

GC23-0702-3

File No. S5520-00

# IBM 5520 Administrative System



File No. S5520-00

# IBM 5520 Administrative System Introduction

.

#### Fourth Edition (11/81)

This is a major revision of, and obsoletes GC23-0702-2. Information has been added to support the IBM 5520 Administrative Processing Program Version 2 (5611-SS2) for Models 21, 31, 32, and 51 of the IBM 5525 System Unit.

Publications are not stocked at the address given below. Requests for IBM publications should be made to your IBM representative or to the IBM branch office serving your locality.

Graphics in this publication represent design models and may not be exact replicas of production models.

It is possible that this material may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Address any comments concerning this manual to IBM Corporation, Information Design and Development, Department 997, Austin, Texas, 78758. IBM may use and distribute any of the information you supply in any way it believes appropriate without incurring any obligation whatever.

© Copyright International Business Machines Corporation 1979, 1980, 1981

This manual describes the devices that make up the IBM 5520 Administrative System and how they function with the IBM Administrative Processing Program, 5611-SS1, or the IBM Administrative Processing Program Version 2 (5611-SS2). It is intended to provide a basic overview of the IBM 5520 to company executives, office administrators, and office personnel.

The following topics are discussed in this manual:

- The IBM 5520 component devices and how they interact
- The IBM 5520 functions
- Examples of IBM 5520 uses
- Support for the IBM 5520

The information in this manual describes all models of the IBM 5520. Your IBM Representative can provide additional information that you may need regarding IBM 5520 devices and functions.

A bibliography, containing a list of other IBM 5520 manuals and guides is also included.

# CONTENTS

Introduction		1-1	(
Functions	•	2-1	IB
IBM 5520 Administrative			]
Processing Program 5611-SS1		2-1	1
System Services		2-1	(
Display Aids		2-2	IB
Personalization and			
Configuration		2-3	(
Background Task Scheduling		2-4	IB
Security Support		2-4	
Text Integrity		2-4	(
File Integrity	•	2-5	IB
Archive Management	•	2-5	I
Magnetic Card Management .		2-5	]
Text Processing		2-5	
Create Text Documents	•	2-5	(
Revise Text Documents	•	2-6	IB
Paginate Text Documents		2-7	
Files Processing	•	2-7	
Create Files	•	2-8	IB
Update Files	•	2-8	IB
Copy Records	•	2-9	]
Duplicate Files	•	2-9	F1
Convert	•	2-9	
Display/List Files	•	2-9	•
Query Files	•	2-10	Ex
Merge Files with Text	•	2-10	Su
Stored Procedures	•	2-10	P1
Create Stored Procedures .	•	2-10	
Run Stored Procedures	•	2-11	
Document Distribution	•	2-11	
Distribute Documents	•	2-12	Ap
Obtain Documents	•	2-14	IB
Acquire Documents from an IBM			•
System/370 Host	•	2-14	
IBM 5520 Administrative			
Processing Program Version 2			IB
(5611-SS2)	•	2-15	
IBM 3270 Emulation	٠	2-15	
Suspend IBM 3270 Mode	٠	2-16	IB
Block Define and Block Copy		2-16	Р
Component Devices	٠	3-1	
IBM 5525 System Unit	•	3-2	
System Unit Characteristics		3-2	1
IBM 5253 Display Station	•	3-5	
Keyboard Characteristics .	•	3-5	
Display Characteristics	•	3-7	
Special Video Effects	•	3-9	

-1	Optional Features	3-11
-1	IBM 5254 Dual Display Station	3-12
	Keyboard Characteristics	3-12
-1	Display Characteristics	3-12
-1	Optional Features	3-12
-2	IBM 5258 Printer	3-13
	Printer Characteristics	3-13
-3	Optional Features	3 <b>-</b> 13
-4	IBM 5257 Printer	3-14
-4	Printer Characteristics	3 <b>-</b> 14
-4	Optional Features	3-14
-5	IBM 6670 and IBM 6670 - Model II	
-5	Information Distributor	3-15
-5	Models	3-15
-5	Printer Characteristics	3-15
-5	Optional Features	3-15
-6	IBM 5219 Printer	3-16
-7	Printer Characteristics	3-16
-7	Optional Features	3-16
-8	IBM 5229 Printer	3-17
-8	IBM 5321 Mag Card Unit	3-17
-9	Mag Card Unit Characteristics	3-17
-9	Flexibility and Extendability	3 <b>-</b> 18
-9	Local Attachment of Devices	3-18
-		5 10
-9	Remote Attachment of Devices	3-21
-9 10	Remote Attachment of Devices Examples	3-21 4-1
-9 10 10	Remote Attachment of Devices Examples	3-21 4-1 5-1
-9 10 10 10	Remote Attachment of Devices Examples	3-21 4-1 5-1 5-1
-9 10 10 10 10	Remote Attachment of Devices Examples	3-21 4-1 5-1 5-1 5-2
-9 10 10 10 10 10	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service	3-21 4-1 5-1 5-2 5-2 5-2
-9 10 10 10 10 11 11	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary	3-21 4-1 5-1 5-1 5-2 5-2 5-2 5-3
-9 10 10 10 10 11 11 12	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         LUM 5252	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1
-9 10 10 10 10 11 11 12 14	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1
-9 10 10 10 10 11 11 12 14	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications         Type Styles         Banar Specifications	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1
-9 10 10 10 11 11 12 14	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications         Type Styles         Paper Specifications         Envelope Specifications	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1 A-1
-9 10 10 10 11 11 12 14	Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         Type Styles         Paper Specifications         Envelope Specifications	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2
-9 10 10 10 10 11 11 12 14 14	Remote Attachment of Devices         Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications         Type Styles         Paper Specifications         Envelope Specifications         IBM 5257 Printer Specifications	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2
-9 10 10 10 11 11 12 14 14 15	Remote Attachment of Devices         Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications         Type Styles         Envelope Specifications         IBM 5257 Printer Specifications         Type Styles         Paper Specifications         Paper Specifications         Paper Specifications	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-2 A-2 A-2 A-2
-9 10 10 10 11 11 12 14 14 15 15	Remote Attachment of Devices         Remote Attachment of Devices         Examples         Support         Planning and Installing         Education         Product Service         Summary         Appendix         IBM 5258 Printer Specifications         Type Styles         Paper Specifications         IBM 5257 Printer Specifications         Type Styles         Paper Specifications         Type Styles         IBM 5257 Printer Specifications         Type Styles         IBM 5257 Printer Specifications         Type Styles         IBM 5257 Printer Specifications         Type Styles         Remote Specifications         Type Styles         Paper Specifications	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2
-9 10 10 10 11 11 11 12 14 15 15 16	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesEnvelope SpecificationsIBM 5257 Printer SpecificationsType StylesIBM 5257 Printer SpecificationsType StylesIBM 5257 Printer SpecificationsType StylesIBM 5257 Printer SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsPaper Specification	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-2
-9 10 10 10 10 11 11 12 14 15 15 16 16 -1	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesEnvelope SpecificationsIBM 5257 Printer SpecificationsType StylesIBM 5257 Printer SpecificationsType StylesIBM 5257 Printer SpecificationsIBM 5257 Printer SpecificationsType StylesIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPrinter Specifications	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-2 A-3 A-3
-9 10 10 10 10 11 11 12 14 15 16 16 -1 -2	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesEnvelope SpecificationsType StylesIBM 5257 Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsType StylesPrinter SpecificationsType StylesPrinter SpecificationsType StylesPaper SpecificationsType StylesPaper Specifications	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3
-9 10 10 10 11 11 12 14 15 15 16 16 -1 -2 -2	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesPaper SpecificationsIBM 5257 Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesCut Sheet Feed Attachment	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3
-9 10 10 10 11 11 12 14 15 16 16 -1 -2 -2 -5	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesPaper SpecificationsIBM 5257 Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesCut Sheet Feed AttachmentPaper Specifications	3-21 4-1 5-1 5-2 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3 A-3
-9 10 10 10 11 11 12 14 15 15 16 16 -1 -2 -5 -5	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesPaper SpecificationsIBM 5257 Printer SpecificationsType StylesPaper SpecificationsIBM 5257 Printer SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsCut Sheet Feed AttachmentPaper SpecificationsIBM Tractor Feed Attachment	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3 A-3 A-3
-9 10 10 10 11 11 12 14 15 16 16 -1 -2 -5 -5 -7	Remote Attachment of DevicesRemote Attachment of DevicesExamplesSupportPlanning and InstallingEducationProduct ServiceSummaryAppendixIBM 5258 Printer SpecificationsType StylesPaper SpecificationsIBM 5257 Printer SpecificationsIBM 5257 Printer SpecificationsIBM 5257 Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsType StylesPaper SpecificationsIBM 5219 Printer/IBM 5229Printer SpecificationsSummarySpecificationsSummary <t< td=""><td>3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3 A-3 A-3 A-3 A-3</td></t<>	3-21 4-1 5-1 5-2 5-2 5-3 A-1 A-1 A-1 A-1 A-2 A-2 A-2 A-2 A-2 A-2 A-3 A-3 A-3 A-3 A-3 A-3 A-3 A-3

IBM 6670 and IBM 6670 - Model II		Type Styles	A-5
Information Distributor		Paper Specifications	A-5
Specifications	A-5	Bibliography	B-1

In this age when inventory data is available almost instantaneously from a company data processing center...a week or more might be required to type, edit, and distribute a marketing plan. Though an airline reservation can be recorded and confirmed in a few minutes without searching through the cabinets...the office is still burdened with the laborious task of handling and storing copies of communications. Technology can move information around the world at electronic speeds...yet an important memo may take days to reach you from an office just down the hall.

For many large enterprises, no integrated system exists to help manage correspondence and other documents as the valuable company resource they are. Material and personnel costs continue to rise, forcing office management to seek corresponding increases in productivity.

IBM, with its commitment to increased office productivity, offers a powerful tool that is designed especially for office use-the IBM 5520 Administrative System, with an associated licensed program. The IBM 5520 Administrative Processing Program, 5611-SS1 combines text processing, files processing, stored procedures, and document distribution in a single system. The IBM 5520 Administrative Processing Program Version 2 (5611-SS2), combines the functions of 5611-SS1, and in addition, offers IBM 3270 Emulation, new models of the IBM 5525 System Unit, and the IBM 5229 Printer.

Using text processing, an operator can create and revise documents at a display station without producing a single sheet of paper. Documents can be created by typing text at a keyboard, or by obtaining text such as standard paragraphs from documents that have been stored in the system's document library. Likewise, text can be changed or deleted at a keyboard, and blocks of text can be moved within a document. Documents can be paginated or printed by the system at the same time the operator is using the keyboard for other processing.



Using files processing, an operator can create, store, and maintain lists of information, called files, at a display station keyboard. A file is a structured collection of records considered as a unit, such as a telephone directory. You can select specific records or groups of records from one stored file to create another file that can be in a different sequence or format. The records of a file can also be merged with text to create documents or reports. Files processing is designed to satisfy



a wide range of administrative requirements, such as maintaining personnel records, logging mail, creating summary reports, and selecting specific names from a customer file to merge with personalized standard letters.

Files processing enables authorized operators to use each IBM 5253 Display Station and IBM 5254 Dual Display Station, connected to an IBM 5525 System Unit, as a data entry station. This capability permits operators to enter information nearer its source, rather than at one central location.

Using an IBM 5520 document distribution network, an operator can forward text and files to destinations in the same building or to remote offices that have compatible IBM communicating office equipment. An operator can also obtain text and file documents from compatible IBM communicating office equipment, or can acquire text and file documents from an appropriately programmed host IBM System/370.



With the Function Extension Feature on the IBM 5253 Display Station for IBM 3270 Emulation, an operator can access a host data base and perform IBM 5520 functions at the same display station. The display station can be used in IBM 3270 mode or IBM 5520 mode. Selectively, an operator can perform text, files, and document distribution functions at the display station or

functions at the display station, or when in IBM 3270 mode, can update and retrieve data from a host application program.



IBM 5520 Mode

1-4

#### FUNCTIONS

# IBM 5520 ADMINISTRATIVE PROCESSING PROGRAM 5611-SS1

The IBM 5520 Administrative System, with the IBM 5520 Administrative Processing Program 5611-SS1, provides text processing, files processing, document distribution, and a variety of system services.

#### SYSTEM SERVICES

The IBM 5520 system services are designed to help operators at IBM 5253 Display Stations and IBM 5254 Dual Display Stations work more productively. These system services include:

- Display aids
- Personalization and Configuration
- Background task scheduling
- Security and integrity aids
- Archive management
- Magnetic card management
- Document distribution management

# DISPLAY AIDS

An IBM 5520 provides reference information at the display screen to aid the display station operator. These display aids are:

- Menus that aid the operator in selecting and defining the tasks to be performed by the IBM 5520.
- HELPs, on request, that provide the operator with assistance at the display station.
- Messages that inform the operator of system status, device status, and detected error conditions.

#### Menus

A menu is a display of variables (called parameters) and options that can be selected by an operator to complete a task.

An example of a menu is Line Format Change. In the example below:



- Adjust indicates whether the ends of subsequent lines are to be adjusted.
- Line Spacing is a list of options from which the operator chooses whether the subsequent lines or the

rest of the page will be single-space, space and one-half, double-space, or triple-space.

• Type Style indicates the type style to be used for subsequent lines.

#### HELPs

The IBM 5520 provides a wide range of guidance, known as HELP, for operators who require information in addition to that in the menus and operator messages. The operator presses the HELP key for assistance. The IBM 5520 displays the HELP information on the screen.

HELP displays the following types of information appropriate to the situation:

- Explanation of error messages
- Description of key functions
- Description of menu functions
- Definitions of menu parameters

An example of HELP is an operator request for information about Line Spacing from the menu in the previous example. When the cursor is positioned at this parameter and HELP is requested, information similar to the following will appear:

$( \frown$	Line Spacing
PURPOS	E: To change line spacing:
ACTION	<ul> <li>Your choices are:         <ol> <li>Accept the line spacing displayed.</li> <li>OPT ADV to one of the following options:</li></ol></li></ul>
To exi	t: CANCEL

#### Messages

The system communicates with the operator at the display station through messages that appear on the message line of the display. Some messages are displayed automatically, and can be broadcast to all operators currently using display stations. Messages can also be placed in a message queue, or holding area, for a particular operator, and are displayed when the message (MSG) or device message (DEV MSG) key is pressed. Device messages are directed to the operator at a particular device, rather than to a particular operator. The four major categories of messages are:

- Immediate messages These appear on the message line automatically in response to an operator action. For example, an immediate message will be displayed when an incorrect document name is typed.
- Delayed messages These inform the operator of the status of tasks previously requested. The messages do not appear automatically on the message line. They are queued for the appropriate operator and the Operator Message indicator comes on at the display station at which the operator is signed on. For example, a delayed message might inform an operator that a print operation (previously requested by that operator) for a specific document is completed.
- Device messages These indicate that a device needs attention. The messages are queued at the display station assigned to each device, and the Device Message indicator comes on. For example, a device message might indicate that a printer needs paper.
- System messages These are sent to the system operator. These messages are queued for the display

station at which this operator is signed on, and the Operator Message indicator comes on. For example, a system message might inform the operator that a profile cannot be deleted because print jobs are not all completed.

#### Personalization and Configuration

When an IBM 5520 is installed, it is ready to be tailored by you for your particular equipment arrangement, operators, and operator tasks. This tailoring is called personalization, and covers specific information such as:

- Description of the system devices
- Identification of operators
- Names and descriptions of document formats
- Document distribution lists

During personalization, an operator establishes the initial values of parameters for some menus. These pre-defined values are called defaults. Defaults are values considered to be valid for the greatest number of users, and are underscored when displayed.

An example of a default is the name of the format to be used when creating a document. When a large percentage of the documents created by an operator are in the same format, the name of that format can be made the default for the operator. Then, all documents created by the operator will automatically be in that format unless the operator specifies another format.

You set up profiles to describe the defaults more frequently used, the devices that make up your IBM 5520 System, and any setup information needed for the devices.

# Background Task Scheduling

The IBM 5520 performs some tasks requested by a display station operator as interactive tasks, and some as background. An interactive task is performed at the time it is requested by the operator. The display station is dedicated to an interactive task until that task is completed or discontinued by the operator.

When a background task is requested by an operator, the task is scheduled and performed by the system. This allows the operator to proceed with other tasks at the display station. Some background tasks that can be initiated by the operator include:

- Replacements or deletions of each occurrence of specific words or phrases throughout a stored text document
- Paginate an existing document, altering the arrangement of text and adjusting lines and page endings
- Distribute, obtain, or acquire a document
- Print a document
- Merge one file with another
- Merge a file with a text document
- Read or record magnetic cards
- Archive a text document or file to a removable diskette
- Retrieve a text document or file that was previously archived to a removable diskette

# Security Support

The IBM 5520 has various means to help you secure stored and distributed documents. These include:

- Optional keylock at the system unit that must be unlocked for power to be on.
- Optional keylöck at the display station that allows the operator to lock the keyboard and blank the display screen.
- Operator control that limits system access to operators entering a pre-defined operator identification and optional password.
- Document control that allows the owner to designate access as private (access only by using the owner's password), shared read (access allowed, but revision only by using owner's password), or shared revise (access and revision allowed).
- Distribution control, when used, that requires entry of the proper password to obtain personal documents at the intended destination.

Encryption (encoding) devices are also available to aid distribution security.

#### Text Integrity

The IBM 5520 maintains text document integrity page by page during entry or revisions. This means that no alterations to a page are permanently recorded until the operator is finished with that page. Normally, the most information you can lose in the event of a system failure is the entry or revision work on one page.

# File Integrity

File integrity during interactive entry or revisions is by record. This means that no alterations to a record are recorded until the operator is finished with that record. Normally, the most information you can lose in the event of a system failure is the entry or revision work on one record.

# Archive Management

An operator can archive documents that are no longer needed in internal storage by copying them onto diskettes using an Archive Document menu. The IBM 5520 directs the documents to queues for copying on the diskettes. The queues and their descriptions are specified in the setup profiles.

These documents can then be deleted from internal storage, freeing space for other use. Archived documents can be retrieved from the diskettes when needed by using a **Retrieve Archived Document** menu.

# Magnetic Card Management

An operator at a display station can, when the system is equipped with an IBM 5321 Mag Card Unit, read and record magnetic cards of compatible IBM mag card office equipment.

When cards are read, the information is stored as a document in internal storage in the format specified by the operator. This document can then be edited by operators at display stations, who can perform any necessary code conversions.

The operator can record all or a portion of an IBM 5520 stored document onto magnetic cards for IBM mag card typewriters. The version of the document in IBM 5520 storage is not altered.

# TEXT PROCESSING

Text processing includes the creation and maintenance of text documents such as letters, memos, and reports.

With IBM 5520 text processing, an operator using an IBM 5253 Display Station or IBM 5254 Dual Display Station can:

- Create text documents
- Revise text documents
- Paginate text documents
- Delete text documents

# **Create Text Documents**

The display station operator creates a text document with the IBM 5520 by using a menu. The operator uses this menu to name the document and specify other document characteristics such as retention period and whether access is to be shared. The operator then creates the document by typing the text at the keyboard or by moving existing text from a document in storage. The text of a document in storage may be complete, or it may contain codes or instructions to indicate where new information is to be inserted.

# **Getting Stored Text**

The operator can move pages of an existing document in storage to a new document. The text from storage will be merged into the new document beginning at the location of the cursor at the time of the request. Existing text from more than one stored document can be included in the new document.

The operator can specify that the new document be assembled interactively, or as a background task during pagination. When a document is assembled as a background task, text entered by the operator and existing text are combined but not displayed. This allows the operator to perform other tasks at the display station while the document is being assembled.

When a document is assembled interactively, it is displayed so the operator can make line ending and page ending decisions.

# Inserting Variables in Text

Variables can be inserted into a text document when it is assembled, either interactively or as a background task. When the document is created interactively, the operator moves the cursor to each code indicating the location of a variable. A prompt appears on the information line telling the operator what type of variable is to be inserted.

When the document is created as a background task, the operator enters the variable information and the variables are inserted at the location of the codes without further operator involvement.

#### Skip And Keep

An operator can keep a block of text, such as a table, together on one page, or skip a specified amount of vertical space in a document, for purposes such as the insertion of artwork. The space that is skipped will be kept together on a single page.



#### **Revise Text Documents**

To revise a text document with the IBM 5520, an operator with the proper authority at a display station calls the document from internal storage by using a menu. The operator can then revise, replace, delete, rearrange, insert, or reformat the text at the display station.

# Revising, Replacing, and Deleting Text

To revise text, the operator moves the cursor to the position in the document where the text is to be revised and enters the new material at the keyboard. Text can also be deleted by character, by word, by line, or by paragraph using the cursor control keys.

An operator can also replace or delete every occurrence of a word or phrase throughout an entire document. When a word or phrase is being replaced, the replacement can take place either as an interactive or as a background activity. When the replacement is interactive, each occurrence of the word or phrase can be displayed so the operator can review the context before entering the replacement. When the replacement is a background activity, a single request finds and replaces every occurrence of the word or phrase in the entire document.

#### Rearranging, Inserting, and Reformating Text

The operator can define the beginning and end of a block of text or a column with the cursor, then move the block of text or column to another location, copy the block or column to an additional location, or delete the block or column. The operator can also move information from another document to the document being revised. With the IBM 5520, operators can change the format of an existing text document. For example, the operator can lengthen the pages of a text document from 279mm (11 in.) to 533mm (21 in.). The operator can change the format for one line or a series of lines in a document. For example, type style and line spacing of a paragraph can be changed to make it stand out from other text.

#### Paginate Text Documents

After creating or revising a text document, the operator can paginate to:

- Insert other specified text
- Insert variable information where specified in the text
- Adjust line endings
- Adjust page endings
- Eliminate widow lines

Pagination can be requested as an interactive or as a background task. When interactive pagination is selected, the operator makes line ending and page ending decisions. The operator can then request that the document be printed.

When pagination is handled as a background task, the operator is free to perform other tasks at the display station. Background pagination can be requested to replace the original text document or to create a new one, and then to automatically print the final text document.

### FILES PROCESSING

A file is a structured collection of records considered as a unit. Each **record** of the file contains the same type of information. A telephone directory is an example of a file, with each line of the directory being one record in the file. The separately identifiable units of information that form a record are known as **fields**. In the following example, the telephone directory file consists of records having a last name field, a first name initials field, a department number field, and a telephone number field.

Telephone Directory						
Last						
<u>Name</u>	<u>Initials</u>	<u>Dept</u>	<u>Number</u>			
Alfa,	A.A.	210	ן 1586			
Archee,	R.A.	942	7681			
Balder,	T.C.	041	2615			
Boman,	A.J.	081	7272	File		
Dukworth	n, B.Z.	790	1876 🚽	Record		
Galleon,	K.L.	163	3264			
Grant,	B.B.	790	4687	Field		

Records of a file are ordered in a user-defined **sequence**. The sequence can be defined as one field, or it can be more than one field. An operator can go directly to a specific record of a file by referencing a sequence field of the record. The example telephone directory is a file defined as being in alphabetic sequence by the name fields. Therefore, an operator can go directly to, and display, any record of the file by name. If a record is inserted in the file, it is placed in the proper order according to the defined sequence.

Records of a file can also be indexed by field, allowing the operator to go directly to a record by an **index field** as well as by sequence field. For example, the telephone directory can have the telephone number as an index field. This would allow the operator to select records by telephone number, so the record of Grant, B. B. could be selected by the number 4687. No two records of a file can have the same value in the index field. In our telephone directory example, this means no two persons could have the same telephone number. When a field is defined as an index field, a test is made to verify that no two records have the same value.

Records of a file can be selected by qualification, as well as by sequence field or by index field. When selecting by qualification, conditional tests are performed on information in one or several fields of each record, or on the results of arithmetic calculations involving one or more fields of each record. Those records meeting the qualifications are selected. Telephone directory records, for example, with a department number less than 500 could be selected for processing.

With IBM 5520 files processing, an operator using an IBM 5253 Display Station or an IBM 5254 Dual Display Station can:

- Create files
- Update files
- Copy records
- Duplicate files
- Convert
- Display and list files
- Query files
- Merge files with text documents

The display station operator can process all records of a file, or can process selected records.

#### **Create Files**

Prior to creating a file, an operator describes the characteristics and format of the file in a file description. This file description defines the fields in each record (for example, the maximum number and type of characters allowed in a particular field), defines which fields will be sequence fields, and names an index field, if one exists. The operator input to the file is then checked against the file description to verify that the operator has entered data consistent with the requirements of the file description.

After a file is named and described, records can be added to the file in a variety of ways:

- Records can be entered through a menu at a display station.
- Records can be acquired from an appropriately-programmed IBM System/370 host.
- Records can be received from compatible IBM communicating office equipment.
- Records can also be typed by an operator as text, such as a list with tabulated columns. Such lists of text can be converted to file records (see Convert).

#### **Update Files**

An operator can add, change, or delete records of a file from the display station. The operator can optionally specify that all records added, changed, or deleted be printed as a record of the activity (called a log document).

When a record is being added to a file, a menu appears on the display screen. The operator advances the cursor from field to field and types information. If information in one field is conditioned upon information in a previous field, this condition must be satisfied before the second field can be typed. A message immediately informs the operator when the information typed is not valid according to the field description.

When a record is being changed, the record is displayed and the operator positions the cursor and types new information at the field that is to be changed. The cursor can only be positioned at a field in which information is allowed to be typed. A message will immediately inform the operator when the information typed is not valid according to the field description.

After displaying a record, the operator can delete it. When a file is no longer needed, the operator can delete the file to free storage space for other uses.

#### Copy Records

An operator can copy records from one file to another file. The original file is known as the input, the file being created is known as the output. All records can be copied, or certain records can be selected by qualification to be copied. The output file may or may not already contain records. Records selected from the input files are copied to the output file in the defined sequence of the output file. Existing records of the input file are not altered by a copy. An operator can use the Copy task to:

• Merge files - Insert records of the input file into the output file, in the sequence of the output file. This combines the records of two files.

- Resequence files Copy records of an input file to an output file having different sequence fields. This is useful in changing the sequence of a file (sorting).
- Create a subset of files Copy certain records of an input file to an output file. The records that are copied can be selected by qualification.

#### **Duplicate Files**

Reproduce files - Duplicate an input file to an output file, creating an exact copy of the entire file with the same format and sequence. The duplicated output file can be used as a working file without altering the contents of the original file.

#### Convert

An operator can convert text to files, and insert the records in the proper sequence. This allows an operator to create documents as tabulated columns of text, and then convert this text to records. When converting text to records, the information that is being converted will be verified against the field descriptions and records with invalid fields detected can be logged as errors.

After the conversion, the original text document remains unchanged.

#### Display/List Files

An entire file can be displayed or listed, or an operator can select one or more records from a file by qualification to be displayed or listed. The number of selected records can be counted, and this number displayed at the end of the selection process. An option allows the operator to count records without displaying or listing them. While the Display/List File task is in process, other use of the file can be restricted to **read only** if requested by the operator.

An example of the Display/List File task is to search a sales summary file and list all sales personnel with volume above a certain amount.

# **Query Files**

An operator can view a single record in a file on the display screen using the Query task. Operators can request records for query by the value in the sequence field(s), or by the value in the index field. After a query, an operator can request the preceding or the following record as the next query. While a query is in process, other use of the file can be restricted to **read only** if requested by the operator.

An example of a query is to view a specific day of a manager's calendar.

#### Merge Files with Text

An operator can merge file information with text information to create output documents, such as letters or reports. Information from a single file, or from two files, can be merged with the text. All records from an input file can be merged, or records can be selected by qualification.

A stored merge control document contains the instructions for the merge. This control document determines the format of the output document, and can contain instructions to specify the file information that is to be inserted, under what conditions it is to be inserted, and any calculations that are to be performed on file information before it is inserted. Calculations can include addition, subtraction, multiplication, and division within a record, and accumulation between records.

Merge control documents can specify that a separate output document be produced for each input record processed. An example of this is to create a separate letter for each record selected from a file. Merge control documents can also contain instructions to define a single report that is produced with information from all the selected records. An example of this is to create a single report containing information accumulated from selected records of the file. A single merge can produce both separate output documents and a summary report.

#### STORED PROCEDURES

The office environment often requires the tasks for a job to be performed in a particular sequence. Frequently, the job must be run repetitively or at a certain interval of time, such as daily. With the IBM 5520 Administrative System, an operator can define a stored procedure of all the files processing tasks that are performed for a job, and can store the procedure as a document that is to be run whenever the job is required.

#### **Create Stored Procedures**

Each files processing task in a procedure consists of one or more menus that can be tailored to the specific requirements of a job. Defining the individual tasks for a stored procedure and creating the stored procedure document is similar to the process of running the tasks individually.

To create a stored procedure document, an operator displays the menus for those tasks to be included in the stored procedure. The operator can then enter the specific parameters and document names that will be used each time the stored procedure is run. The operator can also indicate that certain optional parameters (open options) and document names must be supplied each time the stored procedure is run.

#### **Run Stored Procedures**

For operator convenience, running a stored procedure closely resembles running a single task.

If there are no open options or document names to be entered, the operator only selects the name of the stored procedure to be run.

After selecting the name of the stored procedure to be run, and if there are any document names to be entered, the operator is presented with the appropriate menu in which to enter required document names. These names will be automatically used by the system for the individual tasks.

Thereafter, the only menus that the operator will see are those that contain open option rings, and those menus that interact with a particular task in the stored procedure (e.g., file information entry menus).

The open menus will be presented in the order in which they appear in the

stored procedure, as the tasks are initiated. If a task requires interaction, these menus will be presented after the task is initiated.

## DOCUMENT DISTRIBUTION

With IBM 5520 document distribution, an operator using an IBM 5253 Display Station or an IBM 5254 Dual Display Station can:

- Distribute text documents and files to addressees
- Obtain text documents and files from other operators
- Acquire text documents and files from an appropriately-programmed IBM System/370 host

Document distribution can be accomplished by a single IBM 5520 System, or by a network of several connected systems. Compatible communicating IBM office machines and appropriately-programmed IBM System/370 host computers can be connected to an IBM 5520 System in a document distribution network, using communication lines, to span a wide range of location arrangements.

### **Distribute Documents**

With IBM 5520 document distribution, a document can be distributed from one operator to receiving devices for one or more local or remote addresses, regardless of their geographic location in the network.

The originating operator initiates document distribution via the

Distribute Document task. The document name and the name of the addressee must be provided at the time of the request. When multiple addressees are listed in a request, the IBM 5520 distributes the document to the receiving device for each addressee.



An operator can distribute to a specific addressee, to a distribution list (containing the names of a number of addresses), or to a combination of names and lists. Once created, distribution lists can be used repeatedly, and can be altered when required.

Distribution is performed according to a designated schedule. The schedule options are:

• Call-in - The operator of a compatible communicating device (or a device with the auto call feature) will call the IBM 5525 System Unit to request any documents waiting to be delivered.



• Time-of-day - When the compatible IBM communicating receiving device has an auto answer feature and the IBM 5525 System Unit has the



optional auto call feature, up to three delivery times per day can be specified in the device profile for that receiving device. At these times, the IBM 5525 System Unit will automatically call that device.

• Economic quantity delivery - A specified number of documents can be accumulated by an IBM 5525 System Unit and forwarded to a destination with a single call or connection. This delivery option can aid in the economical use of communication lines. Up to three periods of time during a day can be excluded for this delivery option, to complement time-of-day delivery.



If time-of-day and economic quantity delivery are both specified, a call will be made each time the number of documents reaches the specified quantity and also at the scheduled time-of-day.

A document can be given priority by the operator and the IBM 5520 system will distribute it as soon as possible. The remote device profile can also specify whether all additional documents stored for delivery to that destination are to be forwarded when contact is made for priority distribution. When documents are distributed, the sending operator can request acknowledgement of delivery. A confirmation message will then be returned to the sending operator after all documents have been viewed or printed by the addressees.

#### Obtain Documents

After an originating operator initiates distribution, the document is stored in the destination's queue until it is removed by the receiving operator. A receiving operator can view the contents of the destination queue, using a **Display Distribution Information** request, to display names of all documents stored for delivery to addressees at that destination device.

If the operator desires a printed copy of this list of documents, the list option of the Display Distribution Information request can be specified.

To remove a document from the destination queue, the receiving operator enters an **Obtain** request, providing the destination name, password, and personal password (for personal documents). An operator can obtain a specific document queued for a destination, or can obtain all documents stored for a destination. The operator can specify that a document is to be:

- Printed according to a pre-defined default format (text documents only).
- Skipped, to remain in the queue.
- Canceled and removed from the queue.
- Stored with a new name, as though it were created by the receiving

operator. The receiving operator can then process the document just as any other created at that destination.



#### Acquire Documents from an IBM System/370 Host

The IBM 5520 allows an operator to acquire text and files that are stored in the data base of a compatible and appropriately-programmed IBM System/370 host. These documents could be, for example, sales activity records that are merged with text to produce marketing reports.

An Acquire request allows the operator to address a specific IBM System/370 host data base. Each request specifies the host text or file document and the IBM 5520 document name to which it will be returned. When the requested information is received and stored by the IBM 5520, the requesting operator is notified by a message.



As a part of an IBM 5520 document distribution network, an appropriately-programmed IBM System/370 host computer can receive documents for the purpose of storing and forwarding them, or can be used to connect an IBM 5520 system to other compatible IBM communicating equipment.



# IBM 5520 ADMINISTRATIVE PROCESSING PROGRAM VERSION 2 (5611-SS2)

The IBM 5520 Administrative Processing Program Version 2 (5611-SS2) provides text processing, files processing, document distribution, and a variety of system services similar to the IBM 5520 Administrative Processing Program 5611-SS1.

In addition, the IBM 5520 Administrative Processing Program Version 2 provides IBM 3270 Emulation with the Function Extension Feature #3270 on an IBM 5253 Display Station.

To use the IBM 5520 Administrative Processing Program Version 2 (5611-SS2), a Model 21, 31, 32, or 51 IBM 5525 System Unit is required. In addition, the IBM 5229 Printer is available for use with the new models.

# **IBM 3270 EMULATION**

The IBM 3270 Emulation function on the IBM 5520 Administrative System supports a subset of the functions and keys available on the IBM 3278 - Model 2 Display Station, with the 87-key EBCDIC typewriter keyboard.

An IBM 5253 Display Station with the Function Extension Feature can support both IBM 3270 Emulation and IBM 5520 functions. IBM 3270 Emulation allows a display station operator to send and retrieve data from an application in an appropriately programmed IBM System/370 or an IBM 4300.

With the Function Extension Feature on the IBM 5253 Display Station, an operator can:

- Add data to an appropriately programmed host data base
- Selectively copy data from a host data base and place it in one of

the IBM 5253 Display Station save areas. This data can then be used in IBM 5520 mode

• Suspend IBM 3270 mode, perform IBM 5520 text, file, or document distribution functions, and then return to IBM 3270 mode and redisplay the last IBM 3270 screen data



IBM 5253 Display Station IBM 3270 Mode/IBM 5520 Mode

#### Suspend IBM 3270 Mode

To easily use data from a host application program, the IBM 5253 Display Station operator can suspend IBM 3270 mode and return to IBM 5520 mode without signing off from the host application program.

The IBM 5253 Display Station operator can suspend IBM 3270 mode whenever data saved from an IBM 3270 screen needs to be used in IBM 5520 mode, or when another IBM 5520 function needs to be performed.

#### Block Define and Block Copy

When in IBM 3270 Emulation mode, the IBM 5253 Display Station operator can use the Block Define and Block Copy keys to save selected data from the IBM 3270 screen. Data brought to the display screen in IBM 3270 mode can be copied and saved in one of the IBM 5253 Display Station save areas. The data can then be used when the IBM 5253 is returned to IBM 5520 mode.

For example, a display station operator can update an appropriately programmed IBM System/370 customer order data base in IBM 3270 mode. The order information and the customer name and address can be saved from the IBM 3270 screen. When returning to IBM 5520 mode, the saved data can then be combined with a letter in the document library confirming the customer order. The update to the host data base and the order confirmation letter are accomplished using the same display station.

# COMPONENT DEVICES

A variety of IBM 5520 Administrative System component devices are available to satisfy the requirements of a wide range of users. These devices include:

- IBM 5525 System Unit
- IBM 5253 Display Station
- IBM 5254 Dual Display Station
- IBM 5257 Printer
- IBM 5258 Printer
- IBM 5219 Printer
- IBM 5229 Printer
- IBM 6670 Information Distributor
- IBM 6670 Model II Information Distributor
- IBM 5321 Mag Card Unit

Each device is described in this chapter.

Note: The IBM 5229 Printer is only available with Models 21, 31, 32, and 51 of the IBM 5525 System Unit, and with IBM 5520 Administrative Processing Program Version 2 (5611-SS2).

#### IBM 5525 SYSTEM UNIT

The IBM 5525 System Unit is the nucleus of the IBM 5520, to which all other devices are connected. The system unit contains internal storage for documents being processed or being held for processing. External storage is available on diskettes for documents that you want to keep and do not use frequently.

A licensed program, the IBM Administrative Processing Program 5611-SS1, or the IBM Administrative Processing Program Version 2 (5611-SS2), is loaded into the system unit by the user. The licensed program controls the IBM 5520 text processing, files processing, document distribution, IBM 3270 Emulation, and system services.

Note: IBM 3270 Emulation is only available with Models 21, 31, 32, or 51 of the IBM 5525 System Unit, and with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).



#### System Unit Characteristics

Devices are connected to the system unit by either local or remote attachment. Local attachment means that the devices are connected directly to the system unit by cables.

The devices that can be connected to the IBM 5525 System Unit by local attachment include:

- IBM 5253 Display Station
- IBM 5254 Dual Display Station
- IBM 5258 Printer
- IBM 5257 Printer
- IBM 5219 Printer
- IBM 5229 Printer
- IBM 6670 Information Distributor
- IBM 6670 Model II Information Distributor
- IBM 5321 Mag Card Unit
- Other IBM 5525 System Unit

Note: The IBM 5229 Printer is only available with Models 21, 31, 32, or 51 of the IBM 5525 System Unit, and with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).

The number of devices that can be attached locally and allowable cable lengths are described under the title 'Flexibility and Extendability' in this chapter.

Remote attachment of other compatible IBM communicating office equipment to the IBM 5525 System Unit is by switched (dial-up) or nonswitched (leased or local) communication lines.

Compatible IBM communicating equipment that can be connected to an IBM 5525

System Unit by remote attachment for purposes of document distribution includes:

- IBM 6640 Document Printer
- IBM 6670 Information Distributor
- IBM Mag Card II Typewriter
- IBM 6240 Mag Card Typewriter
- IBM Office System/6 Information Processor
- IBM Displaywriter System
- IBM Word Processor/32
- Appropriately-programmed IBM System/370 and other IBM host systems
- Other IBM 5525 System Unit

Remote attachment is discussed further under the title 'Flexibility and Extendability' in this chapter.

Your IBM Marketing Representative will assist you in planning document distribution for your IBM 5520 Administrative System.

#### Models

The system unit is available in Models 20, 30, 40, 50, 21, 31, 32, and 51. This range of models provides flexibility to satisfy a wide range of . office requirements.

The system unit contains:

- Local connections for display stations, printers, a mag card unit, and other system units.
- Optional communications connections for document distribution to and from remote compatible IBM communicating office equipment.
- An internal document library to retain documents being processed or being held for processing.
- A diskette drive for external (removable) storage using customer-supplied diskettes. Text and files can be recorded onto diskettes and filed. The diskette drive is either single feed or magazine feed, depending on the system unit model. The magazine feed diskette drive permits automatic use of diskettes from 2 magazines with a capacity of 10 diskettes each, plus manual feed for three additional diskettes.

The Summary of Model Configurations chart below shows the maximum number of devices, the maximum number of communications connections, and the diskette drive for each model of system unit. A variety of optional features are available with the different models. Contact your IBM Marketing Representative for information concerning the features that will be helpful to you.

Summary of Model Configurations Models								
	20	30	40	50	21	31	32	51
Mag card unit	1	1	1	1	1	1	1	1
Maximum display stations	6	12	18	18	8	12	15	. 18
Maximum printers (Note 1)	3	6	10	12	3	6	8	12
Other system units (Note 1) Yes Yes Yes Yes Yes Yes Yes Yes Printer/communications						Yes		
	2	4	8	16	2	4	8	16
Diskette drive (Note	3) S	S	S	М	S	S	S	M
IBM 3270 Emulatio	n No	No	No	No	Yes	Yes	Yes	Yes
License Program 5611-SS1	Yes	Yes	Yes	Yes	No	No	No	No
License Program 5611-SS2	No	No	No	No	Yes	Yes	Yes	Yes
<ul> <li>Note 1. When configuring your system, see the IBM 5520 Administrative System Installation Manual—Physical Planning or contact your IBM Marketing Representative for additional information in the following areas:         <ul> <li>The number of system units to be connected</li> <li>The number of IBM 6670 Information Distributors to be used as system printers</li> <li>The communication line data rate (baud) of printers</li> </ul> </li> </ul>								
Note 2. Each printer line reduces by one the number of lines available for communications						available for		
Note 3. S = Single feed diskette drive. M = Magazine feed diskette drive.								

# IBM 5253 DISPLAY STATION

The IBM 5253 Display Station has a 24-line (26 lines in IBM 3270 mode) display screen and a keyboard. Text and files are entered using the keyboard, and can be revised while being viewed on the display screen. The operator also uses the keyboard to initiate other system tasks, such as files processing, stored procedures, document pagination, document printing, IBM 3270 Emulation, and document distribution.

Note: The Function Extension Feature on the IBM 5253 Display Station for IBM 3270 Emulation is only supported on Models 21, 31, 32, and 51 of the IBM 5525 System Unit, and with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).



#### **Keyboard Characteristics**

The IBM 5253 electronic keyboard is available with either 92 or 96 characters. The keyboard is similar to other IBM office system keyboards, with additional control keys for frequently used functions. The control key groups provide the following capabilities:

Document format and system requests

The document format keys are used to set and clear tabs and margins and change formats. System request control keys direct system functions, such as canceling an operation.

Page and block control

Page and block control keys are used to define pages or blocks of text, and copy them to other locations in a document or delete them. The block define and block copy keys can also be used during IBM 3270 Emulation mode. While in IBM 3270 mode, data on the screen can be blocked and copied to one of the save areas in the IBM 5253 Display Station, and then be used later in IBM 5520 mode.

• Cursor control

Cursor control keys position the cursor on the display screen, marking the point of activity for entry or revision of text.

Text control

Text control keys are used to manipulate the text, such as splitting a page into two pages or finding a phrase in the document.



Note: Artist rendering of IBM 5520 keyboard. Keys are engraved light on dark background.

### **Display Characteristics**

The IBM 5253 screen displays 24 lines (26 lines in IBM 3270 Emulation mode) of information; each line is 80 characters in length.

#### Screen Format



Request Line

Message Line

In IBM 5520 mode, the screen format contains:

- An information line that displays current operation information, such as the name of the text document or file.
- A scale line that is displayed during text and file operations and some format menus. The scale line indicates page format information, such as paper edge, margins, and tab settings. (See illustration of scale line.)
- Lines that can display menus, HELPs, text, or files:
  - A menu is a displayed list of variables that can be selected by an operator to complete a specific task.

- A HELP is a system response to an operator's request for assistance.
- A file is a structured collection of records being created, revised, or viewed.
- Text is a document or a portion of a document that is being created, revised, or viewed.
- A message line that displays device and operator messages. A device message can, for example, tell the operator that a printer needs attention. An operator message might tell the user that a document has been printed.
- A request line where the operator can enter the three-letter abbreviation of system functions. This causes the menu for that function to be displayed without intervening steps.
- In IBM 3270 mode, the IBM 5253 screen displays information as directed by the host application program being used.

#### Cursor

A cursor, similar to a highlighted underscore, indicates the location on the screen where the next character that is typed will appear. The operator can move the cursor to other locations on the screen by use of cursor control keys. A second cursor, called a shadow cursor, moves along the scale line to indicate to the operator the position of the cursor along the line.

The cursor is also used to identify the beginning and end of blocks of information that can be moved or copied to another location in the document, moved or copied to another document, stored in the document library, or deleted. In IBM 3270 Emulation mode, the cursor is placed on the display as directed by the host application program being used, and then is moved horizontally or vertically by the IBM 5253 Display Station operator.



#### Page Positioning

The IBM 5520 can process text or files that have more lines and longer lines that can be displayed at one time on the screen. The display screen can be considered a viewport. The operator can move this viewport up or down, displaying additional lines. This is called vertical scrolling.

Vertical scrolling of one line at a time occurs whenever the cursor moves beyond the lines displayed on the screen. An operator can also vertically scroll downward by using the frame advance (FRAME ADV) key, advancing 20 lines on the screen, beginning with the line where the cursor is positioned.



Vertical Scrolling

20 Lines The operator can also move the viewport across a text document or a file to view longer lines than can be seen at one time on the screen. This is called horizontal segmenting. Horizontal segmenting occurs when the cursor moves farther along a line than the information presently in the viewport, or when the operator presses the segment (SGMNT) key. Note: The maximum line length on Models 20, 30, 40, and 50 of the IBM 5525 System Unit is 172 characters. The maximum line length on Models 21, 31, 32, and 51 is 255 characters.



#### Special Video Effects

Characters are displayed in a number of different ways to highlight information. These visual display variations include:

- Blinking characters
- Video-reversed characters (dark characters on a light background)

- Underscored characters
- Intensified characters
- Each symbol is displayed as its corresponding nonsymbol character, video-reversed.

To assist in providing security for certain information, such as passwords, characters can be entered without being displayed.
## **Display Station Indicators**

Indicators appear on the side of the display screen to signal the display station operator. These indicators are:



- System Available Indicates that the display station is operational and that system functions are available to it.
- Input Inhibited Indicates that the keyboard is temporarily inoperative.
- Auto Return Indicates that the cursor will move to the next typing line automatically when the end of the line is reached.
- Reset Help Indicates an operator error, such as requesting an invalid type style. To continue, an operator must either press HELP or RESET.
- Device Message Indicates that one or more messages about a device assigned to the display station are waiting.
- Operator Message Indicates that one or more messages to the operator are waiting.

## **Control Panel**



The control panel, to the right of the display screen, has controls and lights that include:

- Power Switch Turns display station power on and off.
- Brightness Control Adjusts the brightness of the characters on the display screen.
- Contrast Control Adjusts the brightness of high-intensity characters on the display screen.
- Control Panel Lights Provide an indication of display station conditions.

 Status Switch - Sets display station to normal or test status.

#### **Optional Features**

The keylock feature helps prevent unauthorized use of the display station by locking the keyboard and blanking the display screen. This helps provide security when the display station is inactive, or when active but unattended. For example, an operator can lock the keyboard to blank the screen but remain connected to a document while away from the display station. When the operator returns and unlocks the keyboard, display station status returns to the same condition as before the display station was locked.

The cable through feature allows more than one display station to be attached to the signal cable.

A reduced glare display screen filter is also available for the IBM 5253 Display Station.

The Function Extension Feature for IBM 3270 Emulation is available for the IBM 5253 Display Station when used with Models 21, 31, 32, or 51 of the IBM 5525 System Unit, and with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).

## IBM 5254 DUAL DISPLAY STATION

The IBM 5254 Dual Display Station has two display screens and two keyboards for use by two operators. When determining the number of display stations for a line or system, an IBM 5254 counts as two display stations.



#### **Keyboard Characteristics**

The IBM 5254 keyboard is identical in function and appearance to the IBM 5253 keyboard.

## **Display Characteristics**

The IBM 5254 display is identical in function and appearance to the IBM 5253 except the display screen has 12 lines, and only one side (called the primary side) has lights and controls.

#### **Optional Features**

The optional keylock locks both keyboards and blanks both display screens. (See description under 'IBM 5253 Display Station.')

The cable through feature allows more than one display station to be attached to a signal cable.

Note: IBM 3270 Emulation is not available on the IBM 5254 Dual Display Station.

#### IBM 5258 PRINTER

The IBM 5258 Printer uses ink jet technology to produce high quality print images. The IBM 5258 automatically feeds paper and envelopes from supply drawers. Paper can be selected from one of two drawers, each holding up to 600 sheets. The envelope supply can hold up to 600 envelopes. (Paper and envelope capacities are dependent upon paper weights.)

The weights and sizes of paper and envelopes that can be loaded into the IBM 5258 are listed in Appendix A.



## **Printer Characteristics**

The IBM 5258 prints at a rated burst speed of up to 92 characters per second in 12 pitch. (Actual printing time per page will vary, based on the system workload and information being printed.)

## **Optional Features**

The IBM 5258 can print up to five type styles from fonts that are selected electronically by the display station operator. (The available type styles are listed in Appendix A.) One type style, Prestige Elite 12 pitch, is standard at no extra charge. Two other type styles are chosen at no extra charge, and two additional type styles can be ordered as optional features.

## **IBM 5257 PRINTER**

The IBM 5257 Printer, mounted in a desk-high station, is a bidirectional impact printer.

The IBM 5257 prints on manually-loaded single sheets (cut paper) or on continuous form paper. An end-of-paper sensor indicates when the printer is out of continuous form paper, and a message is sent to the designated display station.



## **Printer Characteristics**

The IBM 5257 prints at a rated burst speed of up to 55 characters per second in 12 pitch. (Actual printing time per page will vary, based on the system workload and information being printed.)

## **Optional Features**

A variable-width forms tractor is available for feeding continuous forms. An attachment feature for a customer-supplied automatic sheet feed device is available. (Allowable paper widths are listed in Appendix A.)

The printer uses interchangeable 96-character print wheels, enabling type style and pitch to be changed. Two identical print wheels are shipped with the printer at no extra charge. Additional print wheels can be ordered as supplies. (See Appendix A for available type styles.)

## IBM 6670 AND IBM 6670 - MODEL II INFORMATION DISTRIBUTOR

The IBM 6670 Information Distributor is a high-quality, laser printer and convenience copier. The IBM 6670 can be used as a locally or remotely attached output printer.



The IBM 6670 is designed to handle large volumes of printed output. It is particularly beneficial in the following environments:

- When printing long documents (10 pages or more) which are subject to heavy and/or multiple revision cycles
- When multiple copies of documents are required

- When fast turnaround time is required
- When printing on both sides of the paper is required
- When convenience copying is needed

## Models

IBM 6670 Used as a system printer (SNA - up to 4800 bps) IBM 6670 - Model II Used as a system printer (SNA - up to 9600 bps)

## **Printer Characteristics**

Actual printing time per page will vary, based on the system workload and information being printed.

## **Optional Features**

The IBM 6670 can have a maximum of six print fonts installed (four of which are standard, and can print a document using up to a maximum of six fonts per document and four fonts per page. (The available type styles are listed in Appendix A.)

An optional 20-bin collator is available for the IBM 6670 for use with the convenience copying function.

#### **IBM 5219 PRINTER**

The IBM 5219 Printer is a table-top, bi-directional, impact printer. The printer uses a variety of interchangable, 96-character printwheel cartridges which are available in 10 pitch, 12 pitch, 15 pitch, and proportional spacing. (See Appendix A for available type styles.)



The IBM 5219 prints on manually-loaded, single sheets (cut paper) or on continuous form paper. An optional automatic two-drawer cut sheet paper feed device is available. The Ribbon Saver capability provides two modes of ribbon feed. Standard Mode provides approximately one million character yield, and Saver Mode provides approximately three million character yield with a slight reduction in print quality.

#### **Printer Characteristics**

The IBM 5219 is available in two models, each with a maximum paper width capacity of 392mm (15.4 in.):

- Model B01 Prints at a rated burst speed of up to 40 characters per second in 10 pitch
- Model B02 Prints at a rated burst speed of up to 60 characters per second in 10 pitch

#### **Optional Features**

The Continuous Forms Feed Device provides a variable-width tractor for feeding continuous forms. (See paper widths and weights in Appendix A.)

The Cut Sheet Feed Attachment provides cut sheet paper from two source trays, paper transport, and output tray. (Allowable paper widths are listed in Appendix A.)

The Auto Paper Handling Prerequisite provides paper sensors and electrical connector and must be installed to use either the Continuous Forms Feed Device or the Cut Sheet Feed Attachment.

Accessories include:

- Paper Trays Provides additional trays for the Cut Sheet Feed Device to facilitate paper changing when a wide variety of paper is used.
- Paper Stacker/Tray Permits feeding of continuous forms from a carton and provides for forms stacking in a single tray after printing.
- Paper Table Provides paper support and a movable guide to assist manual cut sheet insertion when the Cut Sheet Feed Device is not installed.

#### **IBM 5229 PRINTER**

The IBM 5229 Printer is similar to the IBM 5219 Printer except that it has a wide carriage. The IBM 5229 can only be used with Models 21, 31, 32, and 51 of the IBM 5525 System Unit, and the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).



The IBM 5229 is available in one model with a maximum paper width capacity of 483mm (19 in.) and maximum print line of 432mm (17 in.) or 255 characters in 15 pitch.

 Model B12 - Prints at a rated burst speed of up to 60 characters per second in 10 pitch.

(Actual printing time per page will vary, based on the system workload and information being printed.)

Optional Features and Accessories for the IBM 5229 Printer are the same as for the IBM 5219 Printer, except the Auto Paper Handling Prerequisite is not required to use either the Continuous Forms Feed Device or the Cut Sheet Feed Attachment.

#### IBM 5321 MAG CARD UNIT

The IBM 5520 uses the IBM 5321 Mag Card Unit to read magnetic cards created on compatible IBM mag card office equipment, and to record magnetic cards. Information read from magnetic cards and stored in the document library can be displayed and revised at IBM 5253 and IBM 5254 display stations once any necessary code conversions are completed by the operator.



#### Mag Card Unit Characteristics

The pack feed slot holds up to 50 cards for continuous reading. The output stacker holds up to 60 cards. Up to 50 tracks of information can be recorded on each card, with up to 100 characters per track.

#### FLEXIBILITY AND EXTENDABILITY

The IBM 5520 Administrative System can accommodate a wide range of office environments. Devices locally attached to the IBM 5525 System Unit can be grouped in a word processing center, or can be decentralized to the point of need on several floors of a multistory office building. The IBM 5520 equipped for document distribution can transmit documents between operators of locally-attached devices. When communication lines are attached, document distribution is expanded to include operators of compatible remote IBM communicating office equipment.

The IBM 5520 can be extended through addition of devices up to the maximum number for each specific system unit model. (See the Summary of Model Configurations earlier in this chapter.) A Model 20, 30, 40, 50, 21, 31, or 32 system unit can be upgraded to a more powerful model as office needs grow. Several system units can be connected to make up a network of IBM 5520 systems for document distribution.

#### Local Attachment of Devices

Up to 18 display stations and 12 printers can be locally attached to an IBM 5525 System Unit (Model 50 or 51) by signal cables, with the maximum cable length up to 1524 meters (5000 feet) in any direction from the system unit. One display station, designated as the master display station must be within 6.1 meters (20 feet) of, and in the same room as, the system unit. This display station can also be used for normal production work. Other display stations, printers and IBM 5525 System Units can be connected along the cables at varying distances from the system unit.

Multiple display stations can be connected by cables to form a single line, or multiple printers and IBM 5525 System Units can be connected on a single line. Display stations cannot be connected to the same line as printers and IBM 5525 System Units.

One IBM 5321 Mag Card Unit can be connected to the system unit by a cable 4.6 meters (15 feet) long.

# Example of Local Attachment in a Centralized Environment

Below is an example of an IBM 5520 that is installed in a centralized administrative environment. This IBM 5520 provides service for a group of principals in the same section of a building who have different requirements. This IBM 5520 has:

 A Model 20 IBM 5525 System Unit with the IBM 5520 Administrative Processing Program 5611-SS1

Six IBM 5253 Display Stations

- One IBM 5258 Printer
- One IBM 5219 Printer

In this centralized environment, operators can redistribute work loads to adjust to fluctuating requirements. No handling of stored documents is necessary when shifting work load from one operator to another, because documents stored in the IBM 5525 document library can be shared by the operators.



# Example of Local Attachment in a Decentralized Environment

The next example is that of an IBM 5520 installed in a multistory office building where a number of text documents and files are created and distributed to addressees throughout the building, as well as to addressees not in this building through the mail room. Display stations and printers are in convenient locations on several floors. This IBM 5520 has:

• A Model 32 IBM 5525 System Unit with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).

- Two IBM 5258 Printers
- One IBM 6670 Information Distributor
- One IBM 5219 Printer

Using an IBM 5520, operators create text documents and files and then forward them directly to the receiving printers for addressees in the building. This forwarding method reduces the transit time and the physical handling of documents. For addressees at other locations, documents can be forwarded directly to the mail room.



Twelve Display Stations

## Remote Attachment of Devices

Remote attachment allows an operator to forward documents from compatible IBM communicating devices at distant locations.

The IBM 5525 System Unit has up to 16 connectors (Model 50 or 51) for attaching printers and switched (dial-up) or nonswitched (leased or local) communication lines. Connectors not designated for printer lines are available for communication lines.

By means of the optional auto call feature, the switched lines may be made to connect to many compatible IBM communicating office equipment devices without operator intervention. This allows the IBM 5525 System Unit to automatically call other devices up to three specified times during the day.

#### Example of Remote Attachment Using Switched (Dial-Up) Communications

An IBM 5520 is installed in a company sales headquarters building in Dallas. The IBM 5525 System Unit is connected to a number of display stations and printers in the building, and also connected by communication lines to compatible IBM communicating mag card typewriters in each branch office. This IBM 5520 has:

- A Model 51 IBM 5525 System Unit with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2)
- Fifteen Display Stations
- Two IBM 5258 Printers
- One IBM 5257 Printer
- Two switched communication lines



Using an IBM 5520, an operator in the company sales headquarters in Dallas can transmit documents to and receive them from compatible IBM communicating office equipment at branch offices spread across the country. The switched connection is used because of flexibility and cost advantages in this hypothetical case.

Transmitting information between the branch offices and the headquarters can

speed information such as orders and sales summaries to the headquarters. This can allow the company to collect marketing information quickly, improving response time to changing business conditions. This method of transmitting may also reduce human effort and error involved in recording information that was previously forwarded by telephone conversation. Example of Remote Attachment Using a Document Distribution Network of Multiple IBM 5520 Systems

Below is an example of an IBM 5520 installed in a company sales headquarters building in Dallas, with a second IBM 5520 installed in the manufacturing headquarters building in Houston. The two systems are connected by a nonswitched (leased) communication line.

Each has locally-attached display stations and printers, and can also communicate with compatible IBM communicating mag card typewriters in a sales office or a communicating IBM Office System/6 Information Processor in a manufacturing plant. The Dallas IBM 5520 has:

- A Model 51 IBM 5525 System Unit with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2)
- Fifteen Display Stations
- One IBM 6670 Information Distributor
- One IBM 5229 Printer
- Three communication lines (one nonswitched and two switched)



The Houston IBM 5520 has:

- A Model 31 IBM 5525 System Unit with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2)
- Seven Display Stations
- Two IBM 5258 Printers

- One IBM 5229 Printer
- Three communication lines (one nonswitched and two switched)

The two IBM 5520 systems are linked together to form a document distribution network. Documents can be transmitted from either IBM 5525 System Unit to any destination in the network.

This chapter contains a number of examples of how a fictitious company, the XYZ Corporation of Leander, Texas, might use an IBM 5520 Administrative System. The XYZ Corporation manufacturers and distributes building materials, and has:

- Several manufacturing plants
- A headquarters building
- Several warehouses
- Over 40 branch sales offices

The XYZ Corporation uses an IBM 5520 to perform a number of routine office tasks, such as the creation of memos, the distribution of correspondence throughout the headquarters building, and the creation of sales reports.

The IBM 5520 is also used by the XYZ Corporation to create specifications, operating plans, and procedures. These are frequently long documents to which many people contribute and that are revised extensively before distribution.

Each manufacturing plant, warehouse, and branch office of the XYZ Corporation has a compatible communicating mag card typewriter and a System/370 is installed at the headquarters building. The IBM 5520 in the headquarters building communicates with each remote location on a daily basis, delivering documents to, and collecting documents from, the mag card typewriters.

## EXAMPLE 1. ORIGINAL LETTER

The manager of site services at the company headquarters frequently sends short notices to all other managers at that location. To do this:

- The site services manager (the principal) dictates the original letter.
- 2. The document is typed at the display station by the operator.



- 3. The principal reviews the letter and indicates revisions to the operator.
- 4. The operator makes the revisions and forwards the document to a pre-defined distribution list of addressees that includes all managers.
- The final copy is printed upon request by the receiving operators.

November 10, 1981 TO: All managers SUBJECT: Safety All file cabinets should be bolted down to prevent them from tipping over when the drawers are opened. Please inspect your area and report any unsafe file cabinets to the maintenance department. A.J. Connerly Site Services Manager

**Draft Copy** 

**Final Copy** 



## EXAMPLE 2. FORM LETTER WITH VARIABLES

The education department manager sends a letter of recognition to each employee who successfully completes a continuing education course. This information is included in the personnel file in an appropriately programmed application at the IBM System/370. To update the data base in the IBM System/370 and to create the recognition letter, an IBM 5253 Display Station with the Function Extension Feature is used.

In IBM 3270 mode, the education course information is entered in the personnel

file. After the employee's personnel record is updated, the course information and the name and address of the employee is placed in one of the display station save areas. When the IBM 5253 Display Station is returned to IBM 5520 mode, the education course and employee's name and address is inserted in the recognition letter text document as variable information.

Note: The Function Extension Feature on the IBM 5253 Display Station for IBM 3270 Emulation is only supported on Models 21, 31, 32, and 51 of the IBM 5525 System Unit, and with the IBM 5520 Administrative Processing Program Version 2 (5611-SS2).



## EXAMPLE 3. REPETITIVE LETTER

The headquarters personnel department receives a number of inquiries concerning employment opportunities. It responds to each inquiry with a personal letter.

To do this:

- 1. The principal chooses appropriate paragraphs from those stored in the system.
- 2. The operator creates the document from these paragraphs.
- 3. The name and address are added to the document.
- 4. The document and an envelope are printed.

The example document on the facing page shows the stored paragraphs and the letter created from them.



#### **STORED PARAGRAPHS**

			1323
EM1	Thank you for your letter concerning employment with our company.		Hale
)			Dear
EM2	Thank you for sending us a resume of your past		
\	business experience.		<b>T</b> hai
EM3	At the present time, we do not have openings and		com
	we cannot be encouraging about employment		Encl
/	opportunities in the near future. However, please		retu
(	complete and return the enclosed application,		appl
	which we shall retain in our active file for		suita
	consideration should openings develop.	1	
	Enclosed is an application which should be		wei
	completed and returned to our Personnel		/
1	Department. After review of this application, we	· /	You
1	shall contact you relative to any openings suitable		1
1	to your background and interests.	/ X	/
	Again thanks for your interact in our company	//	Har
	Again, thanks for your interest in our company.		
EM6	We look forward to hearing from you soon.	′	XYZ
			P.O.
EM7	Yours truly,		Leal
2	)		
)	Harold Wright	1	-
\	Ĵ		
) EM8	Yours truly,		
]			
<b>\</b>			
1	John Jameson		

XYZ Corporation Leander, Texas 78799

November 15, 1981

Mr. J.M. Allen 1325 W. 87th St. Haley, Texas 76089

Dear Mr. Allen:

Thank you for your letter concerning employment with our company.

Enclosed is an application which should be completed and returned to our Personnel Department. After review of this application, we shall contact you relative to any openings suitable to your background and interests.

We look forward to hearing from you soon.

Yours truly.

Harold Wright

XYZ Corp P.O. Box 1985 Leander, TX 78799

> Mr. J.M. Allen 1325 W. 87th St. Haley, Texas 76089

## EXAMPLE 4. LENGTHY DOCUMENT UNDERGOING REVISION

A number of people are involved in creating a document that describes the procedure for installing a word processing center at the company headquarters.

To do this:

1. Each section of the document is typed separately.

- Each section is printed and submitted to a project coordinator.
- An operator makes revisions requested by the coordinator and prints the final document.

The example documents on the facing page show the revised copy marked by the coordinator and the final printed document.





## EXAMPLE 5. DOCUMENT REQUIRING MULTIPLE APPROVALS

The XYZ Corporation runs a monthly promotional campaign to emphasize a particular product. A bulletin describing the campaign is distributed to each branch sales office. The bulletin must first be approved by several people at the headquarters and then be distributed in time for a monthly meeting of regional sales managers.

To do this:

- 1. The sales promotion manager dictates the bulletin.
- 2. An operator creates a draft of the bulletin and forwards it to the reviewers.
- 3. All comments by reviewers are entered into a separate comments document that can be displayed or printed by any other reviewer.

- 4. The sales promotion manager revises the bulletin. The operator types the revisions and distributes the bulletin again to the reviewers.
- 5. Approvals are recorded by entering a statement in the comments document. The promotional bulletin, when approved by all the reviewers, can be forwarded to a compatible IBM communicating mag card typewriter at each branch sales office.

The example documents shown are:

- The original draft bulletin
- Comments by some reviewers
- The final version of the bulletin
- Approvals by some reviewers



November 23, 1981

#### TO ALL BRANCH MANAGERS

I am pleased to announce that our promotional campaign for the month of April features our popular oak prefinished wall paneling. All styles of this paneling are reduced, some as much as 30% below the regular price. This fantastic offer allows our representatives to encourage more customers to install this fine paneling in their homes.

Enclosed, you will find a price book page that is effective from April 1 through April 30. Within a few days, you will also receive a carton containing promotional literature and eye-catching displays.

S.A. George Marketing Director



Draft Bulletin

#### XYZ Sales Bulletin

November 23, 1981

TO ALL BRANCH MANAGERS

I am pleased to announce that our promotional campaign for the month of April features our popular oak prefinished wall paneling. All styles of this paneling are reduced, some by more than 20% below the regular price. This fantastic offer allows our representatives to encourage more customers to install this fine paneling in their homes.

Enclosed, you will find a price book page that is effective from April 1 through April 30. Within a few days, you will also receive a carton containing promotional literature and eye-catching displays.

S.A. George Marketing Director



**Final Bulletin** 

#### EXAMPLE 6. SALES REPORT

The XYZ Corporation creates monthly sales reports listing total sales by office and by salesperson within the office. These monthly sales reports are created from information that is in a corporate sales file in sequence by date of sale.

To create these reports, a display station operator runs a stored procedure that:

- Resequences the existing corporate sales file, putting the records in a file previously created and defined, sequenced by office and salesperson.
- Uses an existing salesperson master file to obtain the salesperson's name and office.
- Merges the resequenced sales file with the sales report merge control document to produce the sales report, and merges the resequenced sales file with the sales summary merge control document to produce the sales summary report.

The stored procedure, although it is made up of a series of separate tasks, appears as a single task to the display station operator using it.



Examples 4-11

•

`

IBM provides customer support for the IBM 5520 Administrative System in the following major areas:

- Planning and installation
- Education
- Product service

## PLANNING AND INSTALLING

Planning and installing an IBM 5520 Administrative System includes the following series of events:

- 1. Physical planning
- 2. Personalization planning
- 3. Site preparation
- 4. Equipment setup
- 5. Licensed program installation
- 6. Personalization

Each of these steps is supported with publications from IBM to assist you in the planning and installation. Contact your IBM Marketing Representative for information concerning other available assistance, and whether that assistance is provided with or without charge.

While planning for physical installation of the hardware, you will be concerned with preparing your site to accommodate the IBM 5520. The area in which each device will be located requires adequate air conditioning, electrical, and space allowances. The IBM 5520 Administrative System Installation Manual - Physical Planning can help guide you in planning, installing, and setting up the hardware. This manual contains installation planning instructions, supplemented by layout forms, schedule sheets, and checklists, so you can track your progress through this stage.

During personalization planning, you will be planning to tailor the licensed program to your physical site and defined operator tasks when the system arrives. The IBM 5520 Administrative System, Implementation Planning, IBM 5520 Administrative System Files Design and Stored Procedures, IBM 5520 Administrative System Licensed Program Installation and Implementation, IBM 5520 Administrative System—System/370 Host Attach Programmer's Guide manuals and the IBM 5520 Administrative System, Planning Considerations and Management manual can help you with this activity. Worksheets can help you identify your needs and how to plan to meet them.

Site preparation involves the installation of cables and communication lines. You may also be altering or adding space, air conditioning equipment, and electric service during this phase.

Once the site has been prepared, you will be setting up your IBM 5253 Display Stations, IBM 5254 Dual Display Stations, IBM 5257 Printers, IBM 5219 Printers, and IBM 5229 Printers. This process is designed to provide greater flexibility in locating and relocating these devices. IBM Customer Engineers will install and check out the IBM 5525 System Unit, IBM 5258 Printers, IBM 6670 Information Distributors, and IBM 5321 Mag Card Unit.

A licensed program is supplied on a set of diskettes that you will load into the system. Once the licensed program is installed, it can be personalized to match your specific system configuration and operating requirements based on your personalization plan.

#### Education

Education is a continuing process that begins prior to installation of your system. IBM offers a variety of educational assistance for management and supervisory personnel.

IBM also provides modular materials for operator training. The amount of training required by each operator depends on the tasks assigned to that operator. For example, assignment of text processing operations can be divided into sets of tasks based on operator skill level, job level, physical location, or other criteria. You may wish to train each operator to perform only certain specific tasks. For this purpose, IBM provides operator self-study training manuals that describe groupings of operations or tasks.

Information about educational assistance and costs (if any) may be obtained from your local IBM branch office.

### Product Service

If you lease your IBM 5520 from IBM, IBM helps you by providing:

- A highly trained and qualified Customer Engineering team responsible for your service needs
- Parts availability to support the maintenance of your system
- Engineering changes for your specific system that are automatically shipped to you
- A maintenance management program

For purchased systems, the IBM maintenance agreement provides the same service for a fixed maintenance cost.

With IBM maintenance helping to protect your administrative system investment, you can focus attention on your business requirements.

### Summary

IBM customer support is designed to enable you to plan, install, and productively operate an IBM 5520 system. This support is provided through direct contact with your IBM marketing team, through IBM classes and seminars, and through comprehensive IBM 5520 documentation. For additional information on IBM support, contact your IBM Marketing Representative. 5-4

## **APPENDIX**

## **IBM 5258 PRINTER SPECIFICATIONS**

## **Type Styles**

One type style is standard. It is Prestige Elite, 12 pitch. Selectable type style fonts are:

Courier	10 pitch
Courier Italic	10 pitch
Prestige Pica	10 pitch
Artisan	10 pitch
Artisan Upper Case	10 pitch
Bookface Academic	10 pitch
Courier	12 pitch
Courier Italic	12 pitch
Letter Gothic	12 pitch
Bold Face	PSM
Arcadia	PSM
Essay	PSM
Symbol	10/12 pitch

Two selectable type style fonts are shipped with the printer at no extra charge. Two additional selectable type style fonts can be ordered as optional features.

### **Paper Specifications**

Paper sizes include:

178mm x 267mm (7 in. x 10.5 in.)\* 184mm x 267mm (7.25 in. x 10.5 in.)\* 191mm x 267mm (7.5 in. x 10.5 in.)\* 203mm x 267mm (8 in. x 10.5 in.) 203mm x 330mm (8 in. x 13 in.) 216mm x 279mm (8.5 in. x 11 in.) 216mm x 330mm (8.5 in. x 13 in.) 216mm x 356mm (8.5 in. x 14 in.)

\*Feed lengthwise only

Paper weights include:

60	g/m²	(16	1b.)	bond
75	$g/m^2$	(20	1b.)	bond
90	$g/m^2$	(24	1b.)	bond

**Envelope Specifications** 

Envelope sizes include:

Number	7 3/4	98.4mm x 190.5mm
		(3.875 in. x 7.5 in.)
Number	9	98.4mm x 225.4mm
		(3.875 in. x 8.87 in.)
Number	10	104.8mm x 241.3mm
		(4.125 in. x 9.5 in.)

Envelope weights include:

49	g/m²	(13	1b.)
60	$g/m^2$	(16	1b.)
75	g/m²	(20	1b.)
90	g/m²	(24	1b.)

#### **IBM 5257 PRINTER SPECIFICATIONS**

## **Type Styles**

Selectable print wheel type styles include:

Courier	10 pitch
Prestige Pica	10 pitch
Prestige Elite	12 pitch
Letter Gothic	12 pitch
Bold Face	PSM
Modern	PSM
Symbol	12 pitch

These type styles are available for US and other major language groups.

One print wheel and a duplicate are provided with the printer at no extra charge. Additional print wheels can be ordered as accessories.

#### **Paper Specifications**

Paper sizes include:

Width up to 381mm (15 in.) Print line up to 333mm (13.1 in.) Print depth up to 533mm (21 in.)

## IBM 5219 PRINTER/IBM 5229 PRINTER SPECIFICATIONS

#### **Type Styles**

Selectable print wheel type styles include:

10 pitch
10 pitch
10 pitch
12 pitch
12 pitch
12 pitch
12 pitch
15 pitch
PSM
PSM
PSM

One print wheel is provided with the printer, and when ordering, consideration should be given to ordering a second identical wheel for backup.

When the IBM 5219 or the IBM 5229 Printers are being used to print information blocked and saved from an IBM 3270 screen in other than U. S. Keyboard 101, it is possible that a single print wheel will not contain all characters that are on a particular emulated IBM 3270 keyboard. In those cases, a second print wheel that contains the desired characters would have to be mounted.

#### **Paper Specifications**

Paper sizes for the IBM 5219 include:

Width up to 392mm (15.4 in.) Print line up to 335mm (13.2 in.) Print depth up to 533mm (21.0 in.)

Paper sizes for the 5229 include:

Width up to 483mm (19.0 in.) Print line up to 432mm (17.0 in.) Print depth up to 533mm (21.0 in.)

## Cut Sheet Feed Attachment Paper Specifications

The following paper sizes can be fed lengthwise or sideways in the IBM 5219 or the IBM 5229 Printers:

203mm x 267mm (8.0 in. x 10.5 in.) 216mm x 279mm (8.5 in. x 11.0 in.)

The following paper sizes can be fed lengthwise only:

178mm x 267mm (7.0 in. x 10.5 in.) 184mm x 267mm (7.25 in. x 10.5 in.) 191mm x 267mm (7.5 in. x 10.5 in.) 203mm x 330mm (8.0 in. x 13.0 in.) 216mm x 330mm (8.5 in. x 13.0 in.) 216mm x 356mm (8.5 in. x 14.0 in.)

Paper weights include:

60	g/m²	(16	1b.)	bond
75	$g/m^2$	(20	1b.)	bond
90	g/m²	(24	1b.)	bond

## IBM Tractor Feed Attachment Paper Specifications

IBM 5219 Printer:

Pin to pin paper width

51mm to 368mm (2.0 to 14.5 in.)

Edge to edge paper width

64mm to 381mm (2.5 to 15.0 in.)

IBM 5229 Printer:

Pin to pin paper width

51mm to 445mm (2.0 to 17.5 in.)

Edge to edge paper width

64mm to 457mm (2.5 to 18.0 in.)

Paper weights for the IBM 5219 and the IBM 5229 Printers include:

Single-part form 60 - 90 g/m<sup>2</sup> (16 - 24 lb. bond) Multiple-part form 45 - 90 g/m<sup>2</sup> (12 - 24 lb. bond) Note: One to three part forms can be used on the full width of the IBM 5229 Printer pin feed tractors. Four or five part forms must be limited to a 368mm (14.5 in.) pin-to-pin width or 380mm (15.0 in.) edge-to-edge width.

## IBM 6670 AND IBM 6670 - MODEL II INFORMATION DISTRIBUTOR SPECIFICATIONS

**Type Styles** 

Courier	10 pitch
Prestige Pica	10 pitch
Prestige Elite	12 pitch
Letter Gothic	12 pitch
Symbol	12 pitch
Essay Standard	PSM
Essay Italic	PSM
Essay Bold	PSM
Data 1/Rotated	13.3 pitch

Note: The IBM 5520 Administrative System does not support 13.3 pitch. However, the Data 1/Rotated font can be invoked through an appropriately set up IBM 6670 stored format.

#### Paper Specifications

Recommended paper sizes are 203 to 225mm (8 to 8-7/8 in.) wide, and 267, 279, 305, 330, or 356mm (10.5, 11, 12, 13 or 14 in.) long.

Note: Only 203mm (8 in.) paper can be 267mm (10.5 in.) long; all other combinations are possible.

IBM recommends that electrophotographic paper meeting IBM specifications be used for best performance. To obtain these specifications contact your local IBM branch office.
A-6

## BIBLIOGRAPHY

The following is a list of IBM 5520 manuals and guides for the IBM 5520 Administrative Processing Program 5611-SS1. Similar manuals and guides will be published for the IBM 5520 Administrative Processing Program Version 2 (5611-SS2). Please contact your IBM Marketing Representative for the dates when the manuals will beavailable.

IBM 5520 Administrative System Installation Manual - Physical Planning

This manual lists the steps for:

- Site preparation
- Ordering equipment
- Installation of cables
- IBM 5253 Display Station, IBM 5254 Display Station, IBM 5257 Printer, IBM 5219 Printer, and IBM 5229 Printer setup (brief descriptions)

A template, either English or metric scale, and cable labels are used with this manual. This manual, the cable labels, and the templates are ordered as a group.

#### IBM 5520 Administrative System Physical Planning - Cable Labels

These labels are attached to the twinaxial cables when the printer and display station cables are put in place. Labels are used with the <u>IBM</u> <u>5520 Administrative System</u> <u>Installation Manual-Physical Planning</u> manual.

## IBM 5520 Administrative System Physical Planning Template - English

This clear plastic template has the IBM 5520 devices printed at a 1/4 inch to 1 foot scale. It is used with the <u>IBM</u> <u>5520 Administrative System</u> <u>Installation Manual - Physical</u> Planning manual.

IBM 5520 Administrative System Physical Planning Template - Metric

This clear plastic template has the IBM 5520 devices printed at a 10mm to .5m scale. It is used with the <u>IBM 5520</u> Administrative System Installation Manual - Physical Planning manual.

### IBM 5520 Administrative System, Concepts and Facilities

This manual describes the IBM 5520 document distribution capabilities, and describes in general terms how these capabilities are implemented.

## IBM 5520 Administrative System Reference Manual

This manual serves as a reference of IBM 5520 functions, parameters, and options. It acts as a detailed guide to what the system can do.

IBM 5520 Administrative System, Implementation Planning

This manual serves as a guide to prepare the customer for configuring and personalizing the system.

## IBM 5520 Administrative System, Licensed Program Installation and Implementation

This manual is a guide for installing the licensed program. It is used with the IBM 5520 Administrative System, Implementation Planning manual.

### IBM 5520 Administrative System Operator Guide

This manual provides quick reference information and contains a short description of each function available to the operator. A chapter is included describing the conversion of document formats received from or sent to IBM BSC remote devices.

#### IBM 5520 Administrative System, Planning Considerations and Management

This manual describes the IBM 5520 Document Distribution capability, and is to be used as an aid in designing and managing a document distribution network.

### IBM 5520 Administrative System, Files Design and Stored Procedures

This manual describes the files processing and stored procedures functions of the IBM 5520, and is used as an aid to plan, design and maintain files and stored procedures.

### IBM 5520 Administrative System Messages and Recovery Aids Manual

This manual contains information to help the system coordinator identify a problem and resolve it. It includes a list of the messages displayed to an operator and operator recovery aids.

## IBM 5520 Administrative System--System/370 Attach Programmer's Guide

This manual describes the IBM System/370 to IBM 5520 communications protocol to enable the customer to plan, program, and install these systems in a telecommunications environment.

## IBM 5520 Administrative System Remote Device Operator's Guide

This manual contains information to assist the operator when communicating with an IBM BSC remote device.

## IBM 5520 Administrative System Education Planning Guide

This manual serves as a guide for planning education for persons involved with the IBM 5520. A brief description of the courses and self-study training manuals is included.

. .

# **READER'S COMMENT FORM**

#### 5520 Administrative System Introduction

Your comments assist us in improving the usefulness of our publications; they are an important part of the input used in preparing updates to the publications. IBM may use and distribute any of the information you supply in any way it believes appropriate without incurring any obligation whatever. You may, of course, continue to use the information you supply.

Please do not use this form for technical questions about the system or for requests for additional publications; this only delays the response. Instead, direct your inquiries or requests to your IBM representative or the IBM branch office serving your locality.

Corrections or clarifications needed:

Page Comment

1

Cut or Fold Along Line

1

Please indicate your name and address in the space below if you wish a reply.

Thank you for your cooperation. No postage stamp necessary if mailed in the U.S.A. (Elsewhere, an IBM office or representative will be happy to forward your comments.)

**Reader's Comment Form** 

Please Do Not Staple Fold and tape Fold and tape . NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES **BUSINESS REPLY MAIL** FIRST CLASS ARMONK, NEW YORK PERMIT NO. 40 POSTAGE WILL BE PAID BY ADDRESSEE **International Business Machines Corporation** Department 506, Building 998 11400 Burnet Rd. Austin, Texas 78758

Fold and tape

Please Do Not Staple

Fold and tape

•••••

Cut or Fold Along Line ••••



International Business Machines Corporation

IBM,