

NCR  
399

**NCR**

# The NCR 399

The knowledge gained in over 90 years of experience in designing and installing accounting systems has gone into the design of the NCR 399. This experience has provided a system that is powerful, simple to program and operate, and modular in construction. The NCR 399 can be upgraded in your office by adding additional memory and versatile options so that your system can keep pace with the growth of your business. The NCR 399 incorporates the best features of the operator oriented accounting machine with the speed and high capacity of the computer. This combination of speed and simplicity coupled with powerful software provides the NCR 399 with capabilities that were previously available only on computers in a much higher price range.



# Operator Oriented Input Console

The input console has been carefully designed for ease, simplicity, and accuracy in the operation of the NCR 399. The latest concepts in human engineering have been incorporated in its design. The operator oriented input console has an alphanumeric keyboard located at its center. Descriptive data can be printed on documents in the basic forms handler and stored in memory for later transfer to some other type of output. A keyboard buffer, capable of storing 16 digits of information, enables the operator to time share numeric keyboard entries with automatic processor functions. Control keys and multiple option keys are conveniently placed and provide a high degree of programming and operational versatility.

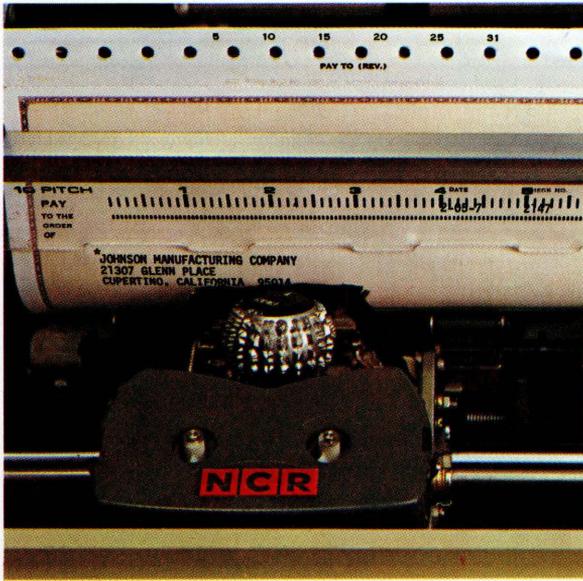
## SIMPLE OPERATION

The NCR 399 combines the power and decision making capabilities of a computer and the simplicity of an accounting machine to provide a system that your operator will easily learn to operate and quickly attain a high degree of proficiency.

The NCR 399 is designed to assist the operator in carrying out the various functions of each program. Control lights indicate the current status of the system and branch keys provide the ability to alter the basic program through the use of alternate routines. As each data entry key is depressed, an audible tone is emitted to ensure the operator that the key was fully depressed. This instills confidence and reduces the possibility of error.



# High Speed Serial Printer



A new high speed ball printer rapidly prepares accounting records and management reports in a clean crisp type font that is neat and easy to read.

The NCR 399 offers the option of either 10- or 12-character per inch print styles. Using the 12-character per inch style, the total type-line can accommodate 265 characters of printed data, while the 10-character per inch style prints a total of 221 characters.



Auditable records, a prime concern of any business, are easily maintained with the NCR 399. Special characters are provided for protecting checks and noting special entries so that a positive audit trail is always maintained. A total of 88 characters including ASCII standard alphabetic, numeric, and special characters are printed by the high speed serial printer.



## EFFICIENT FORMS HANDLING

The new basic forms handler combines simplicity and versatility to accomplish the most demanding system requirements. Virtually any combination of cut forms, journal rolls, and continuous forms can be efficiently processed using the NCR 399. These forms may vary from 4 inches to 23 inches in width.

Another standard feature that adds system versatility is the split platen. This feature permits the simultaneous use of two different sets of forms that can be controlled independently. The new open design of the basic forms handler makes it simple to insert and align forms, and to attach or remove the forms handling features available on the NCR 399.

## Magnetic Tape Cassettes



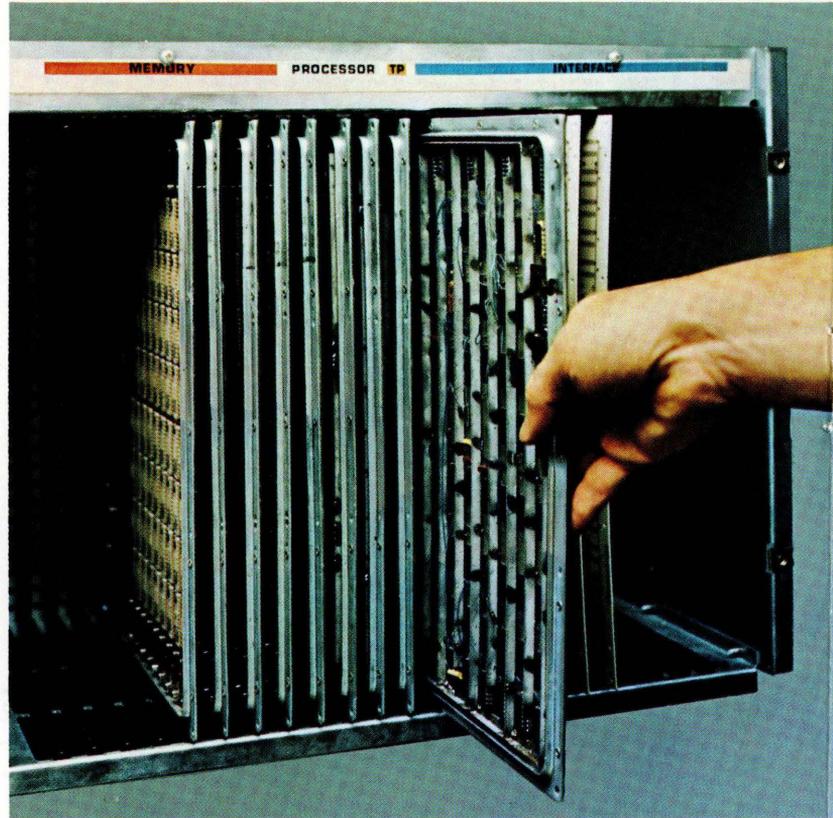
### HIGH SPEED PROGRAM LOADING

Magnetic tape cassettes provide an ideal media for storing programs for the NCR 399. Cassettes are easy to handle and store and enable an operator to quickly load a program into the NCR 399 system.

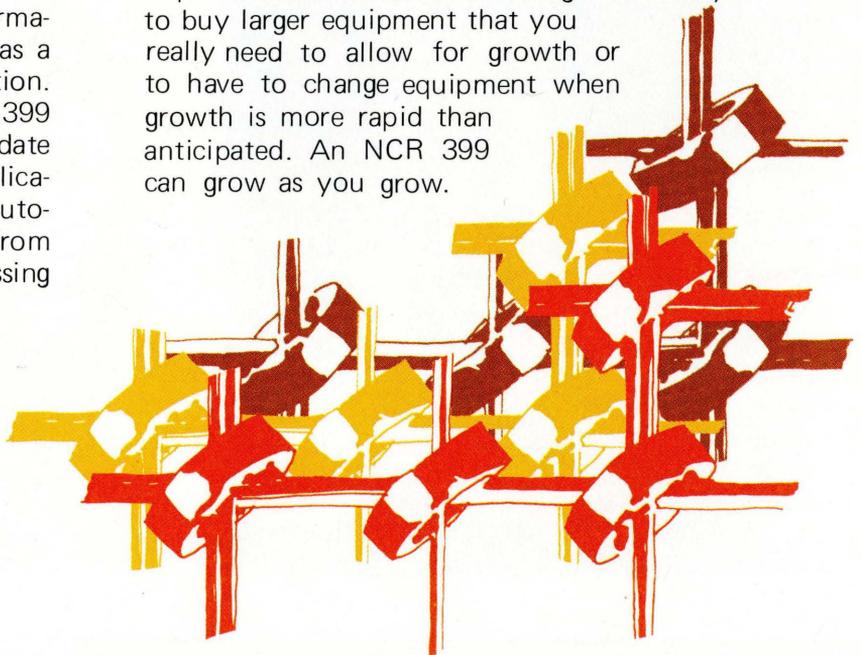
### VERSATILE INPUT/OUTPUT CASSETTES

Versatile magnetic tape cassettes can also be used for input or output of systems information. Data can be encoded on cassettes as a byproduct of a normal posting operation. Later, this data can be input to the NCR 399 to automatically prepare reports, update records, and many other timesaving applications. A typical example would be the automatic preparation of quarterly reports from data captured as a byproduct of processing payroll.

## Modular Core Memory



High speed, proven reliability and modularity are the keywords that describe the NCR 399 modular core memory. The memory of the basic system can be expanded in 2K increments up to 16K bytes, and in 4K increments from 16K to 32K, in your office as your requirements increase. It's no longer necessary to buy larger equipment that you really need to allow for growth or to have to change equipment when growth is more rapid than anticipated. An NCR 399 can grow as you grow.



# Powerful Software



## PROGRAMMING LANGUAGE

The NCR 399 programming language was designed to simplify even the most difficult applications. A full range of powerful commands, structured in a near-English business oriented language, makes it possible to write a program in terms that are problem oriented and are easily understood.

## LOW MEMORY OVERHEAD

A design feature of the NCR 399 is the custom tailoring of the software for each application. Only the command macros used for a particular program reside in memory. Examples of these types of command macros include Multiply, Divide, and Get Magnetic Ledger. This concept optimizes memory utilization.

## PROGRAM ASSEMBLY

Programs can be assembled on an NCR 399 or, if desired, this assembly can be handled on an NCR Century System at your local NCR Regional Systems Center. By utilizing one of the NCR Centers your programs can be prepared in advance and be available for immediate installation when the equipment is delivered. Program assembly from the initial input of the programming data through the assembled program can be efficiently handled on the NCR 399 when changes become necessary.

# Versatile Options

## AUTOMATIC FORM ALIGNMENT

Simplified operating procedures, increased throughput, and neater records are the major benefits of Automatic Form Alignment. Checks, statements, ledger cards, and virtually any type of form can be automatically positioned to the proper posting line with this feature. Automatic Form Alignment is available for the right side, the left side, or both sides of the basic forms handler.

## RIGHT REAR EJECT

Right Rear Eject is available in conjunction with Automatic Forms Alignment. Through the use of this feature an operator can insert a record in the right side of the forms handler and the NCR 399 will take control. Forms are aligned to the proper posting line, posted as required by the program, and automatically ejected through the rear of the forms handler into a receiving tray. This timesaving feature increases throughput for many types of applications such as printing checks, utility bills, or invoices with a minimum of forms handling while maintaining the forms in their original sequence.



# Magnetic Ledgers

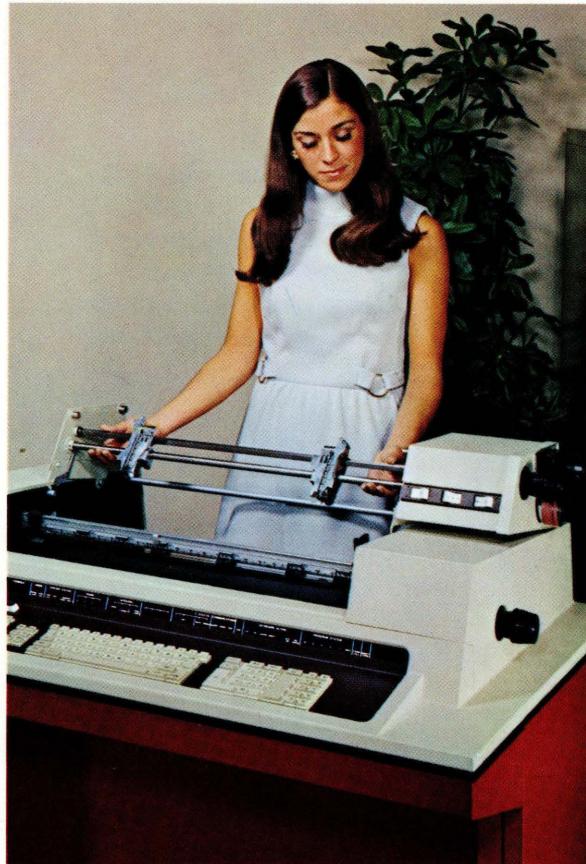
ACCOUNT NO. PAGE NO.						
DESCRIPTION	ACCOUNT NO.	DATE	REFERENCE	DEBIT	CREDIT	BALANCE
LEDGER						

Hard copy records have always been the foundation of accounting systems. The NCR 399 builds upon this foundation by providing this fundamental accounting record in a conventional readable form in combination with electronically encoded information on a magnetic stripe on the back of each ledger. This combination offers the advantage of random access to current and historical data.

A new dimension in magnetic ledger file capabilities is introduced to accounting systems with the NCR 399. New high capacity magnetic ledgers are a result of over 17 years of experience in the design and use of this media. A standard 11-inch magnetic ledger has the capacity to store 470 alphabetic characters or 940 digits of information. For higher capacity, magnetic ledgers up to 16 inches in length with the ability to store over 1500 digits or over 750 alphabetic characters can be processed on the NCR 399. Personnel information can now be stored on payroll records, data for direct mail advertising, credit information, and many types of data previously omitted due to magnetic ledger storage limitations can now be incorporated into your system. The Right Rear Eject feature can be added to the system to simplify and speed up trial balances, quarterly reports, or any function that requires input of data contained on magnetic ledgers while maintaining their proper sequence.

# High Volume Forms Handling Options

Continuous forms provide a means of increasing system throughput by reducing the time required for forms handling. The NCR 399 can be equipped with either one or two continuous forms feeders. They are easily mounted and may be left on the system or removed when not in use. Form alignment is accomplished at a rate of 30 lines per second on this tractor drive forms handler. Forms from 3.5 to 23 inches wide and with an individual form length of 3.5 to 17 inches can easily be accommodated by this forms handling system. Out-of-paper sensors alert the operator well in advance of an out-of-paper condition.



# Advanced, High Performance Peripherals

## HIGH SPEED DISC UNIT

The NCR 656 is a compact, high density disc unit. Disc unit utilizes a single spindle offering both random and sequential file processing. The spindle has a fixed disc and a removable disc pack with a combined recording capacity of over 9.8 million bytes.

For high speed random or sequential file processing, the NCR 656 provides low-cost, fast access to online data storage. The disc unit adds a new dimension to magnetic file processing.



### PUNCHED CARD INPUT

The NCR 368 is a fully buffered alphanumeric punched card reader. Card reading is time-shared with internal processing and input/output operations. Processing the standard 80-column card, the NCR 368 reads 300 cards per minute. With a separate input and output hopper, each hopper has a capacity of 1,000 cards.

Punch cards are an efficient method of automatic data input to the NCR 399. The cards can originate as output from this system or from an offline operation. In addition, punch cards serve as a convenient interface with existing punch card system.



### PUNCHED CARD OUTPUT

The NCR 378 is a fully buffered serial card punch. It produces the standard 80-column card with alpha or numeric data at the punching rate of 40 columns per second. With printing capabilities, data can be punched and printed at a rate of 20 columns per second.

Data output in the form of punched cards can be used for subsequent processing by the NCR 399 or other computer systems. As an automatic by-product of related processing, the card output is identical to the original records and this accurate card has been processed without additional labor, time or delay waiting for offline keypunch operation.





### PUNCHED TAPE INPUT

The NCR 366 is a photo-electric punched tape reader. As an economical device for reading industry compatible data, the NCR 366 photo-electrically reads 8-channel ASCII code tape up to 125 alphanumeric characters per second, 7500 per minute. Optionally, other codes can be read and processed from 1-inch punched tape.

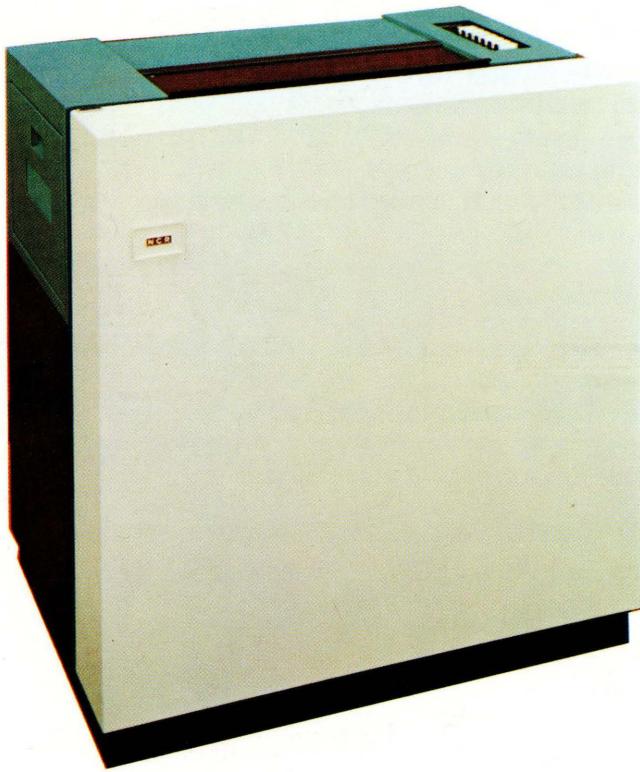
Punched tape provides fast input of data to be processed, updated and reported by the NCR 399. Tape reading includes parity check and is time-shared with internal processing and related input/output operations.



### PUNCHED TAPE OUTPUT

The NCR 367 is a compact unit for producing industry compatible media for subsequent processing of volume data. As a processor-controlled device, the NCR 367 produces 8-channel ASCII code at 75 characters per second, 4500 per minute. Optionally, other codes can be punched and processed from 1-inch tape.

Punched tape permits uniform encoding, inexpensive storage and convenient transmission of alphanumeric data. Parity check and other internal controls ensures accurate punching of output data.



### ALPHANUMERIC LINE PRINTER

The NCR 349 is a free standing, fully buffered alphanumeric line printer. Accurate printing of reports, invoices, checks, statements and other documents is quickly and easily accomplished with the 132-column line printer using a 64-character set of alphabetic, numeric and special symbols. The line printer produces an original and up to five copies of a report or record at the rate of 125, 200 or 300 lines per minute.

Many applications require high volume printing capabilities to obtain the necessary data for effective management decisions and action. The NCR 399 with the NCR 349 Line Printer adds a new processing dimension to the exacting demands of your operations.

### HIGH SPEED UNATTENDED REPORTING

The NCR 314 is an automatic magnetic ledger reader that electronically reads the encoded data from hard-copy records. Over 700 alphanumeric characters or over 1400 digits of data can be electronically read from a 15-inch ledger. The reader accommodates ledger records of six to sixteen inches in width and eight to fifteen inches in length.

The input of data to the processor from the random access ledgers provides a rapid method of automatically analyzing or consolidating information, and preparing valuable management reports. In a high speed unattended processing operation, the unit increases system throughput, reduces peak loads, provides additional computer utilization, and increases the productivity of the total system.

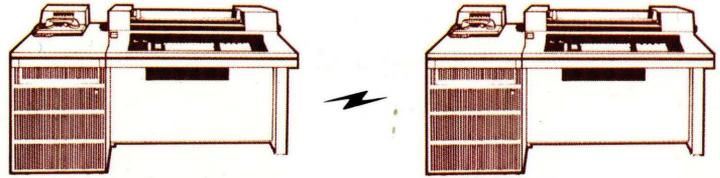


# Communications Capabilities

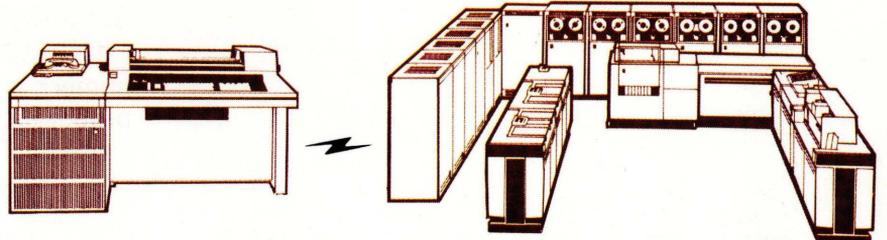
The NCR 399 is a programmable system that provides effective data communications today with the versatility to cope with the processing requirements of tomorrow. As a terminal, the NCR 399 can be used in either an online, realtime or remote batch communications environment. With its unique versatility, many applications may be completely processed on site while other applications may be partially processed before transmission to a central processing facility.

In a communications environment, the NCR 399 will edit, format, validate and batch data for an interchange system or transmission to a remote or centralized processing facility. Data received from the remote or central facility can be formatted by the NCR 399 and reports prepared for immediate utilization by management.

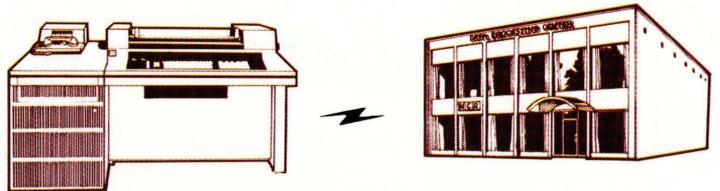
The NCR 399 is a total system that permits management to maintain effective communications with every facet of their operations on a current basis. As an intelligent terminal, it establishes and maintains control of all transmitted data; provides a hard-copy record of all activity; and processes confidential records independently of the computer facility. It relieves the remote or central computer facility of time-consuming input validation and formatting, and many housekeeping and processing functions. It reduces paper handling, line costs, operator errors and transmission of redundant data.



COMMUNICATIONS BETWEEN TWO NCR 399s



COMMUNICATIONS BETWEEN AN NCR 399 AND AN NCR CENTURY OR OTHER COMPUTER



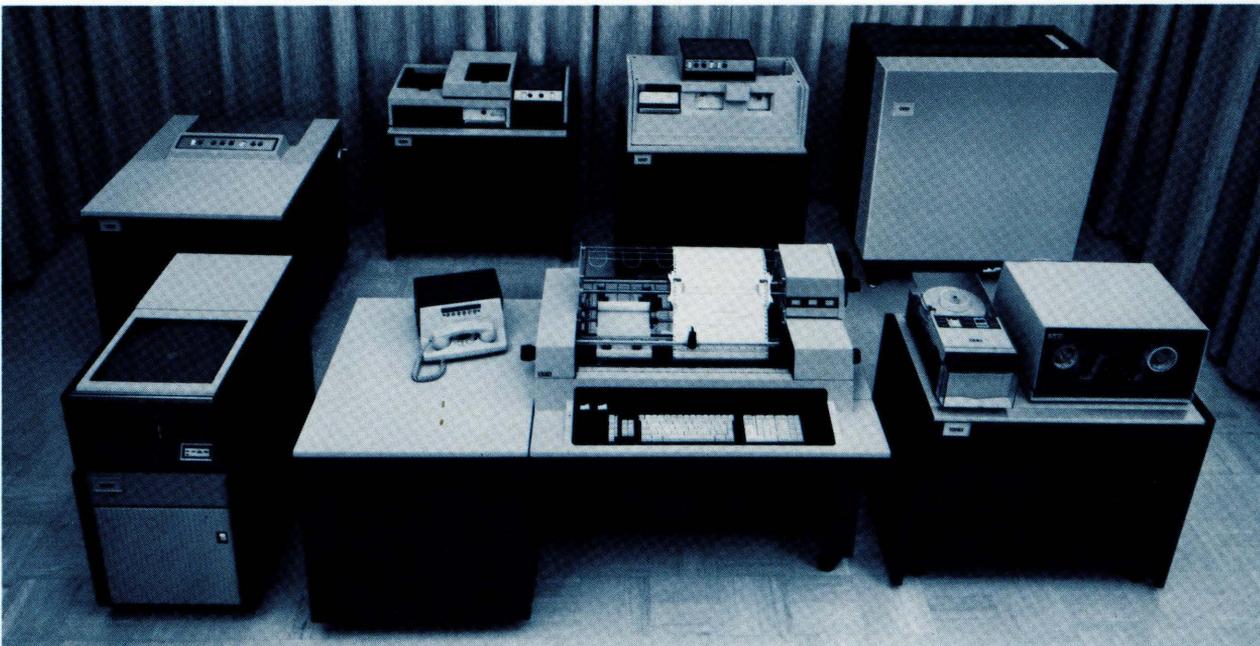
COMMUNICATIONS BETWEEN AN NCR 399 AND SHARED FACILITIES



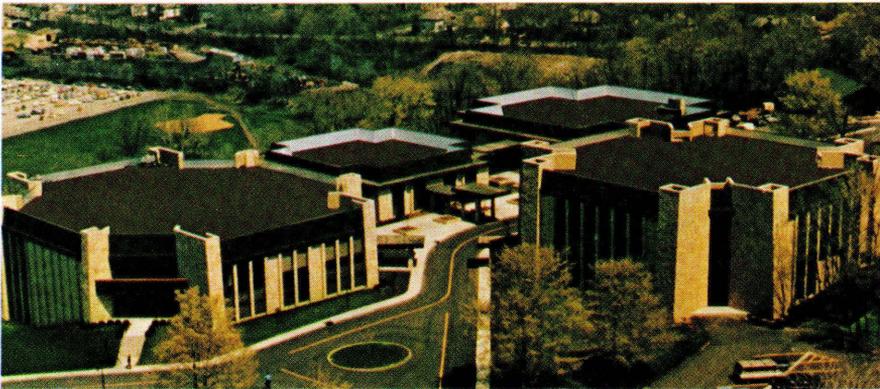
# In Summary

Today's business conditions demand a versatile system that easily adapts to changing requirements . . . a system that is simple to operate to keep personnel costs down . . . a system that is expandable to minimize speculation on future requirements. The NCR 399 accommodates these needs through:

- Alphanumeric keyboard for entering descriptive data into the system.
- Numeric keyboard with 16-digit electronic input buffer for constant system throughput.
- Simple operation — control lights constantly indicate the status of the system to assist the operator.
- High speed serial printer that prepares neat records in a clear crisp type font with the option of 10- or 12-character per inch print style.
- Efficient forms handler that easily handles cut forms, journal rolls, and continuous forms in virtually any combination to suit systems requirements.
- High speed program loading through the use of magnetic tape cassettes.
- Versatile input/output cassettes, under program control, can capture data as a byproduct of regular posting for later input for updating records or automatically preparing reports.
- Modular core memory that can be expanded in 2K increments up to 16K bytes, and in 4K increments from 16K to 32K.
- Powerful software that simplifies even the most difficult application.
- Program assembly that can be accomplished on the NCR 399 or at one of the NCR Regional Systems Centers.
- Automatic forms alignment option that increases throughput while providing neater records.
- Right rear eject option that reduces forms handling time by ejecting and stacking forms in a receiving tray in their original sequence.
- High capacity magnetic ledgers that provide a new dimension in systems designs.
- Continuous forms feeders that reduce forms handling time and increase throughput on high volume applications.
- Advanced, high performance peripherals for complete input and output flexibility, and communications versatility.



# Support Facilities

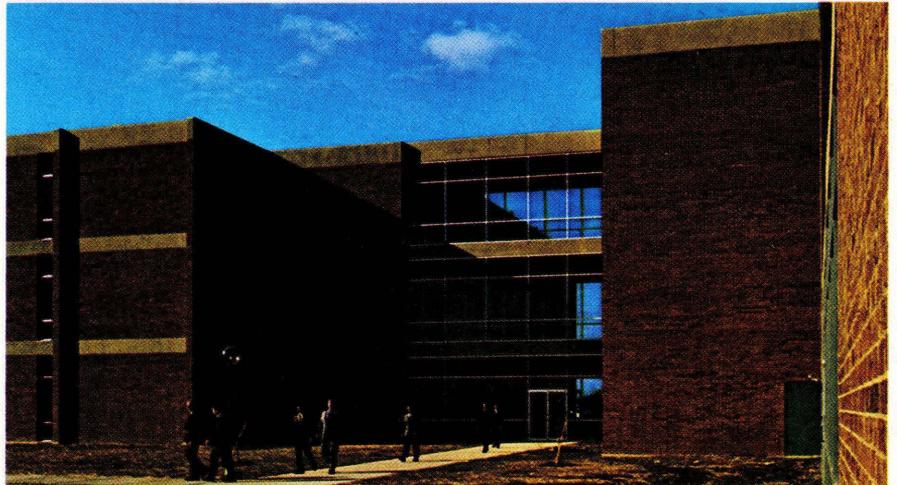


## NCR EDUCATION CENTER

This new educational center is the most recent and extensive of several NCR educational installations throughout the world. It has been designed and equipped to utilize the most modern educational techniques available in the training of NCR sales representatives and system support specialists. At this modern facility NCR specialists are constantly being trained in the most advanced systems concepts and equipment capabilities. This continuous educational process assures NCR customers that their systems will reflect the latest techniques in program design and equipment utilization.

## CENTRAL TECHNICAL EDUCATION CENTER

This is the largest of a number of NCR technical education centers strategically located to serve training needs in every part of the world. More than 23,000 technical specialists in over 120 countries are continually being educated at one of these centers to ensure that NCR systems provide the benefits for which they were originally installed.



## REGIONAL SYSTEMS CENTERS

A network of regional systems centers staffed with NCR customer support specialists stands ready to back up NCR Branch office personnel in solving customer problems and assisting in the prompt installation of your NCR data processing system.

## NCR BRANCH OFFICES

Over 1,100 NCR branch offices in more than 120 countries stand ready to serve you. Branch offices maintain a thoroughly trained staff of sales representatives, systems analysts, customer support specialists and service technicians to provide an ongoing support base of all NCR systems.





NCR Corporation, Dayton, Ohio 45479

Worldwide sales and service through 1,200 offices located in 120 countries.

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