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## **PERSONAL COMPUTERS; Smaller, Lighter, Stronger, Cheaper**

By **PETER H. LEWIS**

THE NCR Corporation, which is now a division of the American Telephone and Telegraph Company, has created an impressive successor to the A.T.& T. Safari notebook computer. It is smaller and lighter and more powerful than the original Safari NSX/20, which was itself a highly regarded machine.

The new NCR 3170 has actually been on the market for a couple of months, but its original list price was so heavy (\$5,399) that some potential buyers may have balked. As attractive as it was, there were similar notebook computers available for far less money. So, NCR changed the list price of the new model to a "net" price of \$3,425.

It is unclear how much of the price cut for the NCR 3170 is the result of the current computer price war and how much is sleight of hand. It may have been possible to buy the 3170 for the lower price by pressing the dealer for discounts. The new price tag more accurately reflects what the customer will probably pay.

In return for the money, the buyer gets a stylish, 4.9-pound notebook that is powered by a 25-megahertz Intel 386SL microprocessor. The chip is more than adequate for running Windows applications, and it can be slowed down, via keyboard command, for plain DOS applications if the user wants to extend battery life.

The NCR 3170 also comes with an 80-megabyte hard disk drive, four megabytes of system memory, an external diskette drive and the DOS and Windows operating system already installed on the hard disk.

NCR has made the system particularly easy to use. A built-in "tour guide" pops up on the screen when the computer is first turned on. Another on-screen tutorial teaches the user how to operate Windows. Even the familiar user registration card is simplified. After answering questions on the screen, the user clicks a button and the card is sent through a modem to NCR headquarters.

Although the merger of NCR and A.T.& T. last year was something like a shotgun wedding, the marriage appears to be working, at least from a technological point of view. The NCR 3170 has features that emphasize the strengths of A.T.& T., the world's biggest communications company. Each NCR 3170 comes with communications software for connecting to the A.T.& T. Mail electronic messaging service, and a cellular-ready send-receive fax modem is standard.

The last item allows a traveler to attach the computer to a cellular phone, the kind that about six million Americans now carry, and send or receive facsimile or electronic mail messages without having to tether the computer to a phone line.

Not all cellular phones are designed the same way, so special cables are needed to connect the cell-phone to the NCR 3170. Once the connection is made, the user can communicate without wires for the life of the phone's battery, which is typically about 15 minutes for some of the tiny pocket models and longer for the bulkier satchel sets or car phones.

Because of the cost of cellular connections, people will probably use the wireless fax capabilities mostly for urgent situations.

There are also optional attachments that will allow the NCR 3170 to receive short electronic messages sent to wireless digital beepers. So you might be sitting on the beach, sipping a daiquiri, when the computer alerts you that the boss wants you in Cleveland right away. Luckily, this feature can be disabled.

Even if the user never gets involved in wireless faxing or messaging, the 3170 is an impressive notebook computer. The screen is big and bright, well-suited for working with Windows.

Windows requires a mouse, which is a problem for portable computers. Various computer makers have tried clip-on trackballs, trackballs built into the screen, cursor keys that work like a mouse and other strategies. NCR has come up with yet another clever solution. Instead of the traditional "inverted T" cursor keys found on most portables, the 3170 has a single round button that rocks and rolls, moving the cursor in whichever direction the user points. NCR calls it a "finger mouse."

The main drawback of the 3170 is its lack of an internal diskette drive. A small external drive is included, and connecting it is easy. However, the drive becomes just one more piece of hardware that has to go into the bag, and it adds about a pound to the computer system's weight.

On a practical level, I have found that I rarely need a diskette drive on the road. The only time I use a notebook's drive is to load new software or transfer one or two files to my desktop machine via diskette, chores that are always done in the office. However, I have also learned that external drives are annoying when the work surface is an airline tray holder.

If you want more information, contact the NCR Corporation of Dayton, Ohio, at (800) 225-5627.