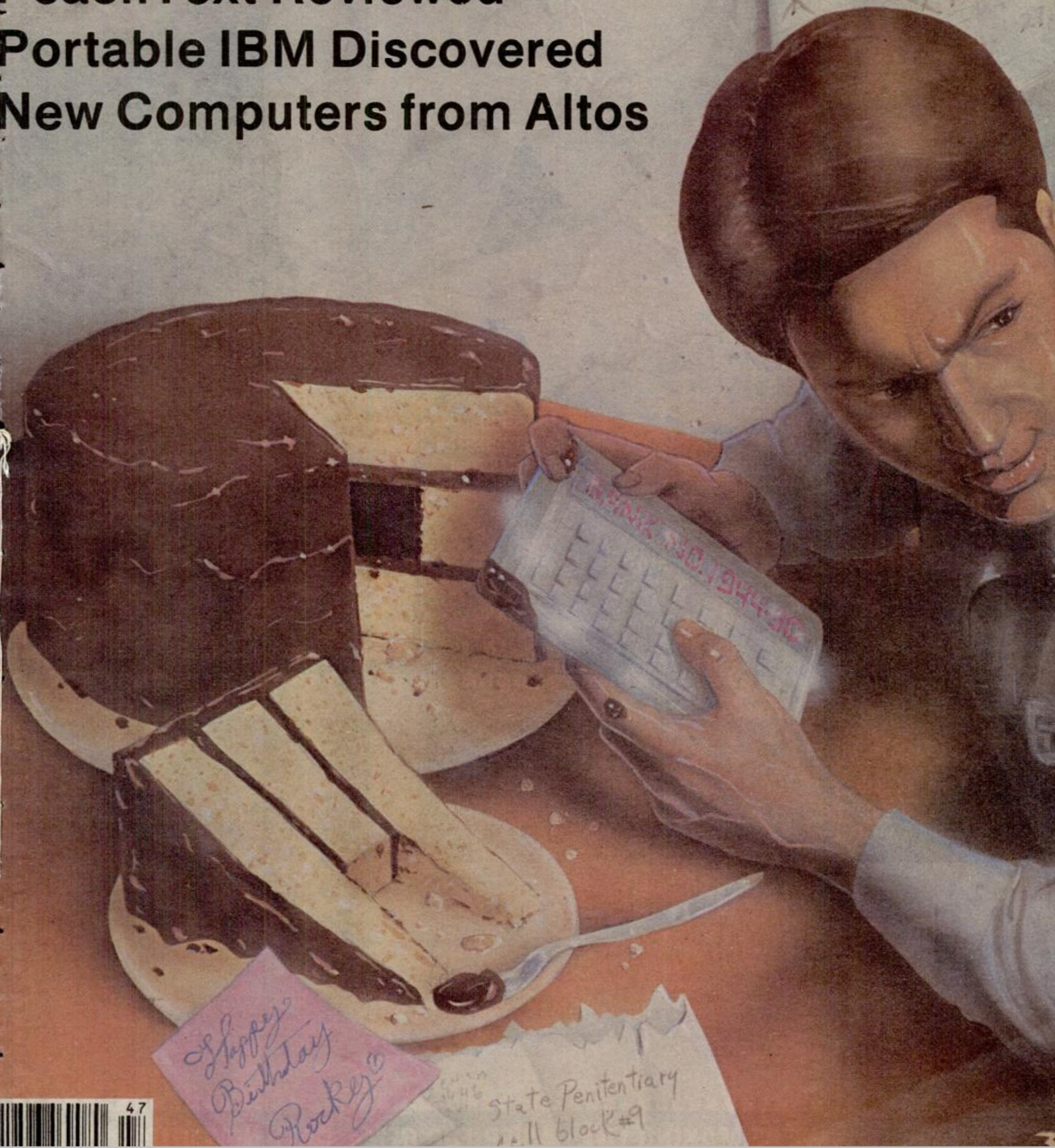


# Great Crimes PeachText Reviewed Portable IBM Discovered New Computers from Altos





# Act

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.





# size.

Optional Microcassette



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 RAM and ROM capabilities. There's even a 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

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*Dr. Senese (left), the U.S. Department of Education, Jack Tramiel, founder of International Computers, and United Nations Secretary-General try out a Commodore 64.*

of an American teaching New York multiplication tables.

The 656 projects cover 13 subject categories. The topics, grade levels, and number of students/teachers per class in addition to the number of students there are 13 categories: grading, attendance analysis; 13 computer games and 83 games.

The 13 categories include administration, computer science, mathematics, geography, history, science, technology, and a miscellaneous category.

There are schools for hobbyists to make students to educate anyone out, we have next 600 programs equipped Trans company plans domain software.

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