

InfoWorld

The Newsweekly for Microcomputer Users

November 22, 1982

Volume 4, Number 46

\$1.25



Computer Crooks

Great Crimes
PeachText Reviewed
Portable IBM Discovered
New Computers from Altos



Software gift unlocks international 'Ivory Tower'

Commodore donates 656 educational programs to public domain

Commodore International has "unlocked the Ivory Tower" by donating 656 educational computer programs to the public domain.

Meticulously catalogued and recorded on 50 computer disks, the program series will be disseminated throughout the United States. Public and private educational institutions,

organizations and foundations, as well as private computerists, can access the software. All of Commodore's 800 full-line U.S. computer dealers will be supplied with a complete set for a nominal distribution charge of \$250.

Sets will also be made available to Commodore's 250 Education Re-

source Centers. Dealers and Resource Centers will be encouraged to make duplicate sets available free, or for the cost of labor and materials.

The ongoing software-development program represents an international effort of great size and scope. Those working on the project compiled more than 1000 original programs. The pro-

grams were designed by educators for use in their own classes and contributed by universities, public-school systems, private educational institutions, user clubs and Commodore staff from around the world.

The best of the programs submitted were standardized, categorized and recorded on disks. Each program was adapted to run on any of the Commodore microcomputers currently in use.

Actual

The size, of course, is a dead giveaway. But don't let the size fool you. The HX-20 is not a toy. Or a glorified calculator.

It's a computer.

A real computer, with 16K RAM (optionally expandable to 32K), and 32K ROM (optionally expandable to 64K), RS-232C and serial interfaces, a full-size ASCII keyboard, a built-in printer, a scrollable LCD screen, and sound generation. It uses a full, extended version of Microsoft BASIC, and has time and date string functions. A microcassette and ROM cartridge are available as options.

Viva la différence!

In fact, the only differences between the Epson HX-20 and a run-of-the-mill desktop computer are:

- 1) The HX-20 is small enough to fit inside your briefcase;
- 2) It'll run on an internal power supply for 50-plus hours, and fully recharge in less than eight;
- 3) It gives you ten separate program functions at the punch of a button;
- 4) It lets you interface with peripherals like MX Series printers for correspondence quality output, the CX-20 Acoustic Coupler for remote communications, a barcode reader for inventory control, and an audio cassette for loading and saving programs;
- 5) It lets you shut the whole unit off while preserving all programs in RAM; and, last, but far from least,
- 6) It costs roughly half as much as a standard desktop.

That ought to be enough to fire your imagination. But there's more.

The perfect traveling companion.

With the Epson HX-20 and the optional RAM expansion, you'll be able to compute—actually write and manipulate programs with a 6301 microprocessor—just about anywhere. Because its nickel-cadmium batteries and a low-power, all-CMOS memory keep the HX-20 running for over 50 hours. And when you get back to the office, you can dump everything you've done into your main system. And even if you shut the HX-20 off, a low-voltage system maintains all programs you have in RAM.

Little screen, big picture.

The HX-20's unique virtual screen is the ultimate answer to the question, "How do you get a big screen in a small space?" You just show part of it at a time.



in schools, including the CBM, the PET, the SuperPET and the Commodore 64.

"Computers have revolutionized education on a truly global scale," said Jack Tramiel, Commodore's founder and chief executive. "Not only have they proven to be a highly inventive, effective and engaging tool for teaching the traditional disciplines, they are providing students with what will be the most important skill they'll need to advance in our technical age... computing."

"Commodore is committed to providing the international network for identifying and accessing superior programming. We are essentially unlocking the Ivory Tower. Why duplicate effort—the incalculable man-hours that went into creating the programs—when you can simply duplicate the programs and introduce them into the public domain?"

The laborious task of preparing the first 656 cataloged programs was achieved through the cooperative efforts of Commodore and many educa-

tional organizations, particularly in Canada.

The project was seeded in the summer of 1981 with an Ontario, Canada, government grant to several prominent educators to create a repository of educational software, employing high-school students. Commodore's Canadian company, already working on a similar project, suggested they pool their resources. The actual work began the following summer.

Throughout last summer, 100 programmers from over 30 public-school

districts spent eight hours a day standardizing the raw programs. The standardized programs were then submitted to Commodore for a final accuracy check and for conversion to run on all the Commodore machines, including the new Commodore 64.

The software will receive widest distribution in the United States, Canada and Britain, because the BASIC programs are written in English, but Commodore will furnish sets to all of its international offices.

"It's the ripple effect," Tramiel observed. "Each program is being cast into the international informational network, and that's bound to make waves. It is conceivable that the efforts



Dr. Senese (left), assistant secretary of the U.S. Department of Education, with Jack Tramiel, founder of Commodore International and children of the United Nations International School, try out a Commodore computer.

of an American educator will soon be teaching New Guinea students their multiplication tables."

The 656 programs cover most subject categories. Each is identified by a topic, grade level, quality and degree of student/teacher participation. In addition to the educational programs, there are 13 administrative aids for grading, attendance and statistical analysis; 13 computer utility exercises; and 83 games.

The 13 catalog classifications include administration, business, computer science, English, French, games, geography, history, mathematics, science, technology, computer utilization and a miscellaneous category.

There are programs for pre-schoolers to university graduates, hobbyists to master computerists, students to educators. "If we've left anyone out, we'll catch them with the next 600 programs being worked on!" quipped Tramiel, adding that the company plans to expand its public-domain software inventory.

**InfoWorld's
Classifieds speak
your language.**

WE FIX

MICRO COMPUTERS...
DISK DRIVES... BOARDS...
\$100 SPECIALISTS

The Computer Service Center
1514 University Ave.
Berkeley, CA 94703
415-845-6518



So with the HX-20, you can do programming, word processing and data entry just like you've got a big screen, up to 255 characters wide, with any 20 column by four line part of it visible by user command. Not only will the screen give you easy-to-read upper and lower case letters, numbers, punctuation and graphics, the viewing angle can be changed to make it easy to see, almost no matter what angle you're viewing from.

Built in hardcopies.

The HX-20's built-in 24 column dot matrix impact microprinter hands it to you at 42 LPM, in a crisp, precise 5x7 matrix. It even has bit addressable graphics to give you a pint-sized sales chart, a cartridge ribbon and a full upper and lower case ASCII character set. And enough international symbols to print most Western languages.

Epson makes more and better printers than anyone else in the world. Need we say more?

The best is yet to come.

When you hold an HX-20 in your hand, you're not only holding a lot of capacity, you're holding a lot of expansion.

There's a standard cassette interface, a cartridge interface, the RS-232C and serial interfaces, and a system bus that lets you expand even the ROM capabilities. There's RAM and floppy disc drive for maxi capacity in a mini package.

The Epson edge.

Surprised that a computer like the HX-20 should come from Epson? You shouldn't be. Because we've been building computers in Japan since 1978. And we've been practicing ultra-high-quality precision manufacturing for a lot longer than that.

We didn't jump right into the American microcomputer market. We could afford to bide our time; to wait for the product that was going to stand America on its ear.

This is it.

The Epson HX-20.

EPSON

EPSON AMERICA, INC.

COMPUTER PRODUCTS DIVISION

3415 Kashiwa Street
Torrance, California 90505
(213) 539-9140