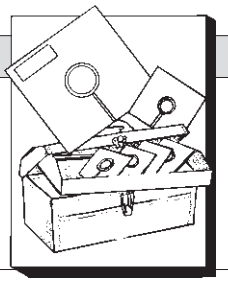

Laptops Work Better and Cost Less

by Morris D. Carey, Jr.

When laptop personal computers first came on the scene, they had bare bones power, memory, and storage; unreadable screens and abbreviated keyboards — they were the pits. And they were priced for the very rich.

But all that has changed. Laptops have taken giant steps forward in speed, battery power, hard disk size, memory, and monitor quality. And as prices have dropped — you can now find them under $2,000 — they are finally giving a reasonable bang for the small-business person's buck.

Laptops still aren't made to handle an office full of sophisticated peripherals like 300-megabyte hard drives and tape backups. They are typically equipped like off-the-shelf desktop models, which is all the sophistication most small contractors want.

Two Desks, One Laptop

If your office has little desk space for computer equipment and you regularly take work home, you might consider a laptop. Here is the setup I have in mind: buy a laptop and two full-size, color monitors; one for your office and one for your home. The monitors will share the laptop, which has its own LCD monitor and battery for when you're between home and work.

If you add an inexpensive dot matrix printer (about $200) at the office, you end up with three computer systems (with printing capability at one location) for less than $2,500. Two equivalent desktop models and a printer would cost another $700 or so in my area, and they take up more room and aren't portable.

Laptops are also useful for larger construction companies that have one or more desktop computers. My brother and I have nine terminals linked by a Novell network at our main office, a single terminal at our Oakland store, and desktop computers at our homes. But we still find the need for our laptops. We get tons of work done while commuting or traveling; I wrote this column on my laptop while riding the train to work.

However, notice that I'm not pushing laptops as the ultimate on-site tool. Although there are some real advantages to having a "mobile" computer, laptops are just as vulnerable to dust and dirt as desktop models, and can be damaged every bit as easily. It also doesn't make sense to try to run your business from a job site; your office is better equipped for the serious work of estimating, job costing, and other intensive number crunching tasks.

Figure 1. *The Packard Bell PB286LPV, at about 15 pounds, is relatively heavy for a laptop but its weighty batteries provide more time on line without recharging than most models.*

Figure 2. *Apple's "luggable" Macintosh Portable offers excellent power and memory; and ports for a printer, mouse, modem, and extra drives, monitor, and speaker.*

Laptop Details

Technically, there are two kinds of computers you can haul around with you: laptops and portables. Laptops can weigh as little as 4½ pounds or as much as 16 pounds; they all can be run off built-in battery packs that are rechargeable. A portable computer is bulkier and heavier — about the same size and shape as a sewing machine — and typically require AC power.

Portables usually have smaller versions of the standard video monitor built in. Better laptops, on the other hand, rely primarily on "supertwist" LCD technology to cut down on the bulk and weight of a video tube. The back-lit versions of these screens are readable under the greatest variety of conditions, although you are still better off to plug into the full-size auxiliary monitor when you're in the office or at home.

It is a misconception that you see less on a laptop monitor than on a regular screen. Although the screens themselves are smaller, most laptops show 80 characters wide and 25 lines high just like the big boys. The keyboards on laptops are a bit smaller and tighter than their full-size brothers, but the keys themselves are typically the same size.

Don't get too excited about the built-in printers that some laptops feature unless having one is extremely important to your operation. Integral printers are ordinarily the thermal type, and the printing paper is flimsy and the image fades over time.

My favorite laptops are the *PB286LPV* by Packard Bell (9425 Canoga Avenue, Chatsworth, CA 91311; 818/773-4488) and the *Macintosh Portable* by Apple Corporation (20525 Mariani Avenue, Cupertino, CA 95014; 800/538-9696). Three other laptops on the IBM side of things that get consistently good reviews are Toshiba, Zenith, and Samsung.

My Packard Bell (see Figure 1) has a 40-megabyte hard drive; a 3¼-inch, 1.2-megabyte floppy drive; 1 megabyte of memory; a CGA monitor card and port (for an auxiliary monitor); an attached monochrome monitor; a comfortable keyboard; a parallel port for a printer; and a serial port for a mouse or modem (I use it for both). Its interfaces are identical to its full-size cousins, so any attachments you buy for it will work on the larger machines.

The Macintosh Portable (see Figure 2), which is not much bigger than a laptop, has a 40-megabyte hard drive; a 3¼-inch, 1-megabyte floppy drive; 1 megabyte of memory; a color monitor card and port (for an auxiliary monitor); an attached monochrome monitor; a comfortable keyboard; a printer port; a mouse port; a modem port; ports for an extra floppy drive and a hard drive; and an external speaker port. And to top it all off, I can plug it directly into my Macintosh IIx, and network directly to my Apple LaserWriter II and other system accessories.

Construction Software Directory for the Mac

I was recently sent an invaluable resource for those of you who work in the world of the Macintosh. It's a current copy of the *Macintosh Construction Forum Builder Software Directory*. This 1990-1991 edition lists Macintosh software for architects, engineers, realtors, and contractors.

The 86-page, 8½-by-11-inch booklet is packed with over 450 software program listings covering accounting, CAD, databases, engineering, estimating, form makers, project management, real estate, surveying and mapping, and telecommunications. Each listing includes a brief description, hardware and software requirements, cost, and ordering information.

Other sections list useful periodicals and books, information on portable computers, training devices, schools, consultants, and even an unclassified section that covers everything from carpet estimating software to a program that calculates wallpaper needs.

But be careful when you're in the accounting section — BPI's entry level accounting system is listed for $89. This would be a steal, but it has no job-cost module, which makes it a real joke as far as I'm concerned.

The *MCF Builder Software Directory* is free to *Macintosh Construction Forum* subscribers (ten issues each year for $69), or you can purchase it separately for $49. For more information, contact editor Melissa Donohue at *Macintosh Construction Forum*, P.O. Box 1272, Sandpoint, ID 83864; 208/263-3078.

Letters, Letters, Letters

I'd like to be as helpful as I can to all of you who write with questions, but most of the time I just don't have enough information about you and your company to recommend software packages and hardware configurations.

I need to know what specific kinds of tasks you want to perform (general accounting, cost accounting, payroll, payables/receivables management, estimating, database management, spreadsheet, job scheduling, word processing, architectural drawing, etc.). And I need to know a bit about your company such as the number of employees, the number of estimates you do a year, your annual volume, your average job size, etc. ■

Morris D. Carey is a partner with Carey Bros. Construction, a remodeling firm based in Pittsburg, Calif. In addition, he has reviewed hundreds of construction-related computer products, and conducts computer seminars for The Journal of Light Construction. *If you have a question about computing in construction, address it to State-of-the-Art Contractor, c/o* JLC, *440 Grand Avenue, Suite 300, Oakland, CA 94610.*