

# Something To Talk About Something To Think About

## The Products' Unique Highlights and Low-Lights

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**D**uring the 3 1/2 weeks that I tested nine handheld computers, I always had the same answer to friends and family members who asked "How's work going?" I'd respond by rambling on about how cool handhelds are. "They're James Bond material," I'd inevitably add.

I was almost distressed to learn that I wasn't the first person to think so. Someone at MGM Studios thought so too: The Hewlett-Packard (HP) Jornada 430se Palm-Size PC makes a guest appearance in the recent Bond movie, "The World Is Not Enough." In this movie, an American nuclear physicist, aptly named *Christmas Jones*, carries a Jornada 430se on her hip and later uses the handheld computer to diffuse a nuclear bomb while she careens down a shaft.

Of course, the movie's depiction of the capabilities of this or any other handheld is exaggerated. In their defense, however, handhelds aren't designed for diffusing bombs. They're designed for the mundane task of organizing your sometimes chaotic life. All of the handhelds are good at this job, but none of them is good at everything. Let me tell you plainly which features I think are worth talking about and which features you should think about.

### SHARP WIZARD OZ-750: WHO WOULD WANT IT?

The Sharp Wizard OZ-750 is ideal for anyone who is primarily concerned with ease of use and who has no need for an e-mail application or Internet access.

#### Something To Talk About

The Wizard OZ-750, which is based on a Sharp OS, runs a handful of applications that you can expect to find on any handheld: an address book, a calendar, a to-do list, a memo pad, and a calculator. The Wizard OZ-750 also has an

expense application that is as useful and easy to use as the expense application on Palm OS products. In addition, the Wizard OZ-750 has hundreds of applications that you can download from the CD-ROM that comes with the product or from the Internet (<http://www.MyWizard.com>). I downloaded a loan calculator and found the process quick and easy.



In addition to having the best backlight of any of the products I tested with gray-scale displays, the Wizard OZ-750 was the easiest product to set up and use. I whipped through the Quick Start sheet that came with the Wizard OZ-750 and started working through the manual (because that's the kind of user I am). However, I soon realized that reading the manual was unnecessary. I could easily find and use all of this product's capabilities with some stress-free exploring on my own.

#### Something To Think About

The Wizard OZ-750 offers only one choice for data entry—the keyboard, which is very small and useful only for one-finger typing. More important, the Wizard OZ-750 does not have an e-mail application and synchronizes only with its proprietary desktop software, the Day-Timer Organizer (DTO) SHARP Edition. This desktop software enables you to im-

port the address book from other desktop personal information management (PIM) software such as Microsoft Outlook. In fact, I imported my Contacts list from Outlook 98 within seconds.

If you want true synchronization with any desktop PIM other than the DTO, however, you must purchase a third-party application such as RuppLynx 6.0 from RuppLynx (<http://www.rupplynx.com>). RuppLynx 6.0 enables you to synchronize the Wizard OZ-750 address book, calendar, and to-do list with other desktop PIMs, including Outlook (97, 98, 2000), Lotus Organizer (97, 97GS, 5.0 and 6.0), and Goldmine 4.0.

### PALM V: WHO WOULD WANT IT?

The Palm V is perfect for anyone whose primary consideration is the size and weight of a handheld computer.

#### Something To Talk About

You won't find a handheld computer that is smaller and lighter than the Palm V. Weighing in at a mere 4 ounces with a depth of only .4 inches, the Palm V fits comfortably in any pocket—pants or shirt pockets, in the front or back.

#### Something To Think About

You better think about why the Palm V is so small. For one thing, the Palm V is small because, unlike other Palm OS products, it doesn't use an ordinary alkaline AA or AAA battery that you can pick up at a convenience store. In fact, you cannot replace the Palm V lithium-ion battery. You have to recharge the battery, and you can only recharge the battery by placing it in its synchronization cradle and plugging the cradle into the wall. If you're nearing the end of a charge cycle (which, at up to one month, is admittedly a long cycle) and

you're going on a trip, you must take along the cradle, which makes the Palm V less compact and convenient to carry.

The second reason the Palm V is small is because it doesn't have an expansion slot. This does not mean you can't buy a modem for the Palm V; you can. What it does mean is that if you want to access the Internet directly from the Palm V, you must purchase another cradle, the form factor for the Palm V modem. If you need both the modem and the AC adapter to recharge the battery, then you must carry two cradles on your trip.

### **PALM VII: WHO WOULD WANT IT?**

The Palm VII is ideally suited for anyone who demands Internet access directly from the handheld computer and who doesn't want to bother with an external modem.

#### Something To Talk About

The Palm VII's claim to fame is its wireless Internet access, which is provided through Palm.Net Service. Palm.Net Service costs as little as U.S. \$9.99 per month for the Basic Plan or as much as U.S. \$44.99 per month for unlimited access. (For more information, see <http://www.palm.net>.)

#### Something To Think About

Before you rush out and buy a Palm VII for its wireless Internet access, however, you should make sure you live in a covered area. If you travel a lot and plan to use the wireless Internet access on your trips, you should also make sure that the places to which you typically travel are covered. For example, if you travel to Europe and Asia, you're out of luck. You'll have to wait until you get home to use those nifty wireless services. (For information about the area Palm.Net covers, visit <http://www.palm.net/coverage>.)

### **HANDSPRING VISOR DELUXE: WHO WOULD WANT IT?**

Users who have become accustomed to using the Palm OS but want to extend its basic features (and pay less) will

find the Handspring Visor Deluxe well-suited to their needs.

#### Something To Talk About

If you like the Palm OS, you may just love the Visor Deluxe, which was developed by Jeff Hawkins, the creator of the original Palm Pilot. Available in graphite or a translucent ice, green, blue, or orange, the Visor Deluxe has everything the Palm V has to offer in a slightly larger form factor at a little lower cost. (See Figure 1 on p. 12.)

The difference in size is negligible—about .3 x .1 x .3 inches and an additional 1.4 ounces—but the difference in memory is sizable: The Visor Deluxe has 8 MB of RAM (and costs U.S. \$249) compared to the Palm V, which has only 2 MB of RAM (and costs U.S. \$349).

The Visor Deluxe adds small but fun applications to the basic set of Palm applications. For example, the Visor Deluxe includes an advanced calculator and a world clock. The Visor Deluxe also comes equipped with several goodies that separate it from all of the handhelds I tested. For example, the Visor Deluxe desktop synchronization cable connects via a Universal Serial Bus (USB) port. USB transfers information at up to 1.5 Mbit/s. The other handhelds connect to your desktop via a serial port, which runs at 115 kbit/s.

In addition, the Visor Deluxe offers out-of-the-box Macintosh compatibility, which none of the other handhelds offers. Granted, you can synchronize the Palm V and Palm VII with a Macintosh, but to do so, you'll have to purchase the Palm MacPac.

Arguably the most exciting thing about the Visor Deluxe product is its Springboard expansion slot into which you can insert Springboard modules. Several Springboard modules are available, including a modem, an 8 MB flash module, a backup module, an MP3 player module, and a pager module.

I tested the Tiger Woods PGA Tour Golf module and discovered that the Springboard expansion slot provides literal plug-and-play. When you insert the card, the game starts by default. You



play the game, then you remove the card, and all trace of the game disappears.

#### Something To Think About

Visor Deluxe's hard-cover screen protector is not nearly as sleek and elegant as the Palm V leather cover. What is more important to think about is this: Springboard modules work only with the



Springboard expansion slot—which you'll find only on Handspring products. If you buy a Visor Deluxe and several Springboard modules, you lock yourself into Handspring or risk having to throw out your modules.

### **CASIO CASSIOPEIA EZ-100: WHO WOULD WANT IT?**

Anyone who likes to play with new toys and who insists on Windows CE with a color display will be impressed with the Casio Cassiopeia E-100.

#### Something To Talk About

The Cassiopeia E-100 was the first of the Windows CE products I checked out. (This simple fact may explain why it was my favorite.) I loved the color display (which the HP Jornada 430se also has). Unlike the gray-scale displays, the small color screen enables you to view the Cassiopeia E-100 in any light, from any angle, from any distance (or at least the distance between your desktop and your chair).

The Cassiopeia E-100 has three external buttons that you can configure to take you to any application you like. By default, the buttons take you to the Calendar, Address Book, and Menu applications. The Menu shows 12 on-screen buttons, which you can configure to launch the applications of your choice.

The last button is a separate folder for Casio programs. When you click this button, you find six more buttons that can launch any Casio programs you may later install.



For example, you can install a Mobile Video Player that enables you to play Casio-format movies on the Cassiopeia E-100. You can also install the Mobile Video Desktop Converter to convert .mpeg, .avi, and other file formats to the Casio movie format. Are you getting this? With the Mobile Video Player running on your Cassiopeia E-100, you can watch movies on a computer you hold in one hand.

I also tested the digital camera, which is available separately for U.S. \$299. The digital camera is about the size of my index finger. You slip this attachment into the CompactFlash slot and, using the rotating lens in the middle of this silver spy camera, take either still shots or video.

Using the software that ships with the camera, you can then store the still shots in a digital photo album on your Cassiopeia E-100. You can also convert these shots to .jpg files and either store these files on your PC or attach them to e-mail messages.

#### Something To Think About

Between the color display and fun extra features (including a cursor pad, which I never used), the Cassiopeia E-100 was not surprisingly the heaviest of all of the palm-sized products I tested. The Cassiopeia E-100 fits into its leather case like a glove but is quite bulky—not something I'd want to carry around in my pocket, although it would fit easily into a purse or briefcase. (Unfortunately, I carry neither.)

The Cassiopeia E-100 is also the only Windows CE product I tested with the power button on the left side of the product. I found this location surpris-

ingly less convenient than having the power button in the front, as other handhelds have. Also, don't expect a lot of clear help from the manual, which leaves a little to be desired.

#### COMPAQ AERO 1530: WHO WOULD WANT IT?

The Compaq Aero 1530 will suit anyone who finds a color display an unnecessary luxury but who insists on a Windows CE product that's small and light.

#### Something To Talk About

The Aero 1530 is the smallest and lightest of the Windows CE products I tested and is the only one that I'd be willing to carry in my pocket. The Compaq Aero is as long as the other Windows CE products (5.1 inches) but half the depth (only .49 inches compared to the HP Jornada 430se's .9 inches).

Granted, the Aero 1530 doesn't have the color display that the other Windows CE products I tested have, but its 16-color gray-scale is the most crisp of all the gray-scale handhelds I tested. (The others have only 2-color gray-scale displays.) Lack of color extends the Aero 1530's battery life, which at up to 14 hours is longer than the battery life of any other Windows CE product I tested.

#### Something To Think About

The Aero 1530 is noticeably slower than the Cassiopeia E-100 and Jornada 430se. The Aero 1530 has only a 70 MHz CPU compared to the Cassiopeia E-100, which has a 131 MHz CPU, and the Jornada 430se, which has a 133 MHz CPU.

#### HP JORNADA 430SE PALM-SIZE PC: WHO WOULD WANT IT?

Anyone who wants a Windows CE product, demands color, and likes a lot of extra software will find the HP Jornada 430se Palm-Size PC ideally suits his or her needs.

#### Something To Talk About

The Jornada 430se has all of the features other Windows CE products have plus a few extras, including a promotional pack for the James Bond movie. This pack includes earphones, a key chain, coupons for three James Bond movies, and a carrying case. The carrying case has a soft plastic screen cover and openings for the CompactFlash slot, ports, and external buttons so that,

theoretically, you never need to remove the cover.

Unlike the other Windows CE products I tested, the Jornada 430se does not have external buttons for launching applications. Instead, like Palm OS products, the Jornada 430se has on-screen buttons. By default, these on-screen buttons launch the Contacts, Calendar, Tasks, and LandWare OmniSolve applications.

OmniSolve is a financial problem solver that you can use to calculate loan payments and currency conversions, among other things. In addition to OmniSolve, the Jornada 430se ships with more software—approximately U.S. \$150 worth—than any of the other handhelds I tested. Among my favorite additions was Utopia-sof Hum 1.61, which enables you to listen to any music in MP3 format (and the music sounds pretty good).

#### Something To Think About

As with other Windows CE products, the Jornada 430se has limited battery life. Depending upon how extensively you use the Jornada 430se while traveling, you may need to re-



charge it while you're traveling. Fortunately, the Jornada 430se—like other Windows CE products—has an AC adapter that plugs directly into the product. Unfortunately, this adapter has three parts: a cable from the electrical outlet to the AC adapter, the AC adapter, and then another cable from the AC adapter to the 430se. This three-part design is not terribly convenient. Imagine arriving somewhere, getting the flashing signal that the

Jornada 430se's batteries are low, and realizing you left one of the cables at home.

### H/PCS

The handheld PCs (H/PCs) I tested—the Hitachi ePlate HPW-600ET and HP Jornada 690 Handheld PC—are the largest, most powerful, and most expensive of the products I tested. (See Figure 1 on p. 12.) These two products also have a lot



in common. For example, both run the Microsoft Windows CE Handheld Professional Edition 3.0.1, which includes the following applications (all version 3.0.1):

- Pocket Internet Explorer
- Pocket Word
- Pocket Excel
- Pocket PowerPoint

In addition, these two H/PCs are equipped with built-in fax modems and an array of interfaces, including a serial port, infrared port, PC card slot, CompactFlash card slot, earphones jack, VGA output, and a USB port. The idea, of course, is that you can do anything with an H/PC that you can do with a laptop—in a much smaller package.

These two products also share a couple of drawbacks. For example, downloading files is not a speedy process. I downloaded a 43-slide PowerPoint presentation to one of the H/PCs, and the process took 20 minutes. Also, not all of the application features you may expect are available. For example, I downloaded a Word file that includes a large table. As I should have guessed, Pocket Word does not include the Table feature, so the format was destroyed.

### HP JORNADA 690 HANDHELD PC: WHO WOULD WANT IT?

The HP Jornada 690 Handheld PC would be a good pick for anyone who wants the convenient features of a hand-

held coupled with functionality that rivals a laptop in a package one-third the size. Also, someone who prefers to use an actual keyboard rather than an on-screen keyboard or character-recognition software would prefer the Jornada 690 to other H/PCs.

### Something To Talk About

Of the two H/PCs, I much preferred the form factor of the HP Jornada 690, which is also U.S. \$200 less expensive than the Hitachi ePlate HPW-600ET. The Jornada 690 is a clam-shell form factor that sits comfortably in your hand or on your desk. In this form factor, using the H/PC to carry documents either to edit them or to display them on a large-screen monitor for presentations becomes an attractive alternative to carrying a laptop.

### Something To Think About

The Jornada 690 does not ship with Jot, as other Windows CE products do, so the keyboard is your only option for data entry. The keyboard is 75 percent of the size of a regular keyboard and is usable, even for two-handed typing. However, getting used to the size would take time. I found that when using this keyboard, my speed dropped dramatically, and my accuracy was pathetic—worse than when I used either Jot or Graffiti. (Jot and Graffiti are handwriting recognition systems.)

### HITACHI EPLATE HPW-600ET: WHO WOULD WANT IT?

For someone who wants the features of an H/PC but would like a slightly larger viewing area, the Hitachi ePlate may be the ticket.

### Something To Talk About

The ePlate includes a nice Jot tutorial that other Windows CE products do not. This tutorial enables you to train the Jot running on the ePlate to recognize various writing quirks. For example, the Jot tutorial asks if you ever use a particular form of the uppercase J, when you draw the bottom hook first, lift your pen, and then draw the line from left to right for the top of the J. If you answer yes, Jot thereafter recognizes that form of an uppercase J. If you leave the default answer no, Jot does not recognize that form of an uppercase J. This tutorial feature is available for letters J, K, P, Q, t, Y, I and the dollar symbol (\$).

### Something To Think About

The ePlate was the most uncomfortably large of all of the handhelds I tested—too large for me to want to hold in one hand and not large enough to be as pleasant to look at as a laptop.

The lack of an external keyboard also limits ePlate's usefulness. For example, having the whole MS Pocket Office suite is theoretically convenient, but with the only data entry options being either Jot or an on-screen keyboard, you may want to carry along an external keyboard.

On the other hand, if you carry a keyboard, ePlate's flat design makes data entry awkward because it lies horizontally on the surface. As a result, you have to lean over the keyboard and look straight down at the screen.

Although the design of the AC adapter is handy (the plugs collapse into the unit), the cable is too short, as is the modem cable. I had difficulty finding a place in my house where I could reach both the electrical outlet and a telephone jack.

The ePlate also has a poor user manual, which starts off badly with 10 pages



of warnings that range from necessary to highly questionable. Examples of the latter include the following:

- "Do not operate this handheld PC while walking."
- "Do not put the main battery or backup battery into a microwave oven."
- "Do not swirl this handheld PC around. Do not hammer or step on it, either."

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