# By JOHN B. JAINSCHIGG

# ravels

Doubtless, there's an aspect of portable computing that lends itself to macho fantasies of traveling light, shooting

trouble, and filing late-breaking dispatches from a camouflaged pup-tent in a muddy foxhole. And hey, I'm as vulnerable to

macho fantasy as the next galoot. But having used portable computers since

they were first invented, I've

had years to hone fantasy against A Hands-on Look at Atari's Transportable St

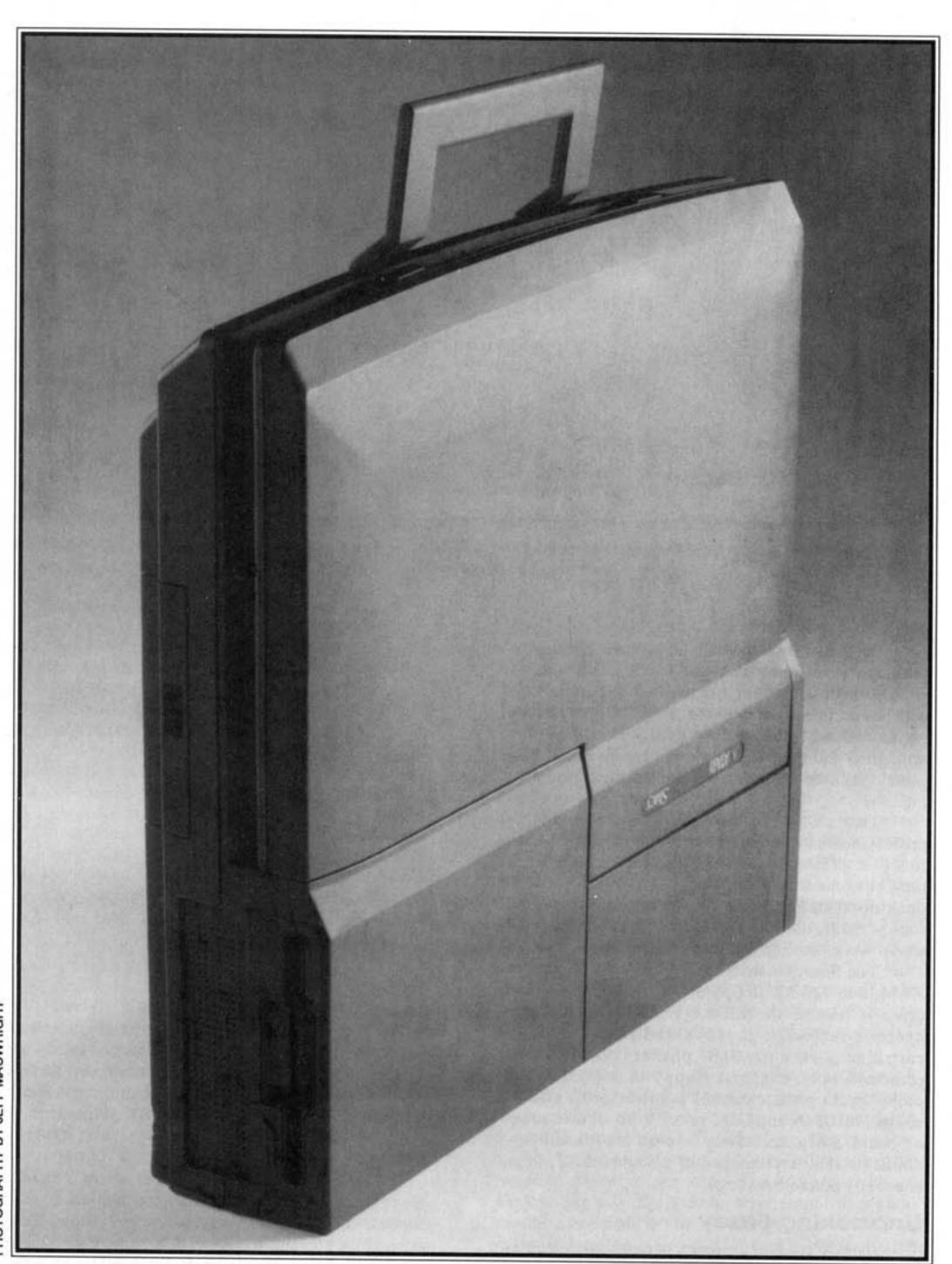
the grindstone of common sense. And

I've become convinced that the point of portable computing has (almost) nothing to do with the portable part (i.e., the part that lends itself to fantasy).

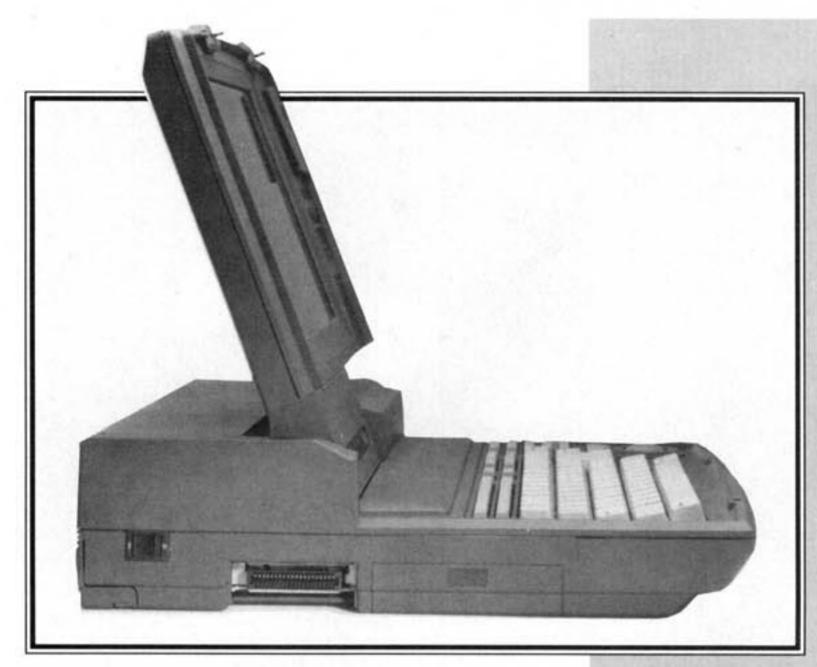
Instead, like travel irons, little-sewing-kits-in-a-thimble, and those wonderful guides to fast-food restaurants in Paris, the

real purpose of portable computers is to make us feel completely at home, wherever we are. A good portable computer makes it possible to emulate, in a variety of un-

familiar contexts the not-terribly-glamorous-but-hopefullyquite-productive workstyle you normally enjoy.



PHOTOGRAPHY BY JEFF MACWRIGHT



Left side of the Stacy, showing the ST-compatible cartridge port (cover removed).

For musicians, this can be particularly important, since so much of what a musician does whether with a computer or with an instrument depends on fluency and timing. That fluency can only be maintained if the systems used for composition, arranging, and other homely tasks are essentially the same ones used for recording, touring, and performing.

That's why musicians, film people, and other professionals have eagerly been awaiting the Atari Stacy. It offers the same power and functionality they've come to expect from conventional Atari ST desktop systems, but offers these facilities in a transportable, durable package that's appropriate for studio work, touring, and live performance.

The Stacy is currently available with 2 Mb of RAM, one 720 Kb floppy drive, and a 20 Mb hard drive. It features the full range of ST ports and connectors, including joystick and mouse ports, a cartridge port, a parallel (printer) port, RS-232 (modem) port, external floppy disk port, DMA daisy-chain port, external monitor port, and of course, MIDI IN and OUT ports. With all this power on-board, Stacy can closely — even transparently — duplicate the functionality of a standard ST, in an eminently portable package.

# **Unpacking Stacy**

The Atari Stacy comes packed in a slightly more compact box than a standard Atari system,

# Atari Stacy, At a Glance

**CPU:** 8 Mhz 68C000 (CMOS 68000)

**ROM: 128K** 

RAM: 2 Mb

pertwist LCD, emulates ST 640 x 400 monochrome graphics mode. Separate port is provided for RGB color monitor.

KEYBOARD: 94-key full-travel, including 10 function keys, separate cursor-control keys, numeric keypad.

**POINTING DEVICE:** Built-in, two-button trak-ball, emulating ST mouse. Switch permits alternative use of conventional mouse.

PORTS: ST mouse, joystick, 128K cartridge, serial (RS-232), parallel (Centronics), external floppy, external hard drive (DMA), RGB/monochrome monitor port, MIDI IN/OUT.

**OPERATING SYSTEM:** GEM, Rainbow TOS in ROM

MASS STORAGE: One 720 Kb high-density microfloppy drive (3.5"), reading and writing in MS-DOS compatible format. 20 Mb Conner Peripherals internal hard drive.

SUGGESTED RETAIL PRICE: \$ 1,999.95

doubtless both because the machine itself is smaller than a standard ST and because — as a portable — it is far less vulnerable to breakage in transport. Along with the one-piece Stacy system unit comes an external power adapter, a "generic" ST manual plus Stacy-specific addendum, an ST Basic Quick Reference manual, and two disks.

The first of these disks is a standard ST language disk, bearing a copy of Atari ST Basic, the Control Panel desk accessory, and other utilities. The second disk contains a copy of Atari's new hard disk utilities for Stacy, a revision necessitated by Stacy's



Right side of the Stacy, showing external mouse and joystick ports and mouse/trak-ball select switch (cover removed). The internal Conner Peripherals 20 Mb hard drive is mounted beneath the floppy disk drive, and is concealed by a perforated cover.

built-in hard drive, which incorporates new drive-controller hardware.

As you would expect, the Stacy is compact when closed, measuring a scant 3-5/8" high, 15 inches wide, and 12-3/4" deep. The one-piece handle, attached to the keyboard end of the unit (see photograph), folds back into a recessed well when not in use. Standing on end, like a piece of luggage, the unit is comfortingly stable. While in this position, the hard disk and floppy drive rest below the unit's center; important, since it insures that if the unit ever does fall over, these most delicate components have the shortest distance to fall. Since the hard and floppy drive units represent most of the mass of the device, placing them towards the rear also adds to the unit's overall stability in "carry mode."

While the Stacy might be stable, it isn't exactly a lightweight. Though every attempt has been made to keep the weight of the unit to a minimum, it still weighs in at a hefty twelve pounds; light enough to shlep from one airport ramp to the next, but hardly the kind of thing you want to carry around all day. The handle, while secure, well-balanced, and reasonably comfortable to grip, is clearly not designed for carrying the Stacy more than a few blocks.

Luckily, a variety of third-party companies have recently come out with universal laptop cases that fit the Stacy quite nicely. Our current favorite, from Computer Coverup, Inc., is made of water-resistant 1000-denier Cordura (Suggested retail: \$85 from Computer Coverup, Inc., 2230 S. Calumet, Chicago, IL 60616, (312) 326-3000, (800) 282-2541 for details). Sleek and elegant, it fits the computer like a glove, has a comfortable shoulder strap, and provides external and internal pockets for power adaptor disks, and extra supplies.

# Setting up Stacy

When closed for transport, Stacy is fully sheathed in grey ballistic plastic, and is almost hermetically secure. The LCD screen is clamped firmly over the keyboard by two metal hooks, protecting both delicate components from impact.

Tight-fitting covers shelter the cartridge port and mouse/joystick ports on the sides of the keyboard, while a long, hinged cover clamps firmly over the array of ports in the rear.

Setting up Stacy for business is generally as simple as opening up and folding back the screen, and doing likewise with the rear protective cover, which folds down into a step that slightly elevates the rear of the unit. Though early press-releases touted the Stacy as having the capability to run off batteries, production Stacys are designed to run off line current, supplied by the included power adapter. A cord from this adapter plugs into a jack in the rear panel.

Stacy's power switch is at the rear of the left-hand side of the unit, well out of reach of accident in normal use. When switched on, the machine boots exactly like a standard ST, first examining the hard disk for an autoboot driver, then examining the floppy drive, then finally — if frustrated in both cases — coming up with the default desktop.

The Stacy hard drive is shipped unformatted. Owners should therefore boot the first time with the enclosed hard disk utility diskette, which contains a hard disk driver in its \AUTO folder. The next step will be to format and partition the hard disk, using the supplied utility program, HDX (Atari Advanced Hard Disk Utility v. 3.02). Finally, most users will wish to install a bootable driver on the Stacy's hard drive, using the utility program INSTALL, allowing the Stacy to boot directly from the fixed disk's root parti-



The Stacy, set up for work (note rear port cover folded down to form elevating step.) Stacy's full 94-key ST-compatible keyboard features all ST function keys, cursor-control keys, and numeric keypad, as well as a built-in trak-ball emulating a standard ST mouse.

tion. The process of formatting and preparing the hard disk for use is fairly simple, and any ST veteran should be able to handle it without referring to the manual.

The Stacy internal hard disk is fast, quiet, and seems very reliable. (N.B.: it's made by Conner Peripherals, reputed to be the fastest-growing OEM hard-drive manufacturer in the world.) Though the drive powers up at the same time as the CPU, boot-time is still considerably shorter than when using a standard 1040 with external hard drive.

Not that you can't attach an external hard drive to a Stacy, if you want. The system DMA connector, mounted on the backplane, permits daisy-chaining up to seven DMA-interfaced devices, such as external hard drives and Atari laser printers. When setting up this type of system, it's important to remember that the Stacy's internal hard drive is SCSI device 0; all DMA devices must be set with unique device numbers.

#### The LCD Screen

Once the machine is turned on, first-time users will wish to set display brightness and contrast, managed by turning a set of knurled dials mounted flush with the case on the righthand side of the screen. The brightness knob controls the intensity of the backlight behind the transparent LCD (the backlight can be turned off in brightly-lit conditions); while the contrast knob controls the opacity of pixels on the display itself. Grouped below the controls are a series of activity lights, which indicate status of the internal floppy and hard drives.

The Stacy's LCD, which precisely emulates a standard ST's 640 x 400 monochrome display, is exceptionally clear and readable when brightness and contrast are appropriately set. The image itself is cyan, which is very easy on the eyes. Pixel refresh is somewhat slower

than on a standard VDT, which tends to cause a bit of "ghosting" about the fast-moving mouse pointer or quickly-scrolling text, but after a while, this is hardly noticeable. Moreover, because of the slower refresh (and therefore fade) rate of the LCD, the Stacy's screen does not pulsate subliminally in time with 60-cycle line current, as do standard VDT displays. Moreover, the Stacy display emits no ionizing radiation.

### **Keyboard and Trak-ball**

The Stacy's keyboard (see photo) emulates that of an ST in every particular, except for key placement and size. The main keyboard, which is full-size, has marginally better tactile feedback than the keyboard found on a standard ST — its response is firm, precise and "snappy," ideal for the experienced touch-typist. Ten small function keys are grouped to the upper left of the main keyboard, in two rows — an arrangement that habitual function-key users must adapt to in switching from the single row of function keys on a standard ST. Help and Undo keys are in the center, while insert, Clr/Home, and cursor-control keys are grouped into a T-formation above the right of the main keyboard.

Again, this arrangement requires some adaptation, though after several days of constant use, I find my hands falling quite naturally onto the cursor keys when I choose to use this portion of the user-interface. The numeric keypad is to the right of the main keyboard, and is pretty teensy-weensy — not exactly an accountant's dream, though fine for intermittent use (for example, with an on-screen calculator).

First-time users will wish to test the built-in trak-ball to see if rolling it moves the Stacy's on-screen mouse pointer. If not (mine didn't), it means the system has arrived from the factory with the mouse/trak-ball switch set to "mouse" mode — apparently a common situation.

To correct the problem, remove the plastic cover from the well on the right side of the Stacy's keyboard, exposing both the switch in question and the Stacy's standard mouse and joystick ports. Flip the switch to activate the trak-ball, or install a standard ST mouse (which may be ordered from Atari), and you're under weigh.

The two-button trak-ball is admittedly a compromise. Pointer-positioning with the trak-ball, though at first difficult, swiftly becomes easier with practice; and basic "point and click" operations (such as those used to select from menus) are quite manageable. Unfortunately, because it's nearly impossible to hold down the left button while moving the ball, "click and drag" operations (such as those used to move and copy files from window to window) are difficult to perform one-handed. If you don't mind carrying a standard mouse, then by all means, buy one and use it.

#### Rainbow TOS

Stacy incorporates TOS 1.4, also called Rainbow TOS, which adds several convenient features to those enjoyed by owners of older STs. Here are just some of the improvements:

The GEM file selector has been completely

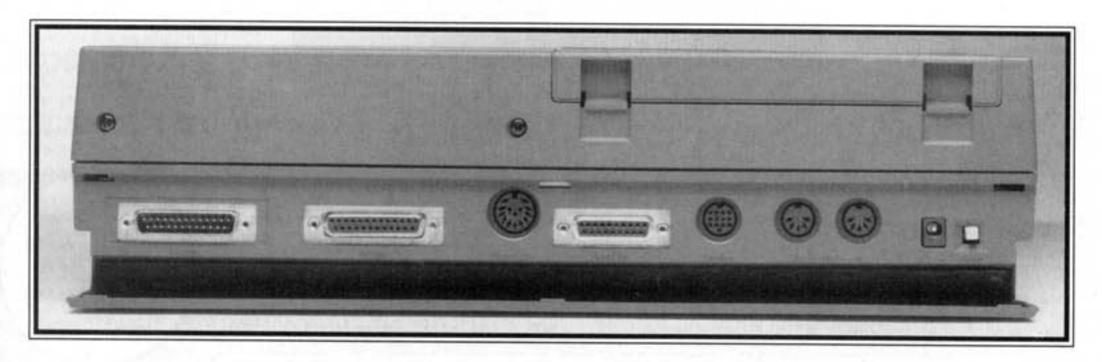
redesigned, and now includes a bank of drive-selector buttons (a la Universal File Selector), that permit instant selection of the root directory on drives A through P (naturally, drive identifiers representing uninstalled drives cannot be selected).

The use of wildcards in pathname specifications has been made more reliable, meaning (for example) that it's now possible to display only those files in a directory with .DOC extensions, simply by ending the path specification with the expression \*.DOC.

Window-to-window file-copy functions have been enhanced, allowing you to skip or overwrite conflicting filenames during group copies, without terminating the operation. It's now possible to move files from place to place, without copying them, simply by holding down Control as you click and drag (the actual operation involves copying the file, verifying the copy, then deleting the source file, allowing a degree of security in what would otherwise be a fairly drastic process). Pressing UNDO will abort any copy, move, or delete operation.

Further changes: the desktop's INSTALL AP-PLICATION function has been enhanced to allow you to set a given GEM program for auto-execution on startup (finally!) A new, uniform dialog box has been implemented for use with both format and disk-copy operations. Folders can be re-named. Pressing the ALT key during bootup will cause an otherwise-configured system to boot from floppy, rather than hard disk. Pressing Control/Alternate/Delete initiates a warm boot, while pressing Control/Alternate/ Right-Shift/Delete causes a full cold boot.

And (last but not least), disks formatted with Rainbow TOS are fully MS-DOS compatible, which means that if you share information with IBM PS/2's and clones, you don't have to format your data-interchange disks on the IBM.



Stacy backplane, with step-cover folded back. From left to right, items are: RS-232 serial port, printer (Centronics) port, external floppy connector, hard disk (ACSI DMA) connector, monitor connector, MIDI Out/In ports, external power jack, and reset button.

#### **Mouse Accelerator 3**

To round out the Stacy's system software suite, Atari has included a copy of Ken Badertscher's Mouse Accelerator 3 utilities. This "terminate-stay-resident" software package offers a variety of optional conveniences to the professional Stacy user. Mouse Accelerator 3 works in one of two ways, depending on whether it's executed from the desktop (double-click on MACCEL3.PRG) or executed on bootup from the \AUTO folder. When run from the desktop, MACCEL displays a configuration dialog box offering access to the following functions:

- The mouse accelerator, which renders the mouse pointer more sensitive to trak-ball or mouse movement. Imposing a degree of acceleration makes it easier to use the Stacy's trak-ball.
- Screen-saver, a utility that monitors the Stacy's keyboard (and/or modem) to determine system activity, and begins rhythmically changing the screen from black-on-white to white-on-black after a prescribed interval of inactivity. This prevents "burn in" of a static image on the Stacy LCD.
- Automatic parking, another "timed" function that parks the Stacy's hard drive heads after a period of inactivity. This last feature is quite useful, as it of-

fers a degree of security against accidentally transporting the system with the heads stopped down over the vulnerable hard disk media. Under normal circumstances, users will probably wish to run the SHIP utility (included on the hard disk utilities diskette both as a function of HDX and as a stand-alone program, SHIP.PRG) before they turn off the system, prior to transporting it.

By selecting SAVE from the MACCEL3.PRG configuration dialog, Stacy users can save the current settings in their copy of the program. If the program is then copied to the \AUTO folder, it will install itself and implement these settings whenever the Stacy is turned on.

Our own Stacy has run flawlessly for two weeks, under daily drill with Cubase, C-Lab Notator, and other music products, plus a whole range of conventional "productivity" software such as Microsoft Write, FSM/GDOS, PageStream, the Mark Williams C-Language Development System, and a host of other programs.

During that time, I've not noticed a single software incompatibility, glitch, or other problem that would lead me to believe the Stacy is not wholly compatible with standard STs.





No credit card surcharge; cards not charged until orders ready to ship. \*Prices don't include shipping: \$3.50 per order (Foreign \$.80 per disk sent Airmail); 2nd Day Air \$8 (Domestic US only); NO COD's. Slightly Used ST products shipping: call and ask price for items ordered. WA residents add 8.1% on total (including shipping). Allow 2 weeks for checks to clear or send money order for immediate processing; make checks payable in US funds to PDC. Prices, contents, and availability subject to change without notice. Disks listed as xxx/xxx (where xxx is a disk number) are 2 separate disks and should be ordered as such. If ordering disks containing nuclity, you must be over 21 years old and must say or write that you are when ordering (sign order form if by mail). PS: We're always available to help you with a problem, question, or just to have a friendly chat!

