-3 Modem</b>				
Unattended Operation Feature	2878	65	2,800	13.00
Specify 60 Hz Feature	2906	10	435	NC
		NC	NC	NC

New 2701, 2702, 2703 Telegraph Capability (B)

New telegraph capabilities for the 2701, 2702, 2703 and the 3945 are now available. In addition, telegraph capability on the 7741 is withdrawn.

Highlights

2701

A new World Trade Telegraph Single Current Adapter (#2829) provides for the attachment of telegraph terminals over 2-wire single current telegraph lines. The attachment is directly to the telegraph facilities (without the requirement for a 3945 Model 12). The operation may be simplex or half duplex. Full duplex is considered as two simplex connections and requires two adapter features. The speed of operation may be 50 or 75 bps. Double current operation is unchanged from what is presently available; that is, via a World Trade Telegraph Adapter (#2794) and a 3945 Model 11. Connection to double current telegraph lines may be via a present 3945 Model 11 (serial number 100 or below) or a new 3945 Model 11 (serial number 200 or above) as contained in this announcement.

2702

A new World Trade Telegraph Single Current Line Adapter (#2829) provides for the attachment of telegraph terminals over 2-wire single current telegraph lines. The attachment is directly to the telegraph facilities (without the requirement for a 3945 Model 12). The operation may be simplex or half duplex. Full duplex is considered as two simplex connections and requires two line adapter features. The speed of operation may be 50 or 75 bps.

A new World Trade Telegraph Double Current Line Adapter (#2831) provides for the attachment of telegraph terminals over 2- or 4-wire double current telegraph lines. The attachment to the telegraph facilities is via a new 3945 Model 11 (serial number 200 or above). The operation may be simplex or half duplex. Full duplex is considered as two simplex connections and requires two line adapter features. The speed of operation may be 50, 75 or 100 bps.

The World Trade Telegraph Line Adapter (#2799) is withdrawn from new production and will be available only on "As Available" status.

Scheduling backlog orders will be filled as scheduled. Other orders within the backlog and scheduled orders which are deferred will be filled on an "as available" basis.

2703

World Trade Telegraph capability is now available on the 2703. In addition to the prerequisite features, this announcement includes:

The World Trade Telegraph Single Current Line Set (#2829) and Line Set Expander (#2830). Each line set provides for the attachment of up to eight 2-wire single current telegraph lines. The attachment is directly to the telegraph facilities. The operation may be simplex or half duplex. Full duplex is considered as two simplex connections and requires two line appearances on a line set. The speed of operation may be 50 or 75 bps.

The World Trade Telegraph Double Current Line Set (#2831) and Line Set Expander (#2832). Each line set provides for the attachment of up to eight 2- or 4-wire double current telegraph lines. The attachment to the telegraph facilities is via a new 3945 Model 11 (serial number 200 or above). The operation may be simplex or half duplex. Full duplex is considered as two simplex connections and requires two line appearances on a line set. The speed of operation may be 50, 75 or 100 bps.

3945

Model 11 - Improvements have been made to the 3945 Model 11 design so that it will connect to 2- or 4-wire double current telegraph lines, will operate at speeds of up to 100 bps, and will be able to more adequately address individual country requirements. The improved 3945 Model 11 (serial number 200 and above) can operate with either the old or the new telegraph features on the 2701, 2702, and 2703. The status of the old 3945 Model 11 (serial number 100 and below) is "As Available" and is withdrawn from new production. Serial numbers 101 through 199 are reserved and will not be utilized.

Model 12 - The Model 12 is withdrawn from new production and is placed on "As Available" status.

Scheduled backlog orders for the 3945 Model 11 (serial number 100 and below) and for the 3945 Model 12 will be filled on currently assigned shipping schedules. Other orders within the backlog and scheduled orders which are deferred will be filled on an "as available" basis.

In addition to the above, IBM is announcing DOS/360 BTAM/QTAM support for certain World Trade telegraph terminals for simplex or half duplex contention operation. See Programming Letter No. 68-82B for additional details.

PTT Approvals

The individual country PTT must approve of the attachment to their facilities. (See your Sales Manual, General Information, Planning for a Tele-processing System.)

It is possible that PTT approval for these features may not be obtainable in every country. Until PTT approval is obtained, these products must not be proposed without the approval of the TP Coordinator. Systems Assurance must review the PTT approval position.

7741

The 7741 is presently on "as available" status. Effective immediately, the Telegraph features are withdrawn. If there are any customers with existing "as available" orders they must be advised that the telegraph features will not become available.

Delivery

First customer shipments for all of the above new features will begin in March, 1969.

Programming Availability

For programming availability, see Programming Letter No. 68-82B.

Publications

TNL's for the 2701, 2702, and 2703 SRL's as well as a revised IBM 3945 Telegraph Line Termination Manual (A19-0013) will be available. Availability will be announced in a forthcoming Publications Release Letter.

RPQ's

RPQ's will be accepted for processing on the 2701/2702/2703 one month after announcement and 90 days on the 3945 Model 11

Prices

<u>Description</u>	<u>Feature Number</u>	<u>MAC</u>	<u>Purchase</u>	<u>MMMC</u>
<u>2701</u>				
World Trade Telegraph Single Current Line Adapter	# 2829	\$125	\$5,575	\$7.00
<u>2702</u>				
World Trade Telegraph Single Current Line Adapter	2829	40	1,800	4.00
World Trade Telegraph Double Current Line Adapter	2831	25	1,125	4.00
<u>2703</u>				
Telegraph Terminal Control Base	7905	20	950	1.25
Telegraph Attachment	7876	46	2,090	6.00
World Trade Telegraph Terminal Control	2795	50	2,250	2.00
World Trade Single Current Line Set	2829	125	5,625	28.00
World Trade Single Current Line Set Expander	2830	105	4,725	22.00
World Trade Double Current Line Set	2821	130	5,850	30.00
World Trade Double Current Line Set Expander	2832	110	4,950	25.00
Line Speed Options	50 bps - 2834 75 bps - 4876 100 bps - 2835	10	475	1.00
<u>3945 Model 11</u> Double Current Line Adapter	- As currently announced.			

2740 Model 1 and 2741 Model 1 Communication Terminals Price Change (C)

PRICE CHANGES...Effective July 1, 1968, the rental and purchase prices for the 2740 Model 1 and 2741 Model 1 are increased. Prices of 2740 Model 2 and the announced and RPQ features are not affected. They remain unchanged.

SAMPLE LETTER

The changes are:

Type	Model	Previous Prices		New Prices	
		Rental	Purchase	Rental	Purchase
2740	1	\$84	\$3,200	\$98	\$4,050
2741	1	84	3,200	98	4,050

ADMINISTRATIVE PROVISIONS...

1. The new prices are effective for all orders received on and after July 1, 1968.
2. For 2740 Model 1s and 2741 Model 1s currently installed/on-order under our lease agreement, the rental increase will be effective October 1, 1968. These customers must be notified on or before July 1, 1968. This is in accordance with the three months' notice provision of the Agreement for IBM Machine Service.
3. Purchase orders negotiated on or after July 1, 1968, will be at the new prices.
4. Government institutions may have fiscal period contracts. Unless specifically precluded by the terms and conditions of these contracts, the effective dates apply for the price changes. Should contractual questions arise, contact your Area Counsel for direction.
5. As provided in the DP Sales Compensation Plan, Paragraph D.3, Quota Points will be credited at the revised prices for equipment installed or ordered after July 1, 1968. Quota credit for equipment installed or on-order before July 1, 1968 is not affected by these price changes. Quota Points for orders cancelled, superseded, or diverted prior to October 1, 1968 will be entered at the previous price. After October 1, they will be at the new price. In conjunction with the above, the Out-of-Territory Quota Points for the 2740 Model 1/2741 are increased to 100. (See Schedule C Group 79.)

ACTION REQUIRED...

1. Customer Notices: Written notices (see sample letter) of the rental increase must be sent to all installed/on-order rental customers. These notices, if mailed, are to be posted so that the customer will receive notification on or before July 1, 1968. They may be hand-delivered to the customer on or before July 1, 1968.
2. Proposals: Prior to July 1, 1968, all affected proposals are to be updated to reflect the new prices.
3. Purchase of Installed: Outstanding Quotation Inquiries are valid only if the Agreement for Purchase of Installed IBM Machines is received before July 1, 1968. Otherwise, new Quotation Inquiries must be submitted.

ABC Company  
Street Address  
City, State

Dear Mr. Customer:

Lease and purchase prices for the 2740 Model 1 and 2741 Model 1 are being increased as follows:

Type	Model	Previous Prices		New Prices	
		Rental	Purchase	Rental	Purchase
2740	1	\$84	\$3,200	\$98	\$4,050
2741	1	84	3,200	98	4,050

The new prices apply to all orders received on or after July 1, 1968.

Lease Customers

These rental increases are not effective until October 1, 1968, for items you now have now installed or on order, according to the advance notice provision of your Agreement for IBM Machine Service.

Purchase Customers

Purchase agreements signed by you and received by IBM before July 1, 1968, will be honored at the previous prices, provided delivery is accepted as scheduled thereunder. Purchase orders negotiated July 1, 1968, or later will be at the new prices.

Your IBM sales representative will be available to answer any questions you may have.

Sincerely yours,

Branch Manager

  
 John Fahey  
 Director of DP Marketing



IBM World Trade Data Processing

Letter No.68-246  
June 13, 1968

Product Announcement

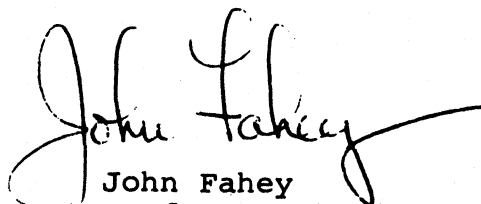
Termination of New 6400 Production

No further new orders will be accepted after July 1, 1968, for the following products:

- 6405 Accounting Machine
- 6420 Accounting Machine
- 6426 Card Punch
- 6422 Automatic Ledger Feed Attachment
- 6425 Magnetic Card Machine
- 6428 Card Reader
- 6454 Paper Tape Reader
- 6455 Paper Tape Punch

6400 systems will be available in limited quantity on "as available" basis until November 1, 1969, at which time the 6400 production will terminate.

Equipment no longer in production is classified "As Available". Orders for "As Available" equipment are accepted on a conditional basis. If equipment is available, the Area fills orders with foreign field transfers. In most cases, "As Available" means that a present customer installation and the country inventory of idle equipment are our only possible sources of supply for that equipment.



John Fahey  
Director of DP Marketing

Distribution: All Areas



IBM World Trade Data Processing

Letter No.68-250  
June 26, 1968

Product Announcement

IBM 188 Withdrawn from New Production

Effective immediately, the 188 Collator is being withdrawn from new production.

Existing orders for new machines will be filled with new equipment on their currently assigned shipping schedules, provided that the schedule is prior to September 1, 1968. Current orders for new machines now scheduled beyond that date must be rescheduled to prior to September 1, 1968.

Any additional orders will be accepted on an "As Available"\* basis only.

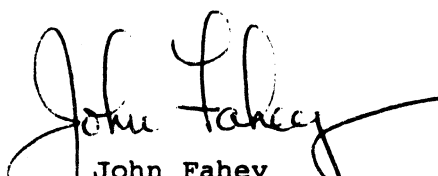
IBM 1285 No Longer in New Production

Effective immediately, the 1285 Optical Reader is no longer in new production.

No additional orders for new 1285s will be accepted. Additional orders will be accepted on an "As Available"\* basis.

Current backlog orders which specify a new 1285 will be honored on their currently assigned shipping schedules.

Note: "As Available" - Equipment no longer in production is classified "As Available". Orders for "As Available" equipment are accepted on a conditional basis. If equipment is available, the Area fills orders with foreign field transfers. In most cases, "As Available" means that a present customer installation and the country inventory of idle equipment are our only possible sources of supply for that equipment.



John Fahey  
Director of DP Marketing

Attachments [2]:           Machines 188 and 1282

Distribution:               All Areas



Letter No. 68-251  
June 26, 1968

Product Announcement

2814 Models 1, 2, and 3 Withdrawn  
Along with Attachment Feature 6148

Effective immediately, the IBM 2814 Switching Unit Models 1, 2, and 3 and the Remote Switch Attachment Feature 6148, are withdrawn from the product line. The 2814 is used to switch a display control unit to either of two System/360 Model 67 System channels. No new orders will be accepted.

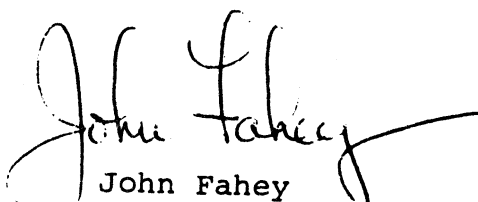
Current Orders...Outstanding orders will be honored provided the order is reconfirmed by the customer and the customer will accept delivery not later than December 31, 1968. Orders which cannot be accepted by December 31, must be cancelled. Shipment schedules for the 2814 Switching Unit Models 1, 2, and 3 will be confirmed within 120 days after reconfirmation of the order.

Restrictions...Customer initiated deferrals will not be accepted.

RPQs...These will not be accepted for the 2814 Switching Unit. The 2814 cannot be installed as an RPQ on a System/360 Model 67.

Maintenance and Limitations...Customer Engineering maintenance will be available for all 2814s installed on Model 67s under this program. Diagnostic support is limited to attachment to the Model 67. No programming support is planned for this equipment.

Action Required...Customers with 2814 Switching Units on order or installed must be notified immediately of this withdrawal.



John Fahey  
Director of DP Marketing

Attachment:           Machines 2802 - 2804

Distribution:         All Areas



Letter No. 68-253  
July 10, 1968

Product Announcement

**NEW FEATURE PROVIDES EMULATION  
UNDER DOS FOR SYSTEM/360 MODEL 40  
(COMPATIBILITY SUPPORT/40 - CS/40)**

A new feature for System/360 Model 40 is a prerequisite for 1401/1440/1460 emulation under Disk Operating System (see P68-99). The feature, 1401/1440/1460 DOS Compatibility Feature 4460, is an improvement and expansion of the RPQ for the Model 40 (E54022) which operated under the Compatibility Operating System, a Type III program.

This device, with the referenced program, provides increased throughput and full multiprogramming capability by allowing an intermixed 1400 and System/360 job stream.

Major functions are:

- . 1440 compatibility added to the Model 40
- . Improved 1400 scatter/gather operations to permit tape processing on either selector channel
- . Storage protect handling for multiprogramming
- . Additional input/output available not previously used by and with emulation
- . 1400 emulated core relocated to starting location of 16,384 characters from 8,192, which permits DOS/360 multiprogramming.

**Prerequisites** ... Feature 4460 is to be installed for those customers who desire to operate the emulator program under DOS/360. Prerequisite features are 1401/1460 Compatibility 9710. The feature will, when installed with its prerequisites, preclude the use of program 360C-EU-074 and the use of the 1401/1460 "stand-alone" ability of Feature 4457.

**Prices** ... Feature 4460 may be rented for \$150 monthly and purchased for \$5,100. There is no minimum monthly maintenance charge.

**Restrictions** ... Normal restriction for compatibility with regard to time dependent programs and minimum system configuration requirements apply to Feature 4460. This feature may be installed on 2040 Models E, F, G, and H. On 2040 Models F, G, and H, Serial No. 20001 (U.S.); 20501 (WTC) and above, both this feature and 1410/7010 Compatibility 4478 can be installed, if desired.

**Delivery** ... First customer shipments will commence with availability of the program which is scheduled for release April 30, 1969.

**RPQs** ... All RPQs (E54022) scheduled for shipment after release of the CS/40 program (announced in P68-99) will be shipped as feature 4460. Field bill of materials to update installed RPQs (54022) to the DOS Compatibility Feature will be available commensurate with program support availability. RPQ orders will not be accepted after December 1, 1968. All Model 40s with the RPQ installed should be upgraded to the DOS Compatibility Feature at no charge.

**Programming Support** ... Feature 4460 will be supported by the CS/40 program announced in P68-99.

**Publications Support** ... TNLs to the Model 40 Functional Characteristics Manual (SRL A22-6881 and Model 40 Operating Procedures A22-6911) describing the DOS Compatibility Support Feature will be available in October 1968. A forthcoming Publications Release Letter will announce this availability.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas

**IBM**

IBM World Trade Data Processing

Letter #68-254  
July 11, 1968**Product Announcement****1416 Train and 1403 Chain Character Arrangements  
Announcement - ISO OCR A Font (Numeric Subset)**

IBM announces two new character arrangements for the 1416 Interchangeable Cartridge and Fixed or Interchangeable Chain Cartridge on the 1403 Models 2,3,7 and N1 when attached to System/360. These character arrangements provide printing of the numeric subset of the International Standardization Organization (ISO) Alphanumeric Character Set for Optical Character Recognition - Type A size 1 (numeric subset). The two arrangements are:

**ODA:** Graphics are identical to the AN arrangement, except the digits 0 through 9 are replaced by the corresponding digits of the ISO OCR A font-size 1.

**ONA:** Graphics are the same as the AN arrangement except the digits 0 through 9 and lozenge, plus, percent symbols are replaced by the digits 0 through 9 and hook, fork, chair symbols of the ISO OCR A font-size 1.

The IBM 1287 Optical Reader is capable of reading the digits 0 through 9 and OCR abstract symbols in these arrangements. The remaining characters are not readable by the 1287.

First customer shipments will begin in 45 days. Prices and ordering procedures are the same as currently published in the Sales Manual for chain and train arrangements. Forthcoming sales manual pages will provide additional details.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas





Product Announcement

**IBM 1288 OPTICAL PAGE READER  
TWO NEW IBM 1287 OPTICAL READER MODELS 3 AND 4  
NEW SERIAL NUMBERING FEATURE FOR THE 1287 AND 1288**

IBM announces new dimensions in Optical Character Recognition with the IBM 1288 Optical Page Reader, Model 1, IBM 1287 Models 3 and 4, a Serial Numbering Feature for the 1287 and 1288 and increased reading capabilities for the 1287 Models 1 and 2.



IBM 1288 OPTICAL PAGE READER

IBM 1288 OPTICAL PAGE READER

IBM 1288 expands the document processing capability previously available on the 1287 to 9" x 14" (22cm x 35 cm) page size documents and optically reads the International Standards Organization Character Recognition Alphanumeric Font Type A-Size I (ISOCRAF - A). (This font is identical to the United States of America Standard Character Set for Optical Character Recognition - Size A.) Typical document speeds will range from 19,600 documents per hour to 850 documents per hour. Actual speeds are dependent upon document size, the number and type of characters to be read and the System/360 program. The 1288 is attachable to System/360 Models 25, 30, 40 and 50. Optional features include Numeric Handprinting, Optical Mark Reading and Serial Numbering.

Here are the highlights:

- . Handles a broad range of document sizes - 3" x 6.5" to 9" x 14".
- . Recognizes ISOCRAF - A alphanumeric character set and the following special symbols • ¶ / - \* & | (LVM) ¶ (Group erase). As a selective feature one of the following national graphic characters £ ¥ ù ¤ may be substituted for the \$. In addition ¢ and ¤ can be specified as additional characters.
- . Rated reading speed for machine printed characters of 1000 characters per second.
- . Reads Documents created on Model 72 typewriters equipped with an ISOCRAF - A typing element.
- . Accepts documents created on IBM 1403 printers equipped with the ISOCRAF - A numeric character train and chain arrangements.
- . Excellent throughput on page size, unformatted, machine printed documents with 6 lines per inch vertical spacing.
- . Formatted documents can contain printing in two orientations.
- . Extraordinary format and editing flexibility under System/360 program control.
- . Designed to function in a multi-programming environment with DOS/360 and TOS/360 support.
- . Numeric Handprinting Recognition is available as a special feature. The ability to recognize the European (1) one and (7) seven is also available as an RPQ (S40004).

A 1288 will be on demonstration in Chicago from July 15 thru July 26, 1968 and during the month of September, 1968 in London. Contact U.K. Product Marketing to make arrangements for your customers to attend the London demonstration.

IBM 1287 OPTICAL READER MODELS 3 AND 4

These two new models of the 1287 extend the character recognition capability of the 1287 to include the ability to read the ISOCRAF - A type font in addition to the standard and optional type fonts available on the 1287 Models 1 and 2. All optional features now available on the 1287 Models 1 and 2 are available on the Models 3 and 4 in addition to a new feature - Serial Numbering. 1287 Models 1 and 2 can be field converted to Models 3 and 4 respectively.

SERIAL NUMBERING FEATURE

This new feature provides the capability of selectively printing a sequential number on documents as they are processed on the 1287 or 1288. Customers will find this feature of real value in applications requiring manual retrieval of specific document from a large file of documents processed by the 1287 or 1288.

The serial numbering feature will be field installable on all 1287's shipped after August, 1968 (serial number 10155 and above). Plant and Field Installations will begin March, 1969. The installation of this feature does not affect throughput or programming support.

INCREASED READING CAPABILITIES FOR THE 1287 MODELS 1 AND 2

These increased capabilities include the ability to recognize the numerical digits 0-9, and 3 abstract symbols of the ISOCRAF - A (size 1) font when printed on documents by all models of the 1403 printer attached to S/360, when pre-printed by letter press as a form identification number and when printed on tally rolls by approved devices. (Models 2 only). ISOCRAF -A Size 4 numeric characters imprinted by approved devices are also acceptable as well as intermixed forms containing ISOCRAF -A Size 4 and 1428E imprinting. No change in the 1287 programming support is required.

Additional details, along with prices, are attached to this letter.

  
John Fahey  
Director of DP Markets

Delivery and Source of Supply

First shipments of the 1288 to 60-cycle users for attachment to System/360 Models 25 and 30 will begin in November, 1969. First shipments to 50-cycle users for attachment to System/360 Models 25 and 30 will begin in March, 1970. First customer shipments (50 and 60 cycle) for attachment to System/360 Models 40 and 50, begin April 1970.

Initial shipments of the 1287 Models 3 and 4 for attachment to System/360 Models 25, 30, 40 and 50 will begin in October, 1969.

The Source of Supply of these products, for all countries except Canada, will be Greenock, Scotland. The Source of Supply for Canada will be Rochester, Minnesota.

The published delivery schedule will be announced in 120 days. Schedule dates for orders received during this 120-day period will be assigned by the appropriate allocating locations on a sequential basis. No commitments to customers are to be made until such dates are received in the branch offices. Alteration Notices and MES's must be submitted at least 120 days prior to the scheduled shipping date.

RPQ's

RPQ's may be submitted immediately, but will not be accepted for consideration until 120 days after announcement with response time dependent upon complexity. Delivery will be a minimum of six months after first customer shipment with actual schedules dependent upon RPQ complexity. The European Handwriting RPQ is an exception to the above.

Programming Support

The 1287 Models 3 and 4 will be supported with the same BPS, BOS, DOS and TOS program support as is currently available for the 1287 Models 1 and 2. The 1288 will be supported by the DOS and TOS program support currently available for the 1287 Models 1 and 2.

Publications Support

The following publications will be available. IBM 1288 SRL Form #A21-9081, IBM 1287 Models 3 and 4 TNL Form #N21-0093, 1287 Models 3 and 4, 1288 Physical Installation Planning TNL Form #'s (60 cycle) N22-0306; (50 cycle) N19-0016. Also, the following additional publications will be available: A Promotional Products Brochure, Proposal Inserts for IBM 1287 Models 3 and 4 and 1288; Insurance and Distribution Industry Brochure. Form #'s and availability will be announced in a forthcoming Publications Release Letter.

Sales Compensation Plan

Normal DP Sales Compensation Plan provisions apply. Add to Schedule "B", Line 18, 1287 Models 3, 4 and 1288 Model 1, 3,000 On-Schedule Quota Points...Add to Schedule "C", Group 43, 1287 Models 3, 4 and 1288 Model 1, 3,500 Out-of-Territory Quota Points.

Customer Test Time

1288	8 hours
1287 Models 3 and 4	8 hours (none for Field Conversions)

Educational Allowance

1287 Models 3 and 4	10	%
1288 Model 1	10	%

DP Orders and Movements Codes

Type	Models	Product Category	Product Line
1287	3 and 4	59, 62, 92, 93	6
1288	1	59, 62, 92, 93	6

Rental and Purchase Prices

	Model/features	Rental	Purchase	MMMC	FIC
IBM 1288 Optical Page Reader	1	\$4,900	\$230,300	\$1,225	
	Rental Plan: "A"; Maintenance Group: "C"; Purchase Option: 40%; Per Call Category: "2"				
Numeric Handprinting	# 5370	1,000	54,000	75	PO
Optical Mark Reading	# 5479	100	5,300	7	PCR
Serial Numbering	6550	300	12,900	60	PCR
IBM 1287 Optical Reader	3	4,300	189,200	1,150	
IBM 1287 Optical Reader	# 4	4,700	211,500	1,200	
	Rental Plan: "A"; Maintenance Group: "C"; Purchase Option: 40%; Per Call Category: "2"				
Numeric Handprinting	# 5370	800	36,000	50	PO
Optical Mark Reading	# 5479	100	4,500	5	PCR
Serial Numbering	# 6550	300	12,900	60	PCR
Farrington 7B font	# 3945	25	1,125	1	PCR
1428 & ISO A font	4470	25	1,125	1	PCR
NCR optical type font	5300	100	4,500	5	PCR



Product Announcement

BSC ADAPTER FOR S/360 MODEL 20  
SUBMODEL 4 ENABLES COMMUNICATIONS  
WITH LARGER MODELS OF SYSTEM 360

WITHDRAWAL OF BSCA (FEATURE CODE 2074) ON 2020  
PROCESSING UNIT MODEL B2

The Binary Synchronous Communications Adapter is now available for the IBM System/360 Model 20 Submodel 4.

The BSCA is completely machine and programming systems compatible with the previously announced BSCA for the Model 20 Submodel 2, providing communications capability between similarly equipped submodels of the System/360 Model 20 in a point-to-point switched or non-switched network.

The Model 20 Submodel 4 may also communicate with a larger System/360 via a BSC equipped 2701 Data Adapter Unit of BSC equipped 2703 Transmission Control Unit. Communications with a larger System/360 may be on either a point-to-point switched or non-switched network, or multi-point non-switched network. Model 20 BSCA IOCS communications with a larger System/360 is supported by DOS (BSC) BTAM and OS (BSC) BTAM.

The BSCA provides for EBCDIC or USASCII line transmission codes, as well as the ability to transmit packed decimal, machine language programs, and other binary data at speeds of up to 50,000 bps.

Programming Support...Model 20 BSCA Input/Output Control System support previously announced for the Model 20 Submodel 2 is available for the 2020 Submodel 4. Model 20 BSCA IOCS is compatible between submodels of the Model 20 and is supported by System/360 DOS BSC BTAM and OS BSC BTAM.

A minimum of 8,192 bytes of storage is required for Model 20 Card System BSCA IOCS, and 12,288 bytes for Model 20 Disk System BSCA IOCS.

Delivery Schedules...First Customer Shipments of 2020 Submodel 4, with BSCA and associated features, will be made in November 1968.

Model 20 (Submodels 2 and 4) BSCA IOCS will be available from WT Program Libraries November 29, 1968.

DOS BSC BTAM supporting Model 20 (Submodels 2 and 4) BSCA IOCS will be available from WT Program Libraries on November 29, 1968.

OS BSC BTAM supporting Model 20 (Submodels 2 and 4) BSCA IOCS will be available from WT Program Libraries on April 30, 1969.

RPQs...Will be accepted immediately, with processing commencing in 120 days. Response time will depend on complexity of request. Deliveries will not commence until at least six months following initial first customer shipment.

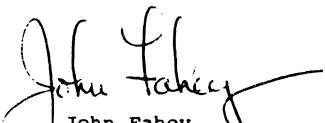
As with other Tele-processing Systems, Systems Assurance approval is required before submission of proposal including this feature.

Marketing Compensation Plan ... Normal provisions apply.

PRICES

Feature	Rental	Purchase	MMMC
2074 on the 2020 Mdl's C4, BC4, D4	\$425	\$17,000	\$16.50

Availability of the BSCA on the 2020 Model B2 is withdrawn immediately. This model is not supported by BSCA IOCS and adequate on-line diagnostic test message exchange cannot be provided by IBM within the 4K available core. Previously established orders for BSCA equipped 2020 Processing Unit Model B2 will be honored, but these customers are to be notified immediately that on-line diagnostic test message exchange to another System 360/20, or larger System/360, will not be provided. IBM supported BSCA diagnostics for the 2020 Model B2 will be limited to an off-line, wrap-around capability.

  
John Fahey  
Director of DP Marketing



Product Announcement

NEW TAB FEATURE FOR 2845 DISPLAY CONTROL

The new optional TAB feature 7801 for the 2845 Display Control permits the display operator to move the character position marker to previously determined locations on the display. Movement is accomplished by a simple key depression.

The addition of the TAB feature will greatly enhance the performance capability of the 2265 when operating with formatted data.

Delivery . . . TAB feature 7801 will be available for shipment in May 1969, which corresponds with the first customer shipment schedules for the basic 2265/2845 units.

RPQs . . . Beginning in August 1968, RPQs will be accepted for processing with response time depending on complexity. No RPQs will be shipped until six months after first customer shipments of the basic units.

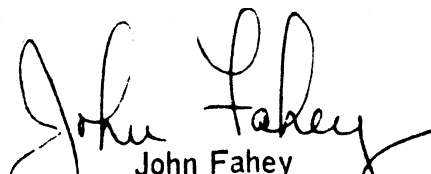
Program Support . . . The new feature requires no changes or extensions to the programs which support the 2265/2845.

Publications Support . . . A TNL for the SRL A27-2731 will be available.

Prices . . . Feature 7801 rents for \$5 monthly and may be purchased for \$180. There is no minimum monthly maintenance charge.

TEST ALLOWANCE IN EFFECT FOR IBM 2265/2845

A three-hour test time allowance is in effect for the 2265 Display Station and 2845 Display Control.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



Letter No. 68-260  
August 2, 1968

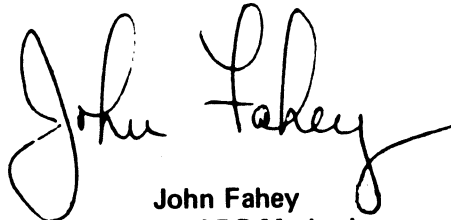
**Product Announcement**

**IBM 408, 409, 528 AND 609  
NO LONGER IN PRODUCTION**

Effective immediately, the 408 Accounting Machine, 409 Accounting Machine, 528 Accumulating Reproducer, and 609 Calculator are withdrawn from the IBM product line. Orders will no longer be accepted.

These products are currently on an "as available"\* basis. Orders now in the backlog will be offered a scheduled delivery date. The customer should be informed that failure to accept the scheduled delivery date, or any delay or postponement of an order in the backlog, may result in cancellation of that order.

**\*Note:** "As Available" - Equipment no longer in production is classified "As Available". Orders for "As Available" equipment are accepted on a conditional basis. If equipment is available, the Area fills orders with foreign field transfers. In most cases, "As Available" means that a present customer installation and the country inventory of idle equipment are our only possible sources of supply for that equipment.



John Fahey  
Director of DP Marketing

**Attachments [4]:**      **Machines 1285-1287, 1287, 1288; TC 77**

**Distribution:**        **All Areas**



IBM World Trade Data Processing

Letter No. 68-261  
August 1, 1968

Product Announcement

MODEL 25 IMPROVEMENTS  
TO 1400 SERIES COMPATIBILITY FEATURE  
ADD TO CAPABILITIES AND PERFORMANCE

System/360 Model 25 improvements to the 1400 Series Compatibility Feature offer the 1440 customer additional capabilities in card, tape, and disk operations, as well as better price/performance. The Compatibility Feature is improved to permit:

- The alternative of emulation of most 1442 functions by means of the natively-attached 2540 on the Model 25, as well as on a channel-attached 1442-N1, thus providing considerable increase in performance.
- The capability of handling multiple 1442s or 1442/1444 Reader-Punch combinations of the 1440 system via the 2540 in 1440 mode on the Model 25.
- Emulation of programs using the card image feature of the 1442 on the 1440, either by a channel attached 1442-N1 (with Card Image feature) or natively-attached 2540 on the Model 25.

A TNL to System/360 Model 25 -- 1440 Compatibility (A24-3512) will be provided. Consult the Weekly Publications Release Letter for availability.

These features will be available with customer shipments starting in January 1969.

Limitations ... No reading followed by punching in the same card is possible, and only blank cards can be utilized in the 2540 punch station. Stacker select is not supported in either reading or punching mode. The following limitations should also be noted:

- If Punch Feed Read feature (5890) is on the 2540, PFR operation is mutually exclusive with 1442 emulation.
- Changes to 1400 Type I or II programs will not be made to support this added capability.
- Programs that use programmed timing loops, or that have been optimized to take advantage of specific timing relationships should be evaluated to determine possible limitations in the use of the Compatibility Feature.



John Fahey  
Director of DP Marketing

Attachments [10]: [1-8] Machines 826, 2025.5, 2540, 2701.1, 2703.3, 2703.5, 2821-2826, 2848... [1] Programming 9023... [1] Type Catalogue 36.

Distribution: All Areas



IBM World Trade Data Processing

Letter No. 68-267  
September 13, 1968

Product Announcement

**THE 1084 SAMPLER READER MMMC PRICE IS INCREASED**

Effective immediately, the Minimum Monthly Maintenance Charge (MMMC) for the 1084 Sampler Reader is increased. The new price is \$37.00 (previous price was \$9.50).

*Administrative Provisions:* The new prices are effective February 1, 1969, for customers who are currently under an IBM Maintenance Agreement. These customers must be notified on or before November 1. This is in accordance with the three months' notice provision.

*Action Required:* Send an Amendment to IBM Maintenance Agreement (112-6136) to each affected customer. On the form, following the words "in accordance with", insert:

Paragraph 1 under Charges for Periods  
of Maintenance Service Availability

The Amendments, if mailed, are to be posted so that customers receive them on or before November 1, 1968. They may be hand delivered on or before that date.

**CONVERSION RENTAL PROGRAM FOR SYSTEM/360 MODEL 75 WITHDRAWN**

DP Letter 66-289 extended by two months the Conversion Rental Program for eligible equipment when displaced by System/360 Model 75.

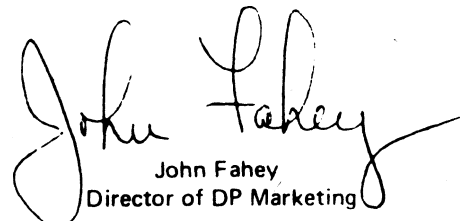
Since the need for this additional conversion aid no longer exists, this two-month extension is being withdrawn. System/360 Model 75's on order as of the date of this letter will not be affected by this change.

Other provisions of this Conversion Rental Program remain the same.

**SYSTEM/360 MODEL 20 WITHDRAWAL OF THE SUBSTITUTE CHARACTER MATRIX CONTROL (FEATURE NO. 2969 ON 2020) FROM THE PRODUCT LINE**

Effective immediately, the Substitute Character Matrix Control (Feature No. 2969) is withdrawn from the WT product line. Orders now in the back-log will be filled.

All outstanding offers of the subject feature are valid for a maximum of 90 days after this withdrawal is announced.



John Fahey  
Director of DP Marketing

Distribution: All Areas





IBM World Trade Data Processing

Letter No. 68-269  
September 30, 1968

*System Support File*

Product Announcement

**CHANNEL ATTACHMENT CAPABILITY  
OF 2495 IS EXPANDED**

The IBM 2495 Tape Cartridge Reader may now be attached to the Selector Channel (Feature number 6960) of the System/360 Model 25 and the Multiplexor Channel 2870 of Models 65 and 75.

*Programming:* Refer to P68-60 where support is indicated through MPS Utility Macros under DOS/360.

*Delivery:* Shipment of the 2495 for the above capability is as follows:

- Model 25 Selector Channel Attachment (Feature number 6960) - February 1969
- 2870 Multiplexor Channel on Model 65/75 - March 1969.

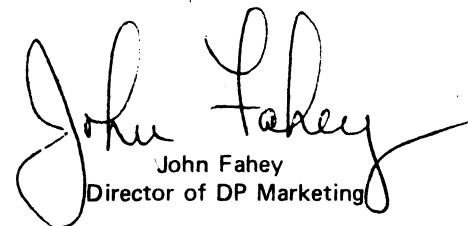
*Publications:* The SRL, IBM 2495 Tape Cartridge Reader, will be revised to include this new capability. Consult the weekly Publications Release Letter for availability.

**CLARIFICATION OF DP LETTER NO.  
68-256, DATED JULY 16, 1968**

Switched Line Capability is supported only in Canada. Speeds above 2400 baud are only supported with specific Modems by RPQ.

The sales manual pages are correct in this regard.

In case of any doubt as to the availability of suitable communications facilities, the Country Teleprocessing Coordinator should be consulted.

  
John Fahey  
Director of DP Marketing

Attachments [10]: Machines 2203, 2420, 2540, 2671, 2701.1, 2701.3, 2702.3, 2841, 2848 and 3976 - 3977.

Distribution: All Areas

*2*



IBM World Trade Data Processing

~~John Fahey~~  
~~Director of DP Marketing~~  
Letter No. 68-270  
October 21, 1968

CUSTOMER RELATIONS

SYSTEMS REFERENCE LIBRARY SUBSCRIPTION SERVICE

The present SRL Revision Service is being replaced by a new expanded service (SRL/SS). Rental and first use purchase customers are eligible to be enrolled in SRL/SS to the extent that the installation may be described in terms of interests in machine components and programs. He will automatically receive a Library copy of any new publication relating to his interests as well as any subsequent revisions.

Users of subsequent use purchase systems may also be enrolled in SRL/SS but only to receive SRL Bibliographies enabling them to order and be billed for publications to meet their needs.

With SRL/SS an eligible customer can be assured of receiving timely copies of all publications needed to operate his system and will be provided with a means of automatically obtaining multiple copies, including subsequent revisions, by form number.

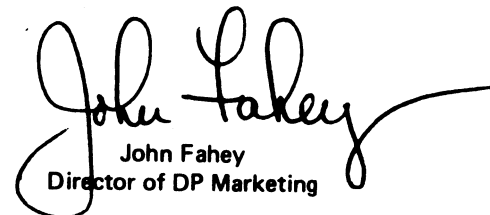
The new service will supply a customer's documentation needs faster and reduce the requirement for paperwork on the part of the IBM representative and the Branch Office. Regular Data Processing installations within IBM are also eligible to subscribe to SRL/SS for the system installed. Your regular Branch Office needs, however, should continue to be secured under DAPS (DP Automatic Publications Service).

More information concerning SRL/SS is attached to this letter. Detailed instructions for subscribing to SRL/SS, as well as a supply of the Subscription Profile Forms (310-0010) used to enter a new subscription or subsequently change or cancel it, is being sent under separate cover to Country DP Literature Coordinators. Additional quantities of 310-0010 may be requisitioned from the IBM Distribution Center, Mechanicsburg, Pennsylvania, or printed locally.

The change-over of customers now registered in the SRL Revision Service to SRL/SS will commence November 1, 1968 and end February 1, 1969 at which time SRL Revision Service will be discontinued. A Subscription Profile Form is required in each case.

Requests for SRL/SS and other publications, information and assistance should be directed to your Country Headquarters Literature Coordinator, who maintains constant liaison with DP Sales Publishing Services, World Trade Headquarters, where the publications distribution function is administered.

\*indicates change from 68-268

  
John Fahey  
Director of DP Marketing

Attachment: Questions and Answers

Cancels Letter No. 68-268

Distribution: All Areas

## QUESTIONS AND ANSWERS

Q. Just what publications are included in the service?

A. All Systems Reference Library manuals (SRL's) and Program Logic Manuals (PLM's) listed in SRL Bibliographies under subject codes 00 through 50 are available *by profile*. The selective dissemination of publications according to profile is designed to provide the user with a basic, master library tailored to his needs.

Application Program manuals, Student Texts, Data Processing Techniques manuals, Course Description Bulletins, and other miscellaneous documents (except padded forms) listed in SRL Bibliographies under subject codes 60 to 99 can be subscribed to *by form number*.

In addition, revision service on multiple copies of SRL's and PLM's under subject codes 00 through 50 may be ordered by form number.

Q. Who is eligible for SRL/SS?

A. All of IBM rental and first use purchase systems are eligible for the Profile Service. Subsequent users are eligible to receive the SRL Bibliographies automatically, without charge. They should then order desired publications from the branch office.

If a system is mixed, the Profile Sheet should indicate only rental and first use purchased machines. Eligibility for programming publications is based on CPU status; system design publications on component status; etc.

A new profile should be submitted when individual system components change from first use to subsequent use status.

Q. How many SRL/SS subscriptions may a customer have?

A. One subscription is allowed per system type per customer number. Very large accounts may have a valid need for more than one subscription. Letters of request from the branch manager to obtain consideration for additional subscriptions may be submitted to your Country DP Literature Coordinator.

Q. How many copies of publications will a subscribing customer receive?

A. For items selected on the basis of the customer's profile, one copy of each applicable publication will be sent. For items subscribed to by form number, the quantity specified will be sent.

Q. Will there be publications sent in which the customer has no interest?

A. If the customer's profile is properly drawn, he will only receive publications which apply to his specific interests as defined by the profile. Because we have limited the profile-matching procedures to SRL's and PLM's and have structured the profile to fit these categories specifically, matching is highly accurate.

To illustrate, let's look at two examples. First, the SRL manual *System/360 Disk Operating System Vocabulary File Utility Program for the IBM 7772 Audio Response Unit (C27-6924)* would only be sent to subscribers whose profile indicated interest in:

1. System/360, Model 30 or higher, and
2. Tele-processing, and
3. Subject code 32, and
4. DOS, and
5. 7772

Note that all five items must match for this publication to be considered of interest to the subscriber.

For a second example, the manual *IBM 1130 Functional Characteristics (A26-5881)* would go to any subscriber whose profile indicated interest in: 1) 1130 and 2) Subject code 01.

Q. How much will all of this cost the branch office?

A. The charges will be the same as for the SRL Revision Service. A charge of \$0.75 per month per subscription will be made. In addition, the branch office is charged at the Intercompany Billing Price (ICBP) used for distributing the same publications thru DAPS, plus the cost of mailing.

Q. What effect will the new service have on the Branch Office budget?

A. Because SRL/SS affects many areas of current cost, several factors must be examined:

- 1) To the extent that customers are now receiving adequate quantities of publications to meet their needs, publication charges should not increase under the new system.
- 2) Profile ordering provides subscribers with copies of new publications as well as revisions and technical newsletters. This eliminates the cost of processing orders and SRL Revision Service subscription changes each time a new form is announced.
- 3) Providing the customer with revision service for multiple copies of publications used by each programmer and operator also eliminates the need for subsequent ordering each time a new edition or Technical Newsletter is released.
- 4) Providing direct shipment thru the SRL/SS eliminates the cost of making a special call to deliver materials or the mailing and packaging costs that would be incurred in the Branch Office.

Q. How does a subscriber under the current SRL Revision Service get enrolled in the new program?

A. In the same way as for a brand new subscriber i.e., a completed SRL Subscriber Profile (310-0010) must be submitted before any action can be taken. Once enrolled in SRL/SS the customer will be concurrently discontinued from the SRL Revision Service.

Q. What happens if no action is taken by the Branch Office to convert a subscriber to SRL/SS?

A. The subscriber will continue to be serviced by the SRL Revision Service until February 1, 1969. After that, no service of any kind will be provided until the required Subscriber Profile Form is received.

Q. Can you be more specific on enrolling a new subscriber?

A. Yes. First, review the customer's requirements for a master library. Based on activities within his installation, determine the areas of his interest with respect to each of the six sections of the profile form. A properly completed profile will provide him with the one library copy of any item under subject codes 00 through 50. For SRL Revision Subscribers this should compare with what he had previously ordered by form number.

## QUESTIONS AND ANSWERS (CONT'D)

Second, determine what publications falling under other subject codes in the SRL Bibliography for the system subscribed - or listed in the *Bibliography of Data Processing Techniques* - should be in his master library.

Enter the form numbers of these - with a quantity of 1 - under the form number section of the subscription form.

Third, determine which manuals must be maintained up-to-date by individual programmers and operators. Add these quantities by form number to the subscription list. (Where a quantity of more than one is requested by form number, include the library copy in the quantity requested.)

Q. What happens when we request "Initial Library"?

A. For new subscribers, the initial library furnished by SRL/SS will consist of all publications matching the profile plus those ordered by form number. However, present SRL Revision Service Subscribers may only be provided with the publications missing from his library. To obtain these, review his existing Library (previously assembled under the SRL Revision Service) and determine what additional publications are needed. Include these on a Publications Requisition Form (111-6034) and submit it with the Subscriber Profile Form.

When a subscriber to the new SRL Subscription Service changes his subscription, he will receive copies of any items not previously sent that match his new profile, or that have been added to his form number subscription.



## Product Announcement

**CONNECTING 2260 TO 2848 BY CABLE  
OVER 1,000 FEET REQUIRES SPECIAL  
FEATURE**

When the IBM 2260 Display Station is connected to a 2848 Display Control by a cable more than 1,000 feet long, a modification is required on the 2260 and on the customer-owned interconnecting cable. This no-charge modification on both rental and purchase machines may be ordered by specifying feature 9430, Long Cable Attachment.

A 2260 with the Long Cable Attachment feature is not interchangeable with a 2260 without the feature.

*Delivery:* Feature 9430 is available from the Kingston plant on a no-charge MES. When ordering, also specify EC 711185 (ECA 18) unless EC 710832 (ECA 17) has previously been installed.

**ACTION REQUIRED**

*Installed Machines:* A sales representative must secure written permission from the customer if the cable is to be modified by the customer engineer, since the cable is owned by the customer. This written permission must be obtained before the feature is ordered.

If the customer prefers to have his own electrical contractor perform the work, the CE must be present when the work is performed since he must concurrently install the companion change in the 2260. The sales representative will coordinate these arrangements.

*On-Order Machines:* If the cable between the 2260 and the 2848 is to be more than 1,000 feet long, submit an Alteration Notice on the 2260 to add 9430.

*New Orders:* If the cable between the 2260 and the 2848 is to be more than 1,000 feet long, specify 9430 on the DPMO.

**SUBSEQUENT CHANGES**

*Machines Already Modified:* In cases where feature 9430 is installed on a 2260 and the 2260 is to be used with a cable 1,000 feet or less in length, submit, to plant of manufacture, a "No Charge" MES to remove feature 9430 for the 2260 and instruct the CE to properly reposition the internal jumper.

*On-Order Machines:* Prior to shipment and within the required lead time, if the customer decides to change the cable length from more than 1,000 feet to 1,000 feet or less, submit an Alteration Notice to delete 9430.

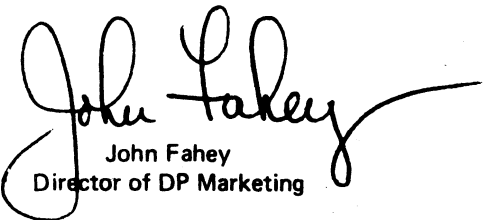
*RPQs:* All RPQs involving both the 2260 and the 2848 must be reviewed for compatibility with feature 9430. This feature cannot be installed on 2260s having RPQ W18550 or F16434.

*Administrative Provisions:* Expenses incurred by the customer in having the necessary cable modifications performed by his own contractor will be reimbursed by IBM in those cases where the cable was originally installed by his own contractor. The branch office, having been furnished a copy of the contractor's invoice through the sales representative, will reimburse the customer in the amount shown.

A sample customer letter explaining the modification is on the reverse side of this letter.

**IF TEMPERATURE EXCEEDS 90 DE-  
GREES FAHRENHEIT, 2260 NEEDS MODI-  
FICATION**

A 2260 Display Station requires a modification if it is to operate in an environment where the temperature exceeds 90 degrees Fahrenheit. The modification can be plant or field installed. Contact Country Special Engineering for ordering instructions. No RPQ is required.



John Fahey  
Director of DP Marketing

Attachment [1]: Machines 2260-2265

Distribution: All Areas

**Dear Customer:**

**If a cable more than 1,000 feet long is required to link your 2260 Display Station to its 2848 Display Control, a modification is required on the 2260 and your cable.**

**There is no charge to you for this modification, whether our customer engineer performs the modification, or whether your contractor does the job.**

**Your IBM sales representative will discuss these arrangements with you in the near future.**

---

**(Signature)**



IBM World Trade Data Processing

Letter No. 68-274  
November 8, 1968

Product Announcement

**1018 CAN NOW PUNCH LAMINATED  
POLYESTER TAPE (IBM 425020)**

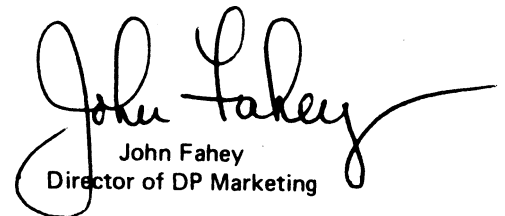
The IBM 1018 Paper Tape Punch now has an added punch capability: It can punch laminated polyester tape (IBM 425020) at no additional charge. With this announcement, the 1018 is able to handle all IBM tape supplies, thus meeting the Mylar punch requirements for numeric control applications in the manufacturing industry.

*Delivery:* First customer shipments of 1018s, which are scheduled for September 1969, will include this capability.

*Publications:* The component description SRL (A33-4500), IBM 1018 Paper Tape Punch, will be updated to reflect this new capability. Availability will be announced in a Publications Release Letter.

*Programming:* Programming support remains unchanged.

*RPQs:* Acceptance of RPQs remains as previously stated for the 1018.



John Fahey  
Director of DP Marketing

Attachment [1]: Machines 1017-1018

Distribution: All Areas





IBM World Trade Data Processing

Corrected  
Letter No. 68-275  
November 14, 1968

Sales Activity

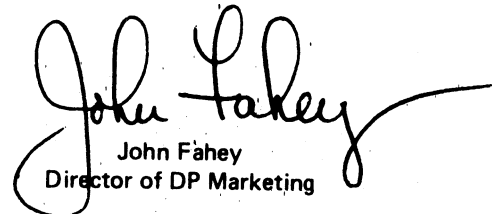
### Maintenance of IBM Equipment

Attached is a revised Customer Information Bulletin, "Maintenance of IBM Equipment On a Per-Call Basis." This Bulletin summarizes existing policy and practices.

Highlights of the Bulletin cover:

- Procedure for authorization of costly repairs.
- Policy relating to charges for installation of engineering changes on equipment services on a per-call basis.

Using Sample Customer letter on the reverse side of this letter, please mail a copy of the Customer Information Bulletin to all applicable customers.



John Fahey  
Director of DP Marketing

**NOTE:** This letter replaces 68-271, but does not require an additional letter to customers if such a letter has already been written.

Cancels: Letter No. 68-271

Attachment: Customer Information Bulletin, "Maintenance of IBM Equipment on a Per-Call Basis."

Distribution: All Areas



**SAMPLE LETTER TO CUSTOMERS  
WHO OWN PURCHASED IBM EQUIPMENT**

Dear Mr. \_\_\_\_\_

The IBM World Trade Corporation has revised its existing policy on "Maintenance of IBM Equipment on a Per-Call Basis." Please note that this relates exclusively to "per-call" maintenance and does not affect IBM policy related to service provided under IBM Maintenance Agreement contracts.

I am attaching a copy of the revised information bulletin on this subject.

Please contact me if I may be of any further assistance.

Signed

Attachment

## Proposed Customer Information Bulletin

Maintenance of IBM Equipment on a Per-Call Basis

IBM will furnish maintenance service on purchased IBM Data Processing equipment on a per-call basis, in accordance with the following conditions and provisions. The term "customer" as used herein may refer to an owner or user of purchased equipment.

A. Maintenance Practices

In response to requests for per-call service IBM, where available, will dispatch a Customer Engineer who is qualified to service the particular equipment involved.

Any repair must be the responsibility of either IBM or another company. IBM Customer Engineers will only work jointly with a non-IBM service representative on IBM equipment when IBM equipment is connected to another manufacturer's product, and then only with a non-IBM service representative trained to maintain the connected product.

IBM will inform the customer when it is determined that the cost of repair will exceed a specified amount (not less than \$100) if so requested by the customer. This will be done before the Customer Engineer proceeds with the repair. If the customer determines that the repair shall be made by someone other than the IBM Customer Engineer, the customer will be billed for all time spent by the IBM Customer Engineer at IBM's normal billing rates.

B. Billing Policy

Service time, travel time, and travel expense of Customer Engineers will be billed at IBM's standard rates. Parts will be billed at established prices. All intermittent or repetitive calls are billable. Time and expense required to obtain needed parts or associated with incomplete calls are billable.

**Minimum Charge:** A minimum charge of one hour per IBM shift for each IBM customer's site applies for calls taken during IBM's normal working hours, and a two-hour minimum charge per IBM shift for all calls taken outside IBM's normal working hours. The hours for all billable calls at a customer's site taken during the IBM shift are to be totalled. If the total hours are less than the applicable minimum, the customer will be billed the minimum charge.

**Hourly Rates:** The particular hourly rate charged will depend on the machine type serviced and the time and day at the location that the work is actually performed. In instances, where a call is started during IBM's normal working hours, any unused time required to fulfill the minimum will be billed at the rate applicable for IBM's normal working hours.

**Assist Calls:** Whenever a Customer Engineer receives assistance because he is unable to diagnose a trouble and the trouble is of a nature that can normally be handled by one Customer Engineer, the customer will be billed for the services of only one man. Whenever a trouble is of a nature that the presence of more than one Customer Engineer is needed this requirement will be brought to the attention of the customer and his concurrence received before the second Customer Engineer starts to work. The customer will be billed for the parallel time.

**Engineering Changes:** Engineering changes are announced by Customer Engineer Memorandum (CEM), and should be ordered by the customer when desired. Orders should be directed to the IBM branch office specifying the CEM number, the specific change wanted and the applicable machine type, serial number, and location. Customer Engineer Memorandums are available on a subscription basis. Subscription requests should be directed to the IBM branch office.

1. **Safety, New Production and Quality Engineering Specification Changes:** IBM will install changes under these categories, where applicable, on purchased machines, provided the owner concurs with the installation of the change. The installation will be made at no charge. In the event that Functional Improvement or Maintenance Reduction engineering specification changes are required as a prerequisite for the engineering changes in this category, the applicable time, expense, and parts cost associated with the changes will be billed to the customer. If the owner refuses to permit installation of a safety change, or removes one already installed, IBM management will appraise the safeness of the equipment, and if conditions warrant, will discontinue providing service until the hazard has been corrected.
2. **Functional Improvement and Maintenance Reduction Engineering Specification Changes:** On customer request, engineering specification changes under these categories will be installed and all time, expenses, and parts cost associated with these changes will be billed. When the customer is not the owner of the equipment, the concurrence of the owner has to be furnished.

**Installation of Special Features:** When ordered field installable special features will be installed on machines meeting necessary engineering requirements for the feature. All costs to install prerequisite Functional Improvement and Maintenance Reduction engineering specification changes will be billed to the customer on a per-call basis in addition to the field installation charge for the feature. When the customer is not the owner of the equipment, the concurrence of the owner must also be furnished by the customer.

**Billing Authorization:** The IBM Customer Engineer will obtain the signature of the customer on each billable Service report. This signature will constitute authority to bill for the service. A copy of the Service Report will be given to the person signing it.



Product Announcement

**NEW S/360 MODELS 40, 50 STORAGE SIZES  
BROADEN CHOICE OF CUSTOMER CONFIGURATIONS**

To meet the expanding requirements of its System/360 Model 40 and 50 customers, IBM is introducing intermediate central processor storage sizes as follows:

Model 40GF	196,608	storage positions
Model 50HG	393,216	storage positions

Both new storage sizes, along with their associated models, broaden the customer choice of configurations. Result: The 2040 and 2050 are more adaptable to meet individual requirements.

**Highlights:**

*Individual Applications:* More Storage for better performance.

- Expanded I/O buffers
- Larger data arrays in memory
- Expanded sort work area
- Fewer overlays

*Improved Sorting Times:* Sort routines may take advantage of the storage size increase. In many instances, the number of passes required for sorting jobs will be reduced.

*Teleprocessing, Remote Job Entry and Graphics:* Customer growth in these areas may use the additional storage for real time applications.

*Balanced Configuration:* Systems configuration design permits better balance for certain job streams, customer workloads and increased multiprogramming requirements.

For Model 50 customers, the HG provides improved performance and turnaround with OS/360 MFT-II and MVT. Included are:

- Additional regions/partitions for multijobbing operations
- Core resident performance options
- In-core readers/writer with class/priority scheduling.

For Model 40 customers, the GF provides improved performance and turnaround via multiprogramming with OS/360 MFT II and DOS/360.

**Delivery:** First customer shipments of the 40GF will begin in March, 1969, while those of the 50HG will start in February, 1969.

**Conversion:** On-order systems now scheduled after first customer ship date may be converted to the new models without a shipment delay provided the conversion order is submitted 120 days prior to the scheduled shipment date. Installed rental systems may be converted by submitting an MES order. To convert purchase systems, an RPQ is required before prices can be quoted.

**RPQs:** These will be accepted immediately.

**Programming Support:** All present System/360 programming systems that run on the Model 40's 131,072 byte core storage size will run on the 40GF. Similarly, current systems that run on the Model 50's 262,144 byte core storage size will run on the 50HG.

**Test Allowance:** 40GF - 23 hours, 50HG - 28 hours.

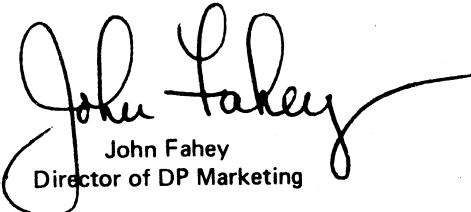
**Publications Support:** Technical Newsletters will be available. Advance copies will be shipped. Additional copies can be obtained from the IBM Distribution Center, Mechanicsburg. Actual availability will be announced in a forthcoming weekly Publications Release Letter.

**Marketing Compensation Plan:** Normal sales provisions apply.

**Prices:**

	<u>MAC</u>	<u>PURCHASE</u>	<u>MMMC</u>
40GF	\$ 9,500	\$ 447,325	\$ 258
50HG	18,025	780,395	550

**Compatibility:** All characteristics of the new models are the same as those within their present model categories except for storage sizes. See the reverse side of this letter for a comparison of these storage sizes illustrating the new intermediate models as compared with existing models.

  
John Fahey  
Director of DP Marketing

2040 MODELS

2.5 us Core Storage (Bytes)

Multiplexor Subchannels

D	16,384	16
E	32,768	32
F	65,536	64
G	131,072	128
GF *****	196,608 *****	128
H	262,144	128

2050 MODELS

2.0 us Core Storage (Bytes)

Multiplexor Subchannels

F	65,536	64
G	131,072	128
H	262,144	128
HG *****	393,216 *****	128
I	524,288	128



Product Announcement

**FOUR NEW FEATURES IMPROVE SPEED,  
COMPATIBILITY OF S/360 MODEL 25**

Four new features offering greater compatibility and speed are now available for the IBM System/360 Model 25. Take advantage of these new features to help 1400 and Model 20 users to grow to the 25 --

- 1401/1440/1460 DOS/360 Compatibility, faster tapes and printers make the Model 25 an even better price performer to attract the uncommitted 1440 user.
- Permitting the 2560 to emulate a 2540, plus the availability of faster tapes and printers, enables you to configure a better system to upgrade Model 20 users.

The Model 25 now offers these important features:

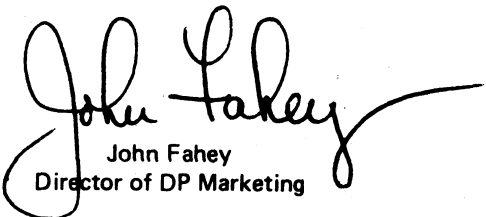
1. 1401/1440/1460 DOS Compatibility -- Used in conjunction with Type I CS/30 Compatibility Support enables execution of 1401 and System/360 programs in a single intermixed job stream with multi-programming capability. This is a no-charge feature.
2. 60KB Channel -- Increased selector channel speed permits the attachment of 60KB Tape Drives (2401, Models 2 and 4). This is a no-charge feature.
3. 2540 Emulation Control Feature -- An addition to the Integrated 2560 Attachment which allows the 2560 Multifunction Card Machine to emulate a 2540 Card Read Punch. Monthly rental on this feature is \$60.
4. 1100 LPM Printer Adapter -- An addition to the Integrated Printer Attachment which provides the ability to attach the 1403 N1 Printer. Monthly rental is \$60.

In addition, the Model 20 Mode (Feature 7600) now provides support for the 2152 Printer Keyboard via the 1052 Printer Keyboard. This capability will be included with first customer shipments of the Model 20 Mode Feature.

RPOs for each of the features may be submitted immediately with actual schedules dependent upon complexity of the RPO.

**Programming Support:** Existing program support for the Model 25 applies for the 60KB Channel, 2540 Emulation Control and 1403 N1 Printer Adapter. The 1401/1440/1460 DOS/360 Compatibility feature is used in conjunction with CS/30 Compatibility Support. Modifications to this program to support this feature are scheduled for release April 30, 1969.

Details on each of the new features, including support materials, delivery dates and other information are on the reverse side.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas

#### **1401/1440/1460 DOS Compatibility (Feature 4470)**

This feature in conjunction with CS/30 Compatibility Support allows 1401/1440/1460 and System/360 programs to run in a single intermixed DOS/360 job stream with multiprogramming capability.

Floating Point Arithmetic (Feature 4427), Sterling Conversion (Feature 2826) and the Integrated Communications Attachment (Feature 4580) are mutually exclusive with this capability. For details see revised sales manual pages for accommodating mutually exclusive features.

Feature 4470 is required for those customers who desire to operate the emulator program under DOS/360. Prerequisite features are 1400 Series Compatibility (Feature 4400) and the Integrated 2311 Attachment (Feature 4590) on the 2025.

First customer shipments will commence with Systems scheduled for June 1969.

MESs to add Feature 4470 to installed 2025s require 120 days lead time. MESs will be made available after July 1969. Schedules to be negotiated with the Plant of System Control.

TNLs to the Model 25, 1401/1440/1460 Compatibility Feature SRL A24-3512-1 will be available. Advance copies will be shipped. Additional copies can be obtained from the IBM Distribution Center, Mechanicsburg. Refer to the weekly Publications Release Letter for actual date of availability.

#### **60KB Channel**

The data rate for the selector channel has been increased from 30 to 60KB. This will permit the attachment of 2401 Models 2 and 4 Tape Drives.

All 2025s equipped with Selector Channel (Feature 6960) will have this capability beginning with shipments scheduled for April 1969.

A major revision to System/360 Model 25 Functional Characteristics Manual which will include the above channel data rate increase will be announced in a future Publication Release Letter.

A 2025 System installed prior to February 1969 with 1400 Compatibility (Feature 4400) requires EC 132842 to enable 1400 programs to run on 60KB Tape Drives. Field Bill of Materials will be shipped automatically starting in April 1969.

#### **2540 Emulation Control (Feature 7800)**

This feature will enable the 2560 Multifunction Card Machine to operate as a 2540 Card Read Punch in Model 25 mode, thus allowing the 2560 to act as the read/punch in both Model 20 and 25 modes. Card Printing and Merging is supported only in S/360

Model 20 mode. The 2540 Column Binary, standard on 2540 Integrated Attachment (Feature 4595), and 1400 Compatibility (Features 4441 and 4442) are not supported.

First customer shipments will commence with Systems scheduled for June 1969.

MESs to add Feature 7800 to installed 2025s require 120 days lead time. MESs will be available after August 1969. Schedules to be negotiated with the Plant of System Control.

Prerequisite features are Integrated 2560 Attachment (Feature 4596) and Model 20 Mode (Feature 7600).

A TNL, N24-0424 (to SRL A24-3524) for Model 20 Mode Feature will be available. Advance copies will be shipped. Additional copies can be obtained from the IBM Distribution Center, Mechanicsburg. Refer to the weekly Publications Release Letter for actual date of availability.

#### **1100 LPM Printer Adapter (Feature 3615)**

This feature permits the attachment of the 1403 N1 Printer via the Integrated Printer Attachment thus providing higher speed printing without the use of the 2821 Control Unit.

First customer shipments will commence with Systems scheduled for March 1969.

MESs to add Feature 3615 to installed 2025s require 120 days lead time. MESs will be available after May 1969. Schedules to be negotiated with the Plant of System Control.

Integrated Printer Attachment (Feature 4590) is a prerequisite.

A major revision to System/360 Model 25 Functional Characteristic Manual SRL A24-3510, which will include the 1100 LPM Printer Adapter, will be available. Advance copies will be shipped. Additional copies can be obtained from the IBM Distribution Center, Mechanicsburg. Refer to the weekly Publications Release Letter for actual date of availability.

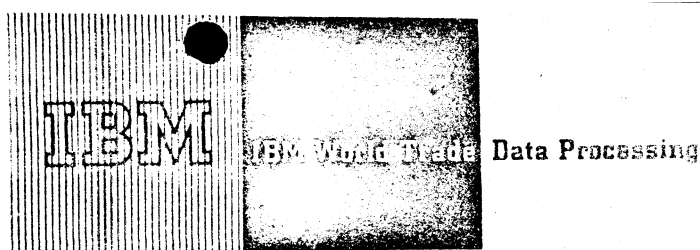
#### **Alteration Notices Required**

Alteration Notices must be submitted 120 days prior to scheduled shipping date:

- a) To add the new feature(s) to 2025s.
- b) Change from 2415 or 2401 Model 1 to 2401 Model 2 or 4.

Schedules on all converted orders must be individually negotiated with Country Orders and Schedules.

Alteration Notices are required to delete Feature 4599 on the 2025. This feature is no longer required for attachment of the 1052 Printer Keyboard.



Letter No. 68-279  
November 29, 1968

**Product Announcement**

**1446 PRINTER CONTROL NO LONGER  
IN NEW PRODUCTION**

Effective immediately, the IBM 1446 Printer Control is not in new production.

Existing orders scheduled for delivery will be honored with new equipment if the original delivery date was within the published delivery schedule in effect at the time of order entry, and if that date has not been deferred beyond the schedule.

New production units will be individually scheduled to satisfy any unique requirements applicable.

**Action Required ...** All customers affected by this release must be notified promptly.

Existing orders scheduled for delivery will be honored with new equipment if the original delivery date was within the published delivery schedule in effect at the time of order entry, and if that date has not been deferred beyond the schedule.

New production units will be individually scheduled to satisfy any unique requirements applicable.

**Action Required ...** All customers affected by this release must be promptly notified.

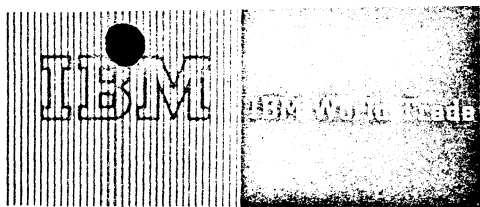
  
John Fahey  
Director of DP Marketing

**PRODUCTION STATUS CHANGED FOR  
IBM 1445 PRINTER**

Effective immediately, the IBM 1445 Printer (Models 1 and N1) is in limited new production.

**Attachments [14]:** [1] General Information 19 ... [2] Systems S/360.3 ... [3 thru 13] Machines 27-29, 357-358, 374-377, 803, 1017-1018, 1052.1, 1287, 1288, 2301-2303, 2311-2314, 2420 ... [14] Type Catalog 71.

**Distribution:** All Areas



Data Processing

Letter No. 68-280  
December 2, 1968

Product Announcement

**1416 TRAIN AND 1403 CHAIN CHARACTER  
ARRANGEMENT ANNOUNCEMENT - ISO  
OCR B FONT NUMERIC SUBSET**

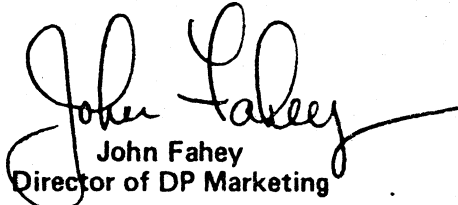
IBM World Trade announces a new character arrangement (ONB) for the 1416 Interchangeable Cartridge and Fixed or Interchangeable Chain Cartridge on the 1403 Models 2, 3, and N1 attached to System/360. This character arrangement provides printing of the numeric digits 0-9 and three (3) special characters of the International Standardization Organization (ISO) Alpha-numeric Character Set for Optical Character Recognition - Type B, Size 1.

The ONB arrangement is a 48-character set consisting of the 13 ISO B font characters (0-9, < > +) 1403 style alphabetic characters and nine special characters - , = \$ / . & ' \*

The IBM 1275 Optical Reader Sorter (Models 3 and 4) are capable of reading the ISO B font characters in the ONB arrangement. The remaining characters are not readable by the 1275.

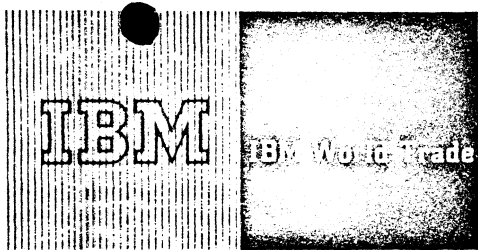
The Universal character set or Multiple character set feature is a prerequisite for the ONB arrangement.

Orders will be accepted immediately. First customer shipments will begin December 1, 1969. Prices and ordering procedures are the same as currently published in the Sales Manual for chain and train arrangements.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas





Product Announcement

1275 Optical Reader/Sorter



IBM World Trade announces the IBM 1275 Optical Reader/Sorter designed especially for your World Trade Banking and Post Giro customers' Document Handling applications. Available in four models, the 1275 features:

- An advanced document handling capability - with speeds up to 1600 documents per minute for six-inch documents (148mm).
- High Resolution Scanning and recognition of numeric ISO OCR A and B font characters.
- On line/off line System/360 operations.
- Powerful, flexible IBM multiprogramming support under DOS/360.

The 1275 offers Banks and Post Giros the opportunity to make a major advance in systems efficiency by providing the ability to read and transfer the information printed on cheques, transfers, notices of payments and other financial documents into the System/360, as well as sort the documents into any desired sequence according to the information printed in the codeline.

The 1275 reads and sorts numeric data at a maximum speed of 1600 six-inch documents per minute. It is equipped with 13 output pockets. The data can be recorded in the codeline in a variety of ways, including letterpress (book printing) offset, IBM 1403 printers (both 600 and 1100 lines per minute models), IBM Model 72 typewriters or other devices such as adding machine inscribers, which produce an equivalent quality of printing.

Depending upon the 1275 model employed, the codeline information to be read and/or sorted can be printed in either the numeric characters and certain special symbols of the International Standards Organization Character Recognition Alphanumeric Font-A (ISOCRAF-A) Size 1 or the ISOCRAF-B, Size 1. The codeline may contain up to seven fields, each fixed or variable in length.

**Model Descriptions:** The 1275 Models 1 and 2 read the ten numerical digits (0-9) and three special characters used as field separators: J (hook) Y (fork) and H (chair) of the ISOCRAF-A Font, Size 1. A pre-printed vertical ruling (I) can be also used as a field separator.

- Model 1 is used for off-line document sorting of ISOCRAF-A Font codeline data.
- Model 2 provides all the functions of the Model 1, and in addition through the Dual Address Adapter, can be attached to the multiplexor channel of System/360 Models 25, 30, 40, or 50. This enables data from the documents to be read into the System/360 and document sorting to be controlled by the 1275 or System/360.

The 1275 Models 3 and 4 read the ten numerical digits (0-9) and three special characters used as field separators: + (plus), < (less than), and > (greater than) of the ISOCRAF-B Font, Size 1. A pre-printed vertical ruling (I) can also be used as a field separator.

- Model 3 is used for off-line sorting of documents containing ISOCRAF-B Font codeline data.
- Model 4 provides all the functions of the Model 3, and in addition through the Dual Address Adapter, can be attached to the Multiplexor channel of System/360 Models 25, 30, 40, or 50. This enables data from the documents to be read into the System/360 and document sorting to be controlled by the 1275 or System/360.

Standard Machine features designed for the operator on all models include:

- Continuous document loading without interrupting machine operation.
- Maximum operator access to hopper and selector areas.
- Optimum Document Stacking.
- High Order Zero and Blank Selector for "outsorting completed documents."
- Two-hand document unloading and restart by simple foot bar activation.
- Indicating switches which display operating status of machine.

**Document Dimensions:** All models can process intermixed paper documents within the following dimensions:

Width	2.75" (70mm) to 4.13" (105mm)
Length	5.83" (148mm) to 8.75" (222mm)
Thickness	.0035" (0.09mm) to .0055" (0.14mm)
Basic weight	20 lb. to 32 lbs. (75 to 120 grams per square meter).

**Checking:** The readability of each character, including special characters used as field separators, can be verified each time a document is read and/or sorted. A field length check is made on all fixed length fields being processed to assure that all digits in the field have been read. When a document does not satisfy the checking conditions it is rejected (when the 1275 controls the checking) or the error condition is presented for interrogation by the user program (when System/360 controls the sorting).

Optional Features

**Endorser:** This feature, if activated, prints an endorsement on the back of each document passing through the 1275, as a positive indication that the document has been processed. The Endorsement may be in one of six positions, and contains date, up to five digits of identifying data, and other fixed information printed from an endorser plate made to the customer's specifications. It is the user's responsibility to select an endorsing position which does not interfere with subsequent reading of the codeline(s).

**Moveable Read Head:** This enables the operator to change the position of the read head, and so permits the reading, in separate passes, of codelines which are located at different distances from the bottom (aligning) edge of the document.

**Multiple Column Control:** This feature examines up to six positions of a selected field and compares the data read there with a control number, set up by keys and dials on the operator's panel. Under operator control, the feature can be used in two ways. Either all documents which do, or all documents which do not, have the same digits as the control number are selected into pocket A. Non-selected documents are sorted normally.

**Program Control for Pocket Lights A-3 (not available on Model 1 or 3):** This facilitates control of output batches. The program stops the reader sorter when a predetermined number of documents has entered any one of the first six pockets designated by the program, and turns on the appropriate pocket light.

**Program Control for Pocket Lights 4-9 (not available on Model 1 or 3):** This is an extension of Program Control for Pocket Lights A-3, which is a prerequisite. With both features the facility of stopping the reader sorter and turning on pocket light(s) is extended to twelve pockets.

**Self Checking Number:** This feature ensures greater reliability when reading fields, such as account numbers, with self-checking numbers. A self-checking number consists of two parts, the basic identifying number and its check digit. The feature verifies a self-checking number field as it is read during any pass. Two methods are available: Modulus 10 and Modulus 11. With the Modulus 10 technique, check digits can be generated for all basic numbers; with Modulus 11 more transposition errors are detectable, but basic numbers requiring a check "digit" of 10 cannot be used. If the field fails to satisfy the check, the document is normally routed to pocket A. If the Multiple Column Control feature is also active, self-checking error documents are routed to the reject pocket.

Programming Support

Existing DOS/360 IOCS for the 1419 Magnetic Character Reader supports the 1275 Optical Reader Sorter, Models 2 and 4.

The 1275 Model 2 or 4 attaches to the System/360 multiplexor channel in the same way as the 1419 Magnetic Character Reader equipped with System/360 Dual Address Adapter. All 1275 optional features are supported, as are the Selective Tape Listing features on the 1403, which allow individual spacing or skipping of tapes on the printer under program control.

Functions performed by the IOCS are:

- Automatically controlled engaging and disengaging of the 1275's. User control also provided.
- Reading of OCR documents.
- Automatic entry to user stacker select routine at the completion of each document read.
- Stacker selection of documents.
- Maintenance of a revolving buffer pool.
- Posting of error conditions to the document buffer for user processing.
- Servicing of I/O and External Interrupts.
- I/O error recovery.
- Operator messages for appropriate I/O error conditions.
- Presenting data and unusual conditions for user processing.
- Macro-instruction for efficient operation of multiple Optical Reader Sorters simultaneously within a single program partition.
- Support for all partitions - Foreground/Background.

Customer Program Testing Allowance

1275 Models 2 and 4 --- 5 hours.

Delivery and Source of Supply

First customer shipments of all models will begin in September 1970. The published delivery schedule will be announced in 90 days. Schedule dates for orders received during this 90 day period will be assigned by the appropriate allocating locations on a sequential basis. No commitments to customers are to be made until such dates are received in the branch office. Alteration notices and MES's must be submitted at least 120 days prior to the scheduled shipping date.

The Source of Supply for the 1275 is Greenock, Scotland.

RPQ's

RPQ's will be accepted by Uithoorn Netherlands Special Engineering for consideration immediately with response time and delivery schedules dependent upon RPQ complexity.

Publications Support

The following publications will be available following announcement. IBM 1275 SRL, Form No. A19-0034, 1275 Physical Installation Planning TNL Form No. N19-0036. Advance copies will be distributed. Additional copies will be available from the IBM Distribution Center, Mechanicsburg. Actual Availability will be announced in a forthcoming Publications Release Letter.

Sales Compensation Plan

Normal DP Sales Compensation plan provisions apply. Add to Group 79, 1275 Models 1, 2, 3, 4, 2000 On Schedule Quota points. Add to Group 45, 1275 Models 1, 2, 3, 4, 2000 Out-of-Territory Quota Points.

Effective Date: December 2, 1968  
Termination Date: January 1, 1969

DP Orders and Movements Codes

Type	Models	Product Category	Product Line
1275	001,003	20	6
1275	002,004	59,62,92,93	6

1275 Demonstrations

Public Demonstrations on the 1275 will be held in the Uithoorn Laboratory during the first two weeks in March 1969. Additional details will be provided to your country Document Handling Coordinator in the near future.

Rental and Purchase Prices

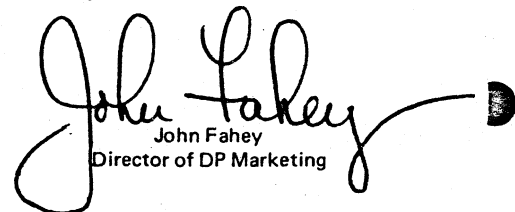
Type/Feature	Model/Feature	Rental	Purchase	MMMC	FIC
1275	1	\$3730	\$179,000	\$1300	
1275	2	\$4000	\$192,000	\$1350	
1275	3	\$4730	\$227,000	\$1300	
1275	4	\$5000	\$240,000	\$1350	
Movable Read Head	2938	\$ 50	\$ 2400	\$ 5.00	PCR
Multiple Column Ctrl	2779	\$ 65	\$ 3120	\$750.00	PCR
Program Control for Pocket Lights A-3	2758	\$ 25	\$ 960	\$ .50	PCR
Program Control for Pocket Lights 4-9	2759	\$ 10	\$ 380	\$ .75	PCR
Self Checking Number Modulus 10	7061	\$ 40	\$ 1950	\$ 1.75	PCR
Modulus 11	7062	\$ 65	\$ 3000	\$ 2.75	PCR
Endorser	3791	\$375	\$ 18350	\$ 30.00	PO
Endorser Plate - specify #3792 for field installation. See Machines 10000.1 for field installation. Purchase only.		\$55*			PC

\* If font and layout work are required, a Service Charge of \$25.00 also applies.

Rental Plan	A	Maintenance Group	C
Purchase Option	40%	Per Call Category	2

The 1275 is not eligible for an Educational Allowance.

See the attached Sales Manual pages for additional details.

  
John Fahey  
Director of DP Marketing



Letter No. 68-282  
December 4, 1968

**Product Announcement**

**NEW FEATURE PROVIDES WAY TO REDUCE  
2250 MODEL 4 ATTACHMENT NOISE**

A new no-charge specify feature is provided for the 2250 Display Unit Model 4. This specify feature provides a power cord which reduces the transient noise when a 2250 Model 4 is attached to the 1130 via Storage Access Channel II and the 1133 Multiplex Control Enclosure.

To order the feature, which is also field installable, specify:

For the 1133

No. 9820 when attaching a 2250 Model 4 to Storage Access Channel II (No. 7492).

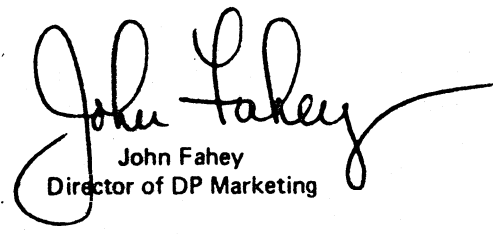
For the 2250

No. 9821 when attaching a 2250 Model 4 to the 1130 Computing System Storage Access Channel I (No. 7490).

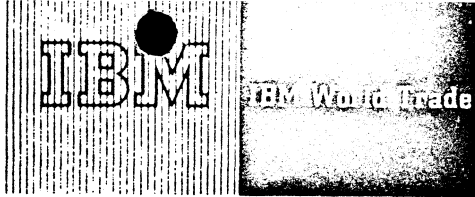
No. 9822 when attaching a 2250 Model 4 to the 1130 Computing System Storage Access Channel II (No. 7492).

**1275 OPTICAL READER SORTER -  
DP LETTER 68-281**

The MMMC for Multiple Column Selector Feature 2779 was erroneously shown as \$750.00. It should be \$7.50.

  
John Fahey  
Director of DP Marketing

Distribution: All Areas



Product Announcement

**2285 PRODUCES PAPER COPY OF IMAGES DISPLAYED BY 2250**

IBM's graphic system capabilities are further enhanced with introduction of the 2285 Display Copier -- a device to produce paper copy of images displayed on the 2250 Models 1, 3 and 4.

The 2285, which is under push-button control, consists of an internal cathode ray tube, a lens system and a paper transport developer device for exposing and developing the output paper.

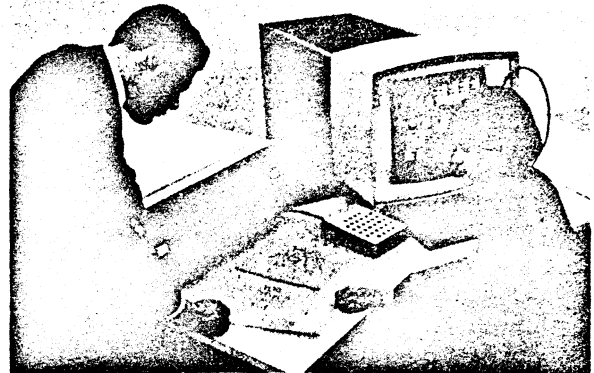
*Highlights are:*

- 7¼" x 7¼" (184 x 184mm) picture area
- Paper output  
(50 and 60 cs) 8.5" x 11" (215.9 x 279.4mm)  
(50 cs only) 8.28" x 11.7" (210 x 297mm) DIN A4
- Dry development
- Photographic type reproduction of 2250 image
- No programming required other than that already announced for the 2250
- Operator control of contrast
- Copy from flicker-free images available in 15 to 38 seconds depending on exposure setting
- Recording paper (type 777 dry silver paper) readily available from the distributor of Minnesota Mining and Manufacturing Company (3M) products.

*Prerequisites ...* The 2285 requires attachment features on the 2250 Models 1, 3 and 4 (3250, 3251, 3252 respectively) and requires the Absolute Vectors (1002) Character Generator (1880), and Buffer (1489 or 1499) features on the 2250 Model 1. The 2285 provides copies of images being displayed on the 2250 Models 1, 3 or 4 to which it is attached. Each 2250 Model 1, 3 or 4 can support one 2285.

*RPQs ...* These will be accepted 120 days after announcement. Response time will depend upon complexity. No RPQs will be shipped until 120 days after initial customer shipment of the basic unit. RPQs will not be accepted for attachment of the 2285 Display Copier to 2250 Model 2 units.

*Publications Support ...* Advance copies of The 2285 Component Description Manual (SRL A27-2730) will be shipped and additional copies will be available from the IBM Distribution Center, Mechanicsburg.



*Delivery and Source of Supply ...* First customer shipment of 50 and 60 cycle units will be in August 1969 for attachment to 2250 Models 1, 3 and 4. Shipment schedules will be confirmed within 90 days after receipt of order. The 2285 is field installable; the DIN A4 paper size feature can be factory installed only. Source of supply is U. S.

*Prices ...*

	Feature	Rental	Purchase	MMMC	FIC
2285 Display Copier		\$ 630	\$ 30,240	\$ 120	
2250-1 Attachment	3250	70	3,360	2	PCR
2250-3 Attachment	3251	70	3,360	2	PCR
2250-4 Attachment	3252	70	3,360	2	PCR
DIN A4 Paper Size	2781	NC	NC		NC

Rental Plan: A Purchase Option: 40%  
Metering: None Maintenance: A Per Call: 2

*Educational Allowance ...* A 10% educational allowance will be permitted on the 2285.

*Sales Compensation Plan ...* Normal provisions apply.

*DP Orders and Movements Codes ...*

Type	Model	Product Categories	Product Line
2285	001	53,59,60,87,89,91, 92,93,95	7

*John Fahey*  
John Fahey  
Director of DP Marketing

Attachment: Machines 2260-2265  
Distribution: All Areas

Product Announcement

**1810 DISK STORAGE MODELS A AND B OFFER UNMETERED USE AND REPLACE 2310 MODELS A AND C**

The IBM 1800 Data Acquisition and Control System continues to play an ever increasing role in around-the-clock operation of a wide variety of industrial and research applications. In recognition of the growing number of customers who use their 1800 systems in this manner, IBM announces the 1810 Disk Storage priced for unmetered use.

Offered under Rental Plan "B" are the 1810 Models A1, A2, A3, B1, B2, and B3. These models replace the present 2310 Disk Storage Models A1, A2, A3, C1, C2, and C3 which are withdrawn from the product line, effective immediately.

*Field Conversion:* Installed 2310s used with 1800 systems will be modified at customer locations by Customer Engineering to convert them to equivalent 1810s. Essentially, this conversion will involve crippling of meters and the affixing of appropriate identification tags. For purchase customers with a Maintenance Agreement, this service will be provided as part of M/A service. Upon request, purchase customers not on M/A will be handled on a time and material basis.

*Administrative Action Required:* All customers with 2310 Models A and C installed and on-order must be notified by the branch office on or before January 1, 1969, that the change will take effect April 1, 1969. A sample customer letter is on the reverse side. Effective April 1, 1969, countries will adjust on-order and billing records to reflect the type change and rental increase. A special instruction letter will be issued providing instructions for reporting OEI movements on this announcement and reporting by the branches to country headquarters to effect this change. The physical change of rental 2310s, for use with the 1800 system to 1810s will be made after April 1, 1969.

The 2310 will be deleted from 1800 BTAs for April since additional use charges will no longer apply.

Purchase customers must now be notified in writing of the change in type number.

An educational allowance of 20% is available on all 1810 models A and B, to qualifying institutions of higher education only.

Outstanding proposals must be updated.

*Programming Support:* The 1800 Time-Shared Executive and Multiprogramming Executive documentation will be modified to support the 1810.

*Publications Support:* TNLs will be issued for affected SRL Manuals. Availability of new Physical Planning and System Summary Manuals will be available. Advance copies will be shipped. Additional copies will be available from the IBM Distribution Center, Mechanicsburg. Refer to forthcoming DP Marketing Communications Release Letter.

*Ordering Procedure and Delivery:* New orders for 2310 Models A and C will no longer be accepted. In addition, while the effective date for adjusting billing records will be April 1, 1969:

2310 units on order before this announcement and scheduled for shipment before February 1, 1969, will be shipped as 2310s with field conversion to 1810s made later.

2310s on order prior to this announcement but scheduled for shipment after February 1, 1969, can, if supply conditions permit, be improved into the shipping period from the date of this letter through January 31, 1969. In this event, units will be shipped as 2310s with field modification to 1810s made after April 1, 1969. Shipment of 1810s will not be made prior to February 1, 1969.

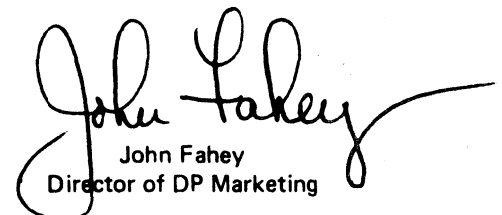
*DP Orders & Movements Codes:*

Type	Model	Product Category	Product Line
1810	All	49	6

*Prices:*

		Rental	Purchase	MMMC
1810	A1	\$ 385	\$ 13,500	\$ 52
	A2	635	21,375	78
	A3	880	29,250	110
	B1	770	28,000	57
	B2	1155	42,000	90
	B3	1540	56,000	127

*Sales Compensation Plan:* As provided in Paragraph E.14, no additional selling or installing quota points will be credited for 2310s now on order, or 2310s already installed when converted in the field to 1810s. However, 1810s ordered after the date of this letter, 2310s installed prior to April 1, 1969 and 1810s installed after April 1, 1969, will be credited at the revised values.

  
John Fahey  
Director of DP Marketing

Date

ABC Company  
Street Address  
City, Country

Dear Mr. Customer:

The 1810 Disk Storage Drive for use with the 1800 Control System has been announced to replace the 2310 Disk Storage Drive. The six models of the new 1810 are functionally identical to the six models of the 2310, except that 1810 units are unmetered. There are no additional use charges for 1810 units regardless of the number of usage hours per month.

The 1810 unit purchase prices are the same as comparable models of the previously available 2310. In accordance with their unmetered status, 1810 rental prices are somewhat higher than comparable 2310 units as follows:

Previously Available 2310

Comparable Replacement 1810

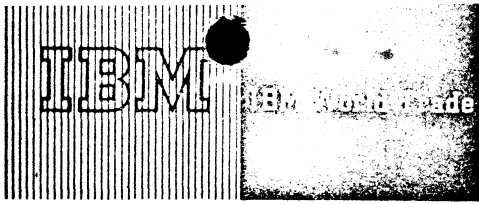
(Note to Branch Office: Enter appropriate models and rentals applicable to your customer.)

All installed 2310s will be redesignated as 1810s as of April 1, 1969, at which time 1810 rental charges will become effective. Physical relabeling and minor modification of your disk storage unit will be scheduled at a mutually convenient time, as soon as possible thereafter. This advance notice is in keeping with the provisions of your Agreement for IBM Machine Service.

Your IBM sales representative will be available to answer any questions you may have.

Sincerely yours,

Branch Manager



Product Announcement

2420 MODEL 5 ANNOUNCED

The 2420 Magnetic Tape Unit Model 5 is the newest addition to IBM's versatile magnetic tape line. The 2420 tape drives offer advanced tape drive technology with features that simplify operator usage.

The 2420 Model 5 uses the new mechanical concept of the previously announced 2420 Model 7 and incorporates the Model 7's outstanding features (see DP Letter No. 68-211).

Highlights are:

- Read/write speed of 100 inches per second - 160 KB data rate
- Attachable to System/360 Models 30, 40, 44, 50, 65, 75, 85, and 91
- Format compatible with 2400 and 2415 series Models 4, 5, and 6 and 2420 Model 7 (1600 bpi recording)
- Automatic threading
- Cartridge loading capability
- Improved rewind characteristics
- 3.9/3.4 millisecond read/write access - six millisecond gap time.

The 2420 Model 5 attaches via a 2803 Tape Control Unit Model 2 equipped with a 2420 Model 5/7 Attachment (7900). A 2803 Model 2 equipped with Feature 7900 can now attach 2420 Model 5s and 7s and, with appropriate feature, all 2401/2402 models.

*Administrative Instructions ...* If 2420 Model 5s are to be attached to a 2803 Model 2 shipped prior to August 1, 1969, equipped with a 2420 Model 7 Attachment (7900), a no-charge feature, 2420 Model 5 Modification (9690), must be ordered (MES) for field installation.

The 2420 Model 5/7 Attachment (7900) can be plant or field installed only on 2803 Model 2s with U.S. serial numbers 14,000 through 29,999 and WT serial numbers 30,001 and up.

A no-charge feature (9701) must be specified when ordering a 2803 Model 2 to be used for future attachment of 2420 Model 5/7s. Alteration Notices, specifying 9701, are required for on-order 2803 Model 2s.

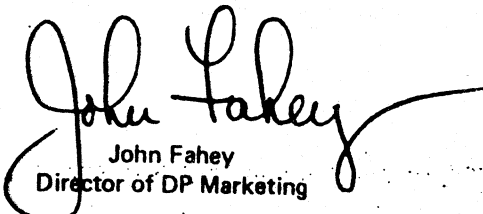
*Delivery ...* First WT customer shipments are scheduled for March 1970. The published delivery schedule will not be announced for 90 days. Schedule dates for orders received in this period will be furnished to the countries on a sequential basis. No commitments are to be made to customers until these dates are received in the branch office and published delivery lead time is announced.

*Prices ...*

	<u>M/SF</u>	<u>Rental (MAC)</u>	<u>Purchase</u>	<u>MMMC</u>
2420 Magnetic Tape Unit	005	\$620	\$32,240	\$110
On 2803 Mdl 2				
2420 Mdl 5/7 Attachment	7900	375*	17,650*	10*

\* Prices are the same as for 2420 Model 7 Attachment (7900).

See the reverse side for additional highlights, RPQs, programming and publication support, sales compensation plan, educational allowance, and sort timings.



John Fahey  
Director of DP Marketing

**Additional Highlights for the 2420 Model 5 ...**

**In-column High Speed Rewind:** Tape is rewound in columns at a speed of approximately 500 inches per second; i.e., the rewind time is essentially proportional to the length of tape to be rewound. The last 100 feet rewinds at 100 inch/sec. (The rewind time for a 2400-foot reel is 1.2 minutes.)

**Packaging Size:** The physical dimensions of the 2420 Model 5 are the same as the 2401. Weight is approximately 400 kilograms.

**2816 Switching Unit:** Will accommodate the 2420 Model 5. The 2420 Model 5 can be intermixed with the 2401/2402 Models 1, 2, 3, 4, 5, 6, and 2420 Model 7.

**Magnetic Tape:** Uses the new IBM Series/500 Magnetic Tape, Dynexcel, Heavy Duty or equivalent.

**RPOs ...** RPOs for modifications to the 2420 Model 5 may be submitted immediately. Processing will not begin until 180 days after announcement. No RPOs will be shipped until six months after the first customer shipment of the basic unit.

**Programming Support ...** Programming support for the 2420 Model 5 will use the existing 2400 series tape support provided under TOS, DOS, OS/360 operating systems and System/360 Model 44 support for System/360 Models 30, 40, 44, 50, 65, 75 and 85. In addition, the following BPS programs without modification will support the 2420 Model 5.

- Card to Tape (360P-UT-051)
- Tape to Printer (360P-UT-052)
- Tape to Card (360P-UT-053)
- Tape to Tape (360P-UT-054)
- Disk to Tape (360P-UT-065)
- Tape to Disk (360P-UT-066)
- FORTRAN (360P-FO-031)
- Assembler (360P-AS-091)

The following emulator programs will support the 2420 Model 5:

*Model 40 Emulators --*

1401/1460 (32K)	360C-EU-074
* 1410/7010 (64K)	360C-EU-728

*Model 50 Emulators --*

1410/7010 (Any model)	360C-EU-726
7070/7074 (256K)	360C-EU-725

*Model 65 Emulators --*

7070/7074 (256K)	360C-EU-725
7080 (256/512K)	360C-EU-727

*Model 65 and 85 Emulators --*

709/7090/7094/709411 (512K)	360C-EU-729
7040/7044 (512K)	360C-EU-733

\*When emulating on a two-channel system, 2420 Model 5s and 2401 Model 6s cannot be attached on both channels (i.e. the combined data rate of the two channels cannot exceed 300KB).

**Publication Support ...** A 2420 Model 5 Component Description Bulletin\* ... Planning Guide - OS/360 Sort/Merge Timing Estimates for 2420 Model 5 (availability will be at a date after announcement when estimates have been verified) ... Operating Guide - 2420 Model 5 Magnetic Tape Drive (available by first customer shipment). A TNL\* to Installation Planning (C22-6820) ... A TNL\* to S/360 Systems Summary (A22-6810).

\*These publications will be available. Advance copies will be shipped. Additional copies will be available from the IBM Distribution Center, Mechanicsburg, Pa. Availability and form number will be announced in a forthcoming Publications Release Letter.

**Sales Compensation Plan ...** Normal provisions apply.

**Education Allowance ...** 10%.

**DP Orders and Movements Codes ...**

Type	Model	Product Categories	Product Line
2420	005	87,91,93,95	7